Resource Report 3
Fish, Wildlife, and Vegetation

Resource Report No. 3

Fish, Wildlife, and Vegetation

Ventura to Farmington A-Line Abandonment and Capacity Replacement Project and Northern Lights 2027 Expansion Project

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RESOURCE REPORT NO. 3 – FISH, WILDLIFE, AND VEGETATION SUMMARY OF FILING INFORMATION

MINIMUM REQUIREMENT	LOCATION ADDRESSED
Classify the fishery type of each surface waterbody that would be crossed, including fisheries of special concern. (§ 380.12(e)(1))	Section 3.1
Describe terrestrial and wetland wildlife and habitats that would be affected by the project. (§ 380.12(e)(2))	Sections 3.2 and 3.3
Describe the major vegetative cover types that would be crossed, and provide the acreage of each vegetative cover type that would be affected by construction. (§ 380.12(e)(3))	Section 3.2.1 and Table 3.2-1 and 3.2-2
Describe the effects of construction and operation procedures on the fishery resources and proposed mitigation measures. (§ 380.12(e)(4))	Sections 3.1.2 and 3.1.3
Evaluate the potential for short-term, long-term, and permanent impact on the wildlife resources and state-listed endangered or threatened species caused by construction and operation of the project and proposed mitigation measures. (§ 380.12(e)(4))	Sections 3.3 and 3.4, Table 3.3-1 and Table 3.3-2
Identify all federally listed or proposed endangered or threatened species that potentially occur in the vicinity of the project and discuss the results of consultations with other agencies. (§ 380.12(e)(5))	Section 3.4, Table 3.4-1 and 3.4-2 (Appendix 3D)
Identify all federally listed essential fish habitat (EFH) that potentially occurs in the vicinity of the project and the results of abbreviated consultations with NMFS, and any resulting EFH assessments. (§ 380.12(e)(6))	Section 3.1.1
Describe any significant biological resources that would be affected. Describe impact and any mitigation proposed to avoid or minimize that impact. (§ 380.12(e)(4) and (7))	Sections 3.3.2, 3.3.3, 3.3.4, 3.4.2, and 3.4.3
ADDITIONAL INFORMATION	
Provide copies of correspondence from federal and state fish and wildlife agencies along with responses to their recommendations to avoid or limit impact on wildlife, fisheries, and vegetation.	Appendix 3B
Provide a list of significant wildlife habitats crossed by the project. Specify locations by milepost, and include length and width of crossing at each significant wildlife habitat.	Not applicable

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Abbreviations and Acronyms

A-line	Northern Natural Gas' 16-inch-diameter M500 A-line
AMA	Aquatic management area
BGEPA	Bald and Golden Eagle Protection Act of 1940
BCC	Birds of Conservation Concern
BCR	Bird Conservation Region
BMP	best management practice
CCAA	Candidate Conservation Agreements with Assurances
CRP	Conservation Reserve Program
D-line	Northern Natural Gas' 30-inch-diameter M500 D-line
E-line	Northern Natural Gas' 30-inch-diameter M500 E-line
EAB	emerald ash borer
EFH	Essential Fish Habitat
EI	Environmental Inspector
EO	Executive Order
ESA	Endangered Species Act
ESB	environmental survey border
ETWS	extra temporary workspace
FERC	Federal Energy Regulatory Commission
HDD	horizontal directional drill
IDNR	Iowa Department of Natural Resources
IPaC	Information for Planning and Consultation
MBS	Minnesota County Biological Survey
MDA	Minnesota Department of Agriculture
MP	milepost
MBTA	Migratory Bird Treaty Act of 1918
MDNR	Minnesota Department of Natural Resources
MLRA	Major Land Resource Area
MOU	Memorandum of Understanding
NL27 Project	Northern Lights 2027 Expansion Project
NLEB	Northern Long-eared Bat
NHIS	Natural Heritage Information System
Northern	Northern Natural Gas
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
OIW	Outstanding Iowa Waters
ONRW	Outstanding National Resource Waters
ORVW	Outstanding Resource Value Waters
PEM	palustrine emergent
PFO	palustrine forested
Plan	FERC's Upland Erosion Control, Revegetation, & Maintenance Plan
Procedures	Northern's Wetland and Waterbody Construction & Mitigation Procedures
Projects	Ventura to Farmington A-line Abandonment and Capacity Replacement Project and Northern Lights 2027 Expansion Project

PSS	palustrine scrub-shrub
ROW	right of way
RPBB	rusty patched bumble bee
RSEA	Regionally Significant Ecological Area
SCBB	Suckley's Cuckoo Bumble Bee
SPCC	Spill Prevention, Control, and Countermeasures
TWS	temporary workspace
U.S.C.	U.S. Code
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
V2F Project	Ventura to Farmington A-Line Abandonment and Capacity Replacement Project
WMA	Wildlife Management Area

3.0 RESOURCE REPORT 3 – FISH, WILDLIFE, AND VEGETATION

Northern's application is composed of two discrete projects, the V2F Project and the NL27 Project (Projects). The two Projects will be built concurrently, and Northern has combined the two Projects into a single Section 7 application. Analysis and impacts are generally discussed separately for each Project throughout the application.

Resource Report 3 contains information necessary to identify and quantify the construction impacts of Northern's V2F and NL27 Projects on existing fish and wildlife resources, plant communities, sensitive species, and habitats that may be directly or indirectly affected by each Project. Resource Report 3 considers anticipated impacts related to construction activities associated with each Project, as well as the mitigation measures designed to minimize these impacts.

Northern owns and operates a natural gas transmission pipeline system, including pipeline and associated aboveground facilities in Minnesota and Iowa. Northern is filing an application with FERC pursuant to section 7 of the Natural Gas Act. The V2F Project involves isolation and abandonment in-place of approximately 105.76 miles of 16-inch-diameter pipeline on Northern's M500 A and 25.35 miles of 16-inch-diameter M500 J pipeline systems (collectively referred to as the A-line) from Ventura, Iowa, to Farmington, Minnesota. To replace the capacity, Northern will construct three new pipeline extensions consisting of approximately 17.88 miles of 36-inch- and 30-inch-diameter pipelines and associated aboveground appurtenances in Freeborn, Steele and Dakota counties, Minnesota.

The NL27 Project consists of the installation of ten pipeline extensions totaling 28.43 miles, a compressor station uprate, and associated aboveground appurtenances in Minnesota for firm transportation requirements associated with Northern's customers. The NL27 Project is in Freeborn, Steele, Scott, Carver, Martin, Stearns, Jackson, Watonwan, Isanti, Morrison, and Washington counties, Minnesota.

Tables 3.0-1 and 3.0-2 provide a list of both Projects' components along with their associated Minnesota or Iowa counties.

Table 3.0-1 V2F Project Facilities and Location

Component	Project Facility	Facility Description	County, State
Lake Mills M500 E-line	8.29-mile pipeline	36-inch-diameter extension	Freeborn, MN
	Lake Mills compressor station	Temporary compression site	Worth, IA
Albert Lea M500 E-line	2.09-mile pipeline	36-inch-diameter extension	Steele, MN
	Owatonna compressor station	Temporary compression site	Steele, MN
Faribault M500 D-line	7.50-mile pipeline	30-inch-diameter extension	Dakota, MN
	Northfield #1	Temporary compression site	Dakota, MN
A-line Abandonment	Ventura compressor station	Pipeline disconnect site	Hancock, IA
	Farmington compressor station	Pipeline disconnect site	Dakota, MN

Component	Project Facility	Facility Description	County, State
	La Crosse BL MNB73201 launcher /ABA05	Temporary compression site	Freeborn, MN

Table 3.0-2 NL27 Project Facilities and Location

Component	Project Facility	Facility Description	County, State
Lake Mills M500 E-line	2.32-mile pipeline	36-inch-diameter extension	Freeborn, MN
Albert Lea M500 E-line	3.42-mile pipeline	36-inch-diameter extension	Steele, MN
Willmar 3rd Branch Line Upstream	1.78-mile pipeline	24-inch-diameter extension	Scott, MN
Willmar 3rd Branch Line Downstream	4.78-mile pipeline	24-inch-diameter extension	Carver, MN
Welcome 2nd Line	1.24-mile pipeline	16-inch-diameter extension	Martin, MN
Paynesville 2nd Branch Line	2.45-mile pipeline	4-inch-diameter extension	Stearns, MN
Worthington 2nd Branch Line	2.17-mile pipeline	8-inch-diameter extension	Jackson, MN
Springfield 2nd Branch Line	7.40-mile pipeline	8-inch-diameter extension	Watonwan, MN
Minnesota Interconnect 2nd Branch Line	1.59-mile pipeline	12-inch-diameter extension	Isanti, MN
Alexandria 2nd Branch Line	1.28-mile pipeline	8-inch-diameter extension	Morrison, MN
Aboveground Facilities			
Hugo Compressor Station Uprate	Hugo compressor station	Turbine switch for newer model with increase of 700 horsepower	Washington, MN

Information for this resource report was derived from three principal sources: (1) Project-specific communication with federal and state agencies; (2) published and unpublished natural resources data pertaining to the regional Project areas; and (3) field surveys.

Field surveys involved concurrent wetland delineation and habitat surveys within the V2F Project and NL27 Project areas, respectively, including the construction workspace for each Project (i.e., TWS, ETWS, access roads, and staging areas). The areas studied during environmental surveys consisted of 4,292 acres for the V2F Project and approximately 4,039 acres for the NL27 Project. These total acreages encompass all workspaces included in both Projects, plus buffers for workspaces for each of the V2F and NL27 Project components. The surveys were completed to identify any sensitive resources warranting protection within or adjacent to the proposed construction workspace. Northern's wetland and waterbody determination and delineation reports are provided in Resource Report 2, Appendix 2B, Wetland Delineation Reports. Northern's rare, threatened, and endangered species reports, including the results of the field habitat assessments and preliminary consultations with USFWS and MDNR, are included in Appendix 3C.

Northern completed biological field surveys for 100% of the parcels within the V2F Project ESB. Northern completed biological field surveys for 98% of the parcels within the NL27 Project ESB. The remaining parcels to be surveyed within the NL27 Project in 2026 are provided in Table 3.0-3.

Table 3.0-3 NL27 Project Parcel Survey Status Summary

NL27 Project Facility	MP		Parcel ID	Survey Status
	To	From		
Lake Mills M500 E-line	All parcels within the Lake Mills M500-E-line ESB were surveyed prior to filing; no additional surveys are required in the 2026 calendar year.			
Albert Lea M500 E-line	All parcels within the Albert Lea M500 E-line ESB were surveyed prior to filing; no additional surveys are required in the 2026 calendar year.			
Willmar 3rd branch line upstream	3.40		SC-003	Relocated WIL-TAR-002 to be surveyed in 2026
Willmar 3rd branch line downstream	9.05	9.07	CA-028	To be surveyed in 2026
	9.07	9.37	CA-026	To be surveyed in 2026
Welcome 2nd line	All parcels within the Welcome 2nd line ESB were surveyed prior to filing; no additional surveys are required in the 2026 calendar year.			
Paynesville 2nd Branch Line	All parcels within the Paynesville 2nd branch line ESB were surveyed prior to filing; no additional surveys are required in the 2026 calendar year.			
Worthington 2nd Branch Line	All parcels within the Worthington 2nd branch line ESB were surveyed prior to filing; no additional surveys are required in the 2026 calendar year.			
Springfield 2nd branch line	15.40		WA-059	Relocated SPR-TAR-001 to be surveyed in 2026
Minnesota Interconnect 2nd branch line	All parcels within the Minnesota Interconnect 2nd branch line ESB were surveyed prior to filing; no additional surveys are required in the 2026 calendar year.			
Alexandria 2nd branch line	17.07		MO-014	Relocated ALX-TAR-002 to be surveyed in 2026
Hugo compressor station[1]	No surveys required as entire construction footprint is active station and previously disturbed.			

Note: Parcels remaining to be surveyed are shown on Figure 2-4 and the Alignment Sheets.
[1] Planned work at the Hugo compressor station is limited to uprate of an existing turbine and associated workspace is fully within the existing facility footprint.

3.1 Fisheries Resources

The USFWS regulates and protects game and non-game fish species in the states of Minnesota and Iowa in accordance with the USFWS Conservation Act of 1980 (16 U.S.C. §§ 2901-2911), the ESA of 1973 (16 U.S.C. §§1531-1543, Public Law 93-205), and the USFWS Coordination Act of 1958 (16 U.S.C. §§ 661-667e). The MDNR Division of Fish and Wildlife, Section of Fisheries, manages a wide range of fishery resources throughout the state. Minnesota game fisheries are regulated by Minnesota Statutes Chapter 97A and Minnesota Rules Parts 6216 and 6254 through 6260. Minnesota R. 6264.0050, subpart 4, identifies waterbodies designated by the state as trout streams. In Iowa, the IDNR is responsible for administering Chapter 481B of the Code of Iowa – Endangered Plants and Wildlife (Iowa Code Annotated § 481B.1 – 10). Chapter 481B is administered by the Natural

Resource Commission and the Director of the Department of Natural Resources. Under Chapter 481B, the Natural Resource Commission is authorized with the following:

- To cooperate with the federal government in the conservation, protection, and artificial propagation of endangered and threatened species
- To designate a state list of endangered and threatened species by rule (Iowa Administrative Code – Natural Resource Commission [571], Chapter 77)

3.1.1 Existing Fishery Resources

V2F Project

Fisheries and aquatic habitats within the V2F Project are primarily characterized by water temperature (warmwater, cool water or cold water) and flow (perennial, intermittent, ephemeral). As described in Resource Report 2, Section 2.2.3, Waterbodies Crossed, Northern has identified four perennial streams: LMA-S03 (County Ditch 68/Shoff Creek), LMA-S07 (County Ditch 9/Wedges Creek, LMA-S01 (County Ditch 11), and FAR-S02 (Chub Creek) and four intermittent streams: LMA-S01, LMA-S07, ALO-S01, and FAR-S05 that will be crossed by the V2F Project.

Northern reviewed the MPCA beneficial use designations and MDNR fisheries aquatic management areas (AMAs) that are within 0.25 mile (MPCA 2024 and MDNR 2025) and determined all eight waterbodies are designated as warmwater habit areas or are tributaries of warmwater habitat streams generating a default warmwater habitat designation. Based on desktop review, Northern has determined that none of the waterbodies identified within 0.25 mile of the V2F Project are listed as the following:

- the National Wild and Scenic Rivers System (National Wild and Scenic River System 2025)
- Minnesota's Wild and Scenic Rivers Program (MDNR 2020)
- State designed ORVW, ONRW, OIW (MDNR 2020)
- or Iowa Protected Waters (IDNR 2016, 2024a, 2024b).

The Vermillion River, located approximately 0.1 mile south of the Farmington compressor station, is the only designated trout water (cold water fishery) located within one mile of the V2F Project. The closest ORVW and Minnesota Wild and Scenic River is Cannon River, located approximately 4.0 miles southeast of the Faribault M500 D-line extension.

Additionally, the V2F Project crosses four public waterbodies.

- one public natural watercourse, Chub Creek, (M-048-017) on the Faribault M500 D-line
- three public ditch/altered natural watercourses: County Ditch 11 (I-030-010-001), Wedges Creek/County Ditch #9 (I-030-010), and Shoff Creek/County Ditch #68 (I-030-009) on the Lake Mills M500 E-line

No public waters are crossed by the Albert Lea M500 E-line, disconnect sites or the temporary compression sites.

Construction of the V2F Project will cross all waterbodies, including public waters and warmwater habitats with potential to support fish, via HDD; Northern does not plan to open-cut any waterbodies as a part of this Project. Waterbody construction methods and mitigation procedures are discussed in Section 2.2.13 of Resource Report 2. The MP locations of the waterbody crossings along with the state fisheries classifications are listed in Resource Report 2, Table 2.2-3.

The fish species are primarily located in waterbodies classified as warmwater fisheries, which are perennial or intermittent headwater streams and rivers. Fish species present within the V2F Project are classified by MDNR fishing regulations as rough or sport fish and not commercial. No designated cool water or cold water fisheries are crossed by the V2F Project. Note that waterbodies with defaulted beneficial use designations are typically smaller tributaries to larger streams and may not contain suitable fisheries habitat during all or a portion of the year due to seasonally inadequate water levels.

NL27 Project

Fisheries and aquatic habitats within the NL27 Project are primarily characterized by water temperature (warmwater, cool water or cold water) and flow (perennial, intermittent, ephemeral). As described in Resource Report 2, Section 2.2.3, Waterbodies Crossed. Nineteen waterbodies will be crossed by the NL27 Project including 12 perennial streams, six intermittent streams and one open-water, all of which are characterized as warmwater or limited resource habitats; and all waterbodies will be crossed with either HDD or open-cut construction methods.

Northern reviewed the MPCA beneficial use designations for waterbodies crossed by the NL27 Project as well as MDNR fisheries AMAs that are within 0.25 mile (MPCA 2024 and MDNR 2025). Seventeen of the 19 waterbodies crossed are designated as warmwater habitat areas or are tributaries of warmwater habitat streams generating a default warmwater habitat designation. The two other waterbodies (WDC-S02 and SPR-S04) are designated as Limited Resource Value, meaning they contain limited water resource value including recreational fishing quality.

No National Wild and Scenic Rivers, ORNWs or ORVWs are crossed by the NL27 Project. The only listed river within 0.25 mile of the Project is the Rum River, located approximately 0.21 mile east of MP 17.64 on the Minnesota Interconnect 2nd branch line. Additionally, no state managed fisheries occur within 0.25 mile and no designated trout waters (cold water fisheries) are located within one mile of the NL27 Project (MDNR 2020).

A total of eight public watercourses are crossed by the NL27 Project:

- Willmar 3rd branch line upstream crosses the Credit River (M-048-017 [delineated as WIL-S08]) via HDD
- Willmar 3rd branch line downstream crosses natural watercourse/unnamed stream (M-055-022-003 [delineated as WDC-S05]) via open-cut
- Paynesville 2nd branch line crosses two public natural watercourses, Kolling Creek (M-074-010 [delineated as PAY-S01]) and an unnamed stream (M-074-010-003 [delineated as PAY-S02]) via HDD
- Worthington 2nd branch line crosses one public natural watercourse/unnamed stream (I-039-005-005 [delineated as WOR-S01]) via open-cut
- Springfield 2nd branch line crosses three public natural watercourses, (M-055-076-003 [delineated as SPR-S01/St. James Creek], M-055-076-003-034-001 [delineated as SPR-S02/Butterfield Creek], and M-055-076-003 [delineated as SPR-S04/Watonwan River]) via HDD

No public waters are crossed by the Albert Lea E-line, Welcome 2nd line, Minnesota Interconnect 2nd branch line, Alexandria 2nd branch line or the Hugo compressor station uprate

One unnamed public water basin/wetland (70001300 [delineated as WIL-W05]) will be crossed via open-cut on the Willmar 3rd branch line upstream. No other NL27 Project components will cross public water basins/wetlands.

Due to the use of HDD, Northern has reduced potential impacts on Minnesota Public Waters at six locations to foot traffic within the one six-foot-wide travel lane or two three-foot-wide travel lanes between the HDD entry and exit points. Travel lanes associated with HDD crossings will only involve hand clearing/limbing of vegetation aboveground, where needed to sufficiently allow pedestrian travel and installation of tracking wires. Vegetation will be allowed to regrow following completion of the HDD. No fill, excavation, mechanical clearing, or vegetative community conversion will occur between the HDD entry or exit points.

Two public waters and one public water basin will be crossed using open-cut methods; these crossings will reduce impacts to these features by implementing Northern's Procedures and MDNR regulatory requirements. Beds and banks of watercourses and wetlands crossed via open-cut will be temporarily disturbed during installation of the pipelines; areas of temporary disturbance will be returned to pre-construction conditions to the extent practicable. Vegetated areas will be allowed to regrow naturally or seeded with a standard Board of Water and Soil Resources wetland seed mix. Waterbody construction methods and mitigation procedures are discussed in Section 2.2.13 of Resource Report 2. The MP locations of the waterbody crossings along with the state fisheries classifications are listed in Resource Report 2, Table 2.2-4.

Fish species present within the NL27 Project are classified by MDNR fishing regulations as rough or sport fish and not commercial. No cold water fisheries are crossed by the NL27 Project. Note that waterbodies with defaulted beneficial use designations are typically smaller tributaries to larger streams and may not contain suitable fisheries habitat during all or a portion of the year due to seasonally inadequate water levels.

3.1.2 Construction Impacts

For both Projects, construction activities could result in temporary and permanent impacts on fisheries and aquatic resources if sediment flows to off-site waterbodies. Where fisheries are present, the degree of impact on fisheries from construction activities depends on the mitigation measures employed and the timing of construction. Sedimentation and introduction of water pollutants can result in stress, injury, and/or possible mortality of stream biota. Riparian vegetation contributes to the shading of rivers and their tributaries. The vegetation controls the amount of solar radiation that reaches the water surface, which in turn controls the input of heat into the stream system. A discussion of construction impacts related to each Project's construction activities follows.

3.1.2.1 Sedimentation

HDD

In order to minimize impacts on aquatic habitat, Northern will complete waterbody crossings via HDD under all eight waterbodies on the V2F Project and 13 of the 19 waterbodies on the NL27 Project. The secondary method for crossing waterways where HDDs are proposed is realignment and re-drilling the HDD until successful.

The primary impact on aquatic habitat that could occur from HDD activities is an inadvertent release of drilling mud directly or indirectly into a waterbody. Drilling mud from an HDD may

leak through previously unidentified fractures in the material underlying the riverbed, in the area of the mud pits, or along the path of the drill, due to unfavorable ground conditions. Drilling mud consists of naturally occurring nontoxic material, such as bentonite clay, water and other inert additives; however, an increase in turbidity can affect aquatic organisms both directly by burial, abrasion and reduced visibility and indirectly by behavior alterations of prey and predators or food chain effects. Turbidity would reduce water clarity and have a short-term effect to algae and aquatic vegetation growth due to the reduction in sunlight. Increased turbidity in high concentrations also could physically damage fish gills. Fish near the inadvertent release could experience turbidity high enough to damage gills, cause stress or result in death. Turbidity also could affect fish behavior, including their ability to hunt or avoid predators. A decrease in water quality due to turbidity would be a short-term effect that may last hours to days before drilling mud settles. Additionally, bentonite clay from a possible inadvertent release could settle in the interstitial spaces between large substrate particles. These interstitial spaces are important for invertebrates and the egg and fry life stages of fish; fine grain sediment could smother organisms living in these habitats.

Northern will minimize the potential impacts of an inadvertent release of drilling mud by implementing its HDD Plans included in Resource Report 1, Appendix 1A1 and Appendix 1A2. Prior to the start of construction, Northern will review its HDD Plans with its contractors. During construction, Northern will ensure its contractors have sufficient spill containment material and supplies needed to contain an inadvertent release of drilling mud that occurs near a waterbody. These materials and supplies may include, but are not limited to, pumps and hoses, sandbags, straw bales, silt fence, small boats, and turbidity curtains. If the drill operator notes the loss of drilling mud or other indicators of a release, the HDD will be temporarily suspended to allow the contractor and/or Northern's EI time to locate the release. If the release is in or adjacent to a waterway, Northern will deploy BMPs that were previously staged by each waterbody to contain the drilling fluid. Northern will report any releases in the vicinity of a waterbody to the USACE, Minnesota Duty Officer who in turn has responsibility to notify the appropriate state and local agencies. Northern will notify FERC. In cases where inadvertent releases of drilling mud occur along the banks of waterbodies, turbidity curtains will be used to contain the mud within the bank area.

As described in the HDD Feasibility Report (Attachment 3, Appendix 1A1 and Appendix 1A2), hydro-fracture assessments were completed based on comparing the modelled maximum formation limiting pressure with the minimum required drilling fluid annular pressure anticipated to maintain circulation of cuttings to surface. Factors of safety greater than 1.5 are considered to have a low risk for inadvertent releases with a competent standard of care. For the V2F Project, factors of safety between 1.25 and 1.5 are considered to be medium risk, but manageable with attention to matching drilling production with fluid management. All waterbody crossings on the V2F Project have a safety factor greater than 1.5. All HDD waterbody crossings on the NL27 Project have a safety factor greater than 1.5.

Additional mitigations such as reducing pumping the portion of the pilot drill under the waterbody, relying on tripping of the drill rod and minimal mud circulation to clean the pilot hole prior to drilling under the waterbody; managing drilling fluids by maintaining drilling fluid density and sand content, and balancing flow rates and drilling speed; adjusting fluid composition with the use of approved additives for lost circulation, viscosifiers, flocculants or coagulants will be considered

when drilling underneath the waterbodies and the hydro-fracture assessment will be monitored with the actual drilling annular pressures.

Open Cut

Northern will mat across two waterbodies (WIL-S01 and ALX-S02) that are within TWS but are not crossed by the pipeline trench. Northern will complete open-cut, dry-ditch crossings of four waterbodies (WDC-S02, WDC-S05, WOR-S01, and ALX-S02) 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 a dam and flume. These devices will be monitored continuously while in place. 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 six TCSBs will be needed at the four open-cut waterbody crossings and two waterbody crossings that occur within Project TWS but are not intersected by the pipeline. The following stipulations will apply to these temporary bridges.

- A 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, per MPCA requirements, as necessary.
- The temporary bridge will be removed as part of final cleanup and restoration.

Northern will minimize potential impacts on aquatic habitats from sedimentation in areas where open-cut construction methods are required by implementing dry-channel construction techniques and adhering to the FERC Plan and its Procedures. In addition, Northern will follow MPCA sediment and erosion control BMPs to appropriately mitigate sedimentation or the discharge of sediment--laden water. Upon completion of construction, all temporarily disturbed bed and bank areas will be restored to pre-construction conditions, to the extent possible.

For dewatering at the V2F Project disconnect site—Farmington compressor station, Northern will obtain any required water appropriation permits and comply with MDNR seasonal discharge restrictions to minimize potential impacts to the Vermillion River, a designated cold-water trout stream.

As described above, implementation of Northern's HDD Plan, installation of BMPs at inadvertent release locations, use of dry-ditch crossing methods at open-cut water crossings, and adherence to applicable Northern Procedures, MPCA, and MDNR requirements will effectively minimize sedimentation and turbidity on aquatic habitats, including dewatering activities at the V2F Project disconnect site – Farmington compressor station. Therefore, the V2F and NL27 Projects are expected to have minimal impacts on fishery resources.

3.1.2.2 Fuel and Chemical Spills

An inadvertent release of fuel or equipment-related fluids could impact water quality if it reaches waterbodies or ditches that occur within both Projects. Chemicals released during spills could have acute fish impacts, such as altered behavior, changes in physiological processes, or changes in food sources. Fish also could experience greater mortality if a large volume of hazardous liquid is spilled into a waterbody.

Northern will require that contractors adhere to the SPCC Plan (see Resource Report 2, Appendix 2A) prepared for each Project. The SPCC Plan includes preventive measures such as personnel training, equipment inspection, and refueling procedures to reduce the likelihood of spills, as well as mitigation measures such as containment and cleanup materials to minimize potential impacts should a spill occur. Adherence to the SPCC Plan will reduce the chance of a large spill from entering surface waters because construction equipment fueling will be prohibited within 100 feet of the waterbody banks (except for water pumps, which will be placed in secondary containment structures). Hazardous material storage will be prohibited within 100 feet of waterbodies. If a spill were to occur, adherence to the measures provided in the SPCC Plan will decrease the response time for control and cleanup, thus avoiding or minimizing the effects to aquatic resources. Additionally, the SPCC Plan requires that adequate supplies are available on construction spreads of suitable absorbent material and other supplies and equipment necessary for the immediate containment and cleanup of inadvertent spills. Training and lines of communication to facilitate the prevention, response, containment, and cleanup of spills during construction activities also are described in the SPCC Plan.

3.1.3 Operational Impacts

Operational activities for both the V2F and NL27 Projects will be limited primarily to the maintenance of the permanent ROW, as well as activities relating to the inspection, repair, and cleaning of the pipeline extensions. Northern will conduct tree clearing as necessary within the

permanent ROW for both Projects per the Plan and its Procedures. Northern will not conduct vegetation maintenance in the permanent ROW at HDD crossings in riverine environments.

Northern will restore all disturbed areas to preconstruction land cover prior to the completion of construction. Northern does not anticipate significant maintenance being required along any of the pipeline extensions given the predominance of agricultural land use. As such, operation of the Project facilities will not affect waterbodies or fisheries resources. No operational impacts will occur at the temporary compression sites or disconnect sites associated with the V2F Project.

3.2 Vegetation

The vegetation within the V2F and NL27 Projects is characterized by the Western Corn Belt Plains ecoregion and North Central Hardwood Forests ecoregion (U.S. Environmental Protection Agency 2013).

Once mostly covered with tallgrass prairie, more than 80% of the Western Corn Belt Plains is now used for cropland agriculture and much of the remainder is planted in forage for livestock. A combination of nearly level to gently rolling glaciated till plains and hilly loess plains, with average annual precipitation of 26 to 37 inches, which occurs mainly in the growing season, and fertile, warm, moist soils make this one of the most productive areas of corn and soybeans in the world. Agricultural practices have contributed to environmental issues, including surface and groundwater contamination from fertilizer and pesticide applications, as well as concentrated livestock production.

The North Central Hardwood Forests ecoregion is transitional between the predominantly forested Northern Lakes and Forests to the north and the agricultural ecoregions to the south. Land use/land cover in this ecoregion consists of mosaic forests, wetlands and lakes, cropland agriculture, pasture, and dairy operations. The growing season is generally long and warm; the soils are arable and fertile.

MLRAs are geographic areas that are characterized by a particular pattern of soils, climate, water resources, land uses, and farming. The V2F Project crosses through the Central Iowa and Minnesota Till Prairie and the Eastern Iowa and Minnesota Till Prairie MLRAs.

- The Central Iowa and Minnesota Till Prairies MLRA is mostly on a young, nearly level to gently rolling glaciated till plain with moraines and glacial lake plains in some areas. Natural lakes, marshes, and potholes occur throughout the area. Few areas of natural conditions remain within this MLRA, approximately four-fifths of the area is cropland. Remaining areas that are not dominated by agriculture are commonly characterized by species that reflect tallgrass prairie. Little bluestem (*Schizachyrium scoparium*), porcupine grass (*Miscanthus sinensis*), and sideoats gramma (*Bouteloua curtipendula*) are found within drier parts of the landscape. Leadplant (*Amorpha canescens*), Indiangrass (*Sorghastrum nutans*), big bluestem (*Andropogon gerardi*), and prairie dropseed (*Sporobolus heterolepis*) grow on the sloping portions of the landscape. Wet areas of the landscape include sedges (*Carex* spp.), switchgrass (*Panicum virgatum*), bluejoint (*Calamagrostis canadensis*), prairie cordgrass (*Spartina pectinata*), broadleaf cattail (*Typha latifolia*), and river bulrush (*Bolboshoenus fluviatilis*).
- The Eastern Iowa and Minnesota Till Prairies MLRA is nearly level to undulated till plain with long slopes and common karst topography. Few lakes and ponds are present because of the well-established drainage network. The land use in the area is primarily dominated by

agriculture and livestock. Remaining upland areas with well drained soils support natural prairie vegetation characterized by big bluestem, Indiangrass, prairie dropseed, and scattered oak trees. Switchgrass, prairie cordgrass, and bluejoint grow on poorly drained soils. While sedges, rushes, bulrushes, and cattails grow on poorly drained and very poorly drained soils.

Seven of the NL27 Project components are located within the Central Iowa and Minnesota Till Prairie MLRA as described above. Three components are in different MLRAs as listed below.

- Paynesville 2nd branch line is located within the Rolling Till Prairie, which is associated with the prairie pothole region, featuring gently rolling landscapes with regular ponds, lakes and marshes throughout. Land use is predominantly cropland, followed by herbaceous wetlands, grasslands, and open water. Characteristic vegetation within non-agricultural areas consists of big bluestem, little bluestem, porcupine grass, and green needlegrass (*Nassella viridula*). Wet areas commonly feature prairie cordgrass.
- Alexandria 2nd branch line is located within the Wisconsin and Minnesota Thin Loess and Till which is a recently glaciated area characterized by gentle to rolling slopes, loess-mantled till plains, drumlin fields, end moraines, and outwash plains linked with major glacial drainageways, or swamps, bogs, and fens. Lakes, ponds, and marshes are common throughout. Land use within this MLRA is primarily deciduous forests and wooded wetlands. Forest enterprises such as lumber, paper, syrup-making, or tourism are important to the region. Characteristic vegetation includes sugar maple (*Acer saccharum*), basswood (*Tilia americana*), yellow birch (*Betula alleghaniensis*), northern red oak (*Quercus rubra*), quaking aspen (*Populus tremuloides*), eastern hemlock, red pine (*Pinus resinosa*), and white pine (*Pinus strobus*). Wooded wetlands feature species such as black ash, green ash (*Fraxinus pennsylvanica*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), and black spruce.
- Minnesota Interconnect 2nd branch line is located within the Wisconsin and Minnesota Sandy Outwash MLRA, which is nearly level to rolling, especially along waterbodies, with outwash plains, moraines, dunes, lake plains, swamps, bogs, marshes, and lakes throughout the area. The land use in the area is primarily forest and wetlands. Croplands in this MLRA are primarily used for feed grains and livestock forage. On well drained soils, vegetation is typically dominated by jack pine (*Pinus banksiana*), northern pin oak (*Quercus ellipsoidalis*) and bur oak (*Quercus macrocarpa*). Oak barrens and oak savanna were historically common. Poorly drained soils are often dominated by black spruce (*Picea mariana*), tamarack (*Larix laricina*), white cedar (*Thuja occidentalis*), black ash (*Fraxinus nigra*), and sedges (USDA 2022).

Existing Vegetation Resources

Specific vegetation communities that will be crossed by each Project were identified by evaluating the 2011 National Land Cover Database data (Homer et al. 2015) and verified during the 2025 field surveys.

V2F Project

The primary land use and vegetation cover type affected by the V2F Project is agriculture (cropland). The V2F Project consists of 363.78 acres of agriculture land, 27.54 acres of open land, 21.76 acres of industrial/commercial land, 4.34 acres of wetland, 3.18 acres of forested habitat, and 0.59 acre of residential land. Approximately 0.01 acre of open water (a stormwater pond) is

present within ETWS at the Farmington compressor station. Additional information on existing resources along with temporary and permanent impacts from construction and operation of the V2F Project are presented in Table 3.2-1 and discussed below. Additional land use information is provided in Resource Report 8, Section 8.1.

Agriculture (Cropland and Pasture)

The majority of the V2F Project consists of active cropland and pasture. Cropland includes areas that are regularly cultivated and used to grow row crops, including corn and soybeans. Crops observed during the Project field surveys included primarily corn and soybeans.

Forested/Woodland

This vegetation type encompasses upland forested areas, including hardwood forest, mixed hardwood-conifer forest, and planted pine forest communities. Forested upland areas within the ESBs were located adjacent to areas along waterbodies and wetland complexes, wooded lots segregating agricultural fields, and adjacent to residences/driveways. Common species in these areas included bur oak, red oak, green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), quaking aspen, eastern cottonwood (*Populus deltoides*), black walnut (*Juglans nigra*), silver maple, box elder (*Acer negundo*), and butternut (*Carya cordiformis*). Understories within immature upland forested communities consisted of prickly ash (*Zanthoxylum americanum*), sumac species, and invasive shrubs such as common buckthorn (*Rhamnus cathartica*). There are no tree plantations. A majority of the forested land is located on the Faribault M500 D-line; significant wooded areas are not located in the other V2F Project components.

Open Land

This vegetation type encompasses non-forested herbaceous uplands, rangeland, farrow land, open space or pasture, grasslands, early successional old fields, non-agricultural fields and/or other herbaceous areas that are dominated by a mixture of mid-grass or short-grass species, introduced grass species, and annual species. Open land also includes mowed areas and areas of mixed weeds and grass along roadsides.

Open land within the V2F Project consists of hay fields, fallow land, grassland, pastureland, and mowed areas along roadsides. Common species observed included Kentucky bluegrass (*Poa pratensis*), buckwheat (*Fagopyrum esculentum*), reed canary grass (*Phalaris arundinacea*), wild parsnip (*Pastinaca sativa*), alfalfa (*Medicago sativa*), giant ragweed (*Ambrosia trifida*), smooth brome (*Bromus inermis*), orchard grass (*Dactylis glomerata*), yellow foxtail (*Setaria pumila*), big bluestem, and red clover (*Trifolium pratense*). Additionally, Northern confirmed that the land between MP 101.62 and 102.18 on the Faribault M500 D-line is currently enrolled in the CRP. The dominant land cover on the CRP land consisted of big bluestem and Indian grass. No other native prairies or other conservation lands were recorded within the V2F Project.

Industrial and Commercial

This community type encompasses developed areas within the V2F Project that are heavily disturbed and contain little to no vegetation (i.e., graveled and paved roadways, graveled facilities, and parking lots). No vegetation communities or dominant plant species were documented within this community.

Residential

This vegetation type encompasses maintained non-native communities surrounding homes and communities that consist mostly of planted woody vegetation and turf grasses. Residential communities within the V2F Project included species such as green ash, bur oak, Kentucky bluegrass, and a mix of managed trees and exotic landscape plants.

Wetlands

This vegetation type encompasses areas dominated by hydrophytic vegetation and exhibiting hydric soils and wetland hydrology. The wetlands that will be crossed by the V2F Project are classified as follows.

- PEM (seasonally flooded basin/farmed wetland, shallow marsh, wet meadow/disturbed wet meadow, and wet to wet-mesic prairie) that were dominated by reed canary grass; narrowleaf cattail (*Typha angustifolia*); fox sedge (*Carex vulpinoidea*); switchgrass; dark green bulrush (*Scirpus atrovirens*); yellow nutsedge (*Cyperus esculentus*); and witchgrass (*Panicum capillare*) with sparse woody species such as black willow (*Salix nigra*) and sandbar willow (*Salix exigua*).
- PSS (shrub-carr) were dominated by deciduous shrubs such as black willow and gray dogwood (*Cornus racemosa*) along with herbaceous plants such as reed canary grass.
- PFO, which is comprised of floodplain PFO wetlands dominated by American elm and green ash and hardwood PFO swamps dominated by silver maple tree species and herbaceous plants such as riverbank wild rye (*Elymus riparius*)
- PUB (shallow open water) – contained minimal emergent vegetation

As discussed in Resource Report 2, Section 2.3, Northern has designed the V2F Project workspaces to minimize wetland impacts during construction and operation. No permanent conversion of wetland types and no permanent fill placement within wetlands will result. Resource Report 2, Table 2.3-1, provides a summary of the wetlands crossed by the V2F Project.

NL27 Project

The primary land use and vegetation cover type affected by the NL27 Project is agriculture (cropland). The NL27 Project consists of approximately 414.48 acres of agriculture land, 103.27 acres of open land, 22.14 acres of industrial/commercial land, 12.20 acres of forested habitat, and 9.94 acres of residential land, and 5.31 acres of wetlands. Approximately 0.02 acre of open water is present within the Willmar 3rd branch line upstream. Additional information on existing resources along with temporary and permanent impacts from construction and operation of the NL27 Project are presented in Table 3.2-2 and discussed below. Additional land use information is provided in Resource Report 8, Section 8.1. The vegetation types are described in the V2F section above; only the dominant plant species are listed for the different vegetation types for the NL27 Project.

Agriculture (Cropland and Pasture)

The majority of the NL27 Project consists of active cropland and pasture. Crops observed during the Project field surveys included primarily corn and soybeans.

Forested/Woodland

Common species within the NL27 Project included bur oak, white oak (*Quercus alba*), green ash, boxelder, red maple, quaking aspen, red elm (*Ulmus rubra*), Siberian elm (*Ulmus pumila*), American basswood (*Tilia americana*), and eastern red cedar (*Juniperus virginiana*). Understories within immature upland forested communities consisted of prickly ash, gooseberry (*Ribes cynosbati*), common elderberry (*Sambucus canadensis*), and invasive shrubs such as common buckthorn. There are no planted pine tree communities.

Open Land

Open land within the NL27 Project consists of hay fields, fallow land, grassland, and pastureland. Common species observed included Kentucky bluegrass, reed canary grass, alfalfa, giant ragweed, smooth brome, orchard grass, yellow foxtail, big bluestem, common milkweed, Indiangrass, common mullein (*Verbascum thapsus*), fescue (*Festuca* spp.), false sunflower (*Heliopsis helianthoides*), and red clover.

Industrial and Commercial

This community type encompasses developed areas within the NL27 Project that are heavily disturbed and contain little to no vegetation (i.e., graveled and paved roadways, graveled facilities and parking lots). No vegetation communities or dominant plant species were documented within this community.

Residential

Residential and commercial areas within the field survey for the NL27 Project included species such as bur oak, fescue, Kentucky bluegrass, common dandelion (*Taraxacum officinale*), and a mix of managed trees and exotic landscape plants.

Wetlands

The wetlands that will be crossed by the NL27 Project are classified as follows.

- PEM (seasonally flooded basin/farmed wetland, wet meadow/disturbed wet meadow, shallow marsh, and deep marsh) that are dominated by reed canary grass, narrowleaf cattail, hybrid cattail (*Typha* X *glauca*), northern water plantain (*Alisma triviale*), river bulrush, giant goldenrod (*Solidago gigantea*), barnyard grass (*Echinochloa crus-galli*), fall panic grass (*Panicum dichotomiflorum*), yellow nutsedge, and with sparse woody species such as black willow and sandbar willow.
- PSS (shrub-carr) were dominated by deciduous shrubs such as black willow, sandbar willow, red-osier dogwood (*Cornus sericea*), and gray dogwood along with herbaceous plants such as reed canary grass.
- PFO, which is comprised of floodplain forest dominated by silver maple, quaking aspen, and green ash and hardwood swamps dominated by boxelder and green ash tree species and herbaceous plants such as reed canary grass and wood nettle (*Laportea canadensis*).

As discussed in Resource Report 2, Section 2.3, Northern has designed the NL27 Project workspaces to minimize wetland impacts during construction and operation. Resource Report 2, Table 2.3-2, provides a summary of the wetlands crossed by the NL27 Project.

3.2.1 Construction Impacts

V2F Project

Table 3.2-1 identifies the general vegetation types that will be affected by the V2F Project. The primary impact on vegetation will be a temporary loss of vegetative cover associated with ground-disturbing activities, which will occur in conjunction with the installation of the pipeline and also during the disconnect activities. Given that the predominant land use within the V2F Project is agricultural, and riparian zones associated with perennial waterbodies will be avoided to the greatest extent practicable through the use of HDD crossing methods, anticipated vegetation impacts are minimal. These impacts are primarily limited to the temporary loss of one growing season of crops and tree clearing required for pipeline construction.

Northern has minimized workspace within forested areas, resulting in the removal of approximately 3.18 acres of trees. However, approximately 0.69 acre of trees within the Farmington compressor station will remain undisturbed. Immediately following the restoration of the ROW, landowners will be able to re-establish agricultural practices. Secondary effects associated with disturbances to vegetation could include increased soil erosion, loss of topsoil, increased potential for the introduction and establishment of invasive or noxious weed species, potential increases in fugitive dust, potential visual resource impacts, and potential wildlife and agricultural productivity impacts. Wetland vegetation communities are discussed in Resource Report 2, Section 2.3, Wetlands.

Table 3.2-1 Vegetation Impacts by Land Cover Type for V2F Project

Project Component	Agricultural (acres)		Forested (acres)		Open Land (acres)		Industrial/ Commercial (acres)		Residential (acres)		Wetland (acres)		Open Water (acres)		Total (acres)	
	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm
Pipeline Extensions																
Lake Mills M500 E-line	168.53	42.63	0.69	0.14	7.45	0.59	2.30	0.70	0.52	0.00	1.37	0.94	0.00	0.00	**180.86**	**45.00**
Albert Lea M500 E-line	41.98	9.76	0.22	0.15	0.84	0.12	0.21	0.00	0.00	0.00	0.24	0.01	0.00	0.00	**43.49**	**10.04**
Faribault M500 D-line	148.91	31.28	1.65	0.62	17.48	4.02	1.48	0.41	0.07	0.00	2.32	0.98	0.00	0.00	**171.91**	**37.31**
Subtotal	**359.42**	**83.67**	**2.56**	**0.91**	**25.77**	**4.73**	**3.99**	**1.11**	**0.59**	**0.00**	**3.93**	**1.93**	**0.00**	**0.00**	**396.26**	**92.35**
A-Line Pipeline Disconnect Sites																
Ventura compressor station	0.76	0.00	0.00	0.00	0.02	0.00	3.94	0.00	0.00	0.00	0.01	0.00	0.00	0.00	**4.73**	**0.00**
Farmington compressor station	0.00	0.00	0.62	0.00	0.68	0.00	3.97	0.00	0.00	0.00	0.19	0.00	0.01	0.00	**5.47**	**0.00**
Subtotal	**0.76**	**0.00**	**0.62**	**0.00**	**0.70**	**0.00**	**7.91**	**0.00**	**0.00**	**0.00**	**0.20**	**0.00**	**0.01**	**0.00**	**10.20**	**0.00**
Temporary Compression Sites																
La Crosse BL MNB73201 launcher/ABA 05	1.30	0.00	0.00	0.00	0.44	0.00	0.38	0.00	0.00	0.00	0.07	0.00	0.00	0.00	**2.19**	**0.00**
Lake Mills compressor station	0.00	0.00	0.00	0.00	0.32	0.00	4.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**5.29**	**0.00**
Owatonna compressor station	0.00	0.00	0.00	0.00	0.00	0.00	4.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**4.33**	**0.00**
Northfield #1	2.30	0.00	0.00	0.00	0.31	0.00	0.18	0.00	0.00	0.00	0.14	0.00	0.00	0.00	**2.93**	**0.00**
Subtotal	**3.60**	**0.00**	**0.00**	**0.00**	**1.07**	**0.00**	**9.86**	**0.00**	**0.00**	**0.00**	**0.21**	**0.00**	**0.00**	**0.00**	**14.74**	**0.00**
V2F Project Total	**363.78**	**83.67**	**3.18**	**0.91**	**27.54**	**4.73**	**21.76**	**1.11**	**0.59**	**0.00**	**4.34**	**1.93**	**0.01**	**0.00**	**421.20**	**92.35**

Source: 2011 National Land Cover Database (Homer et al., 2015).

NL27 Project

Table 3.2-2 identifies the general vegetation types that will be affected by the NL27 Project. The primary impact on vegetation will be a temporary loss of vegetative cover associated with ground-disturbing activities, which will occur in conjunction with the installation of the pipeline. Given that the predominant land use within the NL27 Project is agricultural, and riparian zones associated with perennial waterbodies will be avoided to the greatest extent practicable through the use of HDD crossing methods, anticipated vegetation impacts are minimal. These impacts are primarily limited to the temporary loss of one growing season of crops and removal of open land vegetation required for pipeline construction.

Northern has minimized workspace within forested areas on the NL27 Project, resulting in the removal of approximately 12.20 acres of trees; of which 0.45 acre of forested and scrub-shrub wetland type conversion is included as part of the construction of the Willmar 3rd branch line upstream. See Section 3.2.2, Operational Impacts, for permanent wetland type conversion. Refer to Resource Report 2 Table 2.3-2 for details on impacts on wetland communities.

Immediately following the restoration of the ROW, landowners will be able to re-establish agricultural practices. Secondary effects associated with disturbances to vegetation could include increased soil erosion, loss of topsoil, increased potential for the introduction and establishment of invasive or noxious weed species, potential increases in fugitive dust, potential visual resource impacts, and potential wildlife and agricultural productivity impacts. Wetland vegetation communities are discussed in Resource Report 2, Section 2.3, Wetlands.

Table 3.2-2 Vegetation Impacts by Land Cover Type for NL27 Project

Project Component	Agricultural (acres)		Forested (acres)		Open Land (acres)		Industrial/ Commercial (acres)		Residential (acres)		Wetland (acres)		Open Water (acres)		Total (acres)	
	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm
Pipeline Extensions																
Lake Mills M500 E-line	36.75	11.27	0.40	0.24	9.38	3.71	0.78	0..37	0.27	0.27	0.00	0.00	0.00	0.00	**47.58**	**15.86**
Albert Lea M500 E-line	58.71	17.06	0.24	0.09	11.22	1.74	2.17	0.02	0.02	0.00	0.27	0.11	0.00	0.00	**72.63**	**19.02**
Willmar 3rd Branch Line Upstream	5.52	1.17	2.45	0.92	14.02	2.72	3.08	0.98	6.72	1.87	1.19[1]	0.72[2]	0.02	0.00	**33.00**	**8.38**
Willmar 3rd Branch Line Downstream	89.46	21.34	0.94	0.33	16.78	4.14	0.63	0.31	0.94	0.00	1.44	0.90	0.00	0.00	**110.19**	**27.02**
Welcome 2nd line	27.37	7.41	0.00	0.00	0.72	0.12	0.88	0.81	0.00	0.00	0.00	0.00	0.00	0.00	**28.97**	**8.34**
Paynesville 2nd Branch Line	19.36	4.03	3.43	1.47	18.27	5.17	7.03	0.64	0.44	0.21	0.78	0.39	0.00	0.00	**49.31**	**11.97**
Worthington 2nd Branch Line	32.78	12.04	0.08	0.00	2.87	0.93	0.42	0.24	0.00	0.00	0.00	0.00	0.00	0.00	**36.15**	**13.21**
Springfield 2nd Branch Line	106.77	36.82	0.71	0.24	10.87	4.15	1.17	0.02	0.09	0.00	0.28	0.05	0.00	0.00	**119.89**	**41.28**
Minnesota Interconnect 2nd Branch Line	26.91	5.21	2.92	0.00	9.12	1.31	1.03	0.01	0.02	0.00	0.07	0.00	0.00	0.00	**40.07**	**6.53**
Alexandria 2nd Branch Line	10.85	2.01	1.03	0.29	10.02	2.04	0.42	0.05	1.44	0.76	1.28	0.78	0.00	0.00	**25.04**	**5.93**
Subtotal	**414.48**	**118.36**	**12.20**	**3.58**	**103.27**	**26.03**	**17.61**	**3.08**	**9.94**	**3.11**	**5.31**	**2.95**	**0.02**	**0.00**	562.83	157.48
Aboveground Facility																
Hugo Compressor Station	0.00	0.00	0.00	0.00	0.00	0.00	4.53	4.53	0.00	0.00	0.00	0.00	0.00	0.00	**4.53**	**4.53**
Subtotal	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.53**	**4.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	4.53	4.53
NL27 Project Total	**414.48**	**118.36**	**12.20**	**3.58**	**103.27**	**26.03**	**22.14**	**7.98**	**9.94**	**3.11**	**5.31**	**2.95**	**0.02**	**0.00**	567.36	162.01

Source: 2011 National Land Cover Database (Homer et al., 2015).
[1]Includes 0.45 acre of temporary wetland type conversion of forested and scrub-shrub wetland.
[2]Includes 0.17 acre of permanent wetland type conversion of forested wetland and 0.02 acre of permanent wetland type conversion of scrub-shrub wetland.

3.2.1.1 Abandonment Facilities

V2F Project

In 2029, disconnection of the A-line at two locations and installation of temporary compression at one location will temporarily impact 12.39 acres of vegetation, consisting of industrial/commercial land use (8.29 acres), open land (1.14 acres), agricultural land (2.06 acres), wetland (0.27 acre), and open water (0.01 acre). An additional 0.62 acre of forested area is within the planned workspace at the Farmington compressor station. However, Northern does not anticipate tree removal or impacts on this area because work will be limited to disconnecting the A-line and dewatering activities. Shrubs and trees used for vegetative screening at existing facilities will remain undisturbed.

After the disconnect of the A-line, disturbed areas will be restored similar to the adjacent land cover. Northern will seed and stabilize disturbed areas in accordance with the FERC Plan and stormwater permit requirements. Actively cultivated agricultural land will not be seeded. Open uplands will be seeded using seed mixes recommended by landowners or pursuant to the USDA NRCS seeding recommendations. Following restoration, all disturbed lands associated with the abandonment facilities will be allowed to revert to preconstruction uses. Based on these measures, no long-term impacts on vegetation are expected to occur from disconnect activities.

NL27 Project

No abandonment is proposed for the NL27 Project.

3.2.1.2 Pipeline Extensions

V2F Project

In 2027 and 2028, construction of the three pipeline extensions along with the three temporary compression sites for the extensions will temporarily disturb a total of 408.81 acres of vegetation consisting primarily of agricultural lands (361.72 acres), open land (26.40 acres), industrial/commercial land (13.47 acres), wetlands (4.07 acres), forested land (2.56 acres), and residential land (0.59 acre). This total includes the new permanent ROW, TWS adjacent to the permanent ROW, ETWS, staging areas, and access roads. Of the total area of vegetation disturbance, approximately 88% consists of agricultural land. Tree clearing will be required for all three pipeline extensions. No tree clearing will occur within temporary compression site locations and Northern will not remove any shrubs or trees used for vegetative screening at existing facilities.

Following construction, disturbed areas will be restored to preconstruction conditions. Northern will seed and stabilize disturbed areas in accordance with the Plan and its Procedures (FERC 2013a; 2013b) and stormwater permit requirements. Actively cultivated agricultural land will not be seeded. Northern will seed restored areas using seed mixes recommended by the landowners or pursuant to USDA/NRCS seeding recommendations that are based on previous extensive consultations with the NRCS. Upon implementation of these measures, no long-term impacts on vegetation are expected to occur.

NL27 Project

In 2027, construction of ten pipeline expansions will temporarily disturb a total of 562.83 acres consisting of agricultural lands (414.48 acres), open land (103.27 acres), industrial/commercial land (26.03 acres), forested land (12.20 acres), residential land (9.94 acres), wetlands (5.31 acres)

and open water (0.02 acre). This total includes the new permanent ROW, TWS adjacent to the permanent ROW, ETWS, staging areas, and access roads. Of the total area of vegetation disturbance, approximately 74% consists of agricultural land. Tree clearing within workspaces will be required for the Lake Mills M500 E-line, Albert Lea M500 E-line, Willmar 3rd branch line upstream, and the Willmar 3rd branch line downstream extensions. This includes a total of 0.45 acre of wetland type conversion that will occur as a result of the NL27 Project - Willmar 3rd branch line upstream component, of which 0.17 acre of forested wetland and 0.02 acre of scrub-shrub wetland will be permanently maintained in an emergent state. Refer to Resource Report 2 Section 2.3, Wetlands and Table 2.3-2 for details on impacts on wetland communities.

Following construction, disturbed areas will be restored to preconstruction conditions. Northern will seed and stabilize disturbed areas in accordance with the Plan and it's Procedures (FERC 2013a; 2013b) and stormwater permit requirements. Actively cultivated agricultural land will not be seeded. Northern will seed restored areas using seed mixes recommended by the landowners or pursuant to USDA/NRCS seeding recommendations. Upon implementation of these measures, no long-term impacts on vegetation are expected to occur.

3.2.1.3 Aboveground Facilities

V2F Project

No new facilities will be constructed as part of the V2F Project. Northern will install two block valves within existing facilities on the Lake Mills M500 E-line[1] and the Faribault M500 D-line. These installations will result in approximately 1.27 acres of permanent impact on areas classified as industrial/commercial land use. In addition, three existing facilities, totaling 0.17 acre of industrial/commercial land, will be removed. These areas will be restored to their original land use following removal activities. Refer to Resource Report 8, Table 8.1-4 and Table 8.1-5 for details of impacts on existing land uses from aboveground facilities and Resource Report 1 Section 1.3.2 for further descriptions of aboveground facility construction.

NL27 Project

The NL27 Project will require installation of several new tie-in valve settings and receiver relocations along with a turbine uprate at the Hugo compressor station totaling 10.95 acres of land. Northern will remove four existing facilities, resulting in 0.68 acre of industrial/commercial land being removed and restored to their original land use. Refer to Resource Report 8, Table 8.1-8 for details of impacts on existing land uses from aboveground facilities and Resource Report 1, Section 1.3.3 and Table 1.3-4 for further descriptions of aboveground facility construction. The affected acreage for each of the aboveground appurtenant facilities by existing land use type is detailed in Table 3.2-3 below.

[1] Austin and Wells branch line regulation station is counted in both Project footprints.

Table 3.2-3 Vegetation Impacts by Land Cover Type for NL27 Project Aboveground Appurtenant Facilities

Facility Name	MP	Proposed Activity	Associated Project Component	Existing Land Use	Total Construction Acres[1]	Total Operational Acres[1]
Hugo compressor station (existing)	NA	Compressor uprate	Stand-alone component	Industrial/Commercial	4.53	4.53
Austin and Wells branch line regulation station	42.49	None	Lake Mills M500 E-line	Industrial/Commercial	0.25[5]	0.25[5]
Lake Mills tie-in valve setting	44.81	New valve setting	Lake Mills M500 E-line	Agricultural 0.08 Open Land 1.27 Residential 0.27	1.62[2]	1.62[2]
Albert Lea tie-in valve setting	7.06	New valve setting	Albert Lea M500 E-line	Open Land	0.18	0.18
Willmar 24-inch branch line-MNB75603-Receiver	N/A	Receiver will be relocated, facility will be removed	Willmar 3rd branch line upstream	Industrial/Commercial	0.40	0.00[4]
Willmar tie-in valve setting	3.37	To be removed	Willmar 3rd branch line upstream	Industrial/Commercial	0.23	0.00[4]
Credit River MN #1	5.13	Add relocated receiver to existing TBS	Willmar 3rd branch line upstream	Industrial/Commercial	0.98	0.98
MNB75603 Willmar D-line 24-inch extension receiver	6.38	Receiver will be relocated, no footprint mods	Willmar 3rd branch line downstream	Industrial/Commercial	0.30	0.00[3]
Willmar 3rd branch line downstream receiver	10.95	New facility, receiver	Willmar 3rd branch line downstream	Agricultural 0.15 Open Land 0.01	0.16	0.16
Willmar 3rd branch line downstream tie-in valve setting	11.16	New valve setting	Willmar 3rd branch line downstream	Agricultural 0.23 Open Land 0.06	0.29	0.29
Welcome south receiver and MAOP regulator	10.47	Below ground hot tap after the regulators	Welcome 2nd line	Industrial/Commercial	0.77	0.00[3]
Welcome tie-over valve setting	11.71	New valve setting	Welcome 2nd line	Agricultural 0.10 Open Land 0.02	0.12	0.12
Dooley's #2	2.45	Existing TBS – tie-ins only	Paynesville 2nd branch line	Industrial/Commercial	0.29	0.00[3]

Facility Name	MP	Proposed Activity	Associated Project Component	Existing Land Use	Total Construction Acres[1]	Total Operational Acres[1]
Paynesville tie-in valve setting	0.00	New valve setting	Paynesville 2nd branch line	Industrial/ Commercial 0.07 Open Land 0.07	0.14	0.14
Lakefield Tie-Over Regulating Station	19.34	Relocate receiver, no footprint mods	Worthington 2nd branch line	Industrial/Commercial	0.19	0.00[3]
Worthington 2nd line MNB87002 Receiver	21.51	New facility with relocated receiver	Worthington 2nd branch line	Agricultural 0.29 Industrial/ Commercial 0.03 Open Land 0.09	0.41	0.41
Springfield 2nd branch line terminus valve setting	13.82	To be removed	Springfield 2nd branch line	Industrial/Commercial	0.01	0.00[4]
Springfield 2nd branch line downstream RMV	19.90	New facility with RMV	Springfield 2nd branch line	Agricultural 0.12 Open Land 0.03	0.15	0.15
Springfield 2nd branch line tie-in valve setting	21.22	Expanded block valve setting -new tie-in valve setting	Springfield 2nd branch line	Agricultural 0.10 Open Land 0.04	0.14	0.14
MIC block valve tie-in setting	17.64	Existing block valve setting – tie-in will be removed	Minnesota Interconnect 2nd branch line	Industrial/Commercial	0.01	0.00[3]
MIC tie-in valve setting	19.23	New valve setting	Minnesota Interconnect 2nd branch line	Agricultural 0.05 Open Land 0.11	0.16	0.16
Alexandria 2nd branch line terminus valve setting	16.80	To be removed	Alexandria 2nd branch line	Industrial/Commercial	0.04	0.00
Alexandria 2nd branch line tie-in valve setting	18.08	New valve setting	Alexandria 2nd branch line	Agricultural 0.19 Industrial/ Commercial 0.05 Open Land 0.02	0.26	0.26
NL27 Project Total					**11.63**	**9.14**

[1] Includes permanent access roads(s)
[2] Includes 2.21 acres of existing residential driveway
[3] Facility not needed for operation of NL27 Project
[4] Facility will be removed as part of NL27 Project and facility easement released
[5] Austin and Wells branch line regulation station is counted in both Project footprints.

3.2.2 Operational Impacts

Operational activity on the pipelines for both Projects will be limited primarily to the maintenance of the pipeline ROWs, as well as the inspection, repair, and cleaning of the pipelines. Northern will use public roads to gain access to the ROW and the aboveground appurtenances for maintenance and inspection activities. Disturbed portions of the ROW, TWS, ETWS, staging areas, and temporary access roads will be restored to preconstruction land cover.

V2F Project

Approximately 83.67 acres of agricultural land will be disturbed by operation of the pipeline; however, as farming practices are allowed over the proposed pipelines, actual impacts on landowners will be minimal. A total of 0.91 acre of forested land will be impacted by operational clearing activities and be converted to open land use. A total of 1.93 acres of herbaceous wetland is anticipated to be disturbed by the operation of the pipelines. No permanent conversion of wetland types will occur as a result of the Project. As vegetation maintenance is normally not required in agricultural cropland, grazing areas, residential areas, or herbaceous wetlands, no long-term impacts on vegetation are anticipated to occur during operational activities.

NL27 Project

Approximately 118.36 acres of agricultural land will be disturbed by operation of the pipelines; however, as farming practices are allowed over the proposed pipelines, actual impacts on landowners will be minimal. A total of 3.58 acres of forested land will be impacted by operational clearing activities and be converted to open land use. A total of 2.95 acres of wetland are anticipated to be disturbed by the operation of the pipelines. This includes 0.17 acre of forested wetland and 0.02 acre of scrub-shrub wetland that will be permanently maintained in an emergent state. As vegetation maintenance is normally not required in agricultural cropland, grazing areas, residential areas, or herbaceous wetlands, no long-term impacts on vegetation are anticipated to occur during operational activities, except for the area of wetland type conversion described above.

3.2.3 Unique, Sensitive, or Protected Vegetation

Data was obtained from the Minnesota Geospatial Commons website to determine the presence or absence of known unique, sensitive, or protected plant communities within the V2F and NL27 Projects. This includes an evaluation of RSEAs, MBS sites of biodiversity significance, and other pertinent information related to tree clearing and disposal protections.

V2F Project

RSEAs are natural areas or ecologically significant terrestrial, or wetland areas identified by the MDNR.

- The Faribault M500 D-line contained two RSEAs between MP 98.95 and MP 99.09 and MP 102.06 and MP 102.18.

MBS sites of biodiversity significance rank natural resource sites based on the context and ecological function of the landscape, the quality and rarity of native plant communities, and the quality and rarity of species at the site to help guide conservation and management.

- The Lake Mills M500 E-line extension crosses the Manchester 26 MBS between MP 42.11 and MP 42.12. The site is moderately ranked for significance and contains a southern mesic prairie native plant community (Ups23a).
- The Faribault M500 D-line extension crosses the Eureka 27 MBS between MP 102.06 and MP 102.18. This site is moderately ranked and contains a red oak-white oak native plant community (MHs37a).

The RSEAs and MBS sites will be crossed via HDD and only a six-foot-wide pedestrian foot path to help guide the HDD and monitor for inadvertent releases will be used. No mechanized vegetation clearing or ground disturbance will be completed. Vegetated areas within the foot-traffic travel lane will be allowed to revegetate naturally. No impacts on RSEAs or MBS sites are anticipated as a result of the V2F Project.

There are several additional sites within 0.25 mile of the V2F Project. They are as follows:

- Chapa ka-say-za MBS site is located just north of ALO-SA-004. This site is below the minimum biodiversity threshold for statewide significance, but it may have conservation value at the local level. This site also contains the Chapa kak-say-za WMA. Northern has designed the V2F Project to avoid this location.
- RSEAs near the Farmington compressor station and Faribault M500 D-line
- MBS sites near the Lake Mills M500 E-line: Church Lake, Albert Lea M500 E-line: Berlin 19 with associated southern mesic oak-basswood forest [MHs39] and southern mesic prairie [Ups23a] native plant communities, and Faribault M500 D-line: Chub Lake South
- WMA near the Lake Mills compressor station: Peterson Potholes WMA.

These sites do not overlap the V2F Project area and will not be impacted by the V2F Project. Additionally, Northern will follow the FERC Plan and its Procedures, including adherence to prescribed erosion prevention, sediment control, site stabilization, and resource protection measures, to the extent practicable. The FERC Plan and Northern's Procedures incorporate BMPs designed to protect off-site transport of sediment and to minimize secondary disturbance to adjacent resources. Implementation of these BMPs will maintain protection of off-site plant communities and waterbodies present at the MBS sites, minimizing indirect impacts to them resulting from the Project. They can be viewed on Figure 1-4 in Resource Report 1.

Tree clearing will occur on the Lake Mills M500 E-line, Albert Lea M500 E-line and Faribault M500 D-line in Freeborn, Steele, and Dakota counties, Minnesota, respectively. All three of these counties are listed as quarantine counties for EAB (MDA 2025). Northern will comply with the MDA and EAB quarantine regulations and will not transport ash trees (limbs, branches, stumps, or chips) outside of the quarantine zone. Northern typically cuts trees and hauls them off for disposal at a landfill within the applicable county; however, if requested by the landowner, Northern will leave cut trees on the landowner's property for beneficial reuse. If a landowner requests that Northern remove cut trees, Northern will find a disposal location within each EAB quarantine area to prevent transportation of potentially infected wood outside of the quarantine area. The IDNR has no EAB regulations, and no tree removal is planned for Project components in Iowa (IDNR 2025).

The MDNR tracks oak wilt in Minnesota, which is caused by an invasive fungus that may affect and kill all species of oak trees (MDNR 2024). The MDNR maintains a map of the county distribution

of oak wilt in Minnesota. According to the mapping, all of the Minnesota V2F Project components occurring within Freeborn, Steele, and Dakota counties, Minnesota are within the oak-wilt infected area.

The high-risk time when oaks are most susceptible to infection is from April 1 through July 15. If the spring is unusually warm, the risk of oak wilt can occur before April. If the daily high temperature is about 60 degrees Fahrenheit or higher for six consecutive days, there may be a risk of oak wilt. Northern will attempt to limit disturbance to oak stands during this time; however, avoidance of all oak removal may not be possible. If Northern removes oaks between April 1 and July 15, Northern will comply with MDNR recommendations to apply water-soluble paint or shellac within ten minutes to the cuts. The outer three growth rings and bark will be totally covered with the paint or shellac.

Northern plans to clear trees between February and March 2027, which is outside of the high-risk time when oak species are most susceptible to infection. If an infected oak tree is cut, Northern will not remove it from the property but instead tarp the infected tree to prevent the spread of the disease. After July 15, Northern will chip or de-bark infected oak trees. At this time the IDNR does not have regulations or quarantine zones for oak wilt. Instead, the IDNR recommends the safest tree trimming timeframe is between November 1 and March 14 (IDNR 2024c).

The MDA also recognizes Dutch elm disease as a fungus that can kill elm trees and other species (MDA 2023c). Dutch elm disease occurs statewide in Minnesota. The MDA does not have state or federal regulations or quarantine zones for Dutch elm disease but recommends limiting removal and disposal of elm trees. Northern will not transport cut elm trees outside of the counties where they originated. Further, if a tree is suspected to be infected with Dutch elm disease, Northern will follow University of Minnesota Extension recommendations and chip or bury the tree (2025).

There are no other unique, sensitive or protected vegetation types identified in the V2F Project.

NL27 Project

Four RSEAs were identified as being crossed by the NL27 Project. The RSEAs occur along the Willmar 3rd branch line upstream, Paynesville 2nd branch line and Alexandria 2nd branch line.

- One RSEA intersects the Willmar 3rd branch line upstream between MP 4.04 and MP 4.20.
- Two hydrologically connected RSEAs intersect the Paynesville 2nd branch line:
    - One between MP 0.00 and MP 0.06, and within ETWS PAY 005; and another between MP 1.71 and MP 2.36.
- One RSEA intersects the Alexandria 2nd branch line between MP 17.24 and MP 17.54.

Eight additional RSEAs were identified within a 0.25-mile buffer of the NL27 Project area and can be viewed on Figure 1-5 in Resource Report 1. These sites do not directly overlap the NL27 Project area and will not be impacted by Project activities.

Northern will minimize impacts on these RSEAs, to the extent practicable. Northern will follow the FERC Plan, its Procedures and MPCA required erosion and sediment control measures to prevent sediment runoff from the Project. Areas where temporary vegetation disturbance occurs will be allowed to re-establish naturally or seeded per landowner or Northern requirements implementing NRCS approved seed mixes where required.

The NL27 Project intersects three MBS sites classified as the following:

- Below the minimum biodiversity threshold - Albert Lea M500 E-line (Berlin 17; MP 5.21–5.39), Springfield 2nd branch line (Riverdale 28 SE; MP 15.20–15.28, and Riverdale 28 NW; MP 16.18–16.25),
- Moderate biological significance: Springfield 2nd branch line (Riverdale 20; MP 17.39 and 17.55), and
- High biological significance - Paynesville 2nd branch line (Kolling Creek; MP 0.54 and 0.61 and MP 0.74 and 0.84).

All mapped MBS sites are associated with field delineated wetlands and/or occur in proximity to significant streams or waterbodies within the NL27 Project area. Northern will avoid impacts on the high significance Kolling Creek MBS site and the associated waterbody (Kolling Creek) at MP 0.54–0.61 by using HDD to cross beneath this feature. The crossing between MP 0.74 and 0.84 will be constructed using open cut methods, as this portion of the MBS site consists of disturbed pasture and road ROW dominated by non-native grasses and is unlikely to provide meaningful ecological value to the Kolling Creek MBS, which is primarily located north of the Project area and associated with wetlands and waterbodies outside the construction corridor.

Northern will minimize impacts on all MBS sites to the extent practicable by implementing the FERC Plan, its Procedures and MPCA required erosion and sediment control measures to prevent sedimentation. Temporarily disturbed vegetation will be allowed to naturally reestablish or will be reseeded per landowner or Northern requirements, using NRCS approved seed mixes where applicable.

Two additional MBS sites classified as below the minimum biodiversity threshold are located immediately adjacent to the NL27 Project: one near the Albert Lea M500 E-line (approximately 400 feet south of MP 4.00) and one near the Willmar 3rd branch line downstream, located approximately 100 feet north of MP 9.38. The latter site corresponds to the previously discussed Chapa kak say za WMA (see V2F Project discussion in Section 3.2.3), and the former is mapped as Rice Lake. Northern anticipates no impact on either area from Project activities.

Additionally, 11 MBS sites are located within 0.25 mile of the NL27 Project area, including Manchester 13, Manchester 26 (Lake Mills M500 E-line); Berlin 5, Berlin 18, Berlin 19, Fositen Lake (Albert Lea M500 E-line); Lakeville 35 (Willmar 3rd branch line upstream); Riverdale 18, Riverdale 18 East, Riverdale 17 (Springfield 2nd branch line); Stanchfield-rum Rum junction, and Springvale 29 (Minnesota Interconnect 2nd branch line). These sites do not overlap the NL27 Project area and will not be impacted by Project activities. Additionally, implementation of FERC Plan and its Procedures, including adherence to prescribed erosion prevention, sediment control, site stabilization, and resource protection measures, to the extent practicable will maintain protection of off-site plant communities and waterbodies present at the MBS sites, minimizing indirect impacts to them resulting from the Project.

The MDNR has identified calcareous fens within the vicinity of two Project components. The MDNR consultation letter for Willmar Upstream (MCE-2025-00996) indicated a calcareous fen (Kelleher Park - ID#41531), which is located approximately 5.0 miles north-northeast of MP 4.00. Populations of two state-listed threatened species sterile sedge (*Carex sterilis*) and stream parsnip (Berula erecta) have been documented within the fen. The MDNR consultation letter for the Paynesville 2nd branch line (MCE-2025-00993) indicated two calcareous fens: Big Lake SW-

ID#24729, which is located 1.13 miles southeast of staging area PAY-SA-002 and Roscoe North -ID#24694, which is located 2.21 miles northwest Dooley's #2. Two state-listed threatened plants, sterile sedge and hair-like beak rush (*Rhynchospora capillacea*) have been documented in these fens. Northern's SWPPPs does not include additional protection specifically for calcareous fens due to the distance between the Project area and the calcareous fens. To ensure compliance with Minnesota Wetland Conservation Act, Northern will consult with the Calcareous Fen Program Coordinator to evaluate the potential for direct or indirect impacts to the calcareous fens through construction of the Project. Document for this consultation will be provided to FERC in a supplemental filing.

Tree clearing will occur on all NL27 Project pipeline extensions in Freeborn, Steele, Scott, Carver, Stearns, Jackson, Watonwan, Isanti, and Morrison counties, Minnesota, except along the Welcome 2nd Line in Martin County. All counties where clearing is planned are designated EAB quarantine areas (MDA 2025). Northern will follow the V2F mitigation measures to prevent the movement of potentially infested wood outside the quarantine zone.

Components of NL27 Project within the oak-wilt infected area include the Lake Mills M500 E-line, Albert Lea M500 E-line, Willmar 3rd branch line upstream, Willmar 3rd branch line downstream, Paynesville 2nd branch line, Minnesota Interconnect 2nd branch line, and the Alexandria 2nd branch line. Northern will follow the mitigation measures described in the V2F section to prevent oak-wilt.

For all NL27 Project components, Northern will not transport cut elm trees outside of the counties where they originated. Further, if a tree is suspected to be infected with Dutch elm disease, Northern will follow University of Minnesota Extension recommendations and chip or bury the tree (2025).

There are no other unique, sensitive or protected vegetation types identified in the NL27 Project.

3.2.4 Noxious Weeds and Invasive Species

An invasive species is a plant that is of foreign origin, is new to or not widely prevalent in the U.S., and can directly or indirectly injure crops, other useful plants, livestock, poultry, or other interests of agriculture, including irrigation, navigation, fish and wildlife resources, or the public health (7 U.S.C. §§ 2801-2814, January 3, 1975, as amended 1988 and 1994). Most noxious weeds have been introduced into an ecosystem by mismanagement or accident. Some noxious weeds are native. Typically, noxious weeds are plants that grow aggressively, multiply quickly without natural controls, and display adverse effects through contact or ingestion. Invasive plants are introduced, multicellular organisms that have the ability to thrive and spread aggressively outside its native range. A naturally aggressive plant may be especially invasive when it is introduced to a new habitat (USDA 2017).

Lists of noxious and invasive weeds were obtained by review of federal, state, and local sources. The federal list is maintained on the USDA's Introduced, Invasive, and Noxious Plants database. In Iowa, the Iowa Department of Agriculture maintains the state noxious weed list and the Iowa Noxious Weed Control Act is administered at the county level. In Minnesota, the MDA maintains noxious weed lists.

Northern conducted noxious and invasive weed surveys for the Projects concurrent with the wetland and waterbody field survey work in 2025. Northern identified seven locations where noxious or invasive weeds were observed within the V2F Project and 32 locations where noxious or invasive

weeds were observed within the NL27 Project. These locations along with the species present are included in Table 3.2-4 and Table 3.2-5, respectively.

Table 3.2-4 Noxious Weed Species Observed within the V2F Project

Project Component	MP/General Location	Noxious Species Observed
Ventura compressor station	Located within VCS ETWS-001	Field bindweed
Lake Mills compressor station	Located within LCS ETWS-001 along roadside ditch	Canada thistle
	Located within LCS ETWS-001 along roadside ditch	Wild parsnip
Lake Mills M500 E-line	Immediately adjacent to access road LMA TAR-003	Canada thistle
	Located within TWS near MP 39.19	Canada thistle
Northfield #1	Located within NOR ETWS-001	Canada thistle
Faribault M500 D-line	Located within TWS near MP 101.79	Canada thistle

Table 3.2-5 Noxious Weed Species Observed within the NL27 Project

Project Component	MP/General Location	Noxious Species Observed
Lake Mills M500 E-line	Located within LMA-ETWS-001 along roadside ditch	Wild parsnip
	Located within TWS near MP 42.89	Common buckthorn
	Located withinLMA-ETWS-008 along roadside ditch	Wild parsnip
	Located within LMA-ETWS-009 along roadside ditch	Wild parsnip
	Located within TWS near MP 43.73 along roadside ditch	Wild parsnip
	Located within LMA-TAR-003 along roadside ditch	Wild parsnip
	Immediately adjacent to access road LMA-TAR-004 along roadside ditch	Canada thistle
Albert Lea M500 E-line	Immediately adjacent to ALO-ETWS-005	Common buckthorn
	Immediately adjacent to ALO-ETWS-018	Canada thistle
	Located within ALO-SA-002 along roadside ditch	Wild parsnip
	Located within ALO-TAR-004 along roadside ditch	Wild parsnip
Willmar 3rd branch line upstream	Located within TWS near MP 4.06	Common buckthorn
	Immediately adjacent to WIL-ETWS-011	Spotted knapweed
Willmar 3rd branch line downstream	Located within TWS near MP 6.98	Canada thistle
	Located within WDC-ETWS-031	Canada thistle
	Immediately adjacent to WDC-ETWS-036	Canada thistle
	Located within WDC-ETWS-038	Common buckthorn
	Located within TWS near MP 10.59	Common buckthorn
	Located within HDD workspace from MP 10.64 to MP 10.68	Common buckthorn

Project Component	MP/General Location	Noxious Species Observed
Paynesville 2nd branch line	Located within PAY-ETWS-001	Crown vetch
	Located within TWS near MP 0.78	Canada thistle
	Immediately adjacent to PAY-TAR-003	Canada thistle
Worthington 2nd branch line	Located within WOR-ETWS-001	Canada thistle
	Immediately adjacent to TWS near MP 19.55	Tartarian honeysuckle
Springfield 2nd branch line	Located within SPR-ETWS-001	Canada thistle
	Immediately adjacent to TWS near MP 14.68	Canada thistle
	Located within HDD workspace near MP 16.18	Canada thistle
	Located within SPR-ETWS-034 along roadside ditch	Canada thistle
	Immediately adjacent to SPR-ETWS-049	Canada thistle
	Located within SPR-ETWS-050	Canada thistle
Alexandria 2nd branch line	Immediately adjacent to ALX-ETWS-005	Common buckthorn
	Located within ALX-ETWS-012	Canada thistle

Northern has developed a Project-specific Noxious Weed/Invasive Plant Control and Mitigation Plan that will be used for both Projects to prevent, mitigate and control the introduction and spread of noxious weeds and invasive species during both Projects' respective activities. A copy of the Noxious Weed/Invasive Plant Control and Mitigation Plan is included in Appendix 3A. Following construction of each Project, Northern will monitor the construction corridor in accordance with FERC's Plan and the Noxious Weed/Invasive Plant Control and Mitigation Plan to prevent and control the potential introduction and subsequent spread of noxious weeds and invasive species during Project activities.

3.3 Wildlife

Game and non-game wildlife species are regulated and protected through various federal and state laws and regulations. Federal laws include the USFWS Conservation Act of 1980 (16 U.S.C. §§ 2901¬2911), the USFWS Coordination Act of 1958 (16 U.S.C. §§ 661-667e), the ESA (16 U.S.C. §§1531-1543, Public Law 93-205), and the MBTA of 1918 (16 U.S.C. §§ 703-708, 710-712). Applicable state laws include Chapter 481B of the Code of Iowa – Endangered Plants and Wildlife (ICA § 481B.1 – 10). In Iowa, the IDNR is responsible for administering Chapter 481B, which is administered by the Natural Resource Commission and the Director of the Department of Natural Resources (IDNR 2021). In Minnesota, the MDNR is responsible for administering for the regulations that protect listed species through the Minnesota's Endangered and Threatened Species Law (1971).

This section identifies and discusses the various wildlife species commonly associated with the vegetation cover types identified in Section 3.2.1. Based on review of publicly available databases, no unique or significant habitats such as state game lands, wildlife refuges, and wildlife management areas are anticipated for both Projects. Further, information/comments received from the USFWS, IDNR and MDNR confirm that no unique or significant habitats occur in the V2F and NL27 Projects areas. Correspondence is provided in Appendix 3B.

Because vegetation type is an important component of wildlife habitat and often determines wildlife species distribution, the vegetation community types described in Section 3.2 have been adapted to define wildlife habitat types. A review of pertinent literature and biological surveys were used to determine the spatial distribution, habitat requirements, and ecological status of wildlife species observed or known to occur within the V2F and NL27 Projects.

The V2F and NL27 Projects will primarily affect highly disturbed land uses, including agricultural fields, industrial and commercial properties, and residential lots that provide limited wildlife habitat. Approximately 91.7% of the total land use impacts associated with the V2F Project and 78.4% of the total land use impacts associated with the NL27 Project occur within highly disturbed areas. Natural ecosystems are largely lacking within both Projects. Areas not under actively agricultural production, industrial land use or residential land use are limited to the forested areas, wetlands (emergent, scrub-shrub and forested) and open lands as discussed above.

3.3.1 Existing Resources

Some of the major wildlife species that are commonly observed throughout the V2F and NL27 Projects include white-tailed deer (*Odocoileus virginianus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), eastern cottontail rabbit (*Sylvilagus floridanus*), gray squirrel (*Sciurus carolinensis*), red squirrel (*Tamiasciurus hudsonicus*), field mice (*Apodemus sylvaticus*), skunk (*Mephitis mephitis*), and chipmunk (*Tamias striatus*). Woodchuck (*Marmota monax*), muskrat (*Ondata zibethicus*) and beaver (*Castor canadensis*) may occasionally be present, and less common animals in the region include otter (*Lontra canadensis*) and mink (*Neogale vison*). House wrens (*Troglodytes aedon*), northern cardinals (*Cardinalis cardinalis*), American goldfinches (*Spinus tristis*), blue jays (*Cyanocitta cristata*), song sparrows (*Melospiza melodia*), chickadees (*Poecile atricapillus*), and common yellowthroats (*Geothlypis trichas*) are common bird species observed in open land and residential areas. Woodland bird species include wood thrush (*Hylocichla mustelina*), scarlet tanager (*Piranga olivacea*) and ovenbird (*Seiurus aurocapilla*). Game birds include Canada goose (*Branta canadensis*), ring-necked pheasant (*Phasianus colchicus*), wild turkey (*Meleagris gallopavo*), and gray partridge (*Perdix perdix*). Waterfowl such as wood ducks (*Aix sponsa*), mallards (*Anas platyrhynchos*), blue-winged teal (*Spatual discors*), ruddy duck (*Oxyura jamaicensis*), common loon (*Gavia immer*), and hooded mergansers (*Lophodytes cucullatus*) are common bird species found in and around the wetlands and waterways within both Projects.

Raptor species that could be present include the bald eagle (*Haliaeetus leucocephalus*), red-tailed hawk (*Buteo Jamaicensis*), turkey vulture (*Cathartes aura*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), broad-winged hawk (*Buteo platypterus*), barred owl (*Strix varia*), and great horned owl (*Bubo virginianus*).

V2F Project

Avian wildlife observed during the 2025 field surveys included American crow (*Corvus brachyrhynchos*), American goldfinch, barn swallow (*Hirundo rustica*), black-capped chickadee, blue jay, chipping sparrow (*Spizella passerina*), common yellowthroat, ducks, eastern kingbird (*Tyrannus tyrannus*), eastern wood-pewee (*Contopus virens*), gray catbird (*Dumetella carolinensis*), great blue heron (*Ardea herodias*), great crested flycatcher (*Myiarchus crinitus*), great egret (*Ardea alba*), horned lark (*Eremophila alpestris*), house wren, indigo bunting (*Passerina cyanea*), killdeer (*Charadrius vociferus*), mourning dove (*Zenaida macroura*), northern cardinal, northern harrier (*Circus hudsonius*), red-eyed vireo (*Vireo olivaceus*), red-tailed hawk, red-winged blackbird

(*Agelaius phoeniceus*), sandhill crane (*Grus canadensis*), sedge wren (*Cistothorus stellaris*), song sparrow, turkey vulture, vesper sparrow (*Pooecetes gramineus*), white-breasted nuthatch (*Sitta carolinensis*), wild turkey, and woodpeckers. Various dragonflies, white-tailed deer, gray tree frogs (*Hyla versicolor*), green frogs (*Lithobates clamitans*), and American toads (*Anaxyrus americanus*) also were observed. Coyote, raccoon (*Procyon lotor*) and deer prints were observed in wet areas.

During the December 2025 leaf-off raptor nest survey, Northern identified eight raptor nests within proximity to the V2F Project. Eagle nests were identified by size and structure. No direct species observations were made; however, based on smaller sizes (typically three to four feet wide), seven additional nests were assumed to belong to other raptor species. Table 3.3-1 below provides the summary of raptor nests located within or in proximity to the V2F Project. Exact locations are shown on Figure 3-1 (Filed as Privileged and Confidential).

Table 3.3-1 Observed Raptor Nest Locations near the V2F Project

Project Component	Nest ID	Milepost (MP)	Raptor Nest Type	Approximate Distance and Direction to Nearest Workspace (feet)	Nearest Workspace
Lake Mills M500 E-line	LMA-RN01	38.55	Unknown raptor (non-eagle)	172, W	TWS
	LMA-RN02	38.56	Unknown raptor (non-eagle)	135, W	TWS
	LMA-RN03	40.37	Unknown raptor (non-eagle)	151, E	LMA ETWS-059
Faribault M500 D-line	FAR-RN05	101.66	Unknown raptor (non-eagle)	246, S	FAR TAR-009
	FAR-RN04	101.67	Unknown raptor (non-eagle)	210, S	FAR TAR-009
	FAR-RN03	101.99	Unknown raptor (non-eagle)	7, E	FAR ETWS-038
	FAR-RN02	102.07	Unknown raptor (non-eagle)	399, W	FAR TAR-010
	FAR-RN01	104.70	Eagle nest	2,352, NW	FAR ETWS-059

No raptor nests were observed near other V2F Project components.

Northern will conduct follow-up surveys in early spring 2026 to confirm if any nests are active; a third round of nests surveys will be completed prior to construction during the winter of 2027 and winter 2028 (Faribault M500 D-line only) to verify the status of previously identified nests and determine whether any new nests have been established. If active bald eagle nests are identified within 660 feet of the Project workspace, Northern will consult with the USFWS to ensure compliance and avoid incidental take of bald eagles. Additionally, Northern will adhere to guidance provided by the USFWS and the MDNR to prevent incidental take of other raptor species protected under the MBTA.

NL27 Project

Avian wildlife observations made during the 2025 field surveys included the ring-necked pheasant, cedar waxwing (*Bombycilla cedrorum*), European starling (*Sturnus vulgaris*), rough-legged hawk (*Buteo lagopus*), dark-eyed junco (*Junco hyemalis*), swamp sparrow (*Melospiza georgiana*), great crested flycatcher, green heron (*Butorides virescens*), American crow, American goldfinch, barn swallow, black-capped chickadee, blue jay, common yellowthroat, ducks, eastern kingbird, eastern wood-pewee, gray catbird, great blue heron, great egret, horned lark, house wren, indigo bunting, killdeer, mourning dove, northern cardinal, northern harrier, red-eyed vireo, red-tailed hawk, red-winged blackbird, sandhill crane, song sparrow, turkey vulture, white-breasted nuthatch, wild turkey, and woodpeckers. Various dragonflies, white-tailed deer, plains garter snakes (*Thamnophis radix*), gray tree frogs, green frogs, and American toads also were observed on the NL27 Project. Coyote, raccoon and deer prints were observed in wet areas.

During December 2025 raptor nest survey, Northern identified ten raptor nests. Four eagle nests were identified by size and structure. No direct species observations were made; however, based on smaller sizes (typically three to four feet wide), five additional nests were assumed to belong to other raptor species. Table 3.3-2 below provides a summary of raptor nests located within or in proximity to the NL27 Project. Exact locations are shown on Figure 3-2 (Filed as Privileged and Confidential).

Table 3.3-2 Observed Raptor Nest Locations near the NL27 Project

Project Component	Nest ID	Milepost (MP)	Raptor Nest Type	Approximate Distance and Direction to Nearest Workspace (feet)	Nearest Workspace
Lake Mills M500 E-line	LMA-RN01	42.82	Unknown raptor (non-eagle)	596, E	TWS
Lake Mills M500 E-line	LMA-RN02	44.45	Unknown raptor (non-eagle)	5, E	TWS
Albert Lea M500 E-line	ALO-RN01	5.31	Eagle nest	645, E	TWS/HDD
Willmar 3rd branch line downstream	WDC-RN01	7.36	Eagle nest	980, NE	WDC-ETWS-011
Paynesville 2nd branch line	PAY-RN01	0.49	Unknown raptor (non-eagle)	425, N	PAY-ETWS-007
Worthington 2nd branch line	WOR-RN01	19.63	Unknown raptor (non-eagle)	13, E	WOR-ETWS-006
Springfield 2nd branch line	SPR-RN01	15.27	Unknown raptor (non-eagle)	131, SW	SPR-ETWS-010
Springfield 2nd branch line	SPR-RN02	17.44	Unknown raptor (non-eagle)	571, W	SPR-ETWS-023
Minnesota Interconnect 2nd branch line	MIC-RN01	17.64	Eagle nest	40, E	MIC-TAR-001
Minnesota Interconnect 2nd Branch Line	MIC-RN01	17.65	Eagle nest (alternate nest)	0, E	MIC-TAR-001

No raptor nests were observed near other NL27 Project components.

Northern will conduct follow-up surveys in early spring 2026 to confirm if any nests are active; a third round of nests surveys will be completed prior to construction during the winter of 2027 to verify the status of previously identified nests and determine whether any new nests have been established. If active bald eagle nests are identified within 660 feet of the Project workspace, Northern will consult with the USFWS to ensure compliance and avoid incidental take of bald eagles. Additionally, Northern will adhere to guidance provided by the USFWS and the MDNR to prevent incidental take of other raptor species protected under the MBTA.

3.3.2 Sensitive or Managed Wildlife Habitats

Federally and state-protected wildlife species and their habitats are described in Section 3.4, below. Resource Report 8, Section 8.6, Recreation and Special Interest Areas, provides a discussion of federal, state, recreational, and conservation lands crossed by the Projects. Neither Project crosses any National Park Service Wilderness Areas, National Wild and Scenic Rivers, National Forests, Waterfowl Production Areas, WMAs, or Bird Conservation Areas. The closest sensitive habitat area to either Project is the Rum River located approximately 0.21 mile east of MP 17.64 on the Minnesota Interconnect 2nd branch line. See Resource Report 2, Section 2.2.4, Waterbodies, for information regarding National Wild and Scenic Rivers.

3.3.3 Construction Impacts

The impact of the Projects on wildlife species and their habitats will vary depending on the requirements of each species and the existing habitat present within each Projects' workspaces. Construction activities, especially clearing of the ROW, TWS and ETWS, will reduce feeding, nesting and cover habitat components until vegetation has become re-established. Mobile species may be disturbed or displaced temporarily from portions of their habitats, and accidental injury or mortality of individuals, including of less mobile species such as some small mammals, reptiles or amphibians may occur. Northern will utilize HDD methods to cross under a majority of the wetlands, forested areas and waterbodies within the V2F and NL27 Projects to minimize habitat disturbance and fragmentation. Mulch, if used, will not contain synthetic (plastic) fiber additives in areas that drain to a Minnesota public water. Erosion control mesh, if used, will be limited to bio-netting or natural netting, specifically Category 3N or 4N in the 2016 and 2018 Minnesota Department of Transportation standards.

Indirect wildlife impacts associated with construction noise and increased human activity will be temporary and could include abandoned reproductive efforts, displacement and avoidance of work areas. However, both direct and indirect impacts on wildlife along the construction corridor and other work areas generally will be of short duration and limited to the period of construction activities. Overall, impacts on wildlife are expected to be minimal and temporary, limited to the time of construction and restoration.

Northern will utilize temporary light plants during nighttime work for the compression, venting and HDD work on each Project, respectively. Lighting would be equipped with shields and aimed downward to minimize impact on nocturnal wildlife or surrounding residences. Lenses for the lighting would be yellow or amber to minimize impacts on residents and wildlife.

To protect any livestock and wildlife from injury from the open trench, the environmental inspector will inspect the trench daily prior to construction for wildlife (or livestock). Based on the current land use of actively cropped agricultural land, neither wildlife nor livestock are expected to be encountered during construction. However, if any areas are identified during construction which might support wildlife or livestock activity, Northern will install ramps in the trench and/or temporary fencing if the trench is left open overnight. Ramps and/or fencing will be assessed on a site-specific basis with the landowner and will be applied based on the presence or absence of livestock and the amount of wildlife activity in each area. Northern will implement FERC's Plan and its Procedures and will minimize the amount and duration of open trench to minimize impacts on wildlife and livestock.

Northern is committed to the restoration and preservation of pollinator habitat. Northern joined the USFWS Nationwide Monarch Butterfly Candidate Conservation Agreement on Energy and Transportation Lands in 2020. Northern is currently working with the USFWS to join the Nationwide Conservation Benefit Agreement for the Bumblebees on Energy and Transportation Lands for the rusty-patched bumblebee and other bumblebee species. This agreement will include CCAA measures, as well as a safe harbor for listed species (rusty-patched bumblebee). The plan is still in draft review. Northern also will offer landowners the option of utilizing pollinator friendly seed mixtures on privately owned lands disturbed by construction within both Projects' workspaces. Northern has successfully seeded public areas disturbed by construction creating a dense pollinator habitat within the following growing season.

Construction of the Projects will entail the removal of vegetation and grading within TWS, ETWS, staging areas, and temporary access roads. Although these impacts may cause displacement of wildlife, avoidance of work areas, and possibly reduce reproductive success, impacts associated with these activities are expected to be temporary and primarily associated with construction noise and increased human activity. The predominance of actively cropped farmlands within the Project areas limits the suitability for significant wildlife usage. Loss of any suitable habitat will be temporary, and most areas will be restored to preconstruction conditions following the pipeline disconnect and pipeline construction.

V2F Project

No new facilities will be constructed for the V2F Project and associated aboveground appurtenances will be limited to the installation of two new block valves and one tie-over valve within existing facilities. As such, changes to wildlife populations due to the construction activities associated with the disconnect sites, pipeline extensions, or aboveground facilities are not anticipated.

NL27 Project

Northern will construct several new tie-in valve settings and complete three receiver relocations along with a compressor station uprate at the Hugo compressor station. Three tie-over valve settings and one receiver facility will be removed. In total, construction activities for aboveground facilities will affect approximately 11.63 acres. Because these impacts occur primarily within highly disturbed vegetation communities, no significant effects to wildlife populations are anticipated from the construction of aboveground facilities and pipeline appurtenances.

3.4 Threatened and Endangered Species

3.4.1 Existing Resources

V2F Project

Northern conducted both desktop analyses and field-based habitat assessments for federally listed species found to potentially be present in the workspace/survey areas defined for the V2F Project. The desktop analysis was conducted prior to field surveys to further identify potential habitats so that field-based habitat assessments could be conducted in targeted areas. Field surveys were completed for all V2F Project components. Habitat assessment reports summarizing the results of desktop evaluations and field surveys for rare, threatened, and endangered species and their habitats completed for the V2F Project are provided in Appendix 3C.

Northern accessed the USFWS IPaC system to obtain lists of federally listed threatened or endangered, proposed and candidate species and federally designated critical habitat that may be present within the V2F Project. Species listed within the obtained USFWS IPaC official species list were further assessed through the USFWS IPaC determination keys (determination keys) to generate consistency and concurrence letters for individual species that may be affected. Northern also reviewed the MDNR NHIS database for state-listed species within Minnesota and submitted a request through the IDNR Permit and Environmental Review Management Tool to search existing records for state-listed and federally listed threatened or endangered species, rare natural communities, sensitive habitat, and state lands and waters in Iowa.

Based on the IPaC review, one federally listed species, three species proposed for federal listing, and one species that is listed as a non-essential experimental population have the potential to occur within the V2F Project (see Table 3.4-1 in Appendix 3D). The USFWS states in the official species lists (D-keys) that follow-up with them is not required for their no effect determinations. Additionally, for federal projects with a not likely to adversely affect determination, the USFWS concurrence becomes valid if the project proponent does not hear from USFWS after a 30-day review period.

MDNR identified four state listed species and four state species of special concern that have potential to occur within the V2F Project (see Table 3.4-1, Appendix 3D). IDNR replied that no-site specific records were present.

Field surveys were conducted to identify potential for suitable habitat in summer, fall and winter 2025. Species identified from the USFWS IPaC Environmental Conservation Online System, associated determination keys, the MDNR NHIS database, and the IDNR review are presented in Table 3.4-1 (Appendix 3D) and discussed in Sections 3.4.1.1 and Section 3.4.1.2 below; locations of identified threatened or endangered species found during the field surveys are displayed on Figure 3-1.

3.4.1.1 Federally Listed Threatened and Endangered Species Occurring in the Vicinity of the V2F Project

Tricolored bat

During the winter, tricolored bats hibernate in caves and mines. If mines or caves are not present within the region, they have been observed hibernating in road culverts, tree cavities, and abandoned water wells. During the non-hibernating seasons, tricolored bats roost in living or dead leaf clusters

of living or dead deciduous hardwood trees. Tricolored bats also have been observed roosting in artificial structures such as barns, bridges, roofs, and other concrete structures. (USFWS 2023).

No known bat hibernacula are located within 0.5 mile nor known bat-occupied culverts within 0.25 mile of the V2F Project (USFWS 2025a). The USFWS IPaC indicates that the tri-colored bat may occur within the temporary compression site at the Lake Mills compressor station and the disconnect site at Farmington compressor station. However, planned workspaces are largely confined to the existing footprints of the respective facilities, which lack suitable foraging or roosting habitat. In addition, no tree removal is anticipated at these locations. Therefore, the V2F Project was determined to have no effect on this species. The USFWS determination key concurred with the determination of no effect and indicated that no further coordination with the USFWS is required. The tricolored bat was proposed to be listed as federally endangered September 13, 2022, and is still proposed for listing.

The MDNR also recommends that any tree removal for the three pipeline extensions for the V2F Project occur outside of the bat pupping season of June 1 through August 15. However, the USFWS did not identify any protected bat species, particularly the Northern long-eared bat (NLEB) (*Myotis septentrionalis*) and the tri-colored bat (TCB) (*Perimyotis subflavus*), as occurring or having potential to occur within the three pipeline extension components for the V2F Project area. Furthermore, the Project does not occur within vicinity of any known records of maternal roosts or hibernacula for these two bat species and is not within critical habitat for these species. Northern has limited tree clearing for these Project components and will follow USFWS guidance on federally listed species. Therefore, Northern is not planning to restrict seasonal tree clearing, based on USFWS consultation.

Whooping crane

The whooping crane is a migratory bird species that once nested in northern prairies but now breeds in remote northern forests in Canada, as well as in an experimental population in Wisconsin, preferably within coniferous habitat containing swamps and nearby lakes or ponds. Winter habitat consists of coastal marshes (e.g., Texas, Louisiana, and Florida). (Audubon 2025, USFWS 2025b).

The V2F Project does not include large prairies or coniferous forested swamps that support whooping crane breeding or nesting. Large wetland complexes within the V2F Project will be crossed using HDD methods. Although the V2F Project lies within the Mississippi Flyway, the wild whooping crane population primarily migrates along the Central Flyway farther west. Therefore, this species is unlikely to occur within the V2F Project, and any presence would likely be from the experimental population in Wisconsin. Therefore, the V2F Project is anticipated to have no effect on this species. The USFWS determination key concurred with the determination of no effect and indicated that no further coordination with the USFWS is required.

Monarch butterfly

The monarch butterfly is a migratory butterfly that exists in two main populations within the United States divided by the Rocky Mountains: the eastern population that overwinters in the mountains of Mexico, and the western population that overwinters along the southern pacific coast of California (USDA Forest Service 2025). Monarch butterflies are a widespread species found in fields, prairies, savannahs, and most places where milkweed (*Asclepias* spp.), their host plant, occurs throughout the United States and southern Canada. This species generally occurs in areas with high densities of nectar sources, preferably those of native prairies. During late summer and

migration, adults use nectar species such as black-eyed Susan (*Rudbeckia hirta*), narrow-leaved coneflower (*Echinacea angustifolia*), and rough blazing star (*Liatris aspera)*. (MDNR 2025). However, the presence of milkweed is required for the survival of caterpillars, as it is the only plant on which they can feed (USFWS 2025c).

Monarch butterfly individuals and/or suitable habitat have been identified within the V2F Project. However, Northern is committed to the restoration and preservation of pollinator habitat. Northern joined the USFWS Nationwide Monarch Butterfly Candidate Conservation Agreement on Energy and Transportation Lands in 2020. As part of this Project, Northern will utilize pollinator friendly plant seed mixtures within Northern owned properties, where feasible. Northern will offer landowners the option of utilizing pollinator friendly seed mixtures on privately owned lands within the V2F Project workspaces where temporary impacts occur.

Northern has determined the V2F Project will not jeopardize the continued existence of the monarch butterfly. The USFWS determination key for the V2F Project areas within Minnesota concurred with the determination of no effect and indicated that no further coordination with the USFWS is required. The monarch butterfly was not included within the Iowa USFWS determination key results.

Western regal fritillary

Western regal fritillary requires large, intact grasslands at a landscape scale, with violets for larvae; nectar sources for adults; and warm season, native warm-season bunch grasses for shelter at all life stages. The grasslands need to be large and contiguous, generally more than 3.86 square miles, and be maintained by periodic disturbances.

The V2F Project is within the known range of the western regal fritillary; and managed prairies are present in limited capacity, mainly associated with the Chapa-kak-say-za WMA near the terminus for Albert Lea M500 E-line and within the Faribault M500 D-line Project area between MP 101.62 and 102.18. However, no suitable host plants (violets) were observed during the summer 2025 field surveys. Therefore, this species is unlikely to occur within the V2F Project. The V2F Project was determined to have no effect on the western regal fritillary. Additionally, the western regal fritillary is proposed for listing as threatened by the USFWS with a 4(d) Rule. The western regal fritillary was not included within the USFWS determination key results.

Prairie bush clover

The prairie bush clover is a perennial prairie plant with a grayish silver sheen and pale pink- or cream-colored flowers that bloom in mid-July. Leaflets are approximately 0.8-1/2 inch long and 0.3 inch wide with a narrow oblong shape (USFWS 2025d).

The prairie bush clover inhabits bedrock outcrop prairies, mesic to dry prairie slopes, upper slopes of dry sand-gravel prairie, and bluff prairies. Current populations are often found in prairies that have been or are currently used as pasture. (Anderson and Smith 2020a). The prairie bush clover is considered a midwestern “endemic” and is known only from the tallgrass prairie region of the upper Mississippi River Valley. Loss of tallgrass prairie habitat has led to the decline of this species. Prairie bush clover is listed as a federally threatened species because it is likely to become endangered with extinction in all or a significant portion of its range. Some of the surviving populations are threatened by conversion of pasture to cropland, overgrazing, agricultural expansion, herbicide application, urban expansion, rock quarrying, and transportation ROW maintenance and rerouting; hybridization

with the more common round-headed bush clover (*Lespedeza capitata*) also has been identified as a potential threat in some areas (MDNR 1990, USFWS 2025d).

Managed prairie habitat that may contain prairie bush clover was identified within the Faribault M500 D-line during the summer 2025 field surveys, mainly between milepost MP 101.62 and 102.18, but no individual plants were identified. Therefore, this species is unlikely to occur within the V2F Project; and this species will not be adversely affected. The USFWS determination key concurred with the determination of NLAA and indicated that no further coordination with the USFWS is required.

V2F Project activities will have no effect on the tricolored bat, whooping crane, monarch butterfly, or the western regal fritillary. The V2F Project may affect but is not likely to adversely affect the prairie bush clover. The USFWS states in the official species lists that follow-up with them is not required for their no effect determinations. Additionally for federal projects with a not likely to adversely affect determination, the USFWS determination key concurrence becomes valid if the project proponent does not hear from USFWS after a 30-day review period. Based on the above, no consultation with USFWS is required at this time. Copies of agency correspondence are included in Appendix 3B.

3.4.1.2 State-Listed Threatened and Endangered Species and Special Concern Species Occurring in Vicinity of the V2F Project

According to MDNR review, there are four state-listed species and four state special concern species that have the potential to occur within the V2F Project. The state-listed species include the Blanding's turtle, loggerhead shrike, edible valerian, and the big tick trefoil. The state special concern species include the trumpeter swan, common gallinule, discoid beggarticks, and water-willow. These species and their habitats are described below. The IDNR review did not identify any known records of state-listed or state special concern species for the Iowa components.

Blanding's turtle

Blanding's turtle requires wetland complexes with adjacent sand uplands to sustain viable populations. Calm, shallow waters, including wetlands associated with rivers and streams with rich aquatic vegetation, are preferred. This turtle occurs on a variety of wetland and riverine types throughout Minnesota. In the southeast, it prefers marshes and bottomland wetlands in summer and winter, ephemeral wetlands in spring and early summer, and deeper marshes and backwater pools in summer and winter. Female Blanding's turtles prefer to nest in open sandy uplands. Although they prefer undeveloped land, they have been known to nest in agriculture fields, residential property (low density suburban housing), gardens, under power lines, and in road shoulders (especially dirt roads). Females may travel up to 1.6 kilometers (1 mile) overland from their resident marsh to their nest site at which time they are vulnerable to predators and road mortality. Hatchlings leave the nest from mid-August through early October. Because eggs are laid far from water, hatchlings are vulnerable to predators, automobiles and desiccation while traveling from the nest to a wetland. Loss and degradation of upland and wetland habitats and mortality on roads and primary threats to the species. (MDNR 2008).

Blanding's turtles are documented at Chub Lake in vicinity of the Faribault M500 D-line (V2F Project), which is located 0.5 mile west of the V2F Project component near MP 101.50 at its nearest point. No Blanding's turtles were identified within the Faribault M500 D-line during the July and

August 2025 field surveys. Furthermore, Galaxie Avenue is located between the Project component and Chub Lake. This road is a significant barrier for Blanding's turtles to enter into planned workspace for the Faribault M500 D-line. The IDNR did not identify any records of this species with the V2F Project in Iowa.

Northern will not propose species surveys but rather assume the presence of Blanding's turtles where they have been documented and suitable habitat is present. Northern identified suitable nesting and overwintering habitat for the Blanding's turtle (i.e., wetlands with open water features with adjacent uplands) within the following areas:

- Wetland FAR-W63 and associated Chub Creek riparian corridor between MP 98.28 and 99.4,
- Wetland FAR-W75 and associated open water FAR-OW01, and surrounding area between MP 101.31 and 102.16, and
- Wetland FAR-W78 and surrounding area between MP 102.77 and 103.41.

Locations of suitable Blanding's turtle habitat identified during the summer 2025 field surveys are shown on Figure 2 - Blanding's Turtle Avoidance Measures, that is attached to the consultation letter that will be submitted to the MDNR. Northern plans to use HDD to cross under all waterbodies crossed by the V2F Project. Additionally, Northern will install turtle fence between the entry and exit points adjacent to or within suitable turtle habitat. Per the MDNR NHIS review letter (MCE-2025-00090) dated June 2, 2025, the MDNR requires the following avoidance measures for the Project to avoid and minimize impacts on Blanding's turtles.

- Avoid wetland and aquatic impacts during hibernation season, between September 15 and April 15, if the area is suitable for hibernation.
- Limit erosion and sediment control to wildlife friendly erosion control.
- Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
- Inspect trenches, holes or depressions prior to starting work each day and immediately prior to filling. Upon completion, bore holes and trenches must be filled.
- Upon completion, pits and trenches must be filled and ideally restored to pre-construction contours and re-vegetated with native species suitable to the local habitat.
- The Blanding's turtle flyer must be given to all contractors working in the area.
- Report any sightings using the MDNR Plant and Animal Observation Form.
- If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

Northern also will follow MDNR recommendations to buffer wetlands that contain suitable habitat for the Blanding's turtle by at least ten feet where possible and implement recommended measures from List 1 or List 2, if needed, on the Blanding's turtle fact sheet, to the extent practicable (MDNR, 2026). Northern will train construction personnel regarding identification of the Blanding's turtle and the proper implementation of the MDNR requirements. Northern submitted a letter to the MDNR on February 19, 2026 requesting concurrence on the measures described above to avoid and minimize impacts on the Blanding's turtle. Northern will continue consulting with the MDNR regarding any additional mitigation that may be required based on the agency's response, once received. Locations of areas within the Faribault M500 D-line where Blanding's turtle avoidance

measures will be implemented are shown on Figure 2 - Blanding's Turtle Avoidance Measures, that is attached to the consultation letter submitted to the MDNR. The MDNR review (Project ID: MCE-2025-00090) and consultation letter are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Loggerhead Shrike

The loggerhead shrike is a robin-sized bird that uses a variety of open landscape habitats, including native prairie, pastures, old fields, shelterbelts, farmyards, and cemeteries that contain short grass vegetation and perches, such as small trees, shrubs, and/or hedgerows. This species can be found in non-native grasslands but is considered rare in these settings. Most occurrences of loggerhead shrike are in areas that were historically prairie or oak savanna (Stucker 2018a).

Loggerhead shrike populations continue to decline in this region, and most of the observations near the Faribault M500 D-line are more than 20 years old. Northern plans to perform vegetation clearing for the Faribault M500 D-line in February/March 2027, outside the species' peak breeding season.

The Faribault M500 D-line contains suitable habitat for this species at fence rows and field breaks where grasses and shrubs are present and in prairie areas with perch sites; however, loggerhead shrike populations continue to decline in this region, and most of the observations near the Faribault M500 D-line are more than 20 years old.

Northern plans to conduct vegetation clearing starting in February/March 2027, pending receipt of FERC Notice to Proceed, which is outside of the breeding timeframe for this species (April through July). Additionally, Northern will conduct bird nest surveys prior to construction in 2028 to avoid incidental take of migratory nesting birds during active nesting period. Therefore, the V2F Project will minimize and/or avoid potential impacts on the loggerhead shrike. Northern submitted a letter to the MDNR on February 19, 2026 requesting concurrence on the measures described above to avoid and minimize impacts on the loggerhead shrike. Northern will continue consulting with the MDNR regarding any additional mitigation that may be required based on the agency's response, once received. The MDNR review (Project ID: MCE-2025-00090) and consultation letter are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Trumpeter Swan

During the breeding season, trumpeter swans will utilize small lakes and ponds or bays in larger bodies of water with emergent vegetation such as cattails (*Typha spp.*), bulrushes (*Scirpus spp*.), and sedges (*Carex spp.*) for nesting cover. Preferred habitat includes unpolluted fresh water, emergent marsh vegetation, areas of low human disturbance, and the presence of muskrat or beaver houses that they can use for nesting platforms. At least 100 meters of open water is needed for the trumpeter swan to take off (Stucker 2018b).

Suitable habitat for the trumpeter swan is present in proximity to the Lake Mills M500 E-line and Faribault M500 D-line components. However, no suitable habitat will be crossed by the Project and a majority of aquatic habitats will be avoided or are being crossed by the Project via HDD. Additionally, the application of FERC Plan and Northern's Procedures will protect wetland

resources near these V2F Project components and no impacts to this species are expected. Northern submitted letters to the MDNR, for the respective Project components, requesting concurrence that the Project components avoids impacts on the trumpeter swan. Northern will continue consulting with the MDNR regarding any additional mitigation that may be required based on the agency's response, once received. The MDNR reviews (Lake Mills M500 E-line, Project ID: MCE-2025-00094) (Project ID: MCE-2025-00090) and consultation letters are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Common Gallinule

Habitat for the common gallinule includes freshwater cattail-bulrush marshes that are typically away from human disturbance. This can include quiet rivers, lakes, ponds and small marshes along the edges of lakes or rivers. Preferred habitat characteristics include deep, open water, emergent vegetation, abundant dead vegetation, floating islands of organic matter, and abundant muskrat (*Ondatra zibethicus*) runways. Common gallinules can be sensitive to human disturbance, moving away from areas frequented by people (Dunlap 2022).

The Lake Mills M500 E-line contains shallow marsh habitat; however, areas with potential to contain suitable habitat for the common gallinule are adjacent to human disturbance or will be crossed by the Project via HDD. Therefore, the common gallinule is unlikely to occur, and the V2F Project will have no impact on the common gallinule. Additionally, the application of FERC Plan and Northern's Procedures will protect wetland resources near the Lake Mills M500 E-line preventing indirect impacts to wetlands outside of planned Project workspace that could contain suitable habitat for the common gallinule. Northern submitted a letter to the MDNR on February 19, 2026 requesting concurrence that the Project component avoids impacts on the common gallinule. Northern will continue consulting with the MDNR regarding any additional mitigation that may be required based on the agency's response, once received. The MDNR review (Project ID: MCE-2025-00094) and consultation letter are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Edible Valerian

The edible valerian is a state-threatened vascular plant species that inhabits moist prairies, wet meadows and calcareous fens, that occur in calcium rich/alkaline soils (MDNR 2025a).

The edible valerian has been documented within one mile of the Albert Lea M500 E-line (V2F Project) area according to NHIS data. Prairie habitat and wet meadows were observed onsite, and the Project overlaps Des Moines Lobe glacial deposits, which are characterized by calcium-rich soils. Suitable habitat for this species was identified within planned workspace for the Albert Lea M500 E-line near MP 1.70, 2.11 to 2.45, 2.57, 3.05, and north of MP 3.60 in proposed temporary workspace and staging area on the north side of State Highway 30; and within planned extra temporary workspace for the temporary compression site at the La Crosse BL MNB73201 launcher /ABA05 facility.

MDNR has requested either a suitable habitat survey or rare plant survey to confirm the presence of this species. Northern submitted a letter to the MDNR on February 19, 2026, requesting approval of the edible valerian survey plan. Northern will complete surveys for edible valerian during its

flowering season (May-June 2026), as described in the plan. Once the survey is complete, Northern will provide the results of the survey to MDNR and work with MDNR on mitigation if edible valerian is documented in construction workspace. As such, impacts will be minimized or avoided through mitigative measures for this species. Locations of suitable habitat for the edible valerian are provided on Figure 2 of the survey plan. The MDNR review (Project ID: MCE-2025-00101) and consultation letter with attached survey plan are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Big Tick Trefoil

The big tick trefoil is a perennial forb found in mesic hardwood forests dominated by oaks, sugar maple, and basswood in small canopy gaps with filtered sunlight (Smith 2018a).

Big tick trefoil records are from the MHs37a community surrounding Chub Lake and the species is associated with mesic upland hardwood forest communities dominated by oak species, sugar maple and basswood. None of these community types will be affected by the Faribault M500 D-line, which mostly follows existing pipeline right-of-way over 0.5 mile east of the known occurrences.

A mesic hardwood forest system native plant community is associated with a moderate MBS site Eureka 27 that is located on the Faribault M500 D-line between MP 102.06 and 102.18. Northern plans to cross the MBS site via HDD and implementation of the FERC Plan and Northern's Procedures will protect the MBS site from indirect construction impacts. Additionally, field surveys conducted in summer 2025 did not identify any occurrences of big tick trefoil; and noted that invasive common buckthorn was present within this native plant community, thus degrading the habitat. Therefore, big tick trefoil is unlikely to occur, and the V2F Project will have no impact on this species. Northern submitted a letter to the MDNR on February 19, 2026 requesting concurrence of the Project component avoidance of impacts to the big tick trefoil. Northern will continue consulting with the MDNR regarding any necessary mitigation that may be required based on the agency's response, once received. The MDNR review (Project ID: MCE-2025-00090) and consultation letter are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Discoid Beggarticks

The discoid beggarticks is an annual forb associated with a variety of wetland habitats, including marshes, wet meadow/carr, pond margins, and riverine sloughs (Smith 2018b).

The Faribault M500 D-line contains a number of wetland communities, but no discoid beggarticks individuals were observed within these wetland communities during the July and August 2025 field surveys. Wetlands associated with waterbodies will be crossed by the V2F Project component via HDD. Additionally, records of discoid beggarticks occur in an emergent wetland around the south end of Chub Lake and the application of the FERC Plan and Northern's Procedures will protect these areas from indirect effects associated with the construction of the Project component. Therefore, discoid beggarticks is anticipated to not occur within the Faribault M500 D-line and the Project component will have no impact on the discord beggarticks. Northern submitted a letter to the MDNR on February 19, 2026 requesting concurrence of the Project component's avoidance of impacts to the discoid beggarticks. Northern will continue consulting with the MDNR regarding any necessary

mitigation that may be required based on the agency's response, once received. The MDNR review (Project ID: MCE-2025-00090) and consultation letter are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Water-Willow

The water-willow is a perennial herb or shrub associated with a variety of wetland habitats. In Minnesota, this species is found amongst cattails and bulrushes at the marshy or boggy margins of lakes and slow-moving streams. (MDNR 2025b).

The Faribault M500 D-line contains a number of wetland communities, but no water-willow individuals were observed within these wetland communities during the July and August 2025 field surveys. Wetlands associated with waterbodies will be crossed by the V2F Project component via HDD. Additionally, records of water-willow occur in an emergent wetland around the south end of Chub Lake and the application of the FERC Plan and Northern's Procedures will protect these areas from indirect effects associated with the construction of the Project component. Therefore, water-willow is anticipated to not occur within the Faribault M500 D-line and the Project component will have no impact on this species. Northern submitted a letter to the MDNR February 19, 2026 requesting concurrence of the Project component's avoidance of impacts to the water-willow. Northern will continue consulting with the MDNR regarding any necessary mitigation that may be required based on the agency's response, once received. The MDNR review (Project ID: MCE-2025-00090) and consultation letter are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

The V2F Project will avoid impacts on state-listed species, including big tick trefoil, discoid beggarticks, water-willow, trumpeter swan and common gallinule. Northern will follow MDNR-required measures to minimize or avoid impacts on Blanding's turtle, loggerhead shrike and edible valerian. Ongoing consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

3.4.1.3 Federally Listed Threatened and Endangered Species Occurring in the Vicinity of the NL27 Project

Northern conducted both desktop analyses and field-based habitat assessments for federally listed species found to be potentially present in the workspace/survey areas defined for the NL27 Project. The desktop analysis was conducted prior to field surveys to further identify potential habitats within the NL27 Project, such that field-based habitat assessments could be conducted in targeted areas. Field surveys were completed for all NL27 Project components, except for the Hugo compressor station, which requires limited ground disturbance to install a fuel gas heater, a new motor control center building and replacement of the existing emergency generator. All other work at the Hugo compressor station will be completed inside the compressor building. The facility is currently fenced and covered with gravel. Northern will utilize the existing fenced facility for parking and existing permanent access road for temporary access, and no expansion of the facility boundary is required, avoiding any potential impacts to protected species. Northern completed consultations for the compressor station as part of the Northern Lights 2025 Expansion Project; no impacts on sensitive species or their habitats are anticipated as a result of the NL27 Project. The Hugo compressor station is not discussed further in the below sections regarding threatened and

endangered species. Habitat assessment reports summarizing the results of desktop evaluations and field surveys for rare, threatened, and endangered species and their habitats completed for the NL27 Project pipeline extensions are provided in Appendix 3C.

Northern accessed the USFWS IPaC system to obtain lists of federally listed threatened or endangered, proposed and candidate species, and federally designated critical habitat that may be present within the NL27 Project. Species listed within the obtained USFWS IPaC official species list were further assessed through the USFWS IPaC determination keys (determination keys) to generate consistency and concurrence letters for individual species that may be affected by the NL27 Project.

Based on the IPaC review, five federally listed species, three species proposed for federal listing, and one species that is listed as a non-essential experimental population have the potential to occur in the NL27 Project area (see Table 3.4-2 in Appendix 3D). The USFWS states in the official species lists that follow-up with them is not required for their no effect determinations. Additionally for federal projects with a not likely to adversely affect determination, the USFWS concurrence becomes valid if the project proponent does not hear from USFWS after a 30-day review period.

Field surveys were conducted during summer and fall 2025 to identify potential for suitable habitat of federal and state-listed species within the NL27 Project. Species identified from the USFWS IPaC Environmental Conservation Online System, associated determination keys and the MDNR NHIS review along with minimization and avoidance measures are presented in Table 3.4-2 (Appendix 3D) and discussed in this Section and Section 3.4.1.4 below; locations of identified threatened or endangered species found during the field surveys are displayed on Figure 3-2.

Habitat descriptions for species discussed in Sections 3.4.1.1 are not repeated in this section.

Northern long-eared bat

Suitable roosting, forage and travel habitat for NLEB in the summer consists of a wide variety of contiguous forested and wooded habitats with varying tree density and amounts of canopy closure. While roosting, NLEB is generally found in deep crevices in areas such as forests and woodlots (i.e., live trees and/or snags greater than or equal to three inches in diameter at breast height that have exfoliating bark, cracks, crevices, and/or cavities), as well as linear features such as fence rows, riparian forests, and other wooded corridors. NLEB roosts in both live trees and snags. (Sasse and Perkins 1996; Foster and Kurta 1999; and Owen et al. 2003). Additional summer habitat for the NLEB consists of areas adjacent to wooded areas, namely emergent wetlands and edges of agricultural fields, old fields, and pastures. The NLEB also has been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses (USFWS 2024a). During winter months, NLEB hibernates in caves or abandoned mines (Owen et al. 2003).

No known bat hibernacula are located within 0.5 mile of the NL27 Project (USFWS 2025a). In December 2025, Northern conducted a bat habitat assessment to identify suitable summer foraging and roosting habitat for the NLEB within forested areas crossed by NL27 Project. Based on survey results, Project design, proposed tree clearing amounts, and timing of tree removal (February/March 2027), the USFWS IPaC determination key concluded the following:

Not likely to adversely affect – Lake Mills M500 E-line, Willmar 3rd branch line upstream, and Worthington 2nd branch line

May affect – Willmar 3rd branch line downstream and Paynesville 2nd branch line

Northern conducted informal consultation with the USFWS via email dated February 19, 2026, requesting concurrence that tree clearing completed between February and March 2027 would be considered "Not Likely to Adversely Affect" the NLEB, and requested additional guidance should tree removal activities occur after April 14, 2027. The informal consultation is provided in Appendix 3B. Any additional consultations with the USFWS associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

The NLEB was not listed on the USFWS IPaC official species list as occurring or potentially occurring on the Albert Lea M500 E-line, Welcome 2nd line, Springfield 2nd branch line, Minnesota Interconnect 2nd branch line, and Alexandria 2nd branch line.

For Project components where the MDNR recommends that any tree removal occur outside of the bat pupping season for NLEB (June 1 through August 15), and USFWS does not identify any protected bat species, particularly the NLEB, as occurring or having potential to occur within the NL27 Project area, Northern will follow USFWS guidance on federally listed species. Therefore, Northern is not planning to restrict seasonal tree clearing on the Albert Lea M500 E-line, Welcome 2nd line, Minnesota Interconnect 2nd branch line, and Alexandria 2nd branch line based on USFWS consultation. For Project components where NLEB is listed as potentially occurring, Northern also will follow USFWS guidance to have a no effect or not likely to adversely affect determination.

Gray wolf

The gray wolf is a habitat generalist, utilizing habitats such as temperate forests, mountains, tundra, taiga, grasslands, and deserts. Overall, the presence of wolves is positively correlated with high densities of ungulate prey, such as deer and elk, and forest cover, and negatively correlated with high road density, high human density, and agricultural land (USFWS 2025e).

The Minnesota Interconnect 2nd branch line is on the edge of the southern range for the gray wolf in Minnesota and contains undeveloped forested habitat. The Minnesota Interconnect 2nd branch line primarily consists of agricultural land and open land with some housing that would not be suitable for the species. The gray wolf is unlikely to occur within the NL27 Project. Northern has determined that the NL27 Project may affect, but is not likely to adversely affect the gray wolf based on responses to the IPaC Minnesota-Wisconsin Federal Endangered Species Determination Key. A request for concurrence was submitted to the USFWS December 8, 2025. If the USFWS does not respond to this determination within 30 calendar days, then the Project can proceed under the NLAA concurrence.

Whooping crane

The Willmar 3rd branch line upstream, Willmar 3rd branch line downstream, Paynesville 2nd branch line and Minnesota Interconnect 2nd branch line are within range of the experimental population for the whooping crane. However, these Project components do not include large prairies or coniferous forested swamps that support whooping crane breeding or nesting. Large wetland complexes within the NL27 Project will be crossed using HDD methods. Although the NL27 Project lies within the Mississippi Flyway, the wild whooping crane population primarily migrates along the Central Flyway farther west. This species is unlikely to occur in the NL27 Project and any presence would likely be from the experimental population in Wisconsin. As a result, the NL27 Project is anticipated to have no effect on this species. The USFWS determination

keys concurred with the determination of no effect and indicated that no further coordination with the USFWS is required.

Western prairie fringed orchid

The western prairie fringed orchid inhabits moist tallgrass prairies and sedge meadows. In southern Minnesota, the species is typically found in mesic prairie or wet prairie in full sunlight on moist calcareous till or sandy soils. Light grazing and intermittent haying may not negatively impact this species. (USFWS 2025; Anderson and Smith 2020b).

The Worthington 2nd branch line is within the range of the western prairie fringed orchid. While pasture is present, the Worthington 2nd branch line is primarily disturbed, consisting of agricultural land, roadway ROW, and existing Northern pipeline facilities. Additionally, according to MDNR data (Anderson and Smith 2020b) and Minnesota Wildflowers website, this species has not been documented in Jackson County, Minnesota. Therefore, the western prairie fringed orchid is unlikely to occur within the NL27 Project. Based on responses from the USFWS IPaC Minnesota-Wisconsin Federal Endangered Species Determination Key, the NL27 Project will have no effect to the western prairie fringed orchid. As such, no further coordination with the USFWS is required.

Prairie bush-clover

The Worthington 2nd branch line is within the range of the prairie bush-clover. While pasture is present, the Worthington 2nd branch line is primarily disturbed, consisting of agricultural land, roadway ROW, and Northern pipeline facilities. Additionally, no individuals of prairie bush clover plants were found during the summer 2025 field surveys. Therefore, the prairie bush clover is unlikely to occur within the NL27 Project. Based on responses from the USFWS IPaC Minnesota-Wisconsin Federal Endangered Species Determination Key, the NL27 Project will have no effect to the prairie bush-clover. As such, no further coordination with the USFWS is required.

Western regal fritillary

The Albert Lea M500 E-line, Willmar 3rd branch line upstream, Willmar 3rd branch line downstream and Paynesville 2nd branch line are within the known range of the western regal fritillary, but no large contiguous grasslands, violet species, nor western regal fritillary individuals were observed during the summer 2025 field investigations. This species is unlikely to occur within these NL27 Project. The NL27 Project was determined to have no effect to the western regal fritillary. Additionally, the western regal fritillary is proposed for listing as threatened by the USFWS with a 4(d) Rule. The western regal fritillary was not included within the USFWS determination key results.

Rusty patched bumble bee

The RPBB is known as a habitat generalist, but their needs vary with the various aspects of their life history. Their habitat needs can be broken down to include overwintering habitat, nesting habitat, spring foraging habitat, and summer and fall foraging habitat. Overwintering habitat consists of woodland edges, as well as upland forest and woodland interiors. Woodland types generally consist of even-aged maple-basswood or oak-hickory, and the overwintering queens can be found in shady areas with loose soils, little vegetation, and leaf litter. Nesting habitat (colonies) includes grasslands

and shrublands, upland forest, and woodland edges extending approximately 30 meters into the woodland. Loose soil and leaf litter in these areas can provide nest building sites. (USFWS 2021a).

Spring foraging habitat and summer and fall foraging habitats are similar and can be found in areas with nectar and pollen sources, including plants such as goldenrods (*Solidago* spp.), coneflowers (*Echinacea* spp.), and gentians (*Gentiana* spp.). These areas can include woodland edges, upland forest, upland grassland and shrubland, palustrine wetlands, flower gardens, and agricultural land. (USFWS 2017). Spring ephemeral species and upland forest and woodland interiors that contain nectar and pollen sources also are used for spring foraging (USFWS 2021a).

The western half (starting at MP 3.91) of the 1.78-mile Willmar 3rd branch line extension and the Willmar 24-inch Branch Line-MNB75603-Receiver (WIL-ETWS-017) overlap RPBB High Potential Zones (HPZ) as well as proposed critical habitat for this species. The Willmar 3rd branch line upstream does not contain suitable overwintering habitat for the RPBB. Forested areas observed within the Willmar 3rd branch line upstream were dominated by buckthorn and other understory species and no even-aged woodlands were observed within planned workspace areas. However, woodland edges within this NL27 Project component may provide suitable nesting habitat. The Willmar 3rd branch line upstream also contains preferred forage species for the RPBB, including goldenrods, wild bergamot (*Monarda fistulosa*), common milkweed (*Asclepias syriaca*), jewelweed (*Impatiens capensis*), Joe-pye weed (*Eutrochium maculatum*), willows, and basswood across meadow and wetland habitats (USFWS 2017). Therefore, the RPBB may occur within the Willmar 3rd branch line upstream. Northern submitted informal consultation to the USFWS via email dated February 19, 2026, and plans to conduct surveys in 2026 in order to determine presence or potential absence of the RPBB. Depending on survey results, Northern will follow USFWS recommendations to avoid effects on RPBB and proposed critical habitat and obtain a not likely to adversely affect determination. Consultations with the USFWS associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Suckley's cuckoo bumble bee

SCBB is parasitic bumble bee that relies exclusively on other bumble bees as hosts. The SCBB historically occurred across a wide range of habitats, including prairies, grasslands, meadows, woodlands, urban areas, and agricultural areas where host bumble bee nests are present. This species has historically occurred in portions of western and northern Minnesota (pre-2000), but no extant populations are known to occur in Minnesota at present. The last confirmed sighting of SCBB in the contiguous United States was in 2016. (USFWS 2024c).

The Paynesville 2nd branch line and Alexandria 2nd branch line are within the range for SCBB. While woodlands, grasslands and agricultural areas were observed during the 2025 field investigation, these NL27 Project components are on the far eastern edge of the SCBB historical range where it has not been observed since pre-2000. Based on the lack of habitat and recent records, Northern determined the Project will have no effect on the SCBB. Additionally, the SCBB is proposed for listing as federally endangered. The SCBB was not included within the USFWS determination key results.

Monarch butterfly

Monarch butterfly individuals and/or suitable habitat have been identified within all NL27 Project components, except for the Hugo compressor station uprate. However, Northern is committed to the restoration and preservation of pollinator habitat. Northern joined the USFWS Nationwide Monarch

Butterfly Candidate Conservation Agreement on Energy and Transportation Lands in 2020. As part of this Project, Northern will utilize pollinator friendly plant seed mixtures within Northern owned properties, where feasible. Northern will offer landowners the option of utilizing pollinator friendly seed mixtures on privately owned lands within the Project workspaces where temporary impacts occur.

Northern has determined the NL27 Project will not jeopardize the continued existence of the monarch butterfly. The USFWS determination keys for NL27 Project within Minnesota concurred with the determination of no effect and indicated that no further coordination with the USFWS is required.

3.4.1.4 State-Listed Threatened and Endangered Species and Special Concern Species Occurring in Vicinity of the NL27 Project

Northern initiated a MDNR review for state-listed species within Minnesota by submitting NHIS review requests using the Minnesota Conservation Explorer (MCE) Tool to the MDNR for recommendations on potential impacts on state-listed species that may occur within the NL27 Project and a one-mile buffer of its components. The NHIS reviews and MDNR responses are provided in Appendix 3B. The MDNR responded with automatic letters for the following components. Based on the automatic letter, the MDNR stated that no further review is required.

- Lake Mills M500 E-line (MCE-2025-00991)
- Willmar 3rd branch line downstream (MCE-2025-00998)
- Alexandria 2nd branch line (MCE-2025-00990)

The MDNR letters received for the remaining components that have the following responses.

- Albert Lea M500 E-line has one state threatened plant (MCE-2025-00989)
- Willmar 3rd branch line upstream has one state threatened reptile and one federally endangered invertebrate (MCE-2025-00996)
- Welcome 2nd line has no known occurrences of rare features that would be negatively affected by the Project (MCE-2025-00995)
- Paynesville 2nd branch line has one state plant of special concern and one state threatened fish (MCE-2025-0993)
- Worthington 2nd branch line (MCE-2025-00997)
- Springfield 2nd branch line has one state threatened reptile and one state concern amphibian
- Minnesota Interconnect 2nd branch line has four state species of special concern (MCE-2025-00992)

Habitat descriptions for species discussed in Sections 3.4.1.2 are not repeated in this section.

Great Plains toad

Preferred habitat for the Great Plains toad formerly consisted of dry tallgrass prairies and open grasslands, but now primarily consists of agricultural fields and remnant areas of prairies and grasslands. Breeding occurs in ephemeral shallow water with little to no emergent vegetation.

The majority of the Springfield 2nd branch line is comprised of agricultural fields, and prairie and wetlands also are present. Therefore, the Great Plains toad may occur within the Springfield 2nd branch line. Northern submitted a NHIS letter request for review to the MDNR December 22,

2025. A response from the MDNR was received on February 23, 2026. Northern will follow MDNR recommendations to use wildlife-friendly materials, as prescribed for the Blanding's turtle within suitable habitat. MDNR has stated this will minimize impacts on the Great Plains toad and no further consultation is required.

Blanding's turtle

Northern will not propose species surveys but rather assume the presence of Blanding's turtles where Blanding's turtles have been documented and suitable habitat is present. No Blanding's turtles were identified within the NL27 Project during field habitat assessments that occurred July and August 2025. Northern's subconsultant used their MDNR license to identify known occurrences of state-listed species that occur within one mile of the NL27 Project. The license search indicated known occurrences of Blanding's turtle are within proximity to the Willmar 2nd branch line upstream and Springfield 2nd branch line. Additionally, both NL27 Project components contain suitable nesting and overwintering habitat for the Blanding's turtle (wetlands or streams with open water features and adjacent uplands). MDNR correspondence confirms the presence of the Blanding's turtle within proximity to the Willmar 2nd branch line upstream and Springfield 2nd branch line.

Northern plans to use HDD to cross under all but six waterbodies crossed by the NL27 Project. Additionally, Northern will install turtle fence between the HDD entry and exit points adjacent to or within suitable turtle habitat.

Northern will submit a letter to the MDNR following same requirements and recommendations as discussed in section 3.4.1.2 for areas of suitable habitat that are crossed by, or adjacent to, Project workspaces. The MDNR reviews (Project ID: MCE-2025-00994 and MCE-2025-00996) and consultation letters are provided in Appendix 3B. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Northern will implement the MDNR recommendations as discussed in Section 3.4.1.2 above and will train construction personnel regarding identification of the Blanding's turtle and the proper implementation of the MDNR recommendations. Northern submitted avoidance measures for the Blanding's turtle to the MDNR for review and comment as part of the V2F Project February 19, 2026. Northern will work with the MDNR to comply with required mitigation measures and recommendations, as necessary to minimize and/or avoid potential impacts on the Blanding's turtle as part of the NL27 Project.

Edible valerian

The Albert Lea M500 E-line contains prairie and wet meadow habitats that may be suitable for this species and occur within the Des Moines Lobe glacial deposits, which are characterized by calcium-rich soils. MDNR has requested either a suitable habitat survey or rare plant survey to confirm the presence of this species. Northern plans to complete surveys for edible valerian during its flowering season spring/early summer 2026, within areas of potentially suitable habitat to demonstrate minimization and avoidance measures. Prior to the survey, Northern will submit an edible valerian survey plan to MDNR for approval. Once the survey is complete, Northern will provide the results of the survey to MDNR and work with MDNR on mitigation if edible valerian is documented in construction workspace. Consultations with the MDNR associated with minimizing

and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

As such, impacts will be minimized or avoided through mitigative measures for this species. The MDNR review (Project ID: MCE-2025-00989) is provided in Appendix 3B. The MDNR consultation letter and survey plan will be provided as a separate filing. Any additional consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Pugnose shiner

The pugnose shiner is a small minnow that commonly inhabits clear glacial lakes and low gradient, small-to-moderate-sized streams in areas of little current. Waterbodies where the minnow are found almost always contain muskgrass (*Chara spp.)*.

The Paynesville 2nd branch line is within known species range, and known occurrences are located in lakes in proximity to this component. Potentially suitable habitat could be present within Kolling Creek, which has a direct hydrological connection to lakes where known occurrences have been documented. Northern is proposing to cross Kolling Creek via HDD to avoid impacts and will therefore not impact the pugnose shiner. Northern submitted a NHIS letter request for review to the MDNR December 22, 2025, and a response from the MDNR was received on February 20, 2026. The MDNR indicated since the pipeline beneath Kolling Creek will be installed by HDD, they do not believe impacts to pugnose shiners are likely. No further consultation is required.

Hill's thistle

The hill's thistle is a short, stocky thistle primarily found in dry prairies and dry savannas, and to a lesser extent drier southern mesic prairies and woodlands with scattered oaks (*Quercus spp*.) or jack pines (*Pinus banksiana*).

The Paynesville 2nd branch line is within the species known range and potentially suitable habitat (woodlands with scattered oaks were observed within/adjacent to this component. Northern did not identify any individuals during the 2025 field surveys and wooded areas crossed by the Paynesville 2nd branch line have either been previously disturbed or will be crossed under by HDD. Northern submitted a NHIS letter request for review to the MDNR December 22, 2025.

The MDNR response noted the presence of Hill's thistle within a MBS site of high biodiversity significance along Kolling Creek and the MDNR recommends avoiding disturbance to this ecologically significant area. Northern has designed the project to HDD beneath this area; therefore, no impact to the Hill's thistle is anticipated. No further consultation regarding this species is required.

Red-shouldered hawk

Preferred habitat for the red-shouldered hawk includes mature deciduous forests and floodplain forests with high-density canopy cover, scattered wetlands and lakes, and diverse topography characterized by small hills and ridges.

The Minnesota Interconnect 2nd branch line lies within the known species range, suitable habitat was identified, and an auditory observation occurred near temporary access road MIC-TAR-001 during the 2025 field surveys Suitable habitat was identified in forested areas along MIC-TAR-001, between MP 17.78 and MP 17.87 and between MP 18.25 and MP 18.42. Northern is proposing to use HDD to avoid disturbing these forested areas during construction. By utilizing HDD at these

locations, Northern will substantially limit impacts associated with tree removal. Northern also will attempt to limit removal or impacts on trees and other vegetation during the primary nesting season of breeding birds. If construction work cannot be avoided during the peak breeding season, a pre-construction nest survey would be conducted; therefore, the NL27 Project is anticipated to have no impact on the red-shouldered hawk. Northern will continue consulting with the MDNR regarding any necessary mitigation that may be required based on the agency's response. The MDNR review (Project ID: MCE-2025-00992) is provided in Appendix 3B. Consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Louisiana waterthrush

The Louisiana waterthrush is a passerine bird species in the wood-warbler family Parulidae. Habitat for this species includes mature, closed canopy forest, including mesic hardwood forests, floodplain forests, and wet forests. A key feature used by this species across these habitats is flowing narrow streams with less than 3-5 centimeters of water in sections for foraging. Nest sites are often along slower-moving streams within cavities of stream banks or exposed root masses. Broad rivers and areas with dense herbaceous/shrub layers are generally not used by this species.

The Minnesota Interconnect 2nd branch line lies within the known species range, and suitable habitat was identified, during the 2025 field surveys, specifically in forested areas along MIC-TAR-001, between MP 17.78 and MP 17.87 and between MP 18.25 and MP 18.42. Therefore, the Louisiana waterthrush may occur within the Project component area. Northern is proposing to use HDD to avoid disturbing these forested areas during construction. By utilizing HDD at these locations, Northern will substantially limit impacts associated with tree removal. Northern also will attempt to limit removal or impacts on trees and other vegetation during the primary nesting season of breeding birds. If construction work cannot be avoided during the peak breeding season, a pre-construction nest survey would be conducted. Therefore, the NL27 Project is anticipated to have no impact on the Louisiana waterthrush. Northern will continue consulting with the MDNR regarding any necessary mitigation that may be required based on the agency's response. The MDNR review (Project ID: MCE-2025-00992) is provided in Appendix 3B. Consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Creek heelsplitter

The creek heelsplitter is a freshwater mussel species that inhabits creeks, small rivers, and upstream portions of large rivers characterized by moderate depth (1-3 ft deep) and sand, fine gravel, or mud substrates. (MDNR 2025d).

The Minnesota Interconnect 2nd branch line is within species known range and a known occurrence has been documented within vicinity of this component, specifically in the Rum River. Potentially, suitable habitat for the creek heelsplitter is limited to one perennial waterbody crossing (MIC-S01). Northern will cross underneath MIC-S01 using HDD. Therefore, potential impacts on this species are not anticipated for the NL27 Project. Northern will continue consulting with the MDNR regarding any necessary mitigation that may be required based on the agency's response. The MDNR review (Project ID: MCE-2025-00992) is provided in Appendix 3B. Consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

Gray's sedge

Gray's sedge is a rare, clump-forming wetland sedge that is most often found in mature floodplain forests dominated by cottonwood and silver maple. It is also occasionally found in similar areas with black willow, green ash, American elm, river birch (*Betula nigra*), swamp white oak (*Quercus bicolor*), or hackberry (*Celtis occidentalis*). (Smith 2018c).

The Minnesota Interconnect 2nd branch line is within species known range, a known occurrence has been documented within vicinity of this component, and suitable habitat was identified during the 2025 field surveys, specifically in forested wetland areas near MP 17.80 and MP 18.30. Northern is proposing to cross the wetlands and forested habitat at this location via HDD; therefore, impacts on this species are not anticipated for the NL27 Project. Northern will continue consulting with the MDNR regarding any necessary mitigation that may be required based on the agency's response. The MDNR review (Project ID: MCE-2025-00992) is provided in Appendix 3B. Consultations with the MDNR associated with minimizing and avoiding impacts on protected state-listed species will be provided to FERC as a supplemental submittal.

3.4.2 Migratory Birds and Species of Special Concern

Migratory birds are protected under the MBTA (16 U.S.C. §§ 703-711), which prohibits the taking of any migratory bird, or a part, nest, or eggs of any such bird, except under the terms of a valid permit issued pursuant to federal regulations. Bald and golden eagles are additionally protected under the BGEPA (16 U.S.C. §§ 668-668d). EO 13186 (66 Fed. Reg. 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect to migratory bird populations and to avoid or minimize adverse effects to migratory birds through enhanced collaboration with the USFWS. EO 13186 states that emphasis should be placed on species of concern, priority habitats, and key risk factors, and that particular focus should be given to addressing population-level impacts. On March 30, 2011, the USFWS and FERC entered into a MOU that focuses on avoiding or minimizing adverse effects to migratory birds and strengthening migratory bird conservation through enhanced collaboration between the two agencies. This voluntary MOU does not waive legal requirements under the MBTA, BGEPA, ESA, Federal Power Act, Natural Gas Act, or any other statutes and does not authorize the take of migratory birds.

In accordance with EO 13186 and the MOU, Northern has identified BCC within the V2F and NL27 Projects. Northern consulted with the USFWS concerning threatened and endangered migratory bird species potentially occurring within both Projects. The species listed as BCC, released most recently in 2021, are listed in Tables 3.4-3, which identifies bird species of concern, including those protected under the MBTA (and some non-MBTA-protected species) that represent the agency's' highest conservation priorities (USFWS 2021b). BCRs are geographically based subsets of the large BCC list. The V2F Project is located in the Prairie Potholes (BCR 11), Eastern Tallgrass Prairie (BCR 22), and Prairie Hardwood Transition (BCR 23) bird conservation regions. The NL27 Project is located in the Prairie Potholes (BCR 11) and Prairie Hardwood Transition (BCR 23) bird conservation regions. Northern also researched Important Bird Areas in vicinity to the V2F and NL27 Projects. IBAs are discrete sites that provide essential habitat for one or more bird species and include habitat for breeding, wintering, and/or migrating birds (Audubon Minnesota 2025, Iowa Audubon 2025). The V2F and NL27 Projects activities will not occur within any IBAs.

Table 3.4-3. Birds of Conservation Concern Potentially Occurring in the V2F and NL27 Project Areas

BCR	Listed Birds	
	Common Name	**Scientific Name**
V2F Project Only		
22 (Eastern Tallgrass Prairie)	American Golden-Plover (nb)	*Pluvialis dominica*
	Bald Eagle	*Haliaeetus leucocephalus*
	Chimney Swift	*Chaetura pelagica*
	Grasshopper Sparrow	*Ammodramus savannarum perpallidus*
	Kentucky Warbler	*Geothlypis formosa*
	Prothonotary Warbler	*Protonotaria citrea*
	Red-headed Woodpecker	*Melanerpes erythrocephalus*
	Ruddy Turnstone (nb)	*Arenaria interpres morinella*
	Rusty Blackbird (nb)	*Euphagus carolinus*
	Semipalmated Sandpiper (nb)	*Calidris pusilla*
V2F and NL27 Projects		
11 (Prairie Potholes)	American Golden-Plover (nb)	*Pluvialis dominica*
	Bald Eagle	*Haliaeetus leucocephalus*
	Black Tern	*Chlidonias niger surinamenisis*
	Black Billed Cuckoo	*Coccyzus erythropthalmus*
	Bobolink	*Dolichonyx oryzivorus*
	Chimney Swift	*Chaetura pelagica*
	Franklin's Gull	*Leucophaeus pipixcan*
	Golden Eagle	*Aquila chrysaetos*
	Golden-winged Warbler	*Vermivore chrysoptera*
	Grasshopper Sparrow	*Ammodramus savannarum perpallidus*
	Henslow's Sparrow	*Centronyx henslowii*
	Hudsonian Godwit (nb)	*Limosa haemastica*
	Lesser Yellowlegs (nb)	*Tringa flavipes*
	Long-eared Owl	*Asio otus*
	Marbled Godwit	*Limosa fedoa*
	Northern Harrier	*Circus hudsonius*
	Pectoral Sandpiper (nb)	*Calodris melanotos*
	Red-headed Woodpecker	*Melanerpes erythrocephalus*
	Ruddy Turnstone (nb)	*Arenaria interpres morinella*
	Short-billed Dowitcher (nb)	*Limnodromus griseus*
	Western Grebe	*Aechmophorus occidentalis*
	Willet	*Tringa semipalmata*
23 (Prairie Hardwood Transition)	American Golden-Plover (nb)	*Pluvialis dominica*
	Bald Eagle	*Haliaeetus leucocephalus*
	Black-billed Cuckoo	*Coccyzus erythropthalmus*
	Black Tern	*Chlidonias niger surinamenisis*
	Bobolink	*Dolichonyx oryzivorus*
	Canada Warbler	*Cardellina canadensis*
	Cerulean Warbler	*Setophaga cerulea*
	Chimney Swift	*Chaetura pelagica*
	Eastern Whip-poor-will	*Antrostomus vociferus*

BCR	Listed Birds	
	Common Name	**Scientific Name**
	Golden Eagle	*Aquila chrysaetos*
	Golden-winged Warbler	*Vermivore chrysoptera*
	Grasshopper Sparrow	*Ammodramus savannarum perpallidus*
	Henslow's Sparrow	*Centronyx henslowii*
	Le Conte's Sparrow	*Ammospiza leconteii*
	Lesser Yellowlegs (nb)	*Tringa flavipes*
	Long-eared Owl	*Asio otus*
	Marbled Godwit	*Limosa fedoa*
	Pectoral Sandpiper (nb)	*Calodris melanotos*
	Red-headed Woodpecker	*Melanerpes erythrocephalus*
	Ruddy Turnstone (nb)	*Arenaria interpres morinella*
	Rusty Blackbird (nb)	*Euphagus carolinus*
	Semipalmated Sandpiper (nb)	*Calidris pusilla*
	Short-billed Dowitcher (nb)	*Limnodromus griseus*
	Western Grebe	*Aechmophorus occidentalis*
	Wood Thrush	*Hylocichla mustelina*

(nb) non-breeding in this BCR

A variety of migratory bird species may occur seasonally within the vicinity of both Projects because these areas are located within the Mississippi Flyway for waterfowl. Many species of migratory birds such as ducks, geese, doves, and pigeons, as well as Sandhill and whooping cranes, use the flyways during spring and fall migration between the Gulf of Mexico and central Canada. All of these species use open land and wetland areas and could be sensitive to project construction activities.

The nesting/breeding season for migratory birds in Iowa and Minnesota is generally from April through August with the exception of a few outlying species such as bald and golden eagles, which breed between December 1 and August 31, northern harrier between April 1 and September 15, and the cuckoo between May 15 and October 10. The V2F and NL27 Projects activities during this timeframe could result in short-term disturbance of migratory bird habitat, causing birds present in both Projects areas to relocate temporarily during periods of active construction and human activity. Depending on the season, construction could also disrupt bird courting or nesting, including destruction of nests, eggs, and chicks within the construction work area. The Projects are located primarily in actively cultivated agricultural lands, developed areas, and open land/existing pipeline ROW; therefore, the potential for the Projects to adversely affect important migratory nesting birds or foraging habitats will be low.

A variety of migratory bird species may occur seasonally along the V2F and NL27 Projects. The species most likely to be affected are those that are sensitive to forest fragmentation. Northern plans to conduct the majority of tree clearing activities on both Projects during the non-breeding season for the majority of the migratory bird species identified as potentially occurring within each Project component, to minimize impacts on these species. Additionally, some migratory bird species use open habitats for nesting and will be unable to nest in active project areas during construction.

Construction of the V2F and NL27 Projects has the potential to impact birds protected under the MBTA. Under the MBTA, construction activities in grassland, roadsides, wetland, riparian, shrubland, or woodland habitats, and construction activities that occur on bridges or culverts that

would otherwise result in the taking of migratory birds, eggs, young, and/or active nests, should be avoided. Although the provisions of the MBTA are applicable throughout the entire year, most migratory bird nesting activity in Iowa and Minnesota occurs April 1 to August 31. Northern plans to begin tree clearing February and March 2027, outside the primary nesting season, pending receipt of FERC's Notice-to-Proceed. Pipeline construction will begin spring 2027 and continue through November 1, 2027 for the E-line extensions on the V2F Project and all components on the NL27 Project. The Faribault D-line will be constructed in 2028 and the A-line abandonment will be completed in 2029. Northern will attempt to limit removal or impacts on vegetation during the primary nesting season of breeding birds. If construction work cannot be avoided during the peak breeding season, Northern will have a biologist conduct a pre-construction nest survey for breeding birds within affected workspaces for both Projects. The nest survey will determine the absence or presence of breeding birds and their nests. Pre-construction nest surveys will be completed according to the following procedures.

- No more than seven days before construction activities commence, pre-construction nest surveys for migratory birds will be completed by a qualified avian biologist. The area surveyed will include the proposed workspaces or areas where potentially suitable habitat has been identified.
- If an occupied (non-eagle) raptor nest is observed during the survey, construction activities will not be permitted within 100-foot buffer of it to avoid incidental take of protected raptor species. Furthermore, construction activities will not be permitted within a 660-foot buffer of any eagle nest site during the breeding season or until the fledglings have left the area. Northern will complete consultation with the USFWS, MDNR and/or the IDNR if an active raptor nest are observed, as required.
- If a nest, other than a raptor nest, including loggerhead shrike is observed during the survey, construction activities will not be permitted within a 15- to 30-foot buffer of the nest depending on the species and vertical offset from the nest.
- Upon completion of the nest surveys, the survey results will be submitted to the USFWS, MDNR and/or the IDNR, as appropriate. If breeding birds are not present, construction can proceed with no restrictions. If breeding birds or active nests are present, additional consultation will be completed, as required.

Nest surveys for migratory bird surveys will be conducted prior to any clearing or construction activity; therefore, the V2F and NL27 Projects will have no effect to nesting migratory birds of concern.

Due to the use of pre-construction nesting bird surveys, which will minimize any potential impact the Projects may have on nesting migratory birds, Northern determined the V2F and NL27 Projects will have no effect on birds protected under the MBTA. The USFWS does not provide concurrence with no effect determination or not likely to adversely affect determinations listed in the determination keys, and as such, a written response may not be provided from the agency.

Northern performed a raptor nest survey for both Projects December 2025 (leaf-off period). Raptor nests, including eagle nests were located within proximity to components of both Projects during the December 2025 surveys. Northern plans to complete follow-up surveys late winter/early spring 2026 and again winter 2026/2027 to confirm nest activity and identify any additional or alternative nest sites in proximity to both Projects. Additional information regarding the results of the raptor

nest surveys is included in Section 3.3 and Table 3.3-1. Raptor nests also are displayed on Figures 3-1 and 3-2.

3.4.3 Agency Consultation

Northern has initiated consultation with the USFWS, MDNR and IDNR via the IPaC Environmental Conservation Online System, the MDNR NHIS database, and the IDNR PERMT request to gather information related to threatened and endangered species that may occur within the V2F and NL27 Projects. Official IPaCs were obtained through the USFWS's online system January through April 2025 for the V2F Project, and December 2025 through January 2026 for the NL27 Project. Stantec used its limited license agreement (LA-1005) with the MDNR to obtain an initial list of T&E species and unique habitats within both Projects components and formally submitted NHIS requests to the MDNR. Responses were received by the MDNR and IDNR for the V2F Project between February and May 2025. Agency coordination for the V2F Project is provided in Appendix 3B.

Automatic letters for the following NL27 Project components: Lake Mills M500 E-line, Willmar 3rd branch line downstream, Minnesota Interconnect 2nd branch line and Alexandira 2nd branch line were received from the MDNR December 22, 2025. Responses from the MDNR for the Albert Lea M500 E-line, Willmar 3rd branch line upstream, Paynesville 2nd branch line, Welcome 2nd line, Worthing 2nd branch line, and Springfield 2nd branch line were received February 2026.

Ongoing consultation with the MDNR is underway for several species, including Blanding's turtle and edible valerian, that may occur within the V2F Project area and could be affected by construction activities. Northern also intends to consult with the MDNR regarding Blanding's turtle and edible valerian.

Northern anticipates consultation with the USFWS for the Willmar 3rd branch line upstream NL27 Project component due to its location within the RPBB High Potential Zone and the presence of suitable habitat. Additional consultation with USFWS will be required for the Willmar 3rd branch line downstream and Paynesville 2nd branch line NL27 Project components to address potential impacts on the NLEB associated with planned tree-clearing activities. Northern also will review the USFWS database for updated RPBB occurrence records to assess whether additional surveys are warranted.

If tree clearing cannot be completed in February/March 2027, presence/probable absence surveys for NLEB on the NL27 Paynesville 2nd branch line component are planned for summer. Northern will evaluate the need for additional species-specific surveys on other Project components during the ongoing consultation with the USFWS.

Habitat for listed species is discussed in Section 3.4. All agency coordination to date is presented in Appendix 3B.

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Resource Report 3
Figures

Figure 3-1
V2F Project Rare, Threatened and Endangered Species Habitat Map

(Filed as CUI//PRIV - Do Not Release)

Figure 3-2
NL27 Project Rare, Threatened and Endangered Species Habitat Map

(Filed as CUI//PRIV - Do Not Release)

Appendix 3A
Noxious Weed/Invasive Plant Control and Mitigation Plan

Noxious Weed Control Plan

Ventura to Farmington A-line Abandonment and Capacity Replacement Project and Northern Lights 2027 Expansion Project

February 2026

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1.0 GENERAL PROJECT DESCRIPTION

Northern Natural Gas (Northern) is planning construction of the Ventura to Farmington A-line Abandonment and Capacity Replacement Project (V2F Project) between 2027 and 2029 in Minnesota and Iowa. The proposed facilities include:

- Approximately 17.88 miles of pipeline extensions

Installation and removal of appurtenant facilities include:

- Disconnect activities for the A-line and J-line at two compressor stations
- Installing temporary compression to evacuate gas from the A-line to an adjacent mainline
- Three temporary compression sites for the installation of the extensions

Additionally, Northern is planning construction of the Northern Lights Expansion Project (NL27 Project) in 2027 in Minnesota. The proposed facilities include:

- Approximately 28.43 miles of pipeline extensions
- Uprate of the Hugo compressor station

Installation and removal of appurtenant facilities include

- Two new receiver facilities that include relocation of existing receivers
- Relocation of one exiting receiver
- Nine new valve settings and associated valves and piping, including one new RMV facility
- Expansion of one existing block valve setting
- Removal of one receiver facility and three existing tie-in valve settings

2.0 PURPOSE

The purpose of this Noxious Weed Control Plan (Plan) is to facilitate conformance with Minnesota and Iowa Noxious Weed Law promulgated by Minnesota Statutes § 18.75 to 18.91 and Iowa State Code Chapter 317. This Plan provides measures to be used in the prevention and control of invasion of new noxious weed species or new populations within the V2F and NL27 Projects.

Northern will request written review and approval from FERC in event the construction contractor proposes an alternate noxious weed control measure not included in this Plan.

3.0 FEDERAL, STATE, AND COUNTY WEED LISTS

Lists of noxious and invasive weeds that may potentially occur within both of the Projects were obtained by review of federal, state, and local sources. The federal list is maintained on the U.S. Department of Agriculture's Introduced, Invasive, and Noxious Plants database. The state noxious weed list is maintained by the Minnesota Department of Agriculture and the Iowa Department of Agriculture & Land Stewardship.

In Minnesota, noxious weeds can be designated on state eradicate, control, or restricted lists. Species on the eradicate list are prohibited noxious weeds that are not currently known to be present in Minnesota or are not widely established in the state. These species are to be eradicated, and all of the above and below ground parts of the plant must be destroyed. Measures must also be taken to prevent and exclude these species from being introduced into Minnesota. Propagation, sale, or transportation of these plants are prohibited without a permit.

Species on the Minnesota control lists are prohibited noxious weeds that are established throughout regions of the state. Species on this list must be controlled and efforts must be made to prevent the spread, maturation, and dispersal of any propagating parts in order to reduce established populations and prevent their reproduction and spread. Restricted noxious weeds are plants that are widely distributed in Minnesota and are detrimental to human or animal health, the environment, public roads, crops, livestock, or other property, but whose only feasible means of control is to prevent their spread by prohibiting the importation, sale, and transportation of their propagating parts without a permit. Specially regulated plants are plants that are not native to Minnesota and may cause economic or environmental harm, or harm to human health.

In Iowa, noxious weeds can be designated on the primary or secondary noxious weed list and are administered at the county level. If the landowner is notified by the county weed commissioner of noxious weeds they must be destroyed and if the landowner fails to do so the county can enter the property to destroy the noxious weed population after proper notification. Iowa also maintains a list of invasive plant species that no person can import, sell, offer for sale or distribute within the state in any form including the seeds.

Results of the review of these databases are presented in the table below.

Table 1 - Federal, State and Local Noxious and Invasive Weeds List for Both Projects

Common name	**Scientific name**
Federal Noxious Weeds	
Dodder	*Cuscuta spp.*
British yellowhead	*Inula britannica*
Broomrape	*Orobanche spp.*
Giant hogweed	*Heracleum*
Fireweed	*Senecio*
Cattail grass	*Setaria pumila*
Minnesota State Eradicate List	
Tree of heaven	*Ailanthus altissima*
Palmer amaranth	*Amaranthus palmeri*
Diffuse knapweed	*Centaurea diffusa*
Brown knapweed	*Centaurea jacea*
Yellow star thistle	*Centaurea solstitialis*
Black swallow-wort	*Cynanchum louiseae*
Grecian foxglove	*Digitalis lanata*
Common teasel	*Dipsacus fullonum*
Cut-leaved teasel	*Dipsacus laciniatus*
Giant hogweed	*Heracleum mantegazzianum*
Hooked Hair Hop formerly Japanese hops	*Humulus japonicas*
Dalmatian toadflax	*Linaria dalmatica*
Japanese honeysuckle	*Lonicera japonica*
Johnsongrass	*Sorghum halepense L.*
Red hailstone	*Thladiantha dubia Bunge*
Minnesota State Control List	
Common barberry	*Berberis vulgaris*
Narrowleaf bittercress	*Cardamine impatiens*
Plumeless thistle	*Carduus acanthoides*
Round leaf bittersweet	*Celastrus orbiculatus*

Common name	**Scientific name**
Meadow knapweed	*Centaurea x moncktonii*
Spotted knapweed	*Centaurea stoebe spp. Micranthos*
Canada thistle	*Cirsium arvense*
Poison hemlock	*Conium maculatum L.*
Leafy spurge	*Euphorbia esula*
Purple loosestrife	*Lythrum salicaria, virgatum*
Wild parsnip	*Pastinaca sativa* (Except non-wild cultivated varieties)
Non-native phragmites	*Phragmites australis* ssp. *australis*
Bohemian knotweed	*Polygonum x bohemicum*
Japanese knotweed	*Polygonum cuspidatum*
Giant knotweed	*Polygonum sachalinese*
Common tansy	*Tanacetum vulgare*
Minnesota State Restricted List	
Garlic mustard	*Alliaria petiolata*
European alder	*Alnus glutinosa*
Porcelain berry	*Ampelopsis brevipedunculata*
Japanese barberry cultivars	*Berberis thunbergii*
Siberian peashrub	*Caragana arborescens*
Wild carrot/Queen Anne's Lace	*Daucus carota*
Winged burning bush	*Euonymus alatus*
Lesser celandine	*Ficaria verna*
Glossy buckthorn (and all cultivars)	*Frangula alnus*
Bell's honeysuckle	*Lonicera x bella*
Amur honeysuckle	*Lonicera maackii*
Morrow's honeysuckle	*Lonicera morrowii*
Tatarian honeysuckle	*Lonicera tatarica*
Creeping miscanthus formally Amur silvergrass	*Miscanthus saccariflorus*
Common or European buckthorn	*Rhamnus cathartica*
Black locust	*Robinia pseudoacacia*
Multiflora rose	*Rosa multiflora*
Crown vetch	*Securigera varia*
Saltcedar	*Tamarix ramosissima*
Minnesota State Specially Regulated List	
Amur maple	*Acer ginnala*
Norway maple	*Acer platanoides*
Tatarian maple	*Acer tataricum L.*
Amur corktree	*Phellodendron amurense*
Callery Pear	*Pyrus calleryana*
Poison ivy	*Toxicodendron radican*
Iowa Department of Agriculture & Land Stewardship Primary Noxious Weeds	
Russian knapweed	*Acroptilon repens*
Palmer amaranth	*Amaranthus palmeri*
Perennial pepper-grass	*Cardaria draba*
Canada thistle	*Cirsium arvense*
Bull thistle	*Cirsium vulgare*

Common name	Scientific name
All other species of thistles	*belonging in the genera of Cirsium and Carduus*
European morning glory or field bindweed	*Convolvulus arvensis*
Quack grass	*Elymus repens*
Leafy spurge	*Euphorbia esula*
Horse nettle	*Solanum carolinense*
Perennial sow thistle	*Sonchus arvensis*
Buckthorn	*Rhamnus spp., not to include rangula alnus, syn. Rhamnus frangula*
Iowa Department of Agriculture & Land Stewardship Secondary Noxious Weeds	
Butterprint	*Abutilon theophrasti*
Poison hemlock	*Conium maculatum*
Wild carrot	*Daucus carota*
Teasel	*Dipsacus spp.*
Wild sunflower	*wild strain of Helianthus annuus L.)*
Buckhorn	*Plantago lanceolata*
Multiflora rose	*Rosa multiflora*
Sheep sorrel	*Rumex acetosella*
Smooth dock	*Rumex altissimus*
Sour dock	*Rumex crispus*
Wild mustard	*Sinapis arvensis*
Shattercane	*Sorghum bicolor*
Puncture vine	*Tribulus terrestris*
Cocklebur	*Xanthium strumarium*
Iowa Department of Agriculture & Land Stewardship Invasive Plants	
Garlic mustard	*Alliaria petiolata*
Palmer amaranth	*Amaranthus palmeri*
Oriental bittersweet	*Celastrus orbiculatus*
Teasel	*Dipsacus*
Japanese knotweed	*Fallopia japonica*
Japanese hop	*Humulus japonicus*
Purple loosestrife	*Lythrum salicaria &virgatum*
Multiflora rose	*Rosa multiflora*

3.1 NOXIOUS WEED LOCATIONS

V2F Project

Noxious and invasive weed surveys were conducted for the V2F Project ESBs in 2025. Canada thistle (*Cirsium arvense)*, common buckhorn (*Rhamnus cathartic),* crown vetch *(Securigera varia),* field bindweed *(Convolvulus arvensi),* garlic mustard *(Alliaria petiolate*), plumeless thistle (*Carduus acanthoides),* purple loosestrife (*Lythrum salicaria*), and wild parsnip (*Pastinaca sativa*), were identified within the ESBs. Northern's V2F Project will impact the noxious weed populations identified in Table 2 below. Northern and its contractors will implement the measures discussed in Sections 3.1 and 3.3 to control the spread of these identified populations. A majority of the noxious weed populations were identified adjacent to roadways; therefore, avoidance of these areas is not practicable.

The six locations where noxious weeds were observed within the planned project workspaces during the field surveys are indicated in Table 2 by milepost/workspace identifier and depicted on Figure 1 – Noxious Weed Locations. Figure 1 also depicts the location of the noxious weed occurrences within the ESBs. Consequently, if modifications to planned workspaces are required, the known locations of these noxious weeds can be readily integrated into revised siting and impact avoidance strategies.

Table 2 – Noxious Weed Species Observed for the V2F Project

Project Component	MP/General Location	Noxious Species Observed
Ventura compressor station	Located within VCS ETWS-001	Field bindweed
Lake Mills compressor station	Located within LCS ETWS-001 along roadside ditch	Canada thistle
	Located within LCS ETWS-001 along roadside ditch	Wild parsnip
Lake Mills M500 E-line	Immediately adjacent to access road LMA TAR-003	Canada thistle
	Located within TWS near MP 39.19	Canada thistle
Northfield #1	Located within NOR ETWS-001	Canada thistle
Faribault M500 D-line	Located within TWS near MP 101.79	Canada thistle

NL27 Project

Noxious and invasive weed surveys were conducted for the NL27 Project ESBs in 2025. Canada thistle (*Cirsium arvense)*, common buckhorn (*Rhamnus cathartic),* common tansy *(Tanacetum vulgare),* crown vetch *(Securigera varia),* phragmites *(Phragmites australis ssp. Australis)*, round-leaf bittersweet (*Celastrus orbiculatus*), spotted knapweed (*Centaurea stoebe spp. Micranthos),* Tatarian honeysuckle *(Lonicera tatarica)* and wild parsnip (*Pastinaca sativa*), were identified within the ESBs. Northern's NL27 Project will impact the noxious weed populations identified in Table 3 below. Northern and its contractors will implement the measures discussed in Sections 3.1 and 3.3 to control the spread of these identified populations.

The 15 locations where noxious weeds were observed within the planned project workspaces during the field surveys are indicated in Table 3 by milepost/workspace identifier and depicted on Figure 1 – Noxious Weed Locations. Figure 1 also depicts the location of the noxious weed occurrences within the ESB. Consequently, if modifications to planned workspaces are required, the known locations of these noxious weeds can be readily integrated into revised siting and impact avoidance strategies.

Table 3 – Noxious Weed Species Observed for the NL27 Project

Project Component	MP/General Location	Noxious Species Observed
Lake Mills M500 E-line	Located within LMA-ETWS-001 along roadside ditch	Wild parsnip
	Located within TWS near MP 42.89	Common buckthorn
	Located withinLMA-ETWS-008 along roadside ditch	Wild parsnip

Project Component	MP/General Location	Noxious Species Observed
	Located within LMA-ETWS-009 along roadside ditch	Wild parsnip
	Located within TWS near MP 43.73 along roadside ditch	Wild parsnip
	Located within LMA-TAR-003 along roadside ditch	Wild parsnip
	Immediately adjacent to access road LMA-TAR-004 along roadside ditch	Canada thistle
Albert Lea M500 E-line	Immediately adjacent to ALO-ETWS-005	Common buckthorn
	Immediately adjacent to ALO-ETWS-018	Canada thistle
	Located within ALO-SA-002 along roadside ditch	Wild parsnip
	Located within ALO-TAR-004 along roadside ditch	Wild parsnip
Willmar 3rd branch line upstream	Located within TWS near MP 4.06	Common buckthorn
	Immediately adjacent to WIL-ETWS-011	Spotted knapweed
Willmar 3rd branch line downstream	Located within TWS near MP 6.98	Canada thistle
	Located within WDC-ETWS-031	Canada thistle
	Immediately adjacent to WDC-ETWS-036	Canada thistle
	Located within WDC-ETWS-038	Common buckthorn
	Located within TWS near MP 10.59	Common buckthorn
	Located within HDD workspace from MP 10.64 to MP 10.68	Common buckthorn
Paynesville 2nd branch line	Located within PAY-ETWS-001	Crown vetch
	Located within TWS near MP 0.78	Canada thistle
	Immediately adjacent to PAY-TAR-003	Canada thistle
Worthington 2nd branch line	Located within WOR-ETWS-001	Canada thistle
	Immediately adjacent to TWS near MP 19.55	Tartarian honeysuckle
Springfield 2nd branch line	Located within SPR-ETWS-001	Canada thistle
	Immediately adjacent to TWS near MP 14.68	Canada thistle
	Located within HDD workspace near MP 16.18	Canada thistle
	Located within SPR-ETWS-034 along roadside ditch	Canada thistle
	Immediately adjacent to SPR-ETWS-049	Canada thistle
	Located within SPR-ETWS-050	Canada thistle
Alexandria 2nd branch line	Immediately adjacent to ALX-ETWS-005	Common buckthorn
	Located within ALX-ETWS-012	Canada thistle

4.0 MANAGEMENT GOALS

4.1 PRE-CONSTRUCTION AND CONSTRUCTION WEED CONTROL

A pre-construction meeting(s) will be held to provide both the V2F and NL27 Project contractors with information and training regarding noxious weed identification and management. Contractors will be provided information about measures to be taken to prevent the spread of noxious weeds in uncontaminated areas and about controlling the proliferation/spread of noxious weed populations already present in the Project areas. Qualified environmental inspectors (EIs) will be used to conduct on-site monitoring before and during construction.

Noxious weed control measures will be implemented in accordance with existing regulations and jurisdictional land management agencies or landowner agreements. Treatment methods will be based on species-specific and area-specific conditions (e.g., proximity to water, wetlands, riparian areas or agricultural areas) and time of year. All noxious weed areas within the workspace must be addressed by one or a combination of the following options: avoidance, personnel control, chemical treatment, or mechanical controls. If Northern's contractor proposes an alternate method, Northern's EI and construction team must approve the method prior to use.

Avoidance and Personnel Control

Wherever possible, the contractor will avoid the use of access roads, temporary workspace (TWS), extra temporary workspace (ETWS) and staging areas within noxious weed areas. The contractor will install silt fence around the noxious weed areas and erect signage warning personnel to avoid the areas. If avoidance of a noxious weed area is not possible, the contractor will control access of personnel and equipment through the noxious weed area to only those that are essential for construction.

Chemical Treatment

The use of chemical treatments is not permitted within 100 feet of wetlands or waterways. Northern's EIs or right of way personnel will work with landowners to get approval for specific herbicide product if contractor determines that chemical treatment may be used. Northern will use a licensed herbicide applicator to conduct the spraying.

Mechanical Methods

Mechanical methods may be utilized in lieu of or in combination with herbicide treatment for select locations. Potential mechanical methods include:

<u>Mowing and Physical Removal</u>

Mechanical methods of weed control may include mowing, discing, and hand pulling small, localized and/or isolated populations of noxious weeds. Access roads, TWS, ETWS and staging areas that contain noxious weeds may be mowed prior to equipment access. The mower will be cleaned prior to leaving the noxious weed area. As an additional measure, Northern may elect to treat the noxious weed areas with an herbicide. There will be no discing in native habitat areas.

<u>Soil Handling</u>

Prior to excavation activities, silt fence will be installed at the boundaries of the area containing noxious weeds. The 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. The construction contractor will

stockpile cleared noxious weeds and salvaged topsoil adjacent to the area from which they were stripped to prevent the transport of noxious weed seeds, roots, or rhizomes with the soil. Stockpiled soil from noxious weed areas will be marked with signage and will be returned to the areas from which they were stripped. Soil and vegetation from noxious weed areas will not be moved outside of the identified and marked noxious weed infestation areas. Construction equipment will not be allowed to work in or on these stockpiles. All straw or hay bales and mulch used to control sedimentation will be certified weed free and obtained from state approved sources.

In areas where full topsoil stripping does not occur (e.g., wetlands, access roads, and ETWS), Northern will install a layer of geotextile fabric, or a functional equivalent, at the boundaries of areas containing noxious weeds. Then, a layer of construction mats will be installed. The contractor will utilize the mat road to traverse the noxious weed area, limiting direct contact with the area. The mats and fabric will be removed as part of final clean up. The mats will be sprayed and the geotextile fabric will be disposed of at a landfill.

Equipment Wash Stations

Northern's contractor will place equipment wash stations along the V2F and NL27 Project components, as needed, to best minimize the spread of noxious weeds. Wash stations will be wholly within the workspace identified for the Projects. The contractor will implement the following controls during the use of equipment wash stations:

- Construction equipment and vehicles that are used to move vegetation and topsoil during clearing and restoration phases of the V2F and NL27 Projects that come into contact with vegetation or disturbed soil in areas where noxious weeds have been identified will be cleaned before being allowed to work in non-noxious weed areas of the site. Equipment traveling out of noxious weed areas will be cleaned free of soil and plant debris prior to proceeding into an area without invasive plants. Water for the wash stations will be obtained from municipal sources. Water from the equipment wash stations will be collected and transported off-site to an appropriate disposal facility. A typical drawing of the equipment wash station is provided as Figure 2.
- All equipment entering or leaving the noxious weed areas will be logged with the date and time of entry, exit and confirmation that the equipment was cleaned.
- All ground disturbing equipment will be clean and free of soil or plant debris prior to arriving onsite. The on-site EI will inspect all equipment upon arrival and maintain a log of such inspections. In the event that equipment arrives in a manner not consistent with the above requirement(s), the EI will direct the contractor to clean the equipment at an off-site location prior to its use on the Project.

Boot Cleaning Stations

Northern will HDD wetlands and waterbodies for the V2F and NL27 Projects. If the HDD travel lane will traverse a noxious weed area, Northern's EIs will establish a boot cleaning area for the pedestrian traffic that traverses the noxious weed areas. Boot cleaning stations should be installed at boundaries of V2F and NL27 Project workspaces where HDDs or conventional bores cross noxious weed populations. All personnel entering and leaving a noxious weed area on foot must use the boot cleaning stations and record their use of the cleaning station. A typical drawing of a boot cleaning station is provided as Figure 3. Any equipment that enters a noxious weed area due to an inadvertent release of drilling mud will follow the procedures for equipment wash stations.

4.2 AQUATIC NUISANCE SPECIES CONTROL

Any equipment to be used in water must follow precautions to avoid the introduction of aquatic nuisance species (ANS) into Project areas. Best management practices include, but are not limited to:

- Removing all plants, animals, or fragments of plant or animals prior to equipment arriving onsite
- Draining all water from motors, pumps, bilges, or other containers; if the equipment has been drained for less than seven days prior to arrival on site, a chemical or hot water treatment sufficient to kill ANS organisms will be utilized
- Visually inspecting equipment to detect any presence of ANS prior to arriving onsite and after each use in an aquatic environment
- Cleaning and inspecting transporting trailers and trucks

4.3 RESTORATION WEED CONTROL

Following construction, Northern's contractor will restore the project areas per landowner or land managing agency requirements using native seeding and mulching as applicable. Northern's contractor will use proposed specifications for mulch and seed to ensure noxious weeds are not brought in through contaminated mulch or seed. Certified weed-free mulch and seed will be applied where practicable or required.

Restoration specific best management practices include:

- Revegetate disturbed areas as soon as possible. Revegetation includes topsoil replacement, planting, seeding, fertilizing, and weed free mulching, as necessary
- Seeding will be conducted on disturbed areas that have reached final grade or that will remain undisturbed for 30 days
- Use seed and other plant materials that have been certified as weed free.
- Use native materials where appropriate and feasible
- Treat weeds adjacent to newly seeded areas prior to planting and treat planted areas for weeds during the first growing season
- Non-residual herbicide such as glyphosate will be used; no herbicide will be used within 100 feet of any wetland/waterbody area

4.4 OPERATION WEED CONTROL – THREE-YEAR PLAN

Northern will complete post-construction monitoring of noxious weed areas. This monitoring will include inspection of existing weed populations and identification of any new weed populations on or immediately adjacent to the V2F and NL27 Project components. Any new populations of noxious weeds located within the project's ground-disturbance area would be considered a result of construction activities and would be controlled and treated accordingly.

First Year Weed Control Objective:

1) Identify local species of noxious weeds
2) Identify weed control options and establish a plan
3) Identify weed control contractor licensed in herbicide application and establish contract
4) Apply competitive native grass seed to prevent weeds
5) Mow, spray, and monitor weed control program

Second Year Weed Control Objective:

1) Renew weed control contract and perform facility inspection with contractor
2) Apply native grass seed to thin areas, where required
3) Mow, spray, and monitor weed control program

Third Year Weed Control Objective:

1) Renew weed control contract and perform facility inspection with contractor
2) Apply native grass seed to thin areas, if required
3) Mow, spray, and monitor weed control program

Figure 1

Noxious Weed Locations

V2F Figures

Appendix

3A

Title

Noxious Weed Locations
V2F - Temporary Disconnect Site Ventura Compressor Station

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Hancock County, Iowa

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

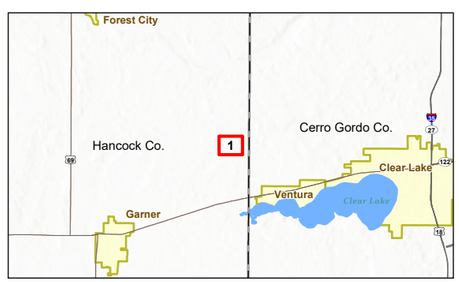
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Existing Pipeline
- Culvert
- Invasive Species
- Field Delineated Wetland

National Hydrography Dataset

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



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

Stantec

Northern Natural Gas

Appendix

3A

Title

Noxious Weed Locations
V2F - Temporary Compression Site Lake Mills Compressor Station

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Worth County, Iowa

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

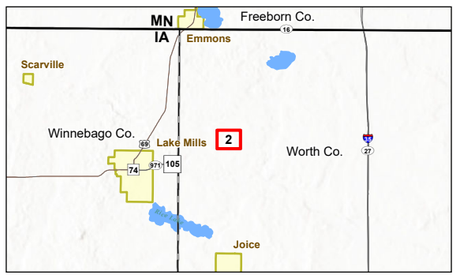
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

National Hydrography Dataset

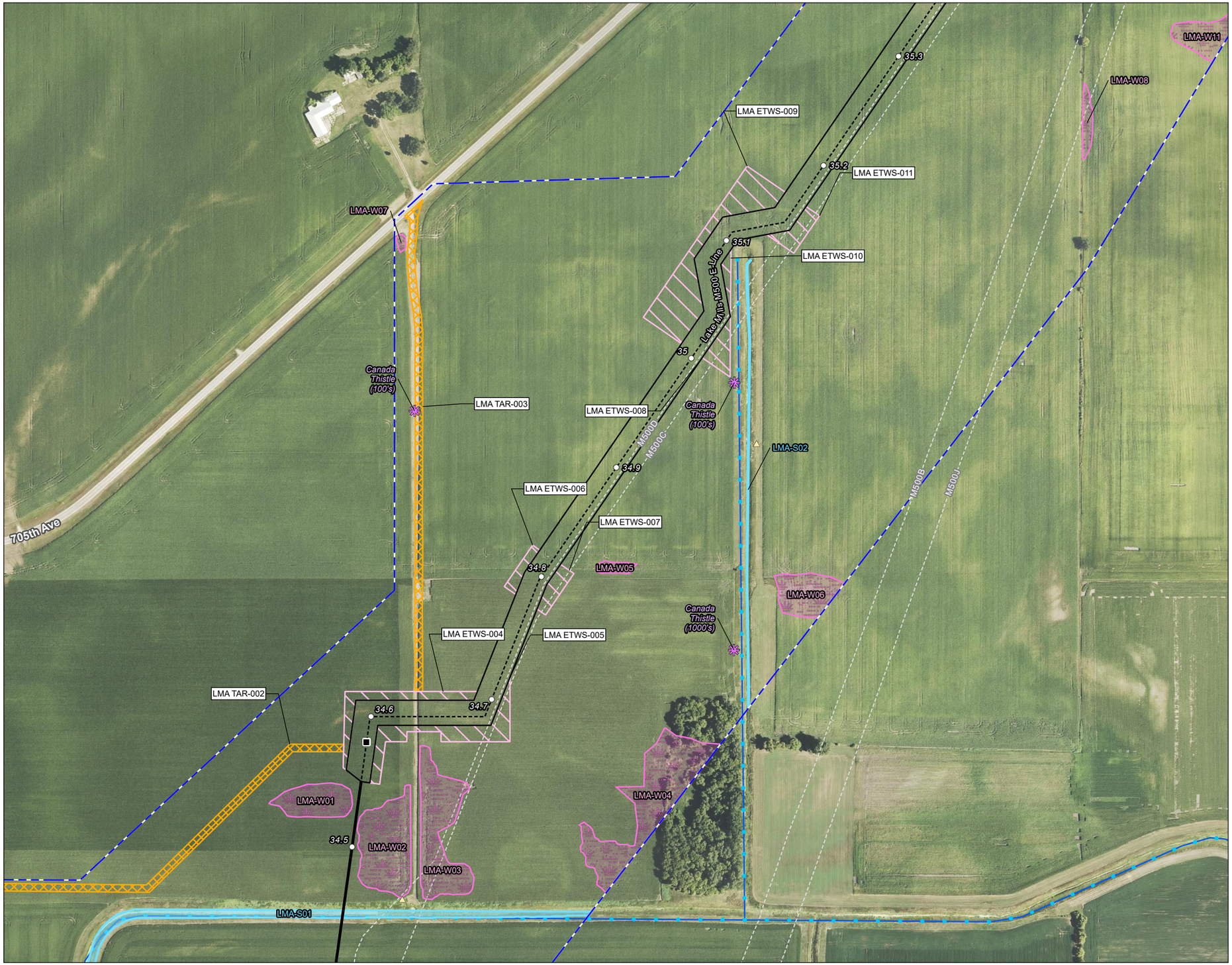
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



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

Stantec

Northern Natural Gas



Appendix

3A

Title

Noxious Weed Locations
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

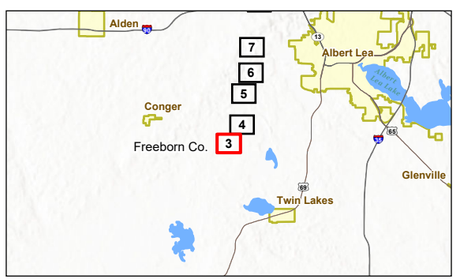
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Culvert
- Invasive Species
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

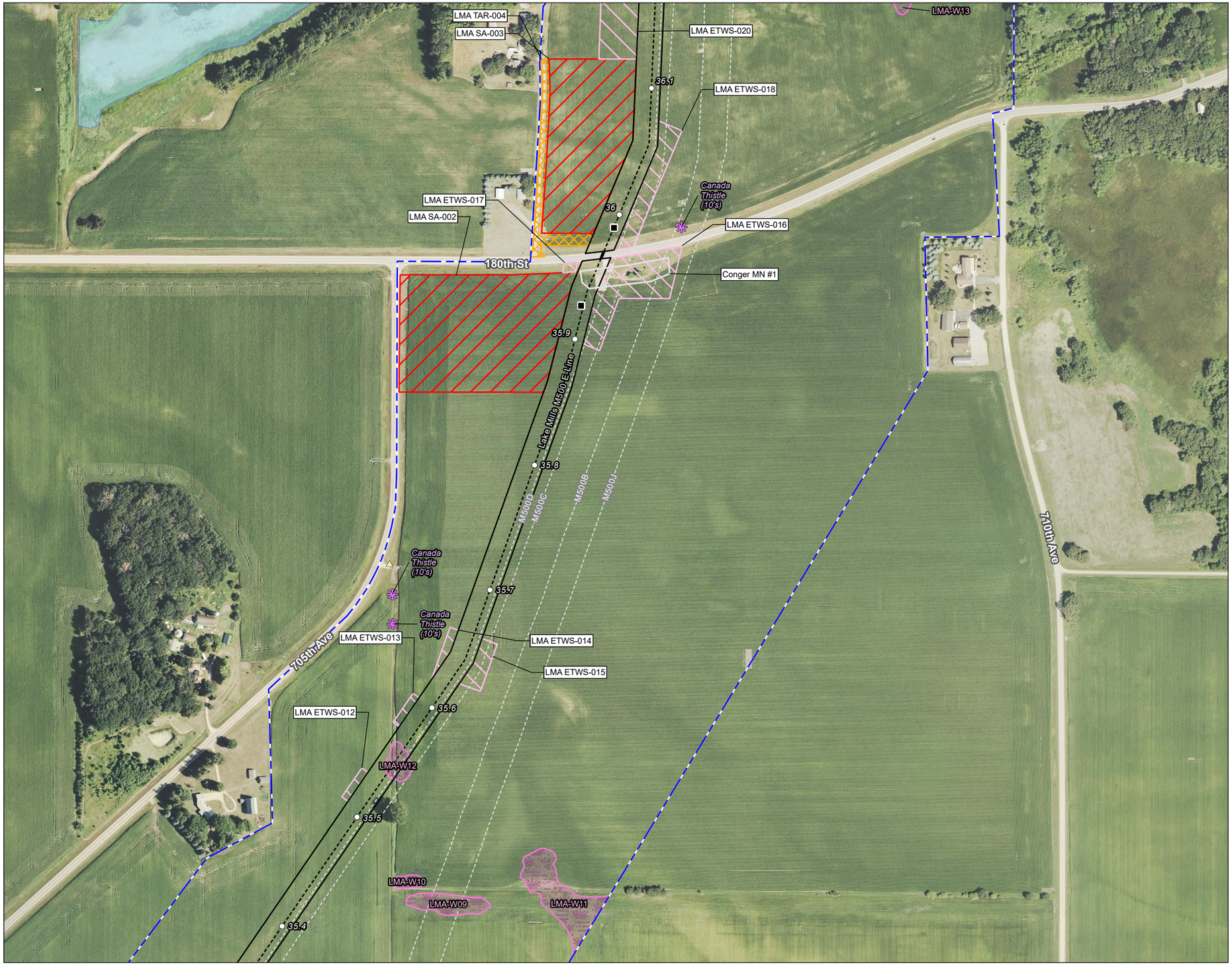
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



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

Stantec

Northern Natural Gas



Appendix

3A

Title

Noxious Weed Locations
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

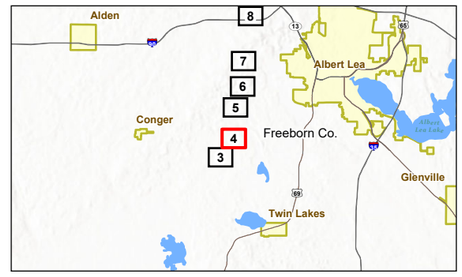
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Lot
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Culvert
- Invasive Species
- Field Delineated Wetland

National Hydrography Dataset

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



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

Stantec

Northern Natural Gas

Appendix

3A

Title

Noxious Weed Locations
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

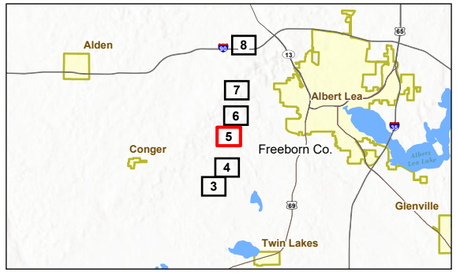
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Temporary Workspace
- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Invasive Species
- Upland Drainage Feature
- Field Delineated Wetland

National Hydrography Dataset

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



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

Stantec

Northern Natural Gas

Appendix

3A

Title

Noxious Weed Locations
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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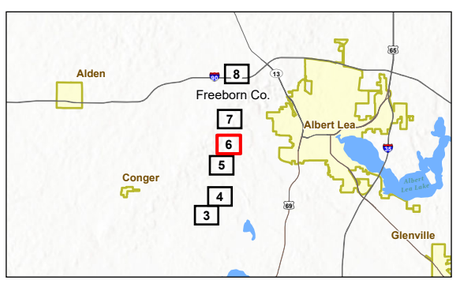
Legend

- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Culvert
- Invasive Species
- Field Delineated Waterway
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

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



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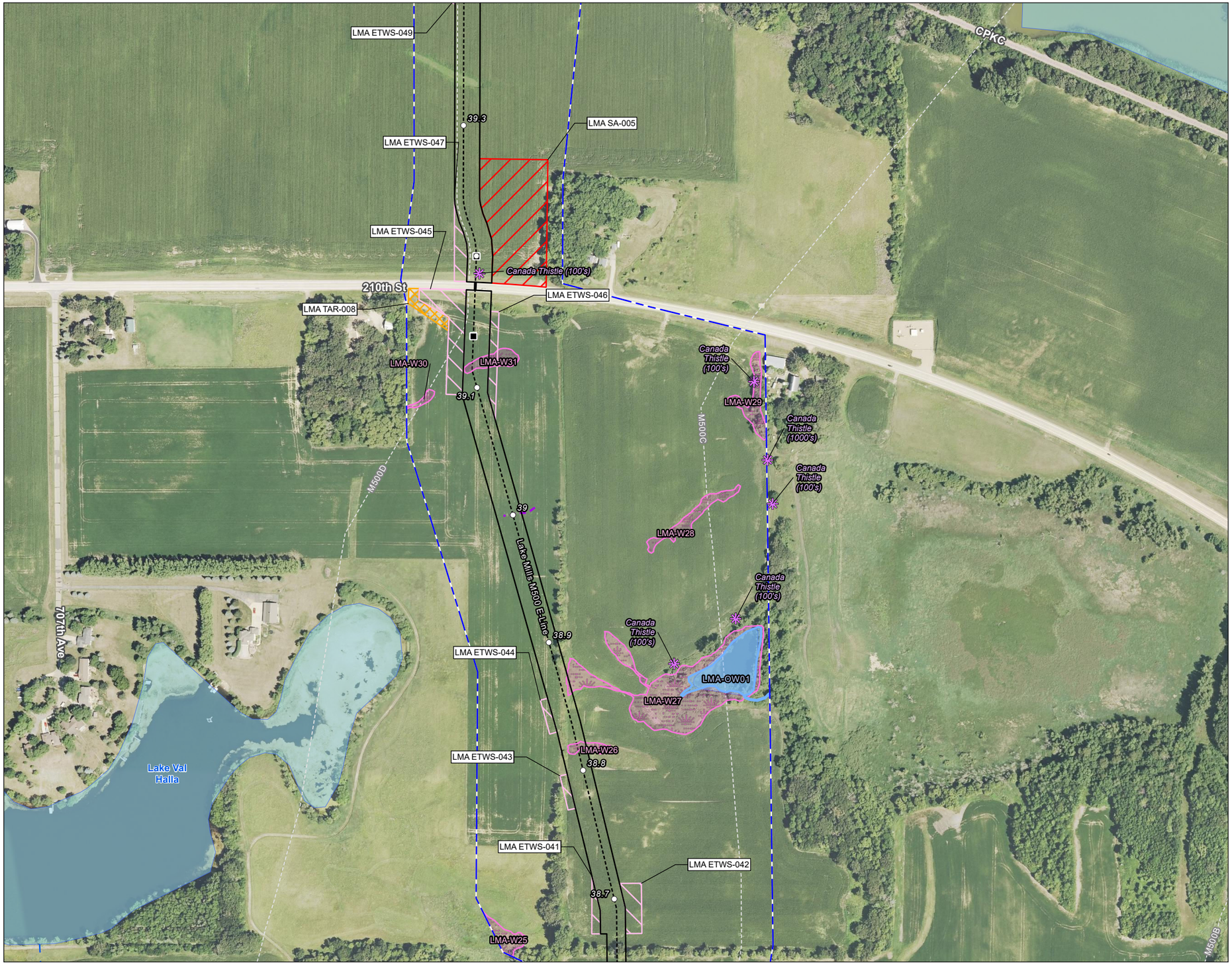
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas



Appendix

3A

Title

Noxious Weed Locations
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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- Environmental Survey Boundary
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- Staging Area
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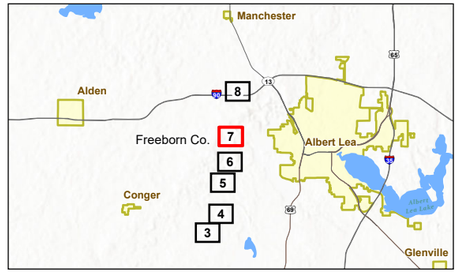
- Proposed Pipeline
- Existing Pipeline
- Invasive Species
- Upland Drainage Feature
- Field Delineated Open Water
- Field Delineated Wetland

National Hydrography Dataset

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



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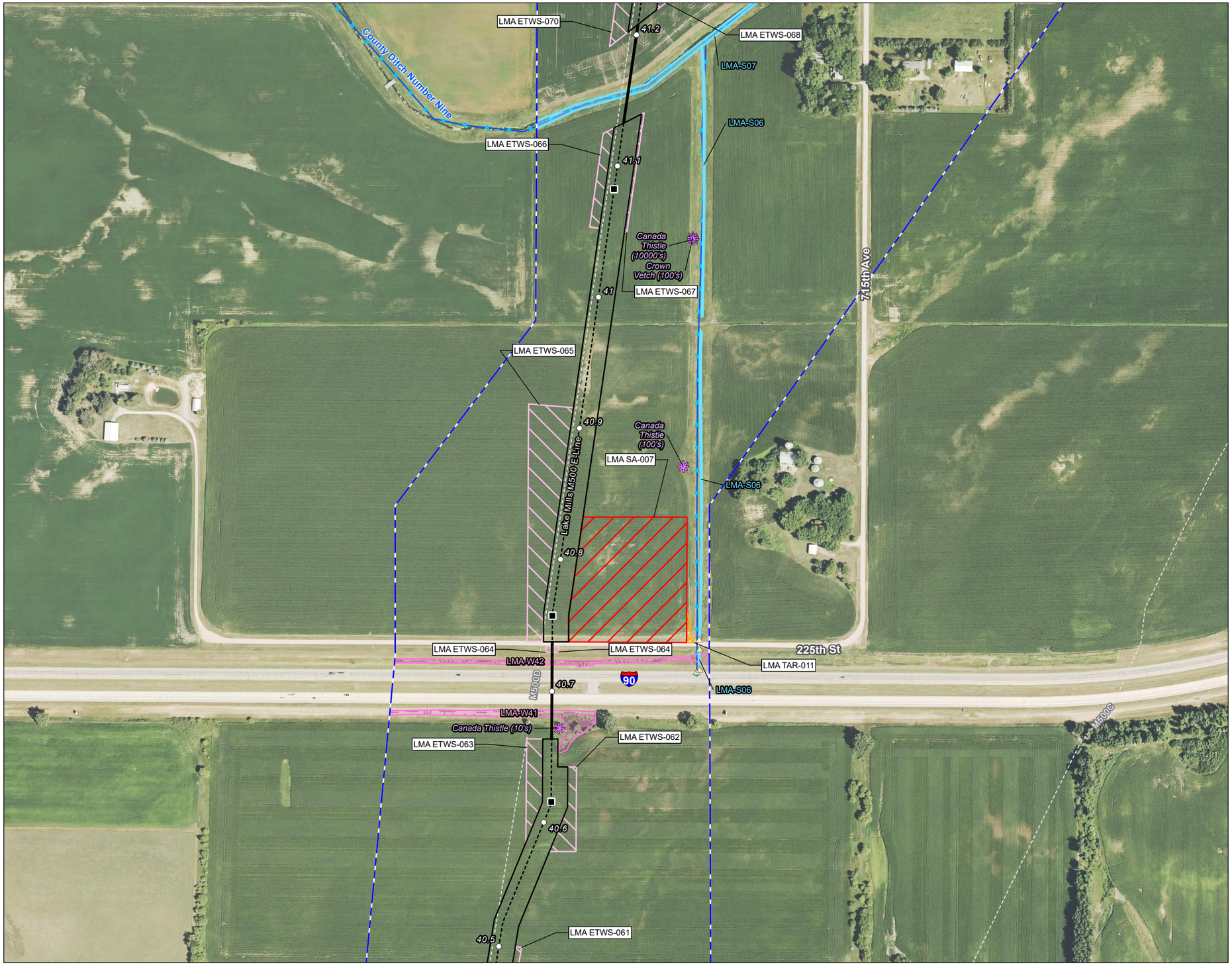
Stantec

Northern Natural Gas



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3A

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Noxious Weed Locations
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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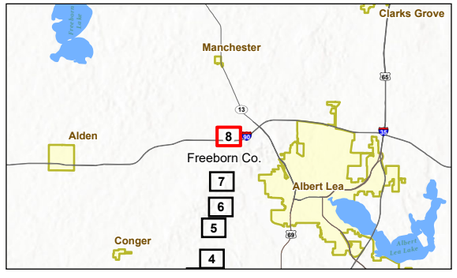
- Culvert
- Invasive Species
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

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



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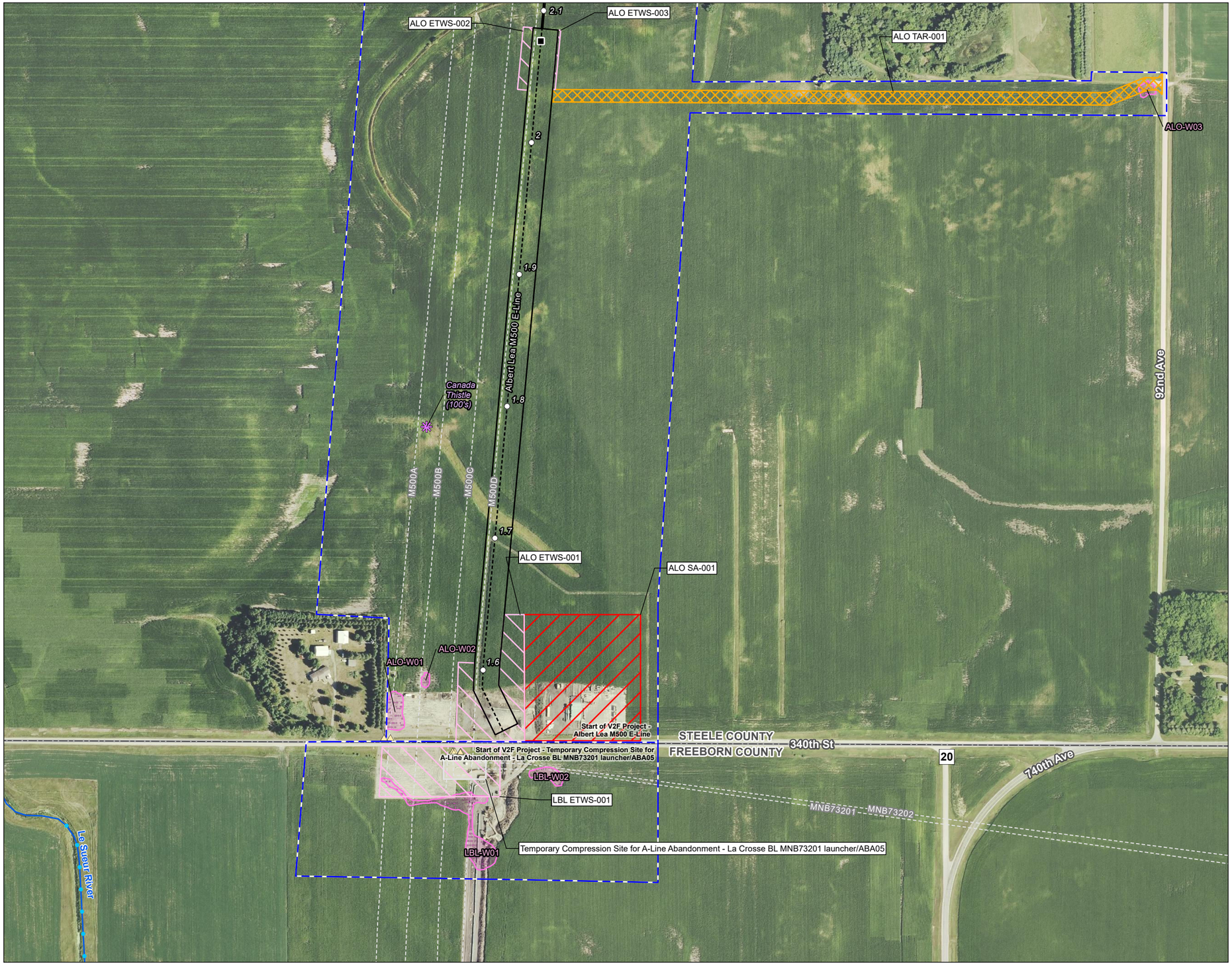
3. Background: 2023 NAIP

Stantec

Northern Natural Gas



Appendix

3A

Title

Noxious Weed Locations
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
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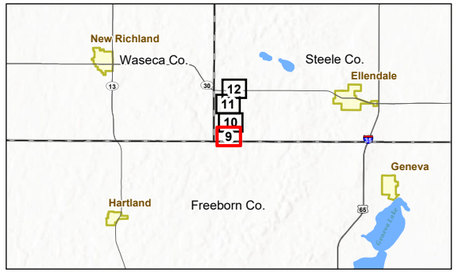
Legend

- Environmental Survey Boundary
- Existing Lot
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Culvert
- Invasive Species
- Field Delineated Wetland

National Hydrography Dataset

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



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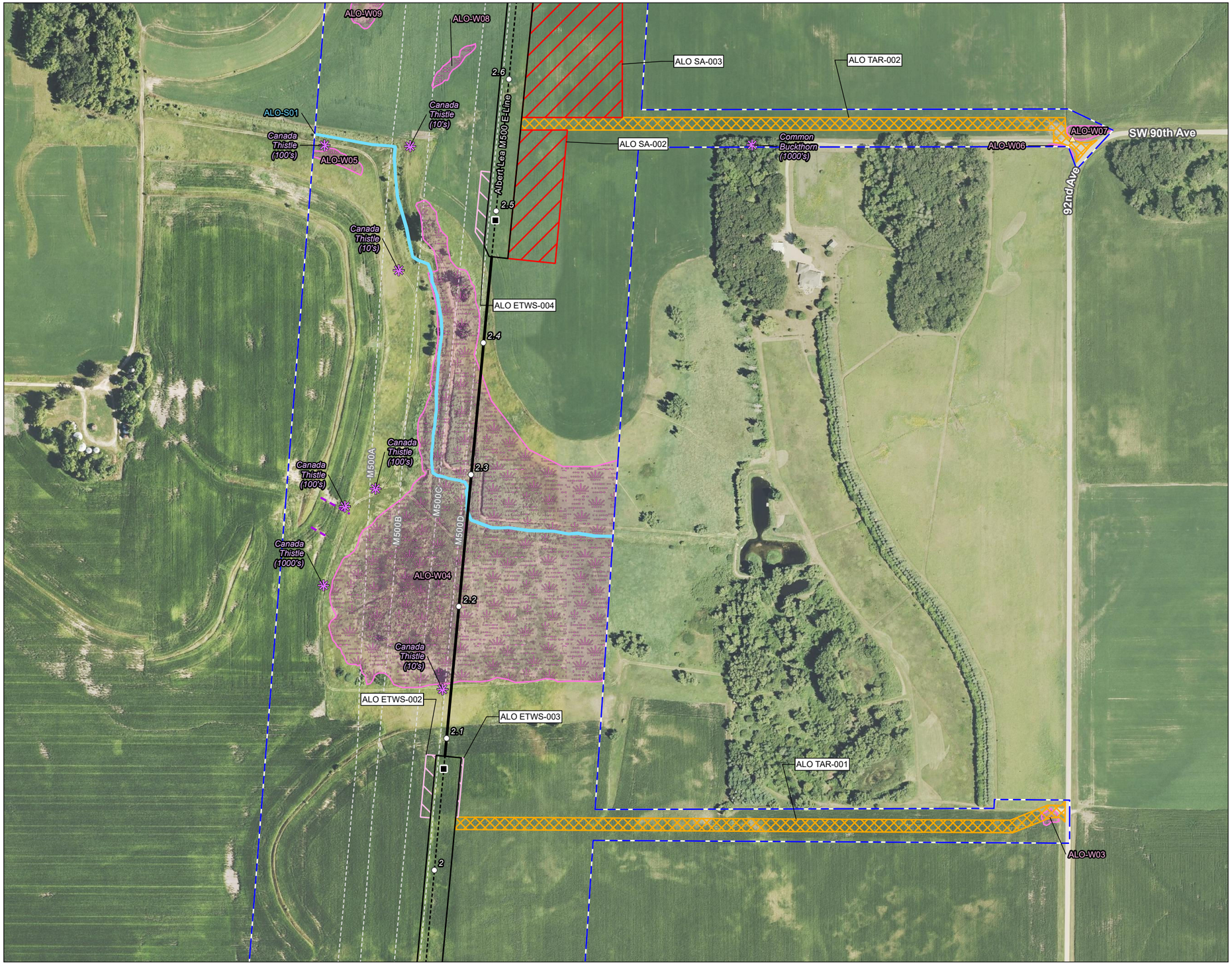
Stantec

Northern Natural Gas



Appendix

3A

Title

Noxious Weed Locations
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

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- Culvert
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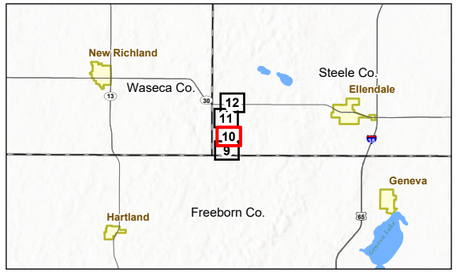
- Upland Drainage Feature
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

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



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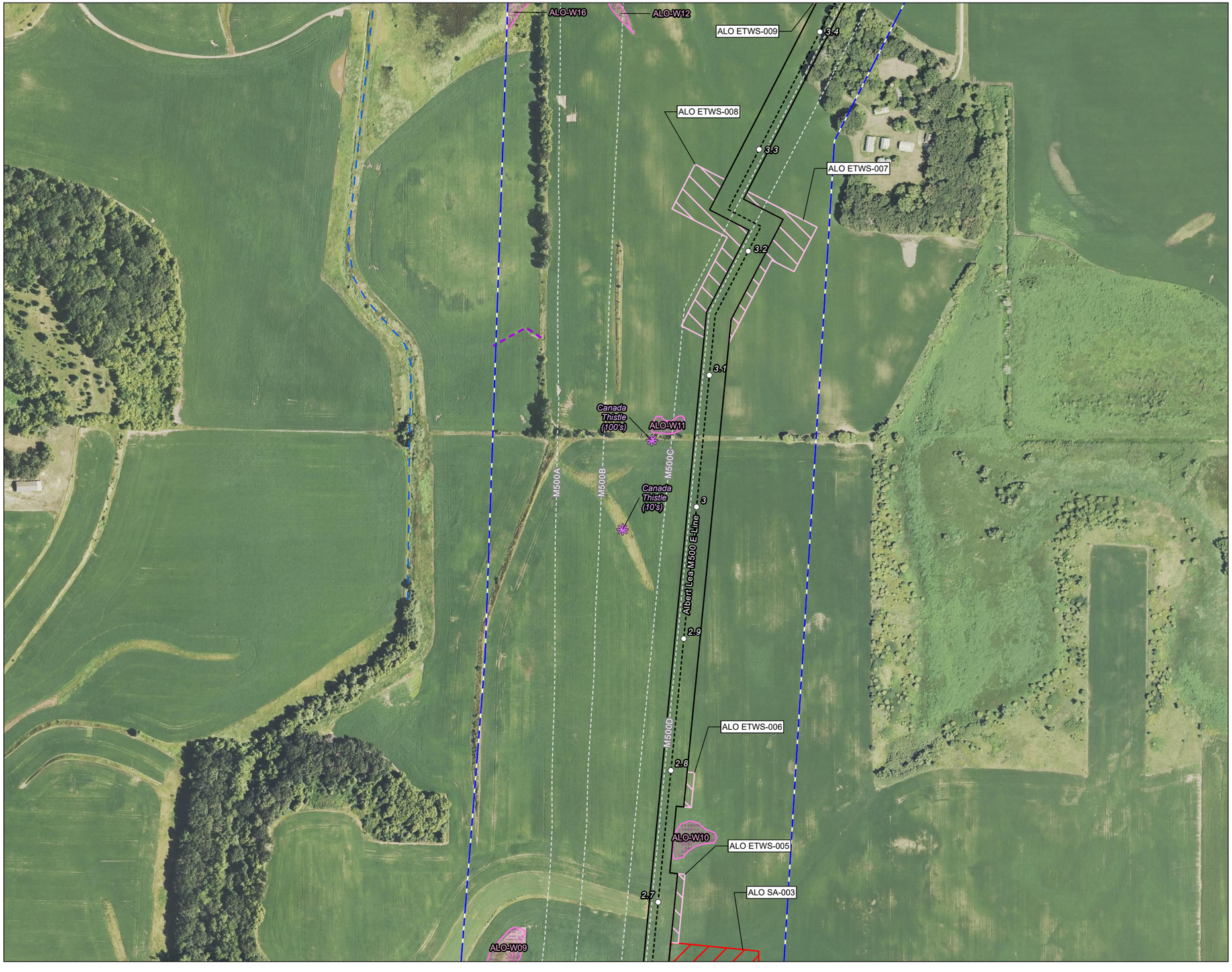
3. Background: 2023 NAIP

Stantec

Northern Natural Gas



Appendix
3A

Title
Noxious Weed Locations
V2F - Albert Lea M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
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- Upland Drainage Feature
- Field Delineated Wetland

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
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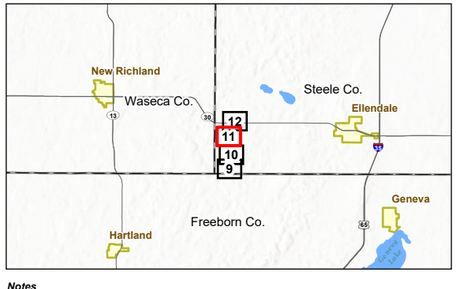

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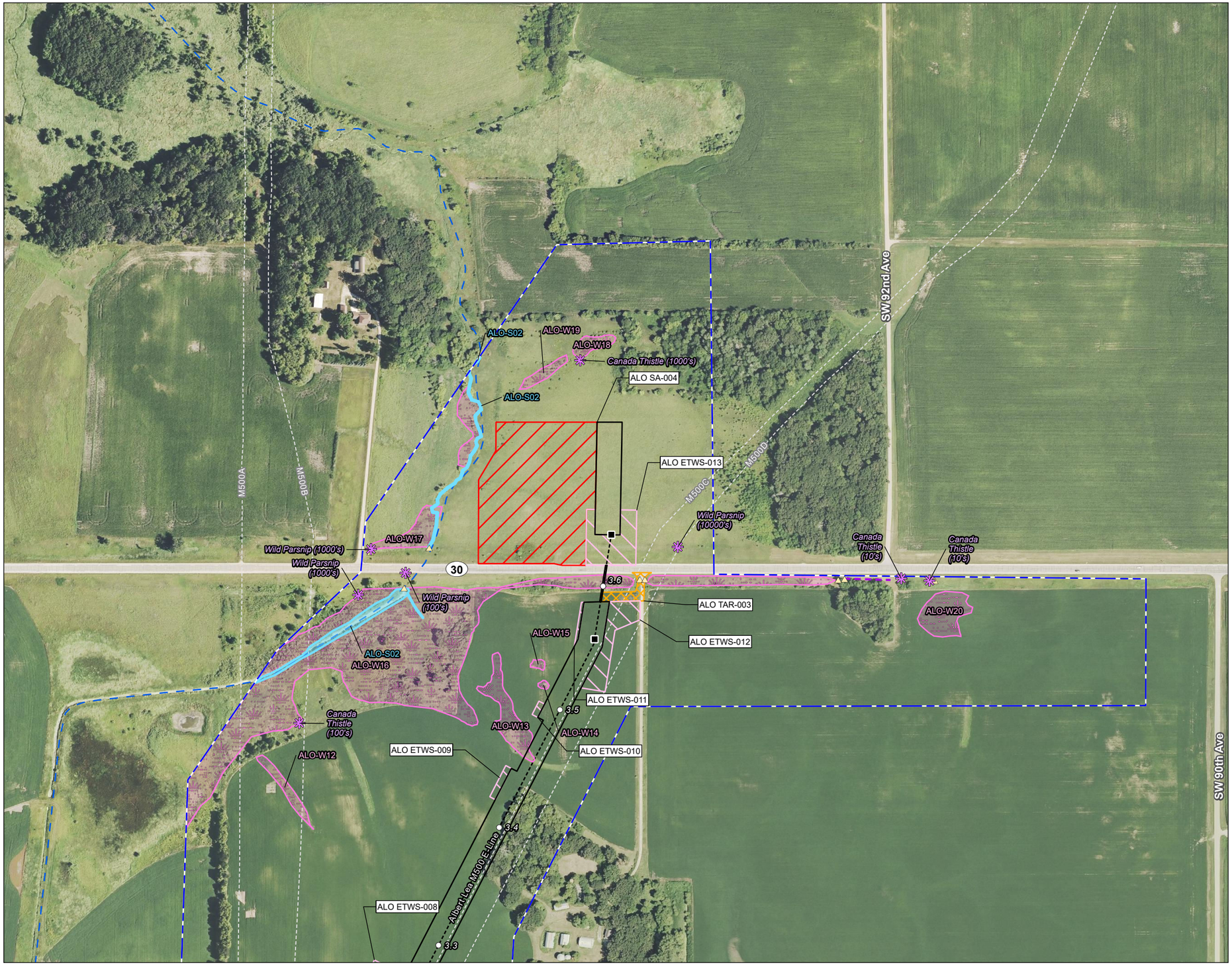
Stantec
Northern Natural Gas



Appendix
3A

Title
Noxious Weed Locations
V2F - Albert Lea M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
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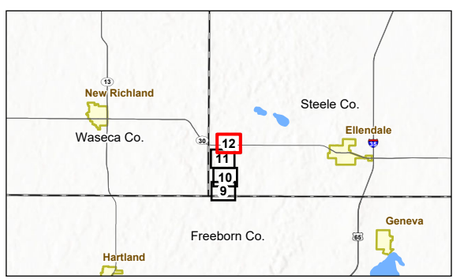
- Culvert
- Invasive Species
- Upland Drainage Feature
- Field Delineated Waterway
- Field Delineated Wetland

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



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

Stantec
Northern Natural Gas

Title
Noxious Weed Locations
V2F - Temporary Compression Site
Northfield #1

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

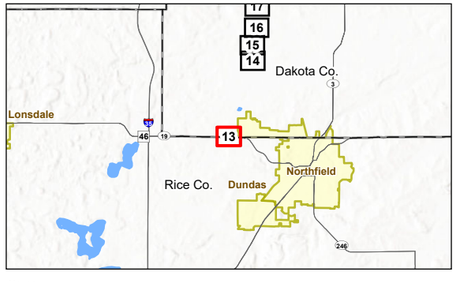
Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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

Legend
- Environmental Survey Boundary
- Existing Lot
- Extra Temporary Workspace
- Temporary Access Road
- Existing Pipeline
- Culvert
- Invasive Species
- Upland Drainage Feature
- Field Delineated Wetland

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



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

Stantec

Northern Natural Gas

Appendix
3A

Title
Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
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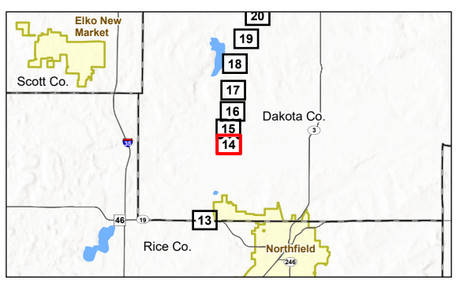
Legend
- Environmental Survey Boundary
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Temporary Workspace
- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Culvert
- Invasive Species
- Upland Drainage Feature
- Field Delineated Wetland

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



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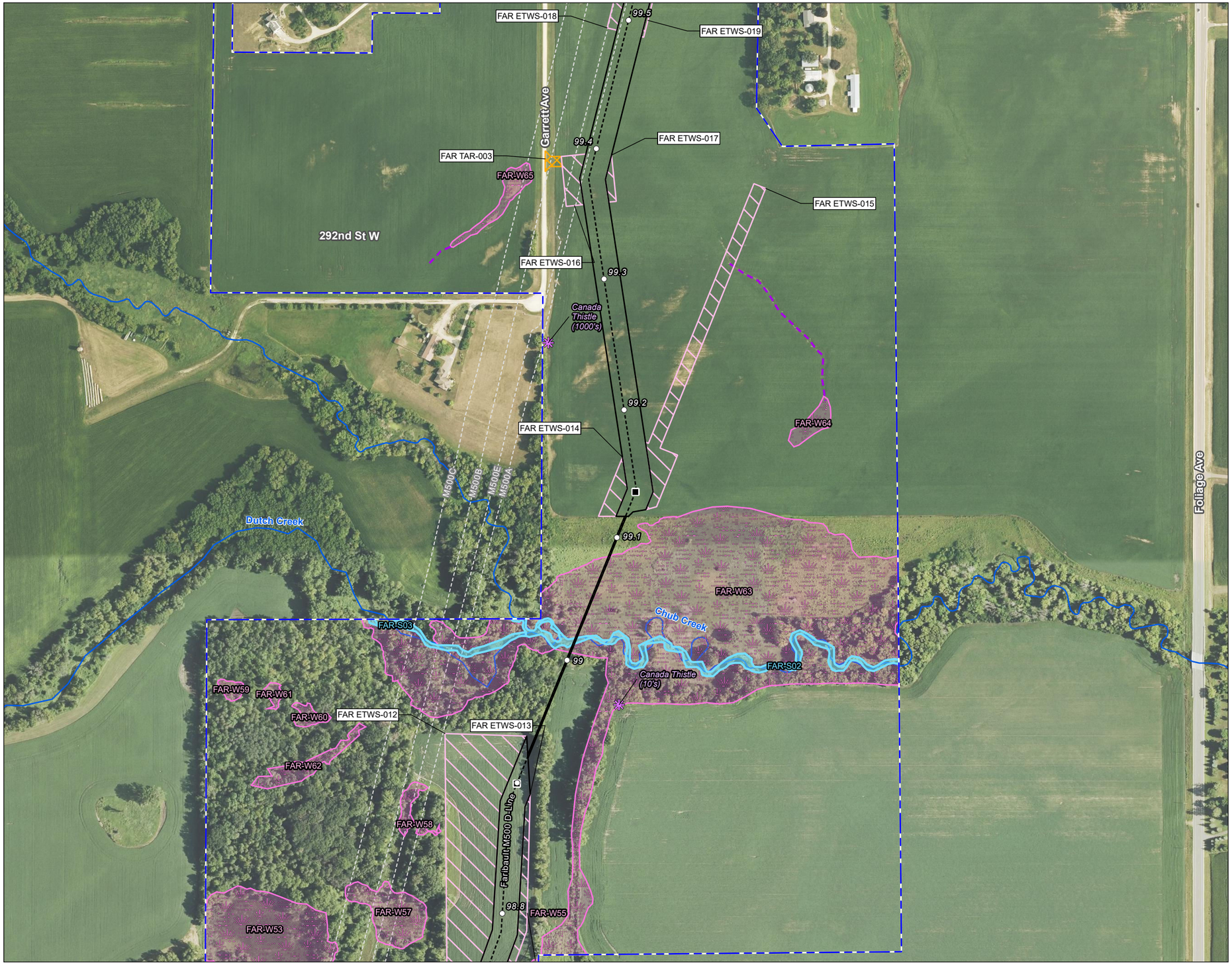
3. Background: 2023 NAIP

Stantec
Northern Natural Gas



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3A

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Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

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Legend

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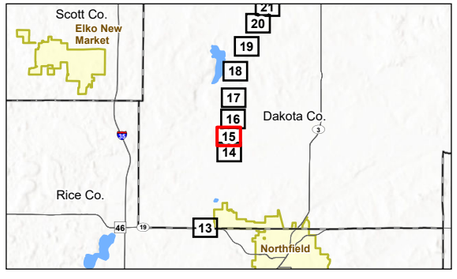
- Existing Pipeline
- Invasive Species
- Upland Drainage Feature
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

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



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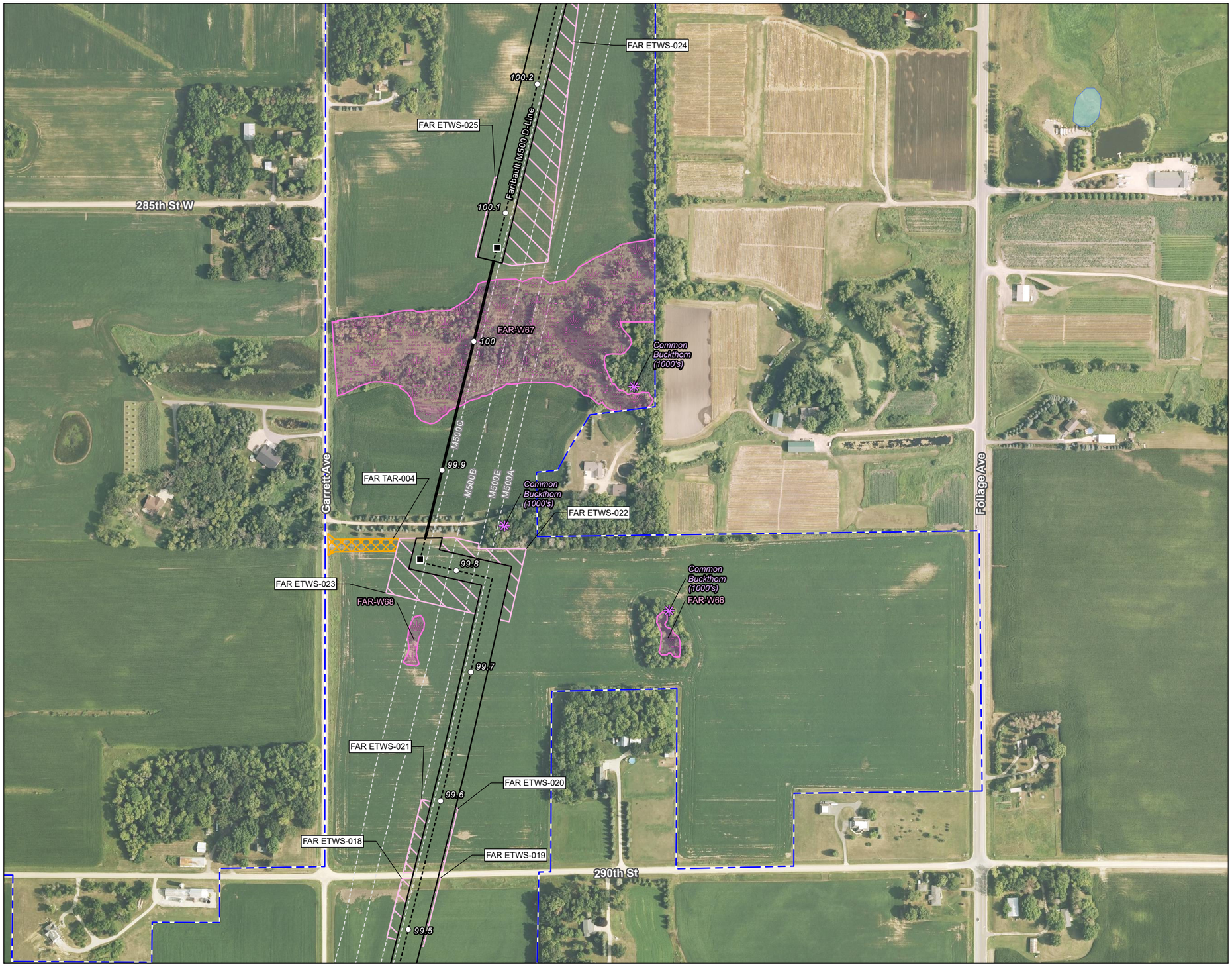
Stantec

Northern Natural Gas



Appendix
3A

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Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

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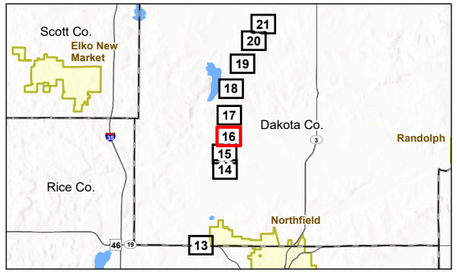
- Invasive Species
- Field Delineated Wetland

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



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Stantec

Northern Natural Gas

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Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

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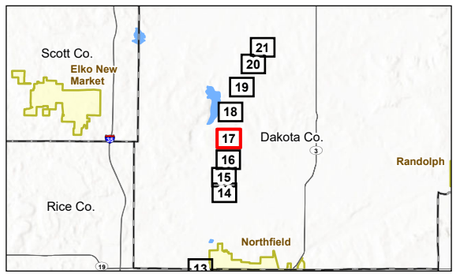
Legend

- Environmental Survey Boundary
- Existing Lot
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Culvert
- Invasive Species
- (No Access)
- Field Delineated Wetland

National Hydrography Dataset

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



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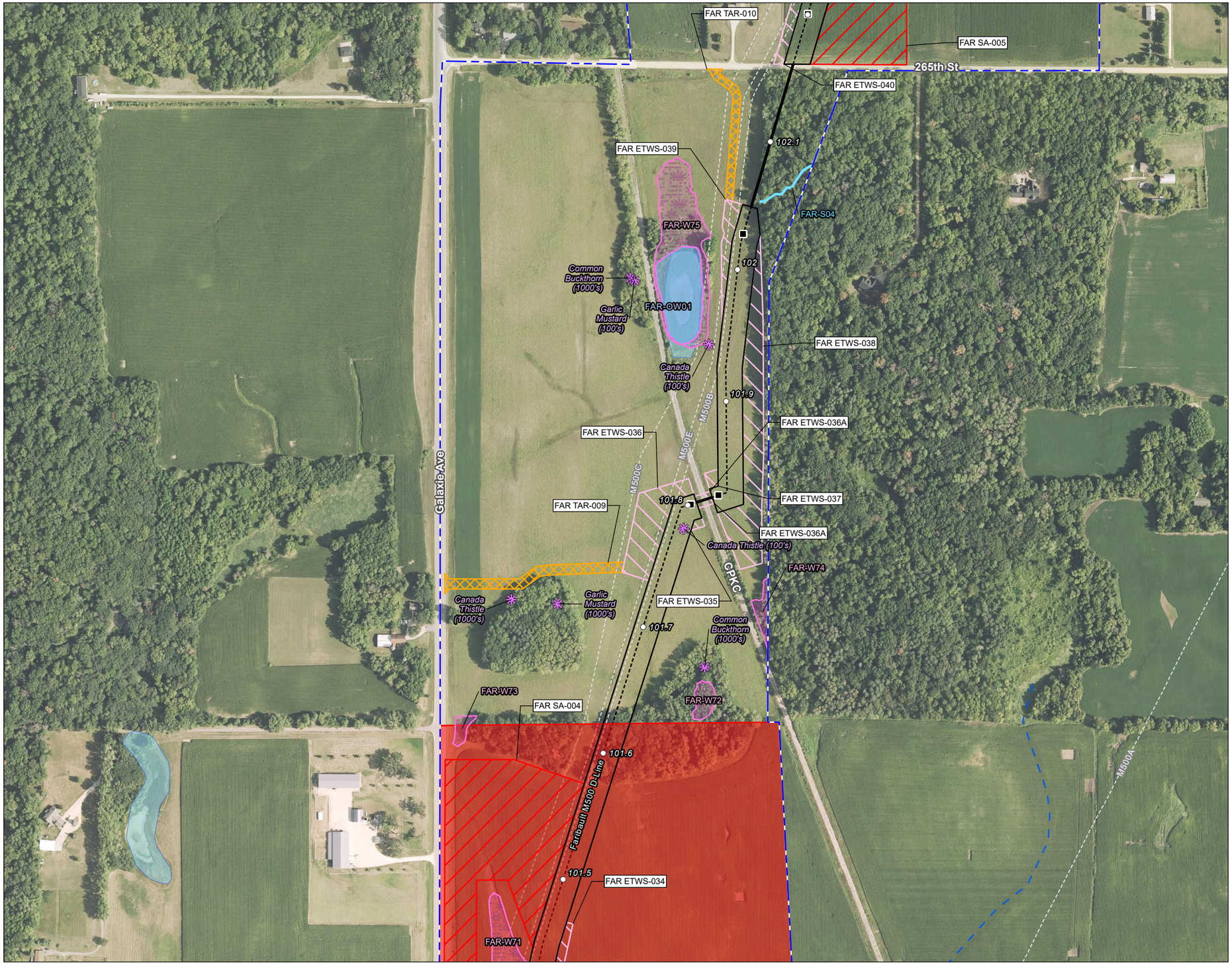
Northern Natural Gas



Appendix

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Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

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- Existing Pipeline
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- Field Delineated Wetland

National Hydrography Dataset

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- Intermittent Stream
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- Canal/Ditch
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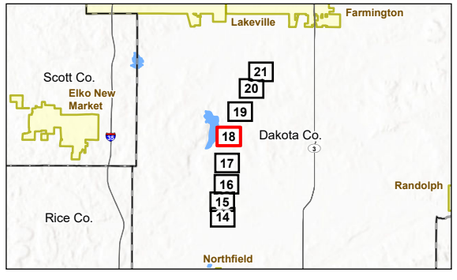

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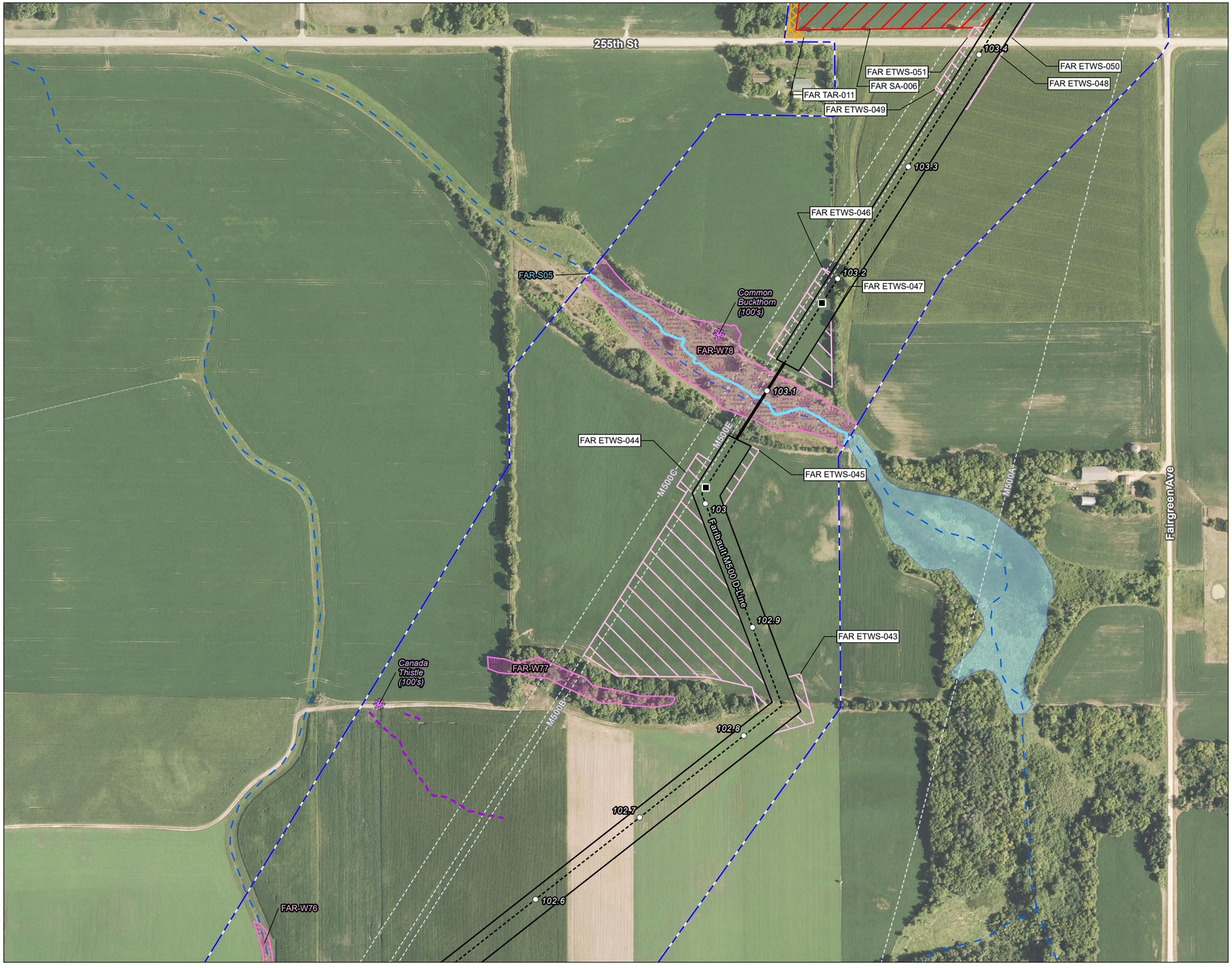
Stantec

Northern Natural Gas



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Noxious Weed Locations
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Client/Project 172608813

Northern Natural Gas
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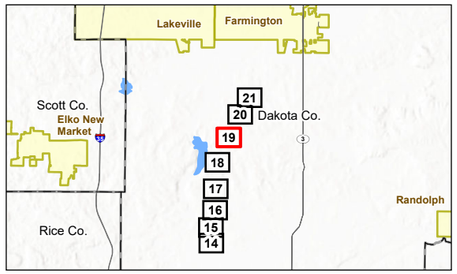
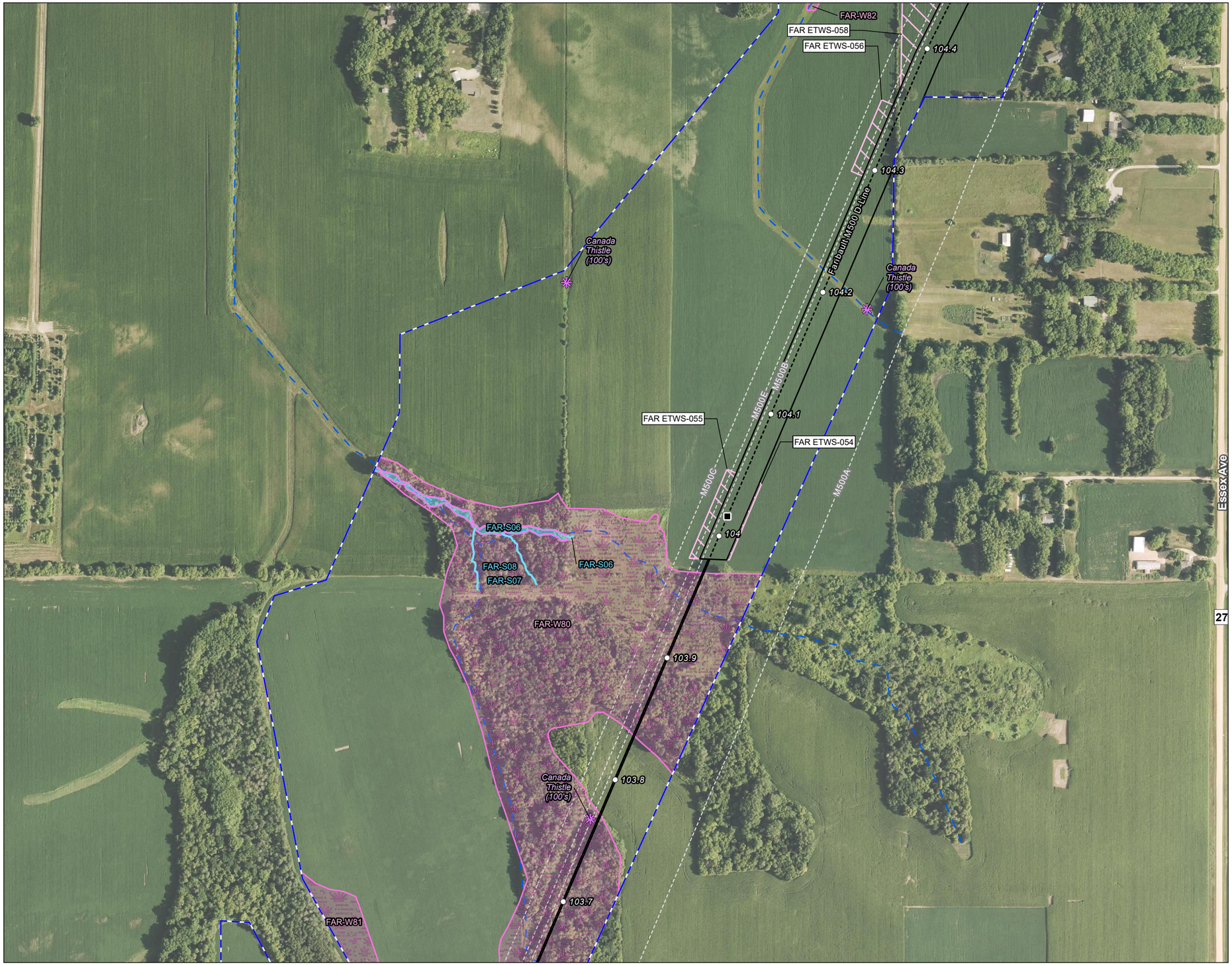
- Canal/Ditch
- Waterbody



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

Stantec

Northern Natural Gas



Appendix
3A

Title
Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

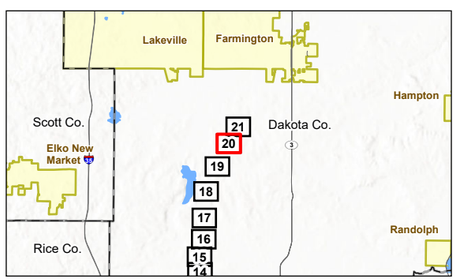
Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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

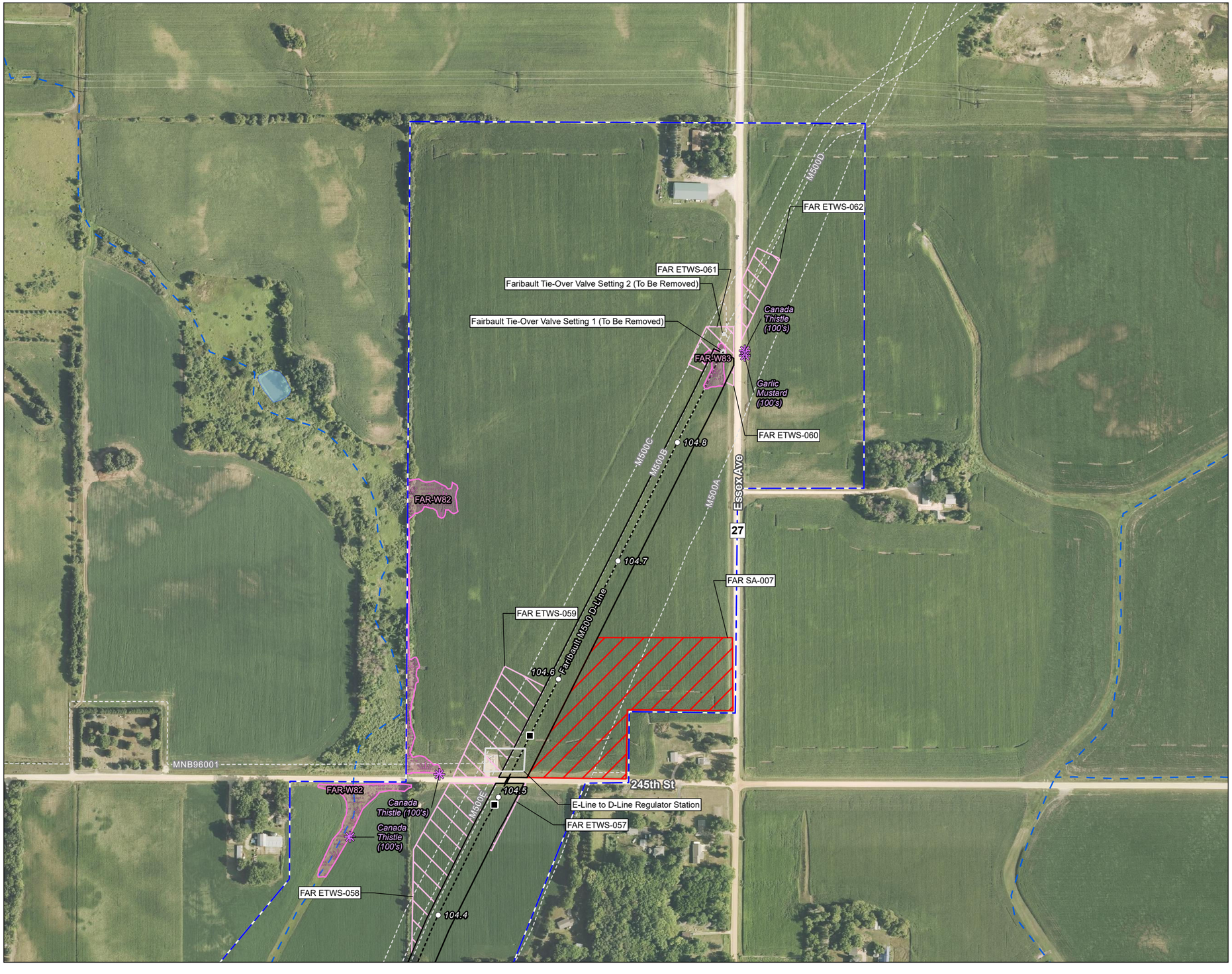
Legend
- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Invasive Species
- Field Delineated Waterway
- Field Delineated Waterway
- Field Delineated Wetland

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



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

Stantec
Northern Natural Gas



Appendix
3A

Title
Noxious Weed Locations
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

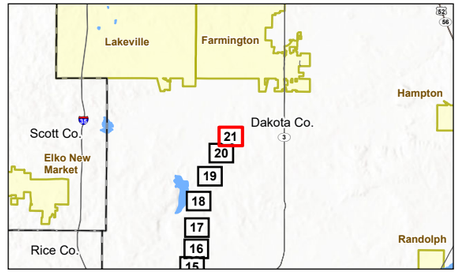
Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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

Legend
- Environmental Survey Boundary
- Existing Lot
- Extra Temporary Workspace
- Staging Area
- Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Invasive Species
- Field Delineated Wetland

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



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

Stantec
Northern Natural Gas

NL27 Figures

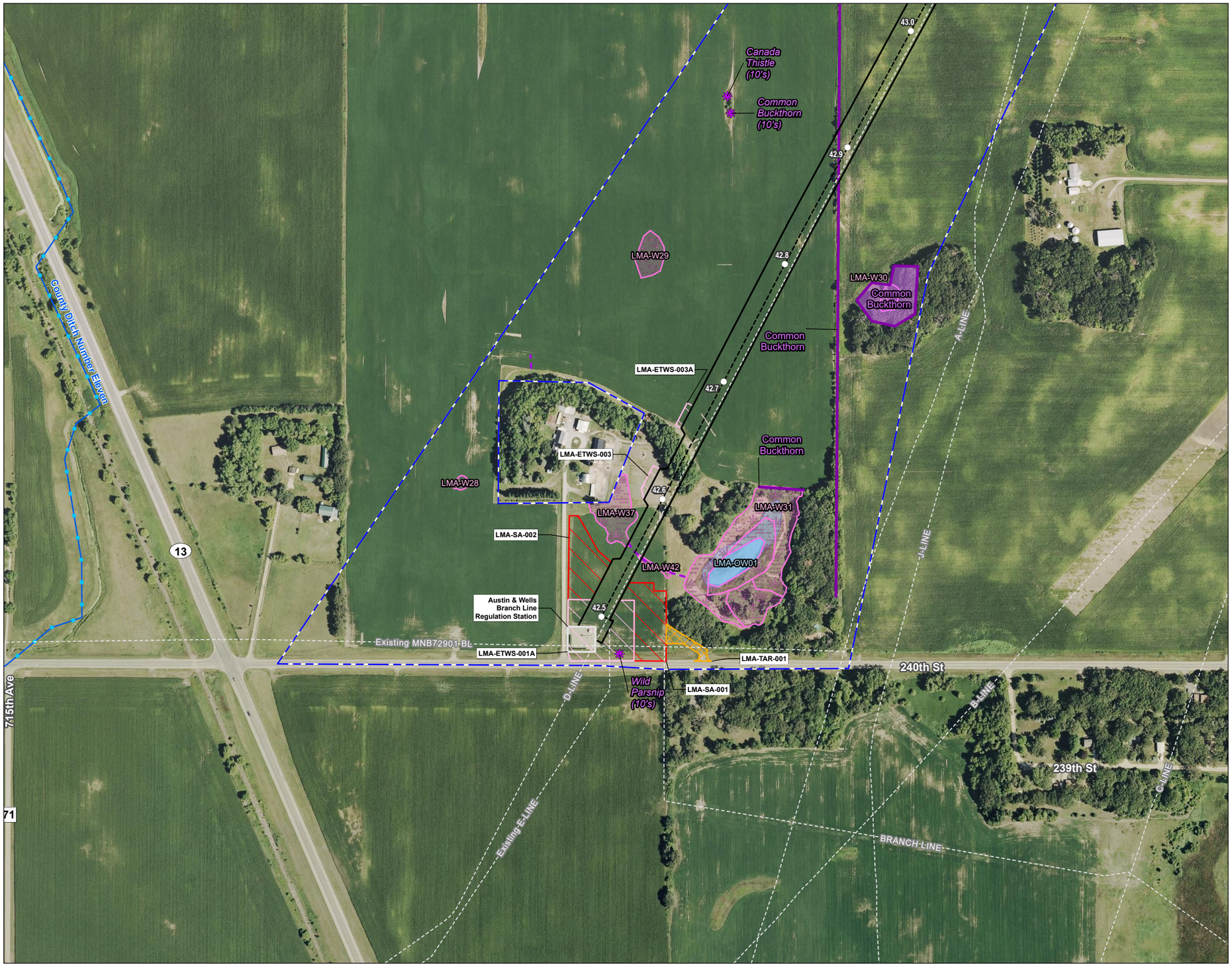


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

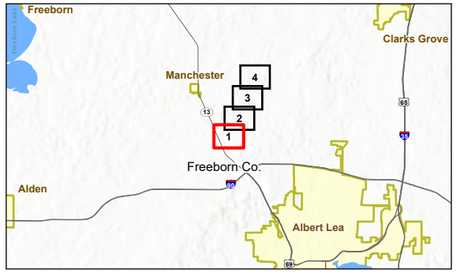
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Noxious Weed Point
- Noxious Weed Area
- Noxious Weed
- Upland Drainage
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

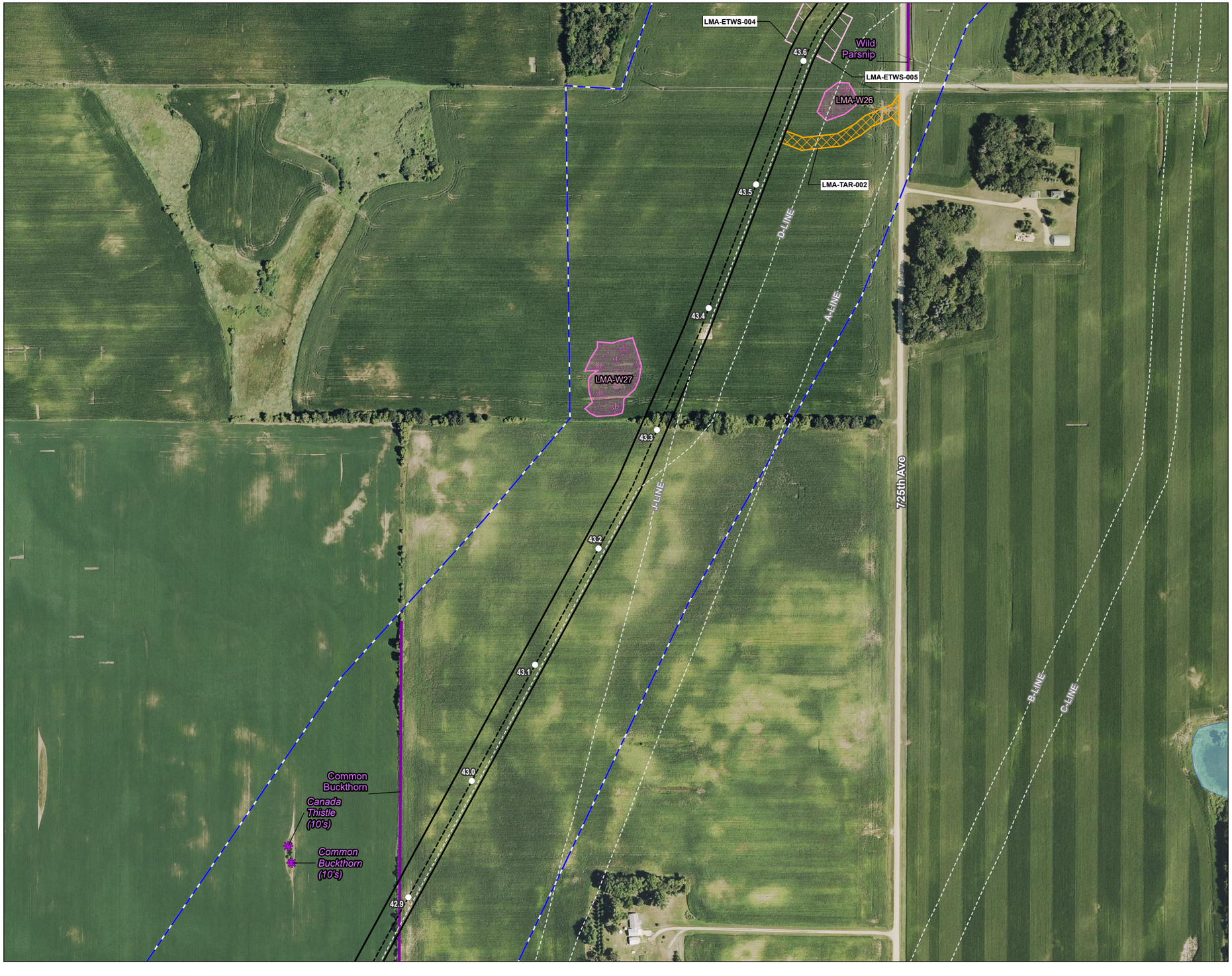


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Lake Mills M500 E-line

Client/Project

172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

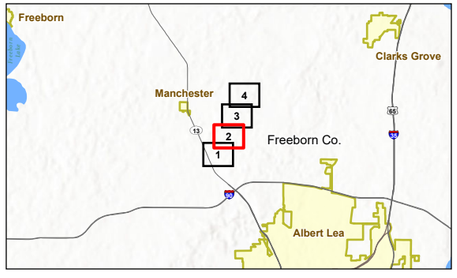
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Noxious Weed Point
- Noxious Weed
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

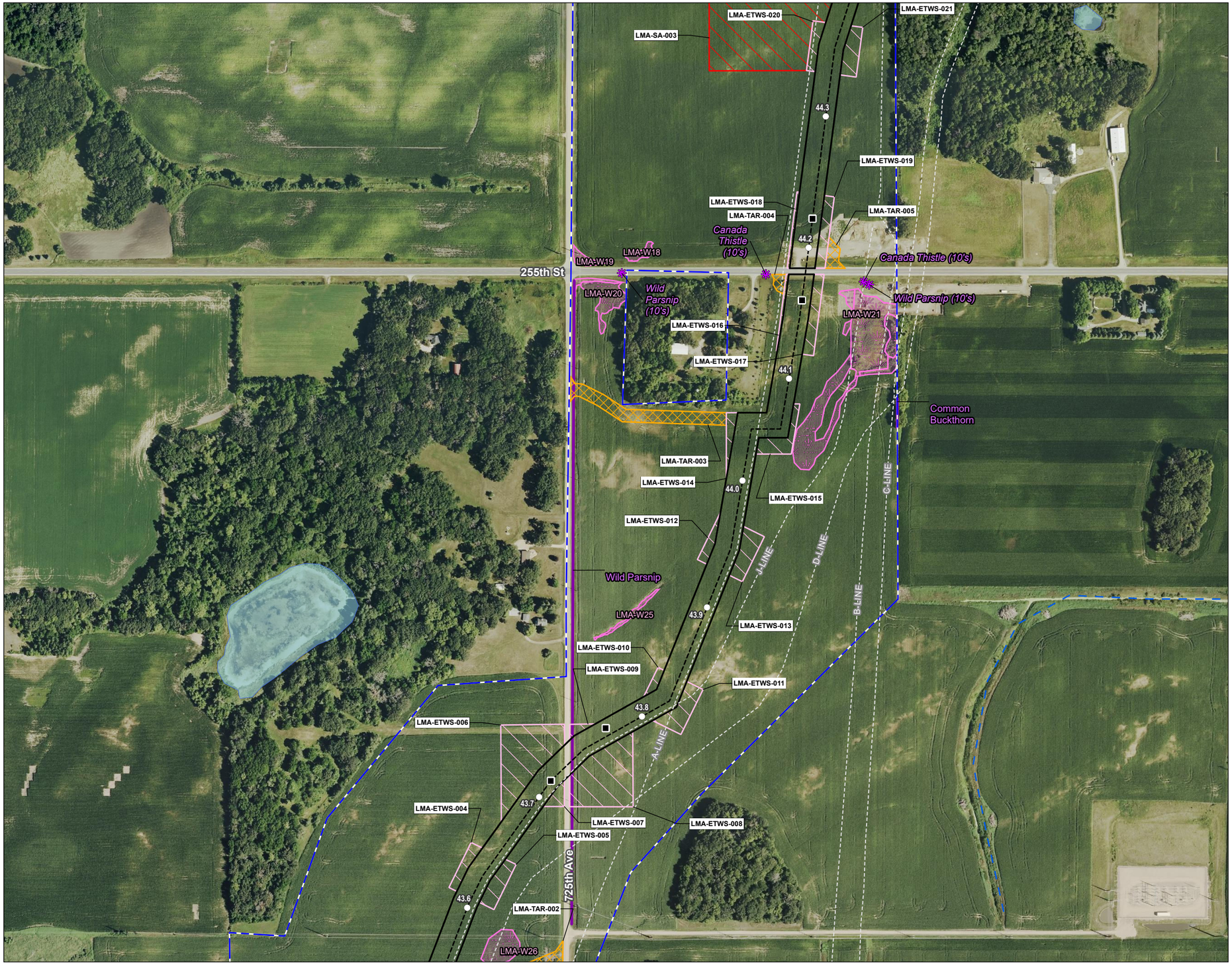


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

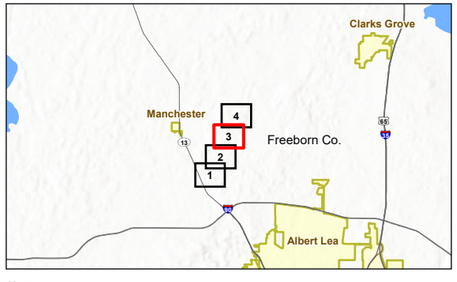
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Noxious Weed
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

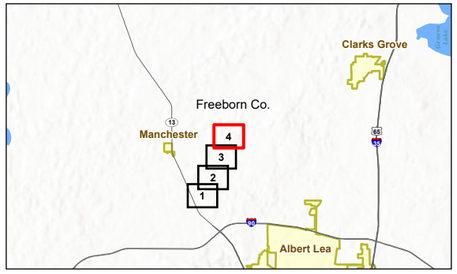
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Upland Drainage
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

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(At original document size of 11x17)
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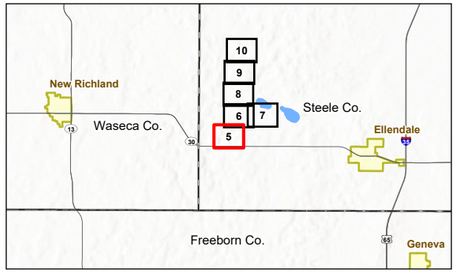
Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Upland Drainage
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

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



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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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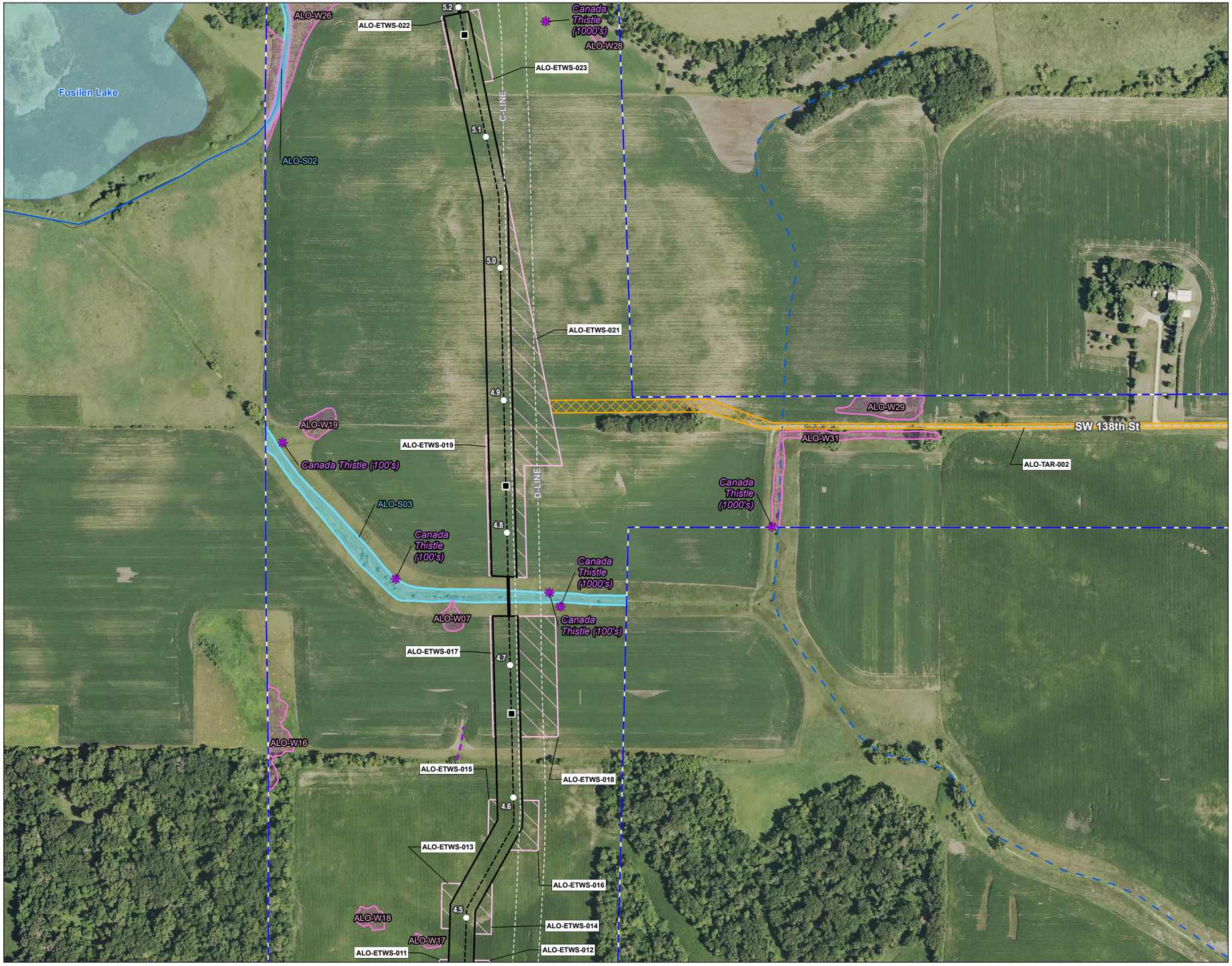


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

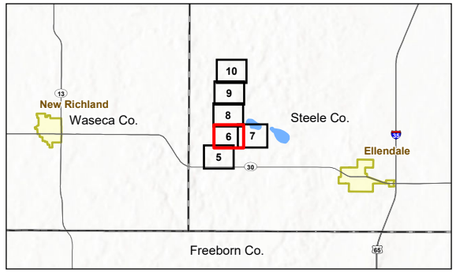
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Upland Drainage
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.
3A

Title
Noxious Weed Locations
NL2027 - Albert Lea M500 E-line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

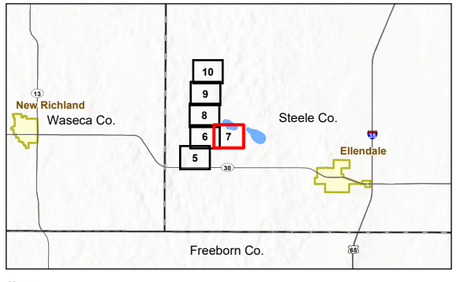
Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

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

Legend
- Environmental Survey Boundary
- Temporary Access Road
- Existing Pipeline
- Field Delineated Wetland

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



Notes
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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

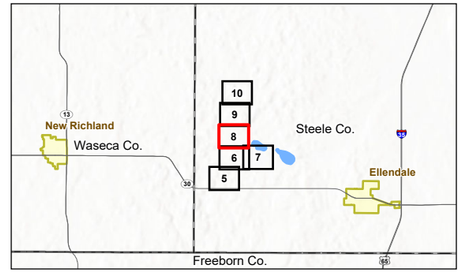
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Upland Drainage
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

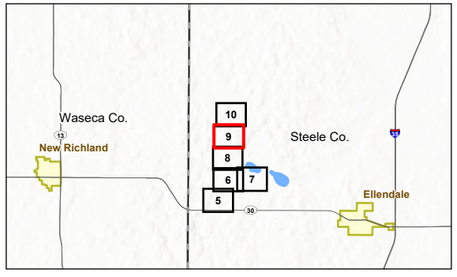
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Noxious Weed
- Upland Drainage
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

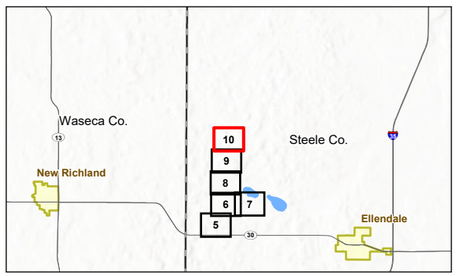
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Noxious Weed
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Upstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Scott County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

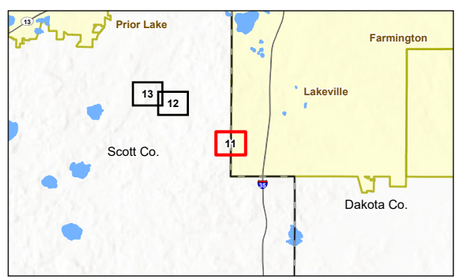
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

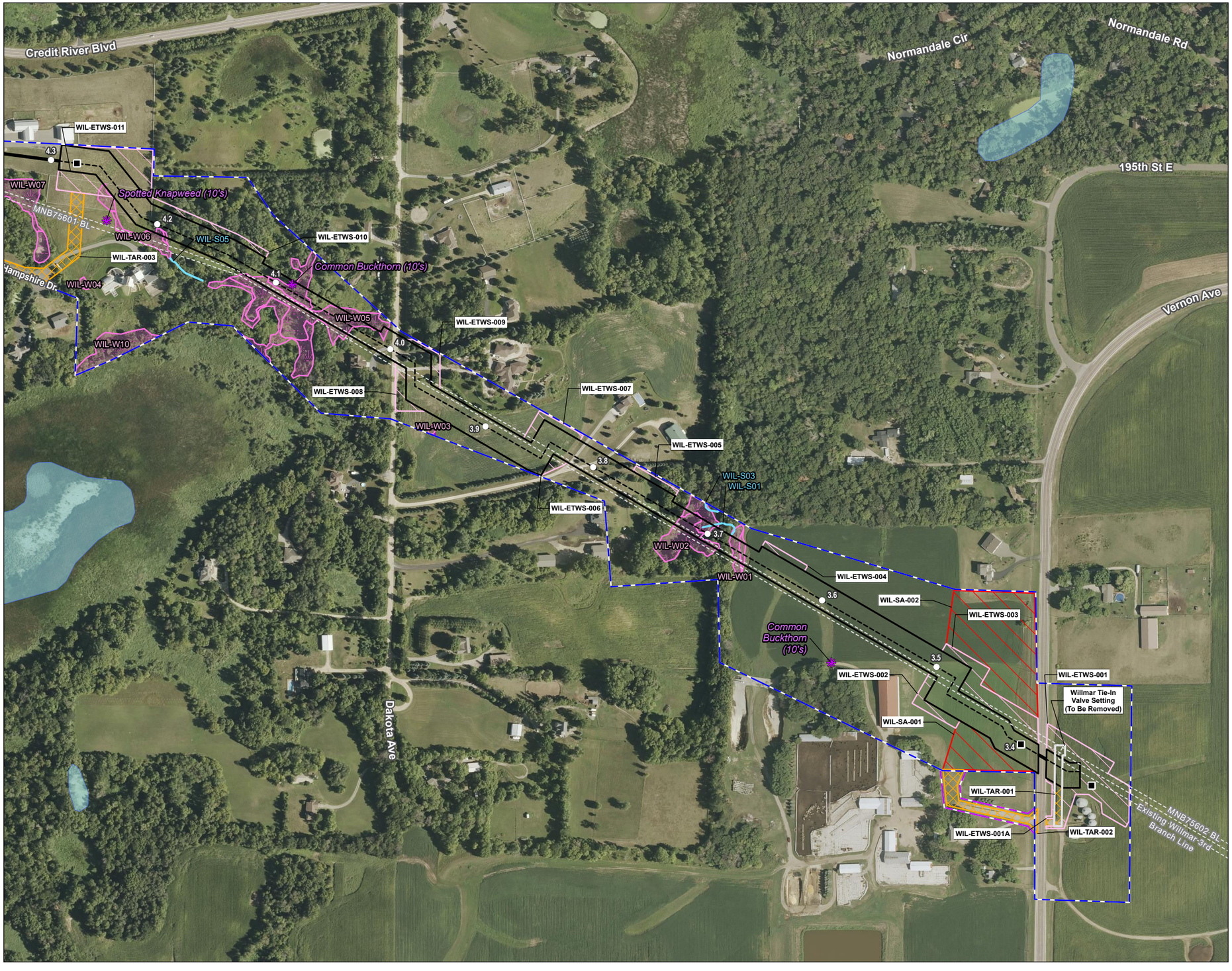


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Upstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Scott County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

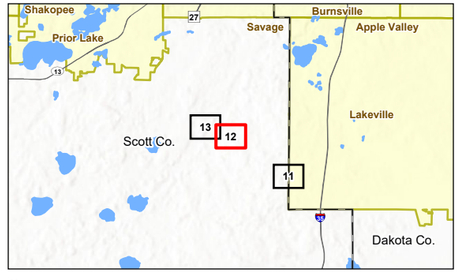
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Upland Drainage
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

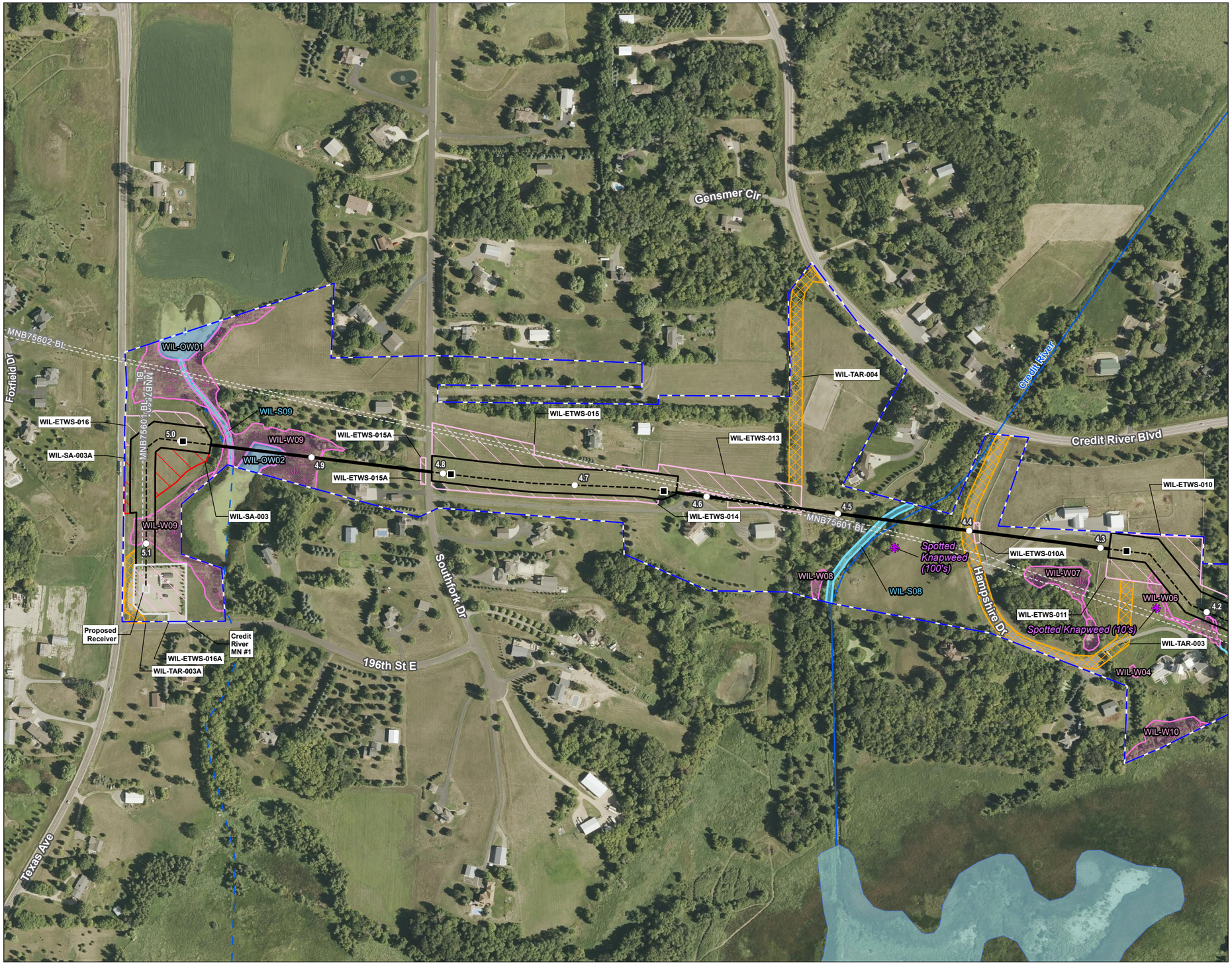


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Upstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Scott County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

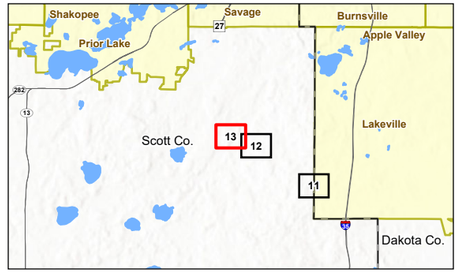
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Field Delineated Waterway
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

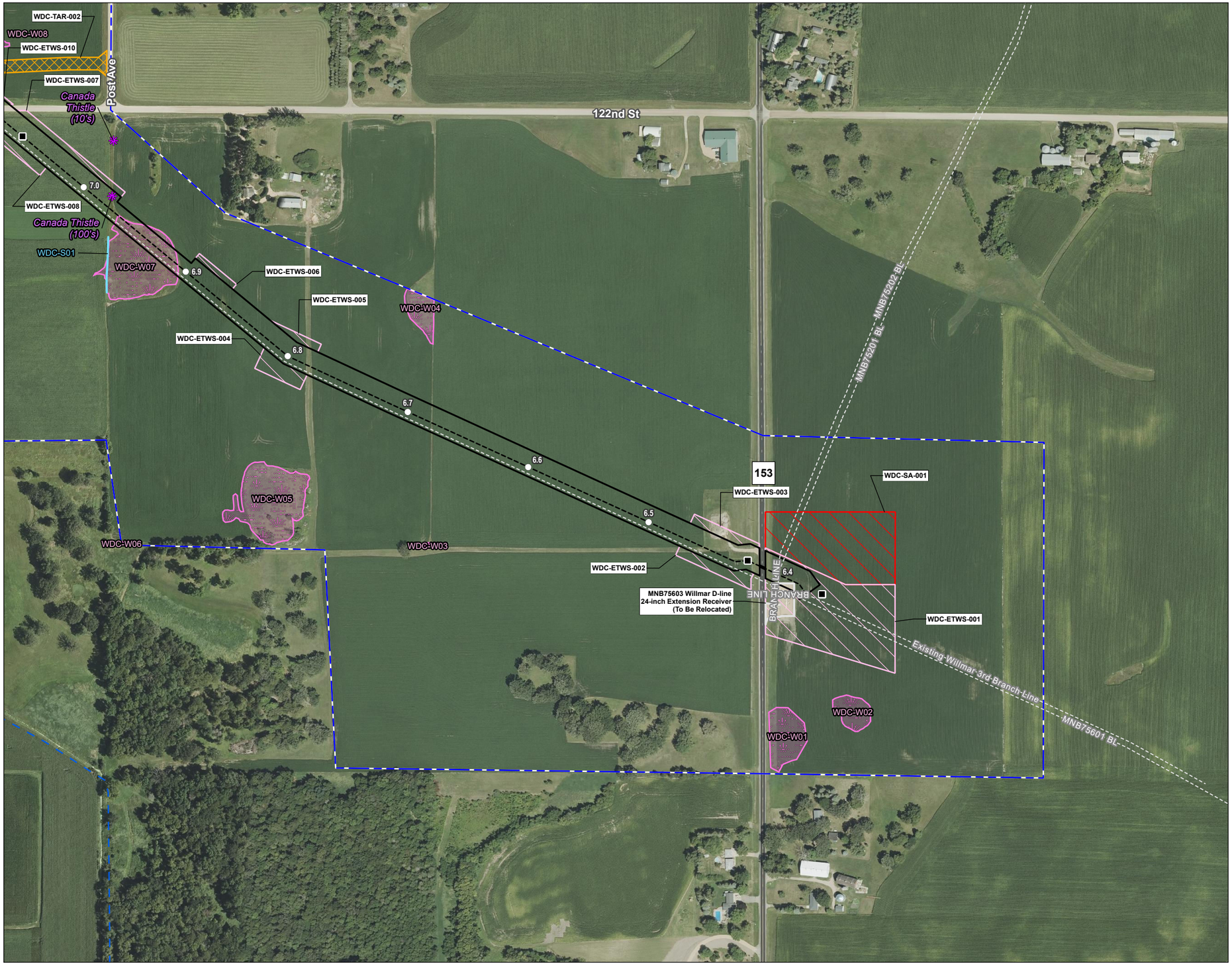


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

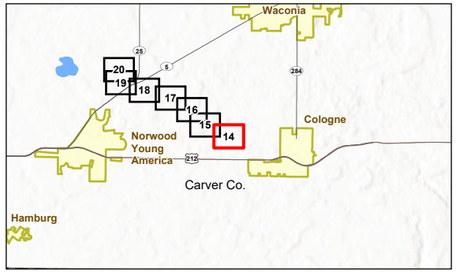
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

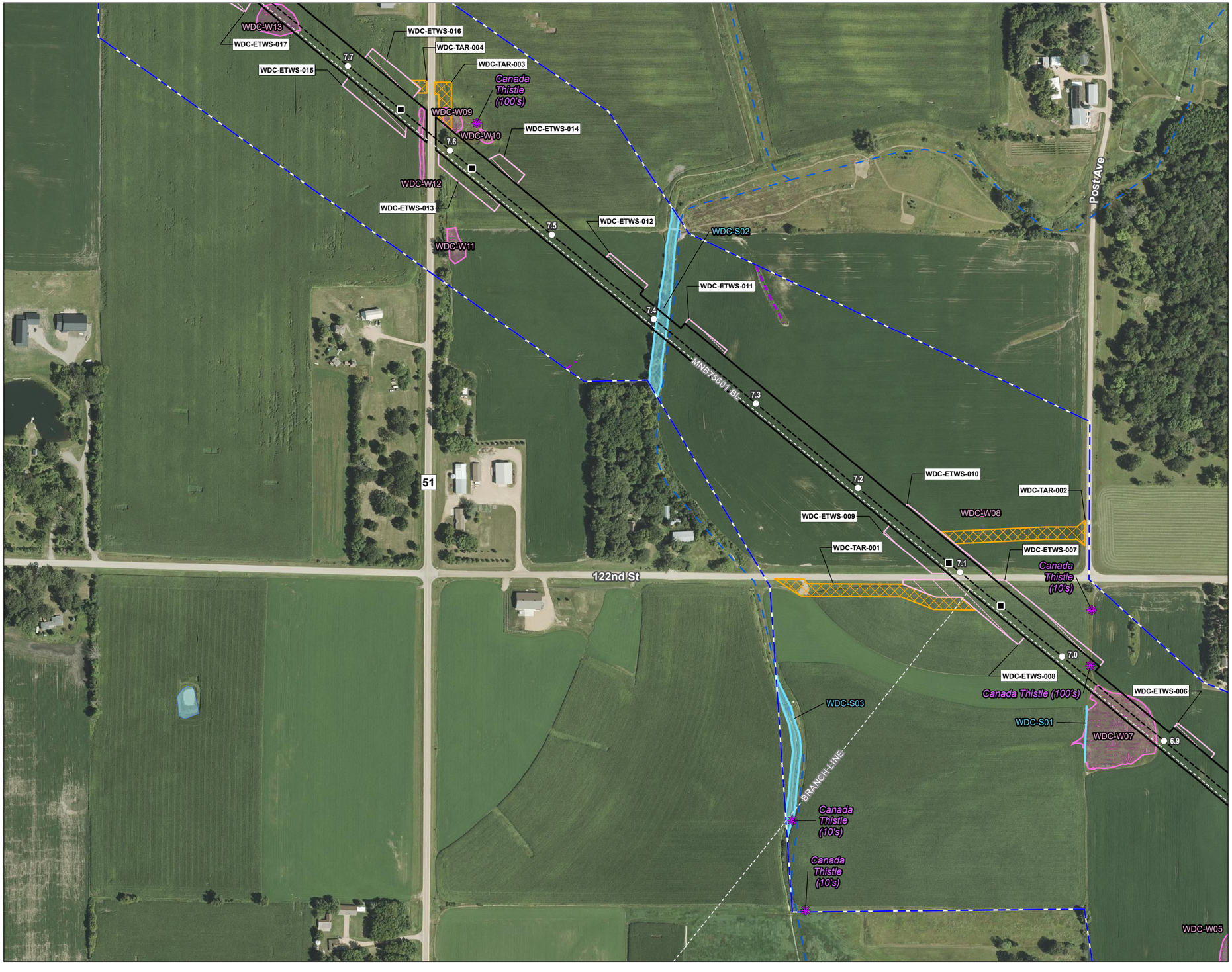

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

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- Field Delineated Wetland

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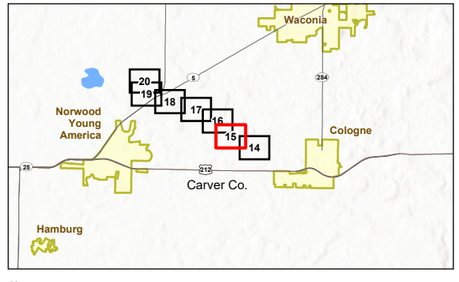
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Stantec

Northern Natural Gas

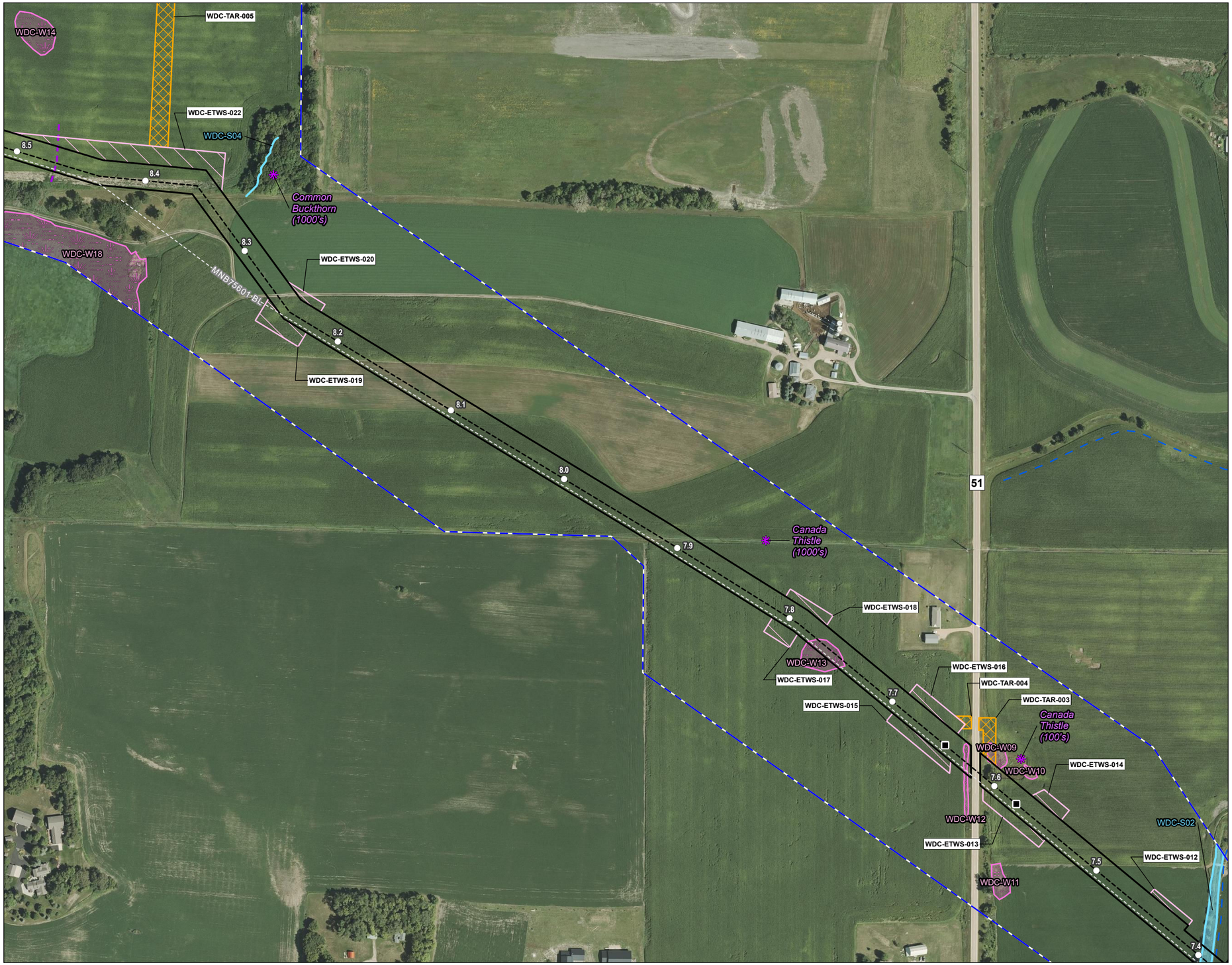

Figure No.

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Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

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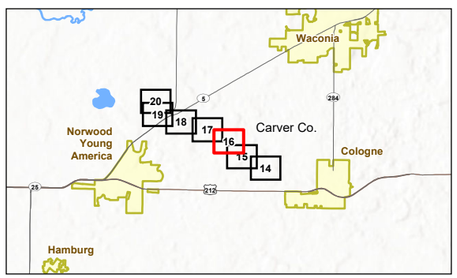

Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

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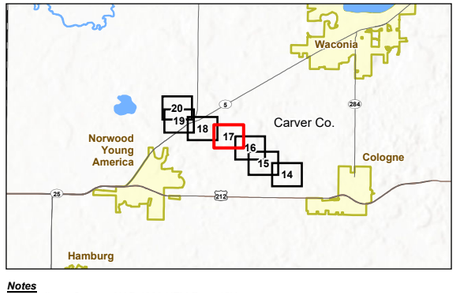
Legend

- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Noxious Weed Point
- Upland Drainage
- Field Delineated Waterway
- 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
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

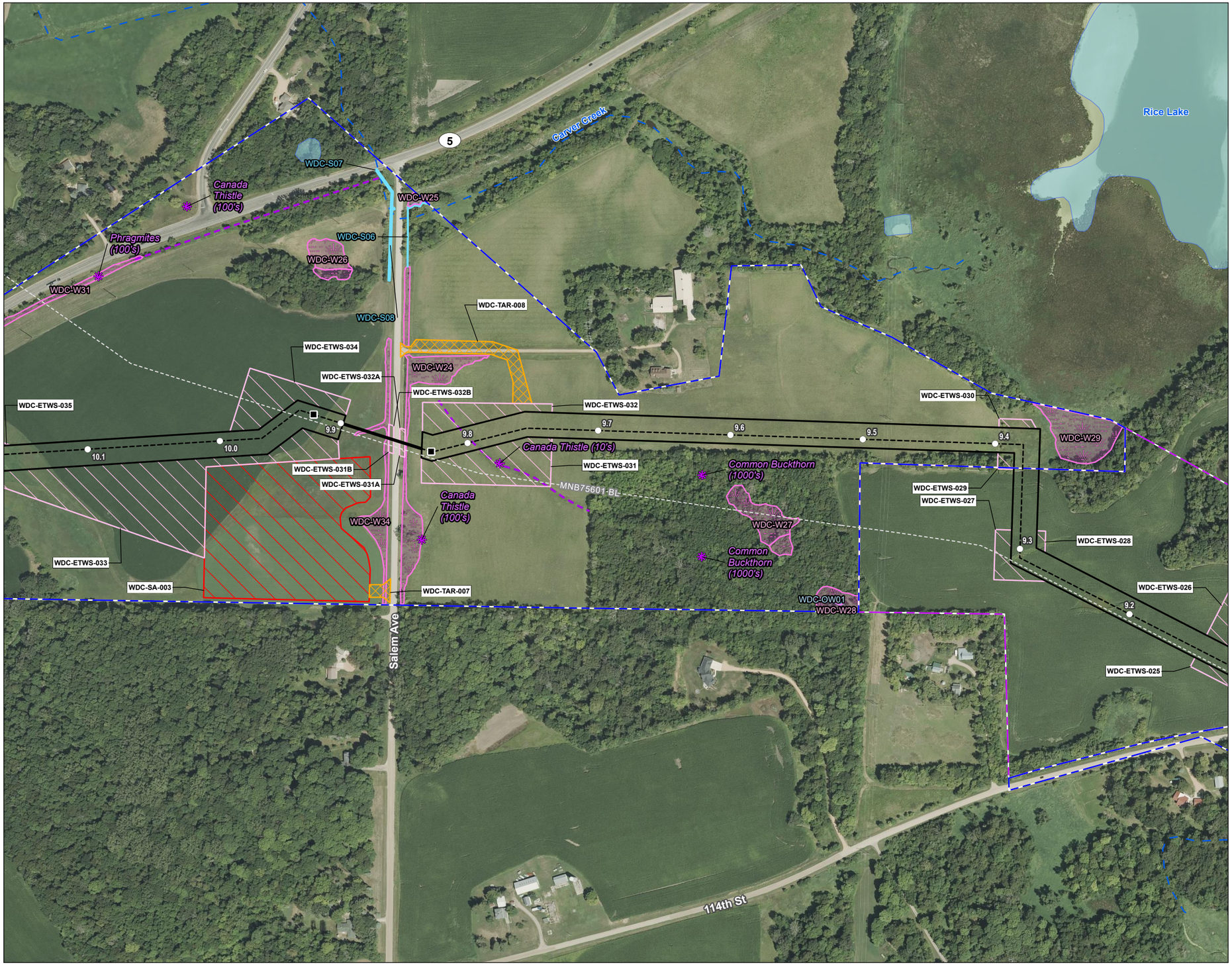

Figure No.

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Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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Legend

- Environmental Survey Boundary
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- Field Delineated Waterway
- Field Delineated Open Water
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
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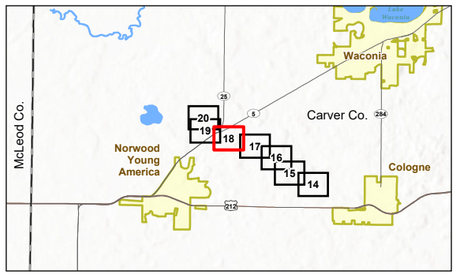
- Waterbody



Notes
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Stantec

Northern Natural Gas

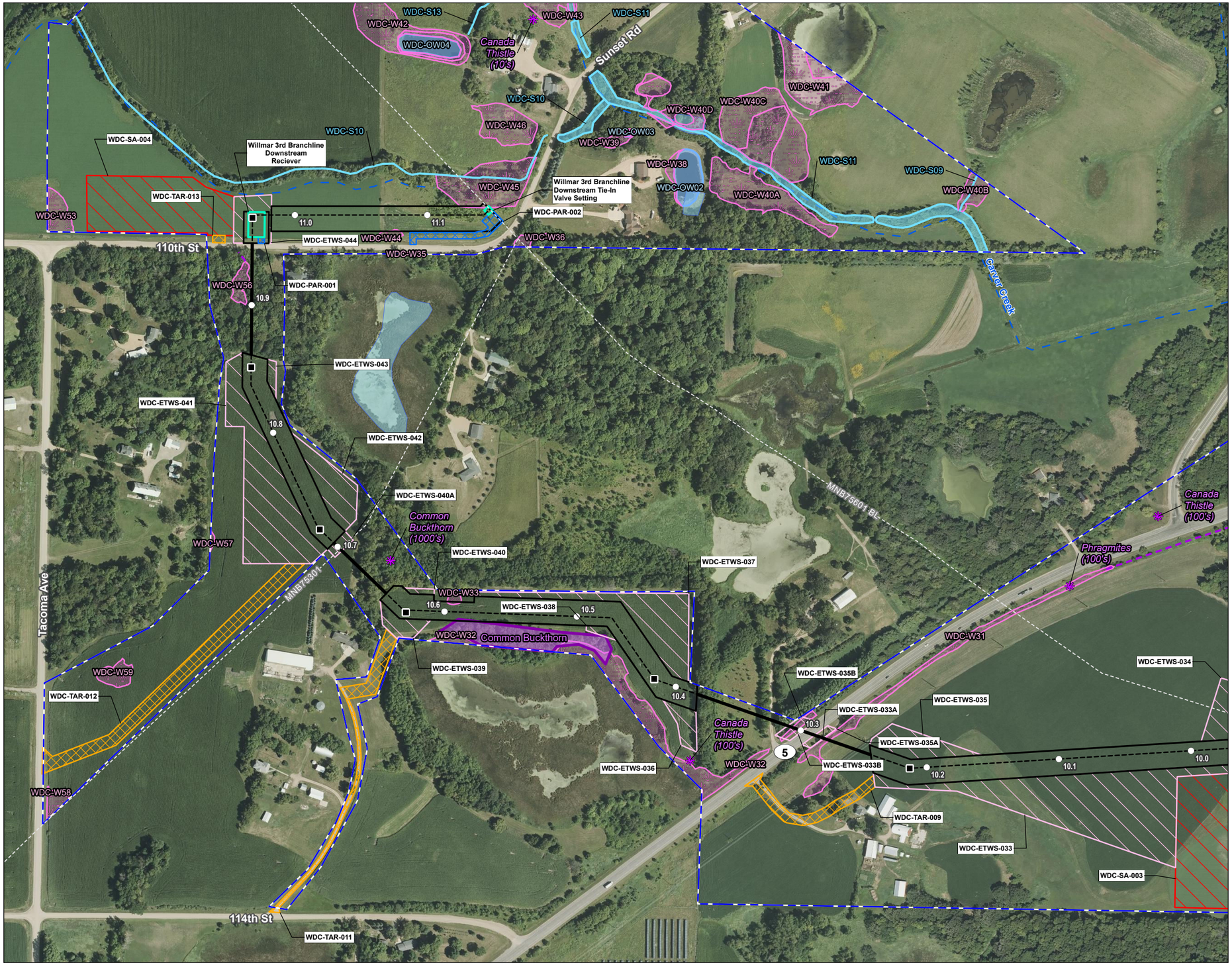

Figure No.

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Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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Legend

- Environmental Survey Boundary
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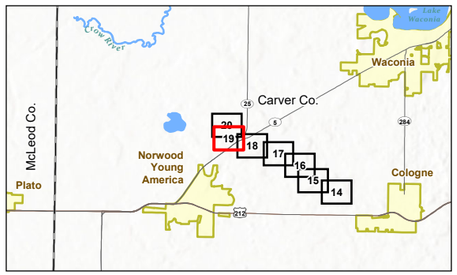
National Hydrography Dataset

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



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

Stantec

Northern Natural Gas

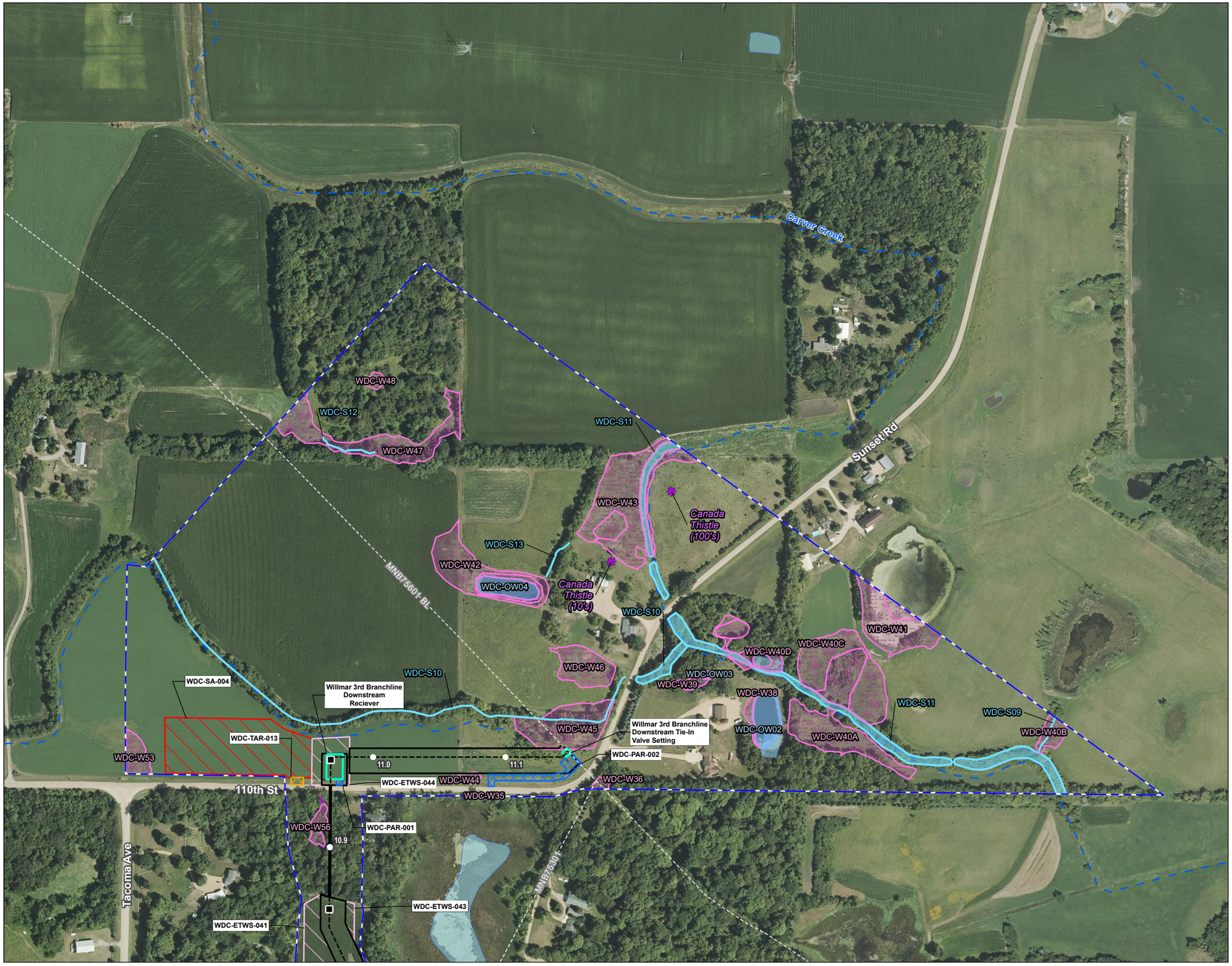

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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Legend

- Environmental Survey Boundary
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- Field Delineated Open Water
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National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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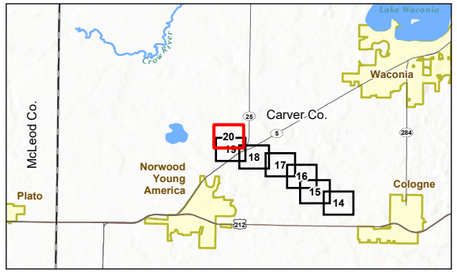
- Waterbody



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

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Welcome 2nd Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Martin County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

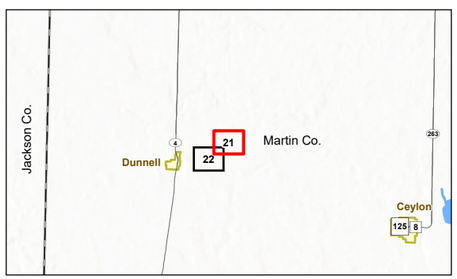
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

National Hydrography Dataset

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



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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

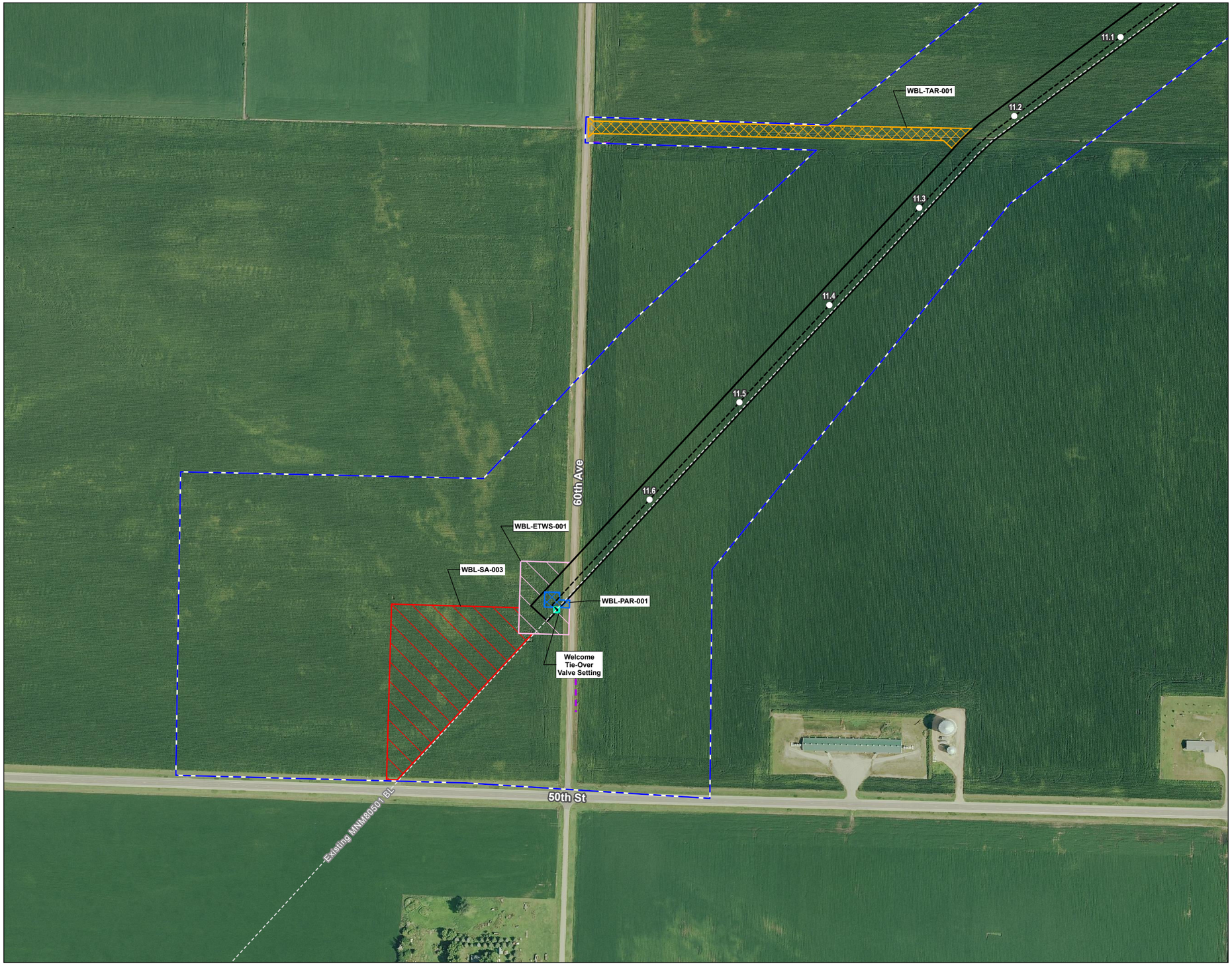

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Welcome 2nd Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Martin County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

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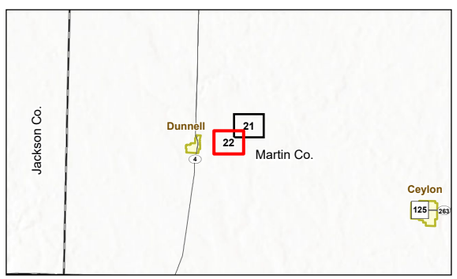
Legend

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

National Hydrography Dataset

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



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Stantec

Northern Natural Gas

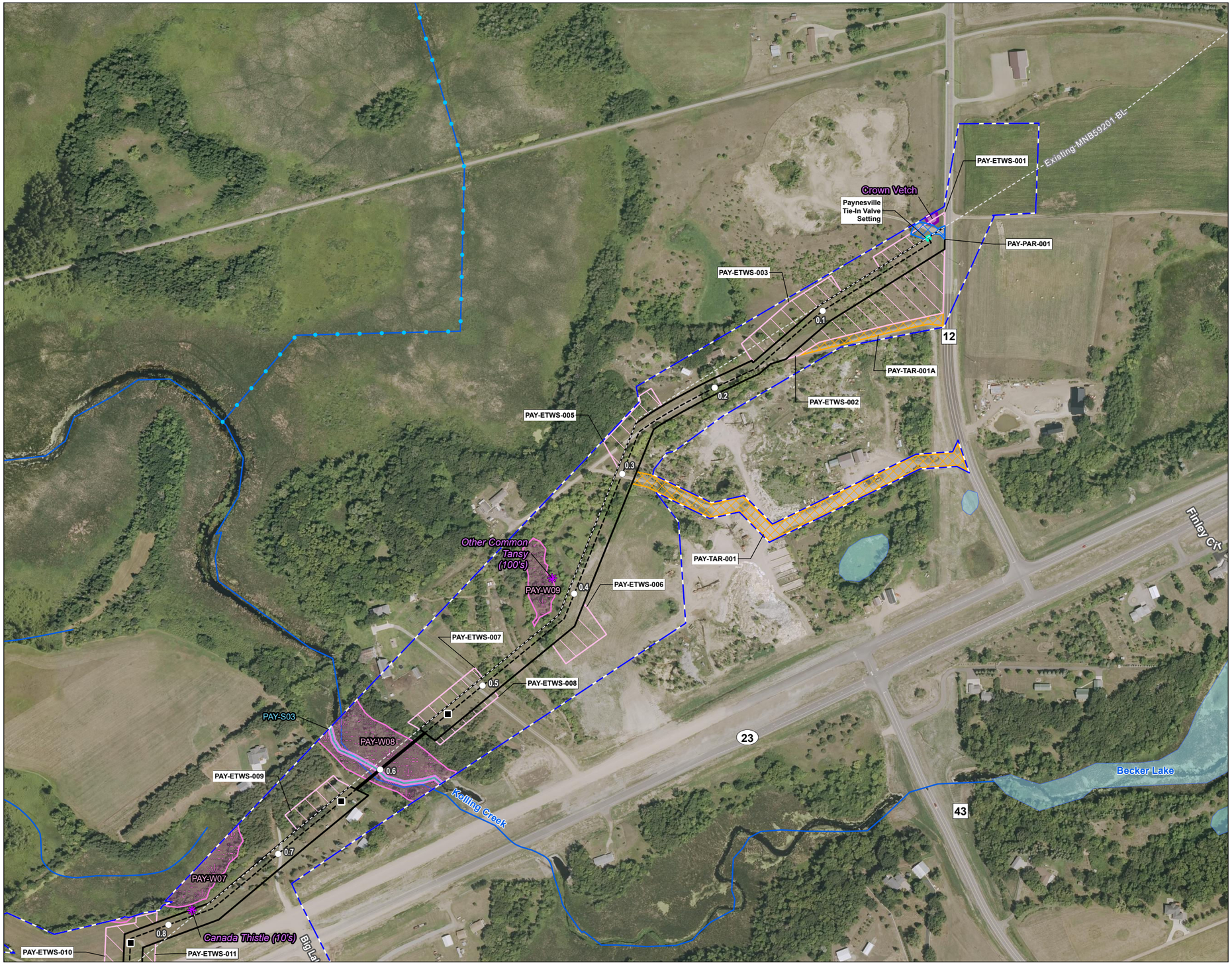

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Paynesville 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Stearns County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

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(At original document size of 11x17)
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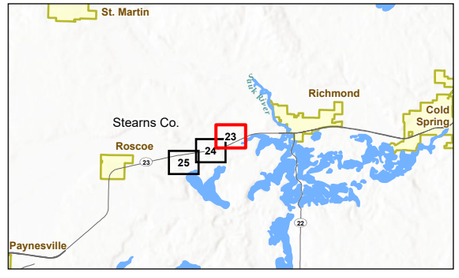
Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Noxious Weed Area
- Field Delineated Waterway
- Field Delineated Wetland

National Hydrography Dataset

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



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Stantec

Northern Natural Gas

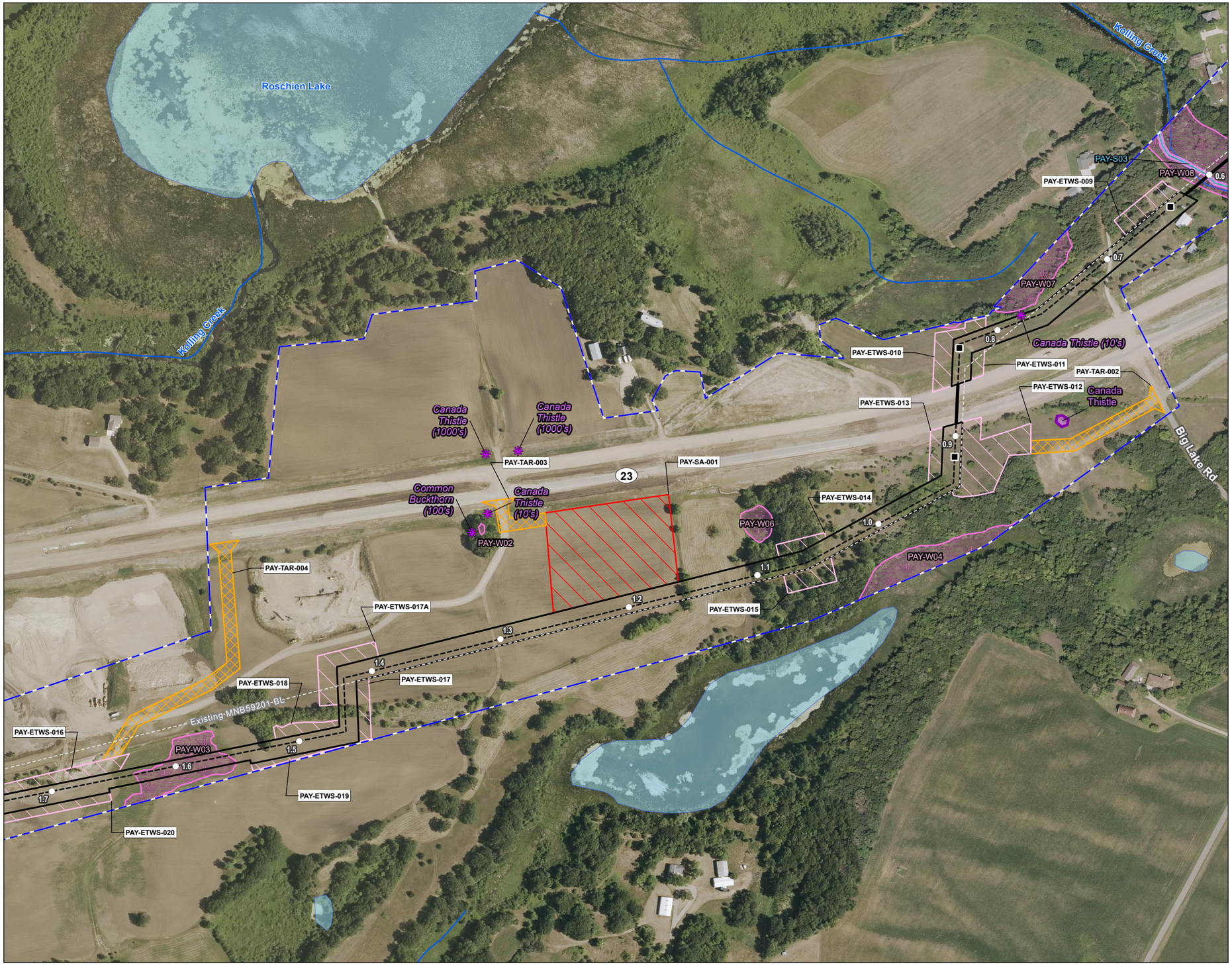

Figure No.
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Title
Noxious Weed Locations
NL2027 - Paynesville 2nd Branch Line

Client/Project
Northern Natural Gas
Northern Lights 2027 Expansion Project

172609138

Project Location
Stearns County, Minnesota

Prepared by JM on 2025-12-15
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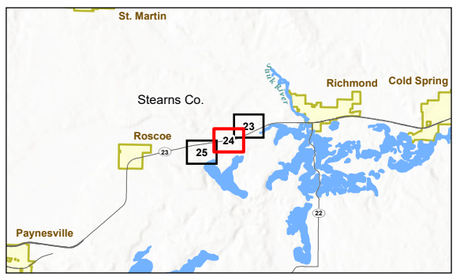

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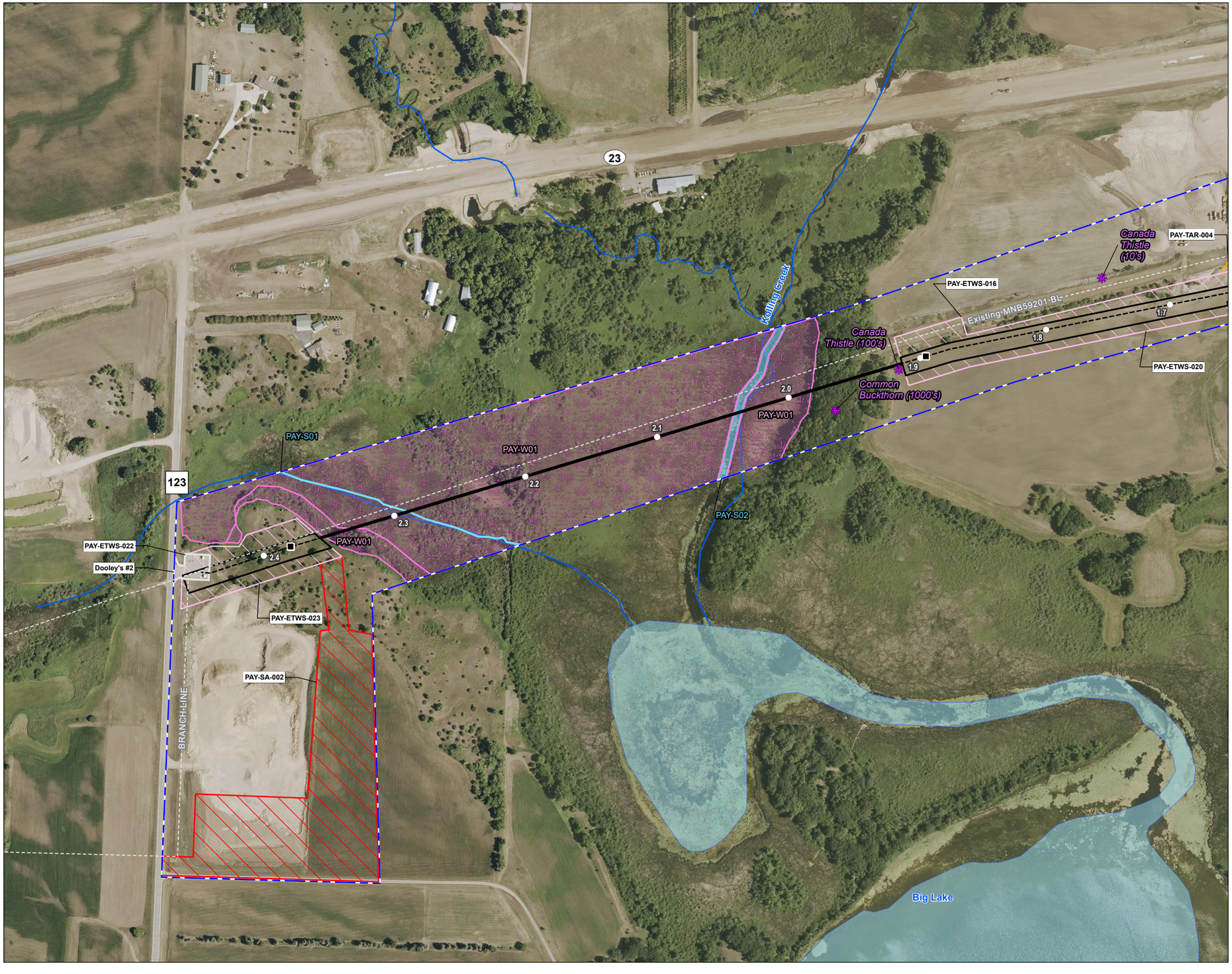

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Paynesville 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Stearns County, Minnesota

Prepared by JM on 2025-12-15
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- Intermittent Stream
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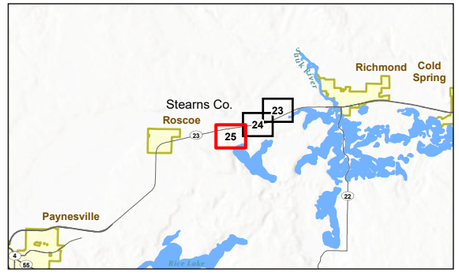

Notes
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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Worthington 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Jackson County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

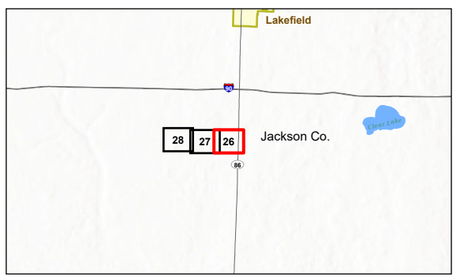
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Noxious Weed Area
- Field Delineated Waterway

National Hydrography Dataset

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



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Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Worthington 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Jackson County, Minnesota

Prepared by JM on 2025-12-15
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
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- Field Delineated Waterway

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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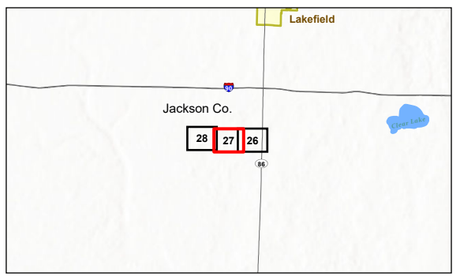

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Stantec

Northern Natural Gas

Figure No.
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Title
Noxious Weed Locations
NL2027 - Worthington 2nd Branch Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Jackson County, Minnesota

Prepared by JM on 2025-12-15
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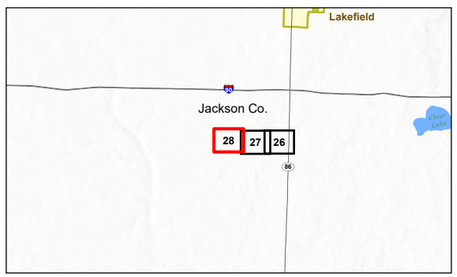
Legend
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Upland Drainage
- Field Delineated Waterway
- Field Delineated Wetland

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



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

Stantec
Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

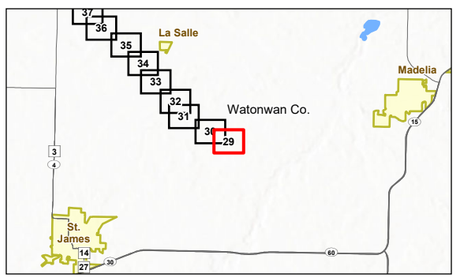
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Noxious Weed 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

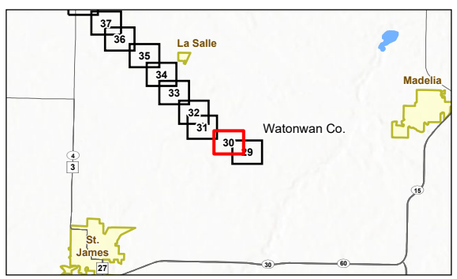
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Noxious Weed 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

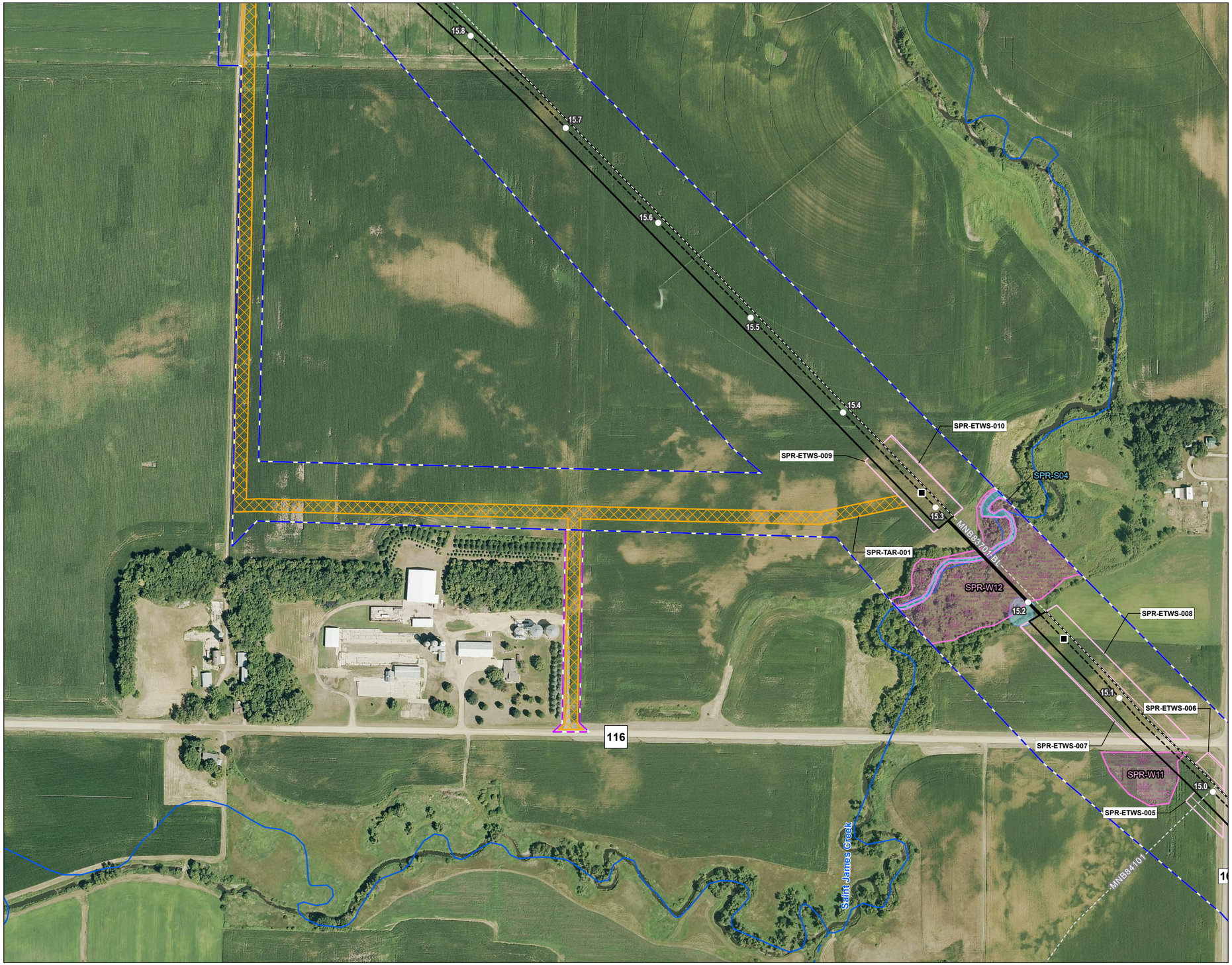


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

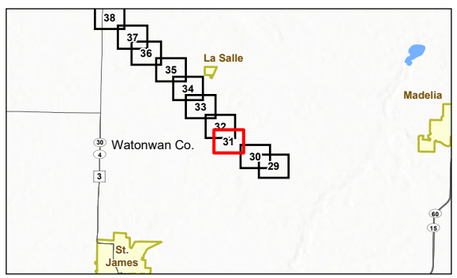
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

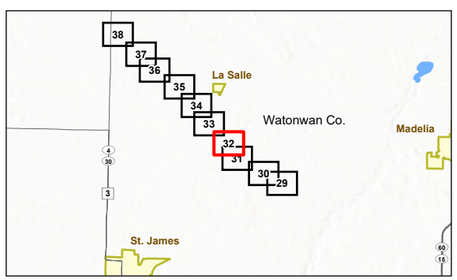
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

National Hydrography Dataset

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



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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

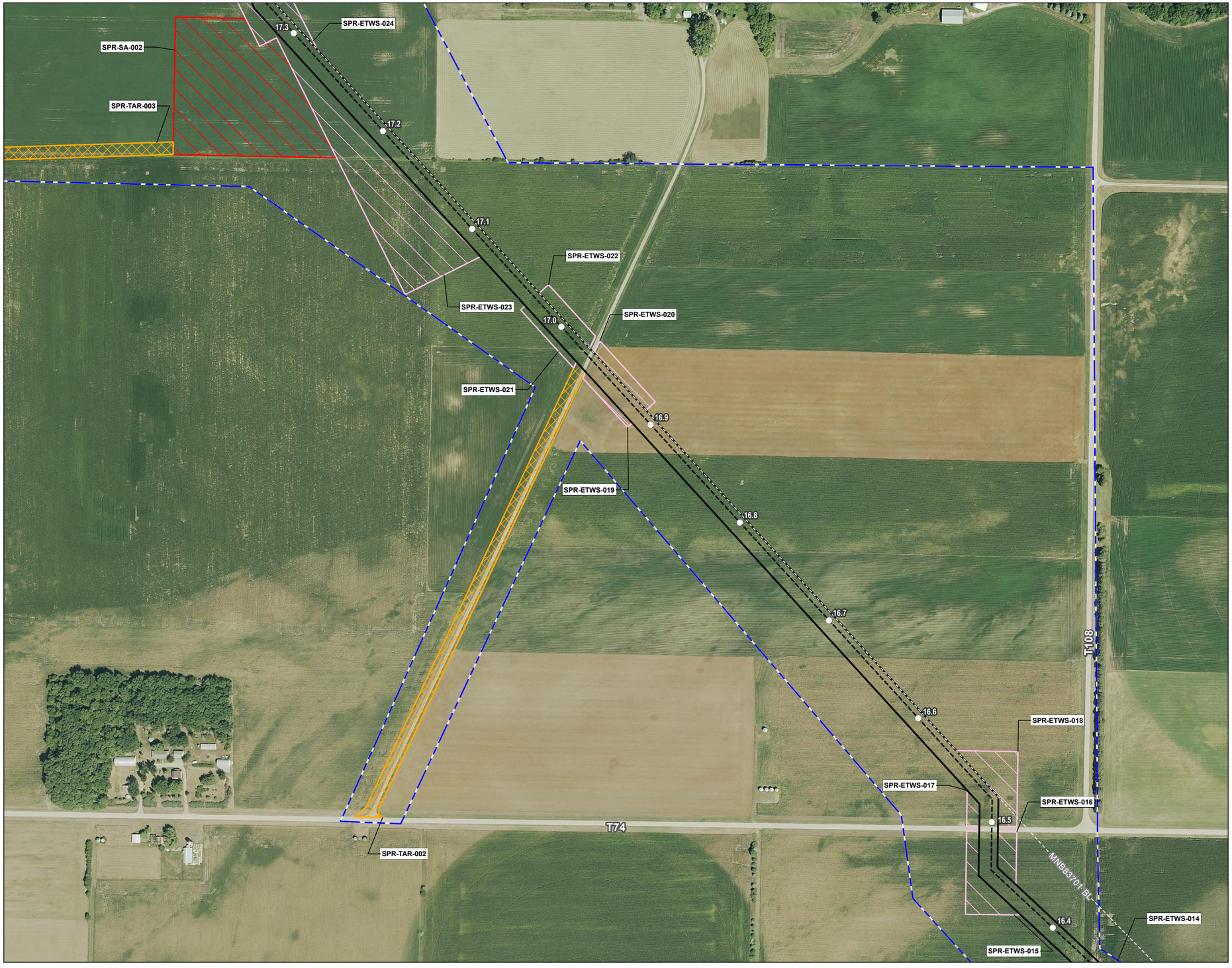


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

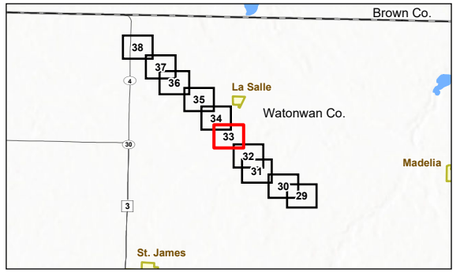
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

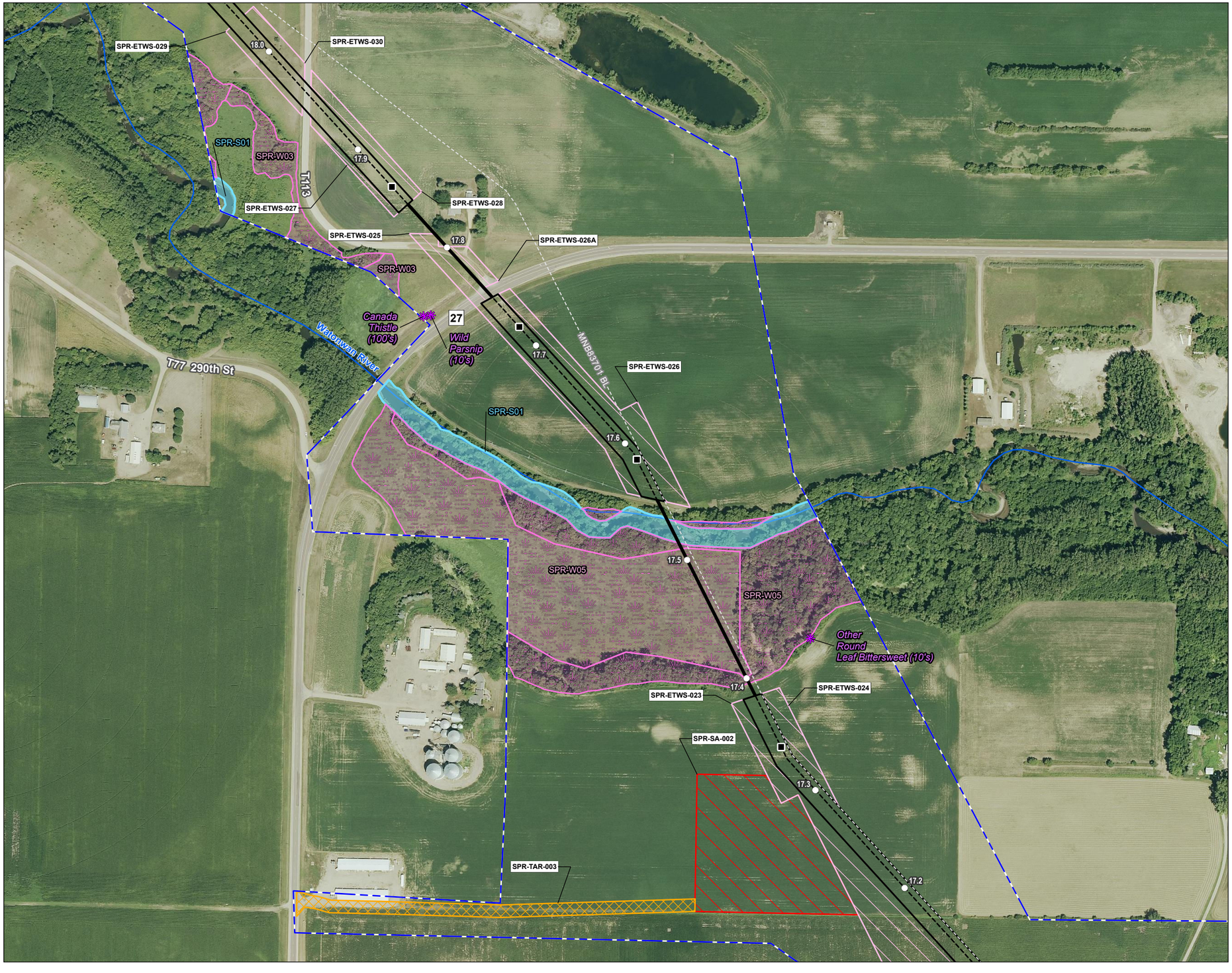


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

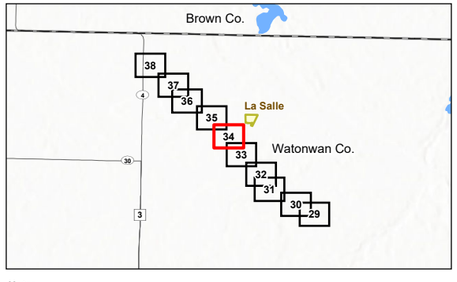
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

National Hydrography Dataset

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



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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

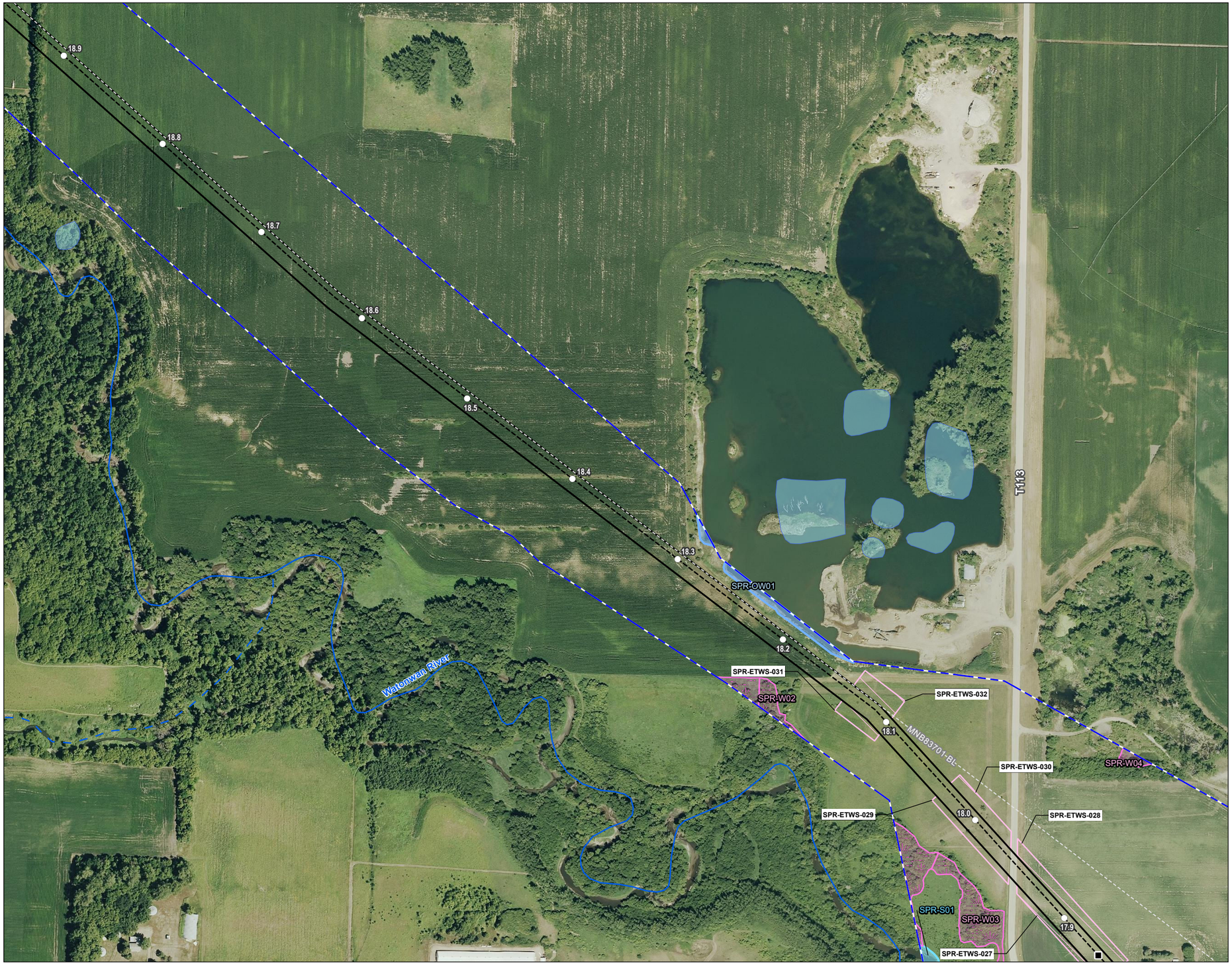


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

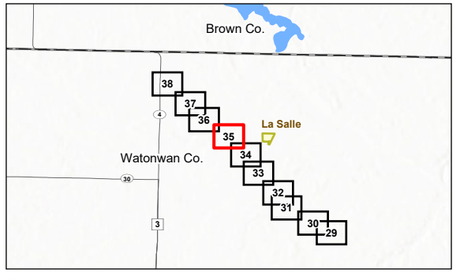
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

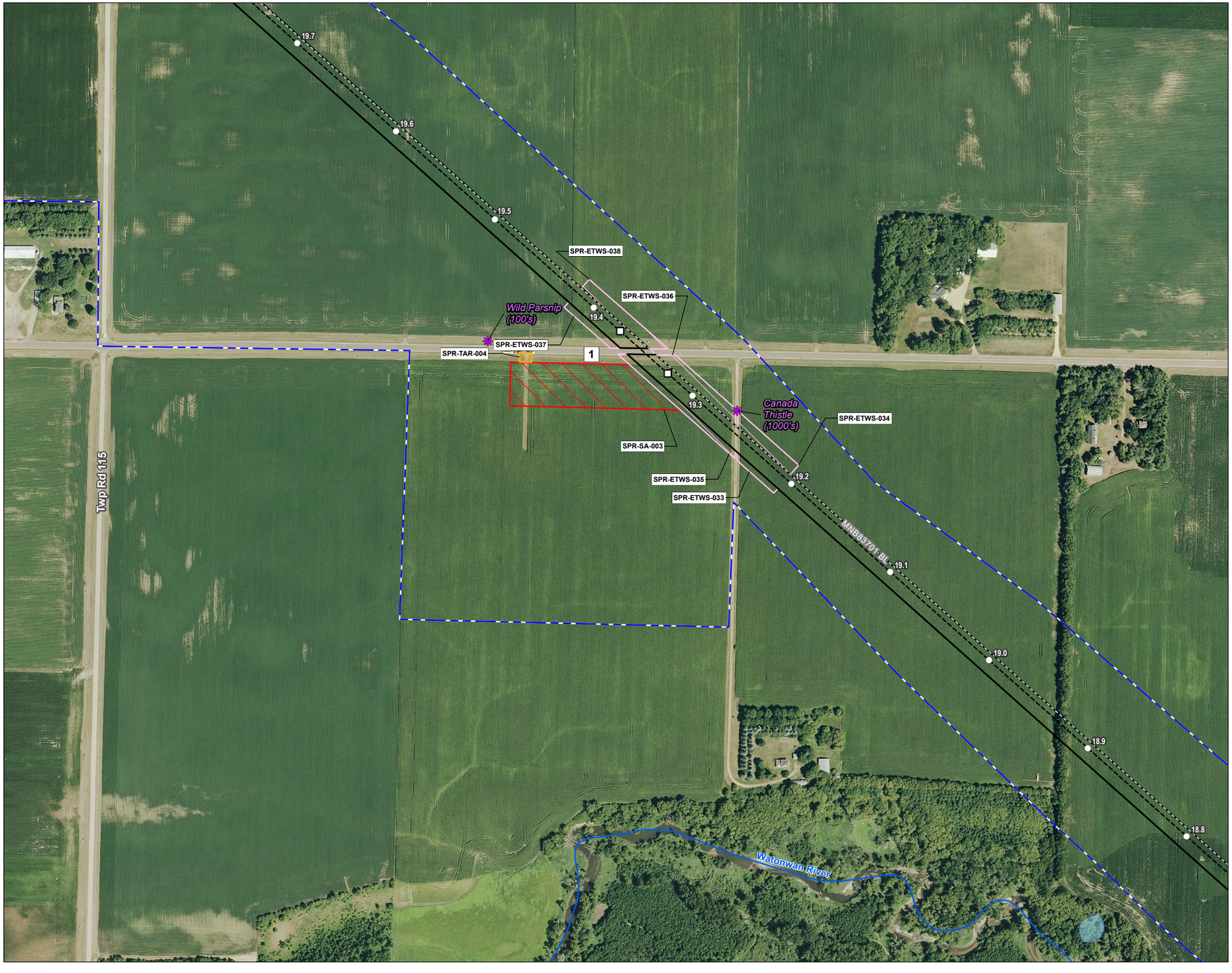


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

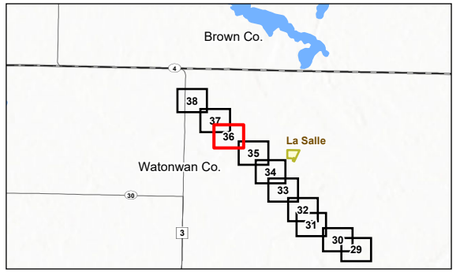
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Auger Bore
- Noxious Weed Point

National Hydrography Dataset

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



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

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

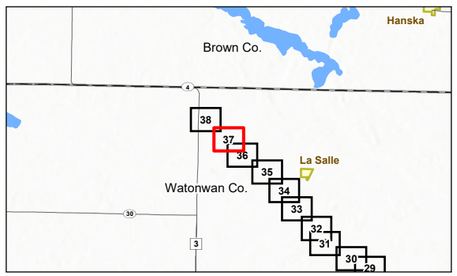
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

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

National Hydrography Dataset

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



Notes
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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

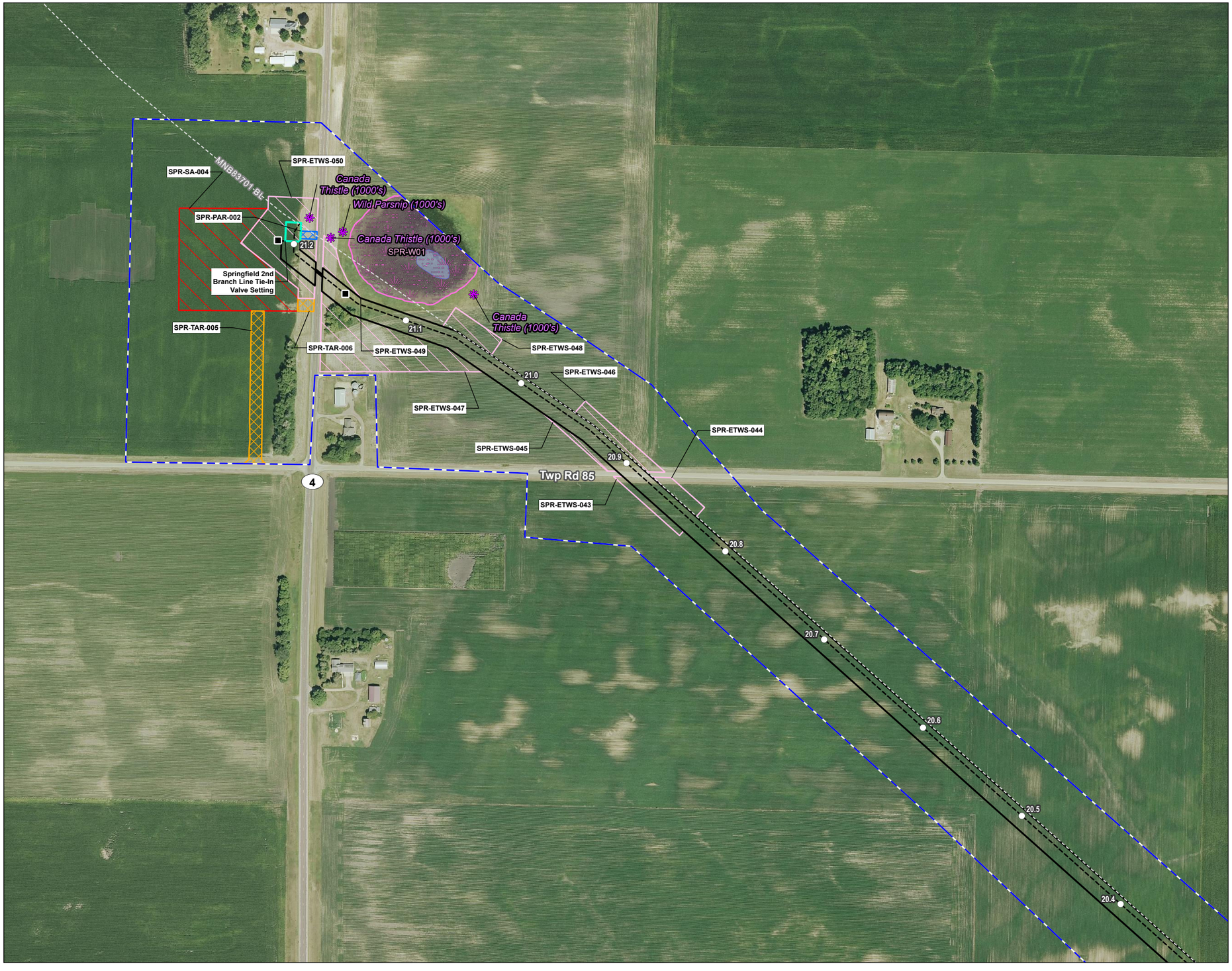


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

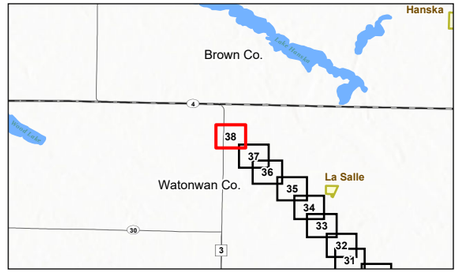
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

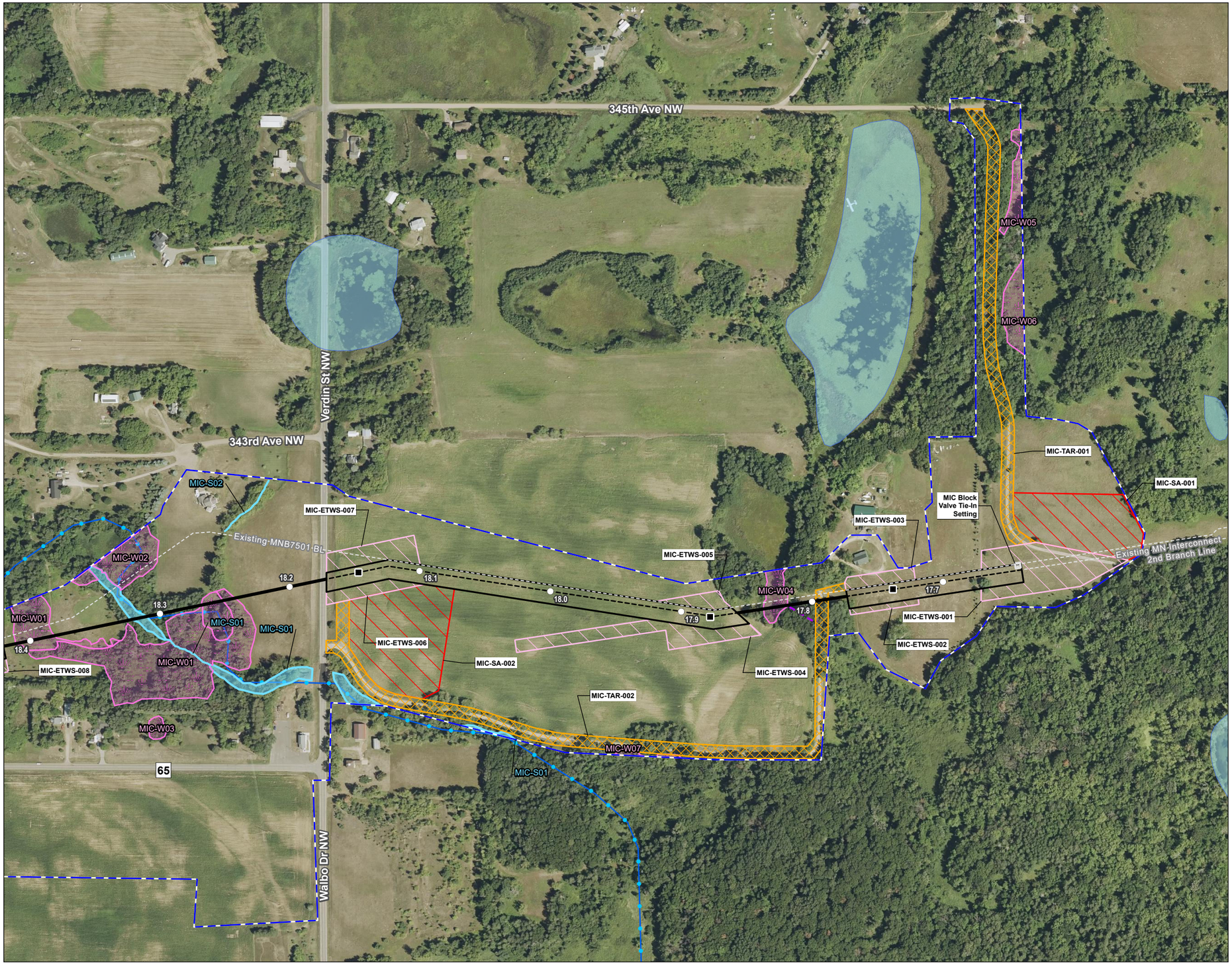


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Minnesota Interconnect 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Isanti County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

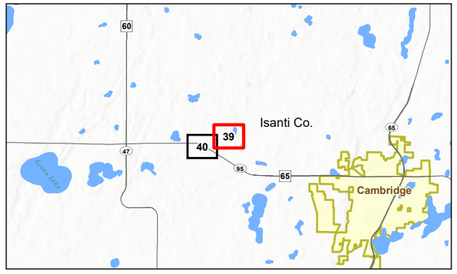
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Upland Drainage
- Field Delineated Waterway
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Minnesota Interconnect 2nd Branch Line

Client/Project

172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Isanti County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

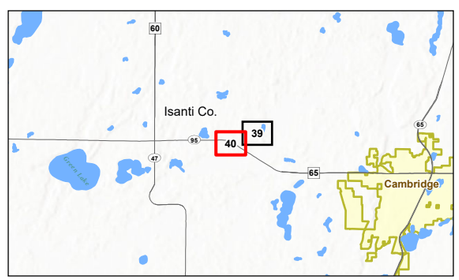
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed Point
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

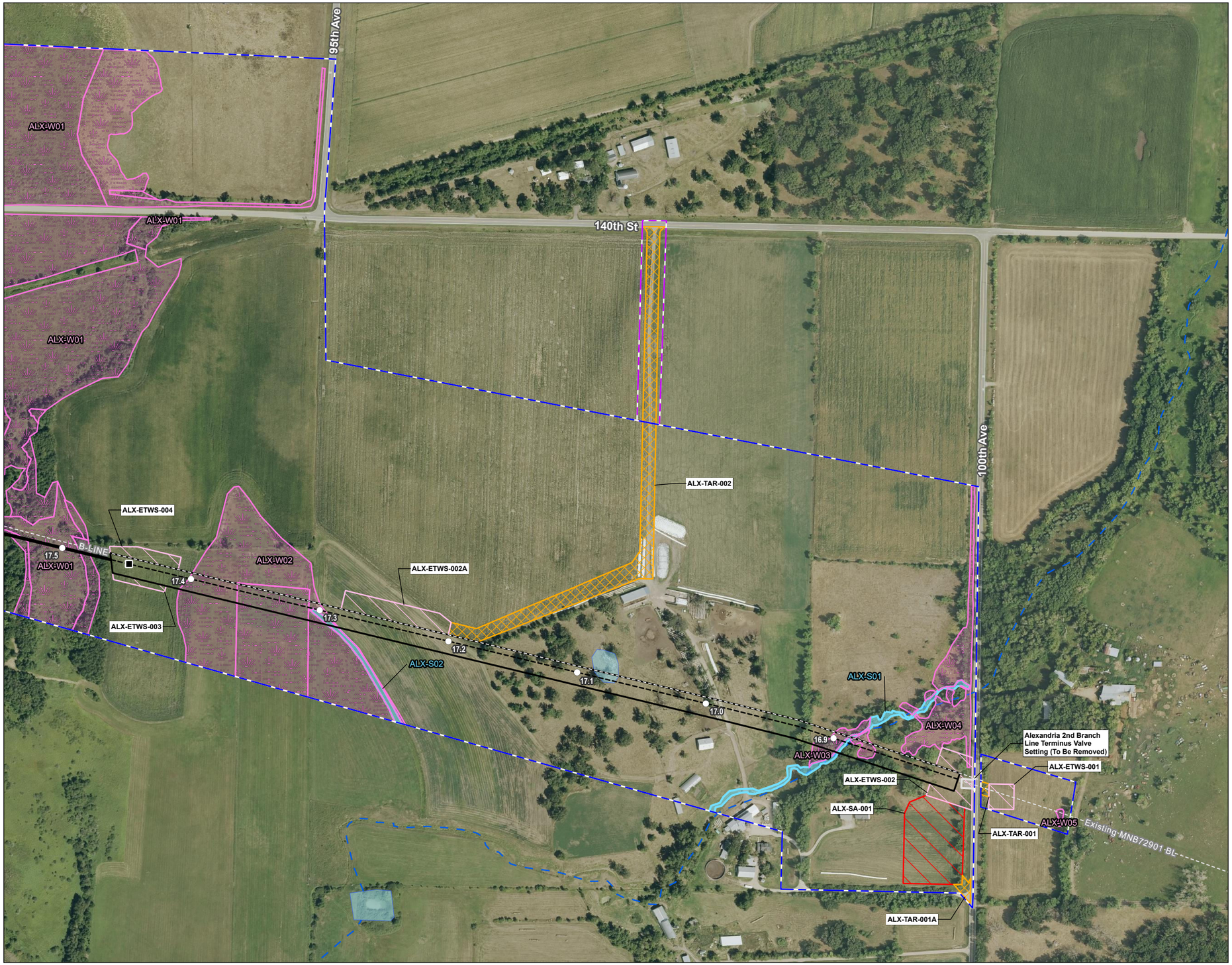


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Alexandria 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Morrison County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

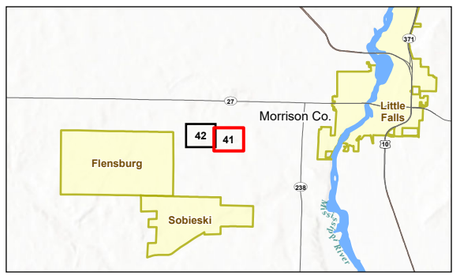
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Field Delineated Waterway
- 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

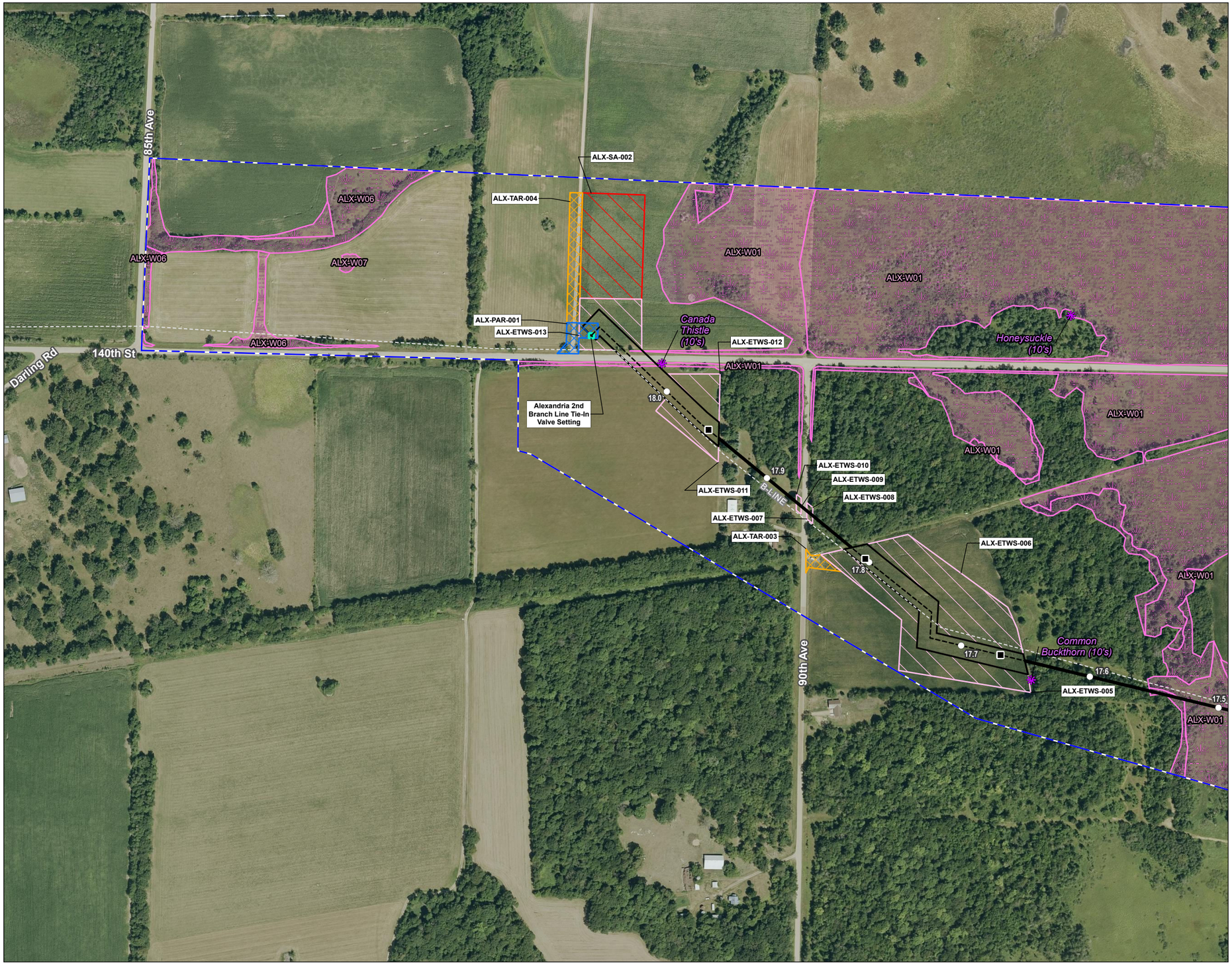


Figure No.

3A

Title

Noxious Weed Locations
NL2027 - Alexandria 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Morrison County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

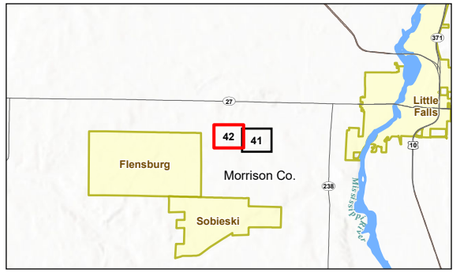
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD
- Noxious Weed 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, Northern Natural Gas, Esri, USCB, USGS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Figure No.
3A

Title
Noxious Weed Locations
NL2027 - Hugo Compressor Station

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Washington County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2025-12-22
IR by CS on 2026-02-05

N

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

Legend
- Environmental Survey Boundary
- Existing Facility
- Existing Pipeline

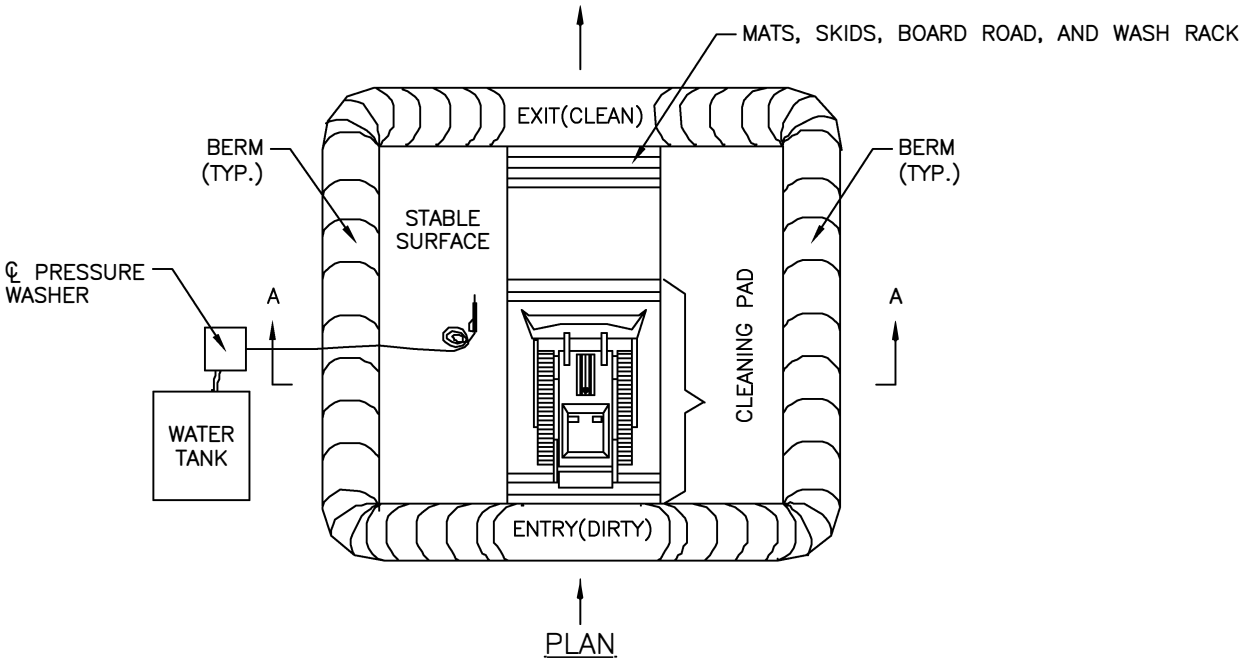
National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

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

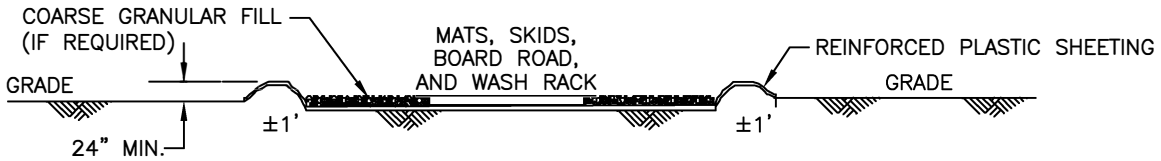
Stantec
Northern Natural Gas

Figure 2

Equipment Wash Station



PLAN



SECTION A–A

WASH STATION NOTES:

1. ALL EQUIPMENT AND VEHICLES ARE REQUIRED TO BE WASHED AT WASH STATIONS LOCATED AS SHOWN ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE COMPANY'S INSPECTOR. WASH STATIONS SHALL BE CONSTRUCTED BY THE CONTRACTOR. WASHINGS SHALL BE CARRIED OUT UNDER THE SUPERVISION AND TO THE SATISFACTION OF THE COMPANY'S INSPECTOR.
2. WATER FROM THE EQUIPMENT WASH STATIONS WILL BE COLLECTED AND TRANSPORTED OFF–SITE TO AN APPROPRIATE DISPOSAL FACILITY. ANY SOILS CONTAMINATED BY PETROLEUM–BASED PRODUCTS OR NOXIOUS WEED MATERIALS FROM WASH STATIONS SHALL BE REMOVED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS.
3. SIZE OF STATION SHALL BE ADEQUATE TO ACCOMMODATE MAXIMUM SIZE OF EQUIPMENT EXPECTED AND REQUIRED WORK.
4. EQUIPMENT TO ENTER AT "DIRTY END" AND EXIT AT "CLEAN END".
5. GRAVEL FILL (IF REQUIRED) AND REINFORCED PLASTIC SHEETING SHALL BE REMOVED AND DISPOSED OF IN AN ACCEPTABLE LANDFILL.
6. WASH STATIONS SHALL BE EQUIPPED WITH SKID PADS, WASHED RACKS, MATS OR BOARD ROADS TO PREVENT SOIL FROM BEING CARRIED ON TRACKS OR TIRES AS EQUIPMENT AND VEHICLES EXIT THE WASH STATION.
7. DEPRESSION SHALL BE BACKFILLED WITH BERMED MATERIAL.
8. THE BERM SHALL BE CONSTRUCTED WITH SUBSOIL; TOPSOIL SHALL NOT BE USED.
9. IF THE CONTRACTOR DOES NOT SELECT AN ALTERNATE MEANS TO AVOID POTENTIAL CONTAMINATION BY NOXIOUS/INVASIVE PLANTS, THE CONTRACTOR SHALL UTILIZE A CLEANING STATION AS DEPICTED IN THIS TYPICAL.
10. ENTIRE EQUIPMENT WASH STATION WILL BE REMOVED BY CONTRACTOR ONCE WORK IN THE AREA IS COMPLETE.

FAC. CODE : N/A		REL. W.O. N/A
PL#.		CONST. YR 2027
STA# N/A		
	BY	DATE
DESIGN	ED	
DRAWN	MB	
ASBUILT		
FILE NO.: N/A		
SCALE: NTS		

Northern Natural Gas.

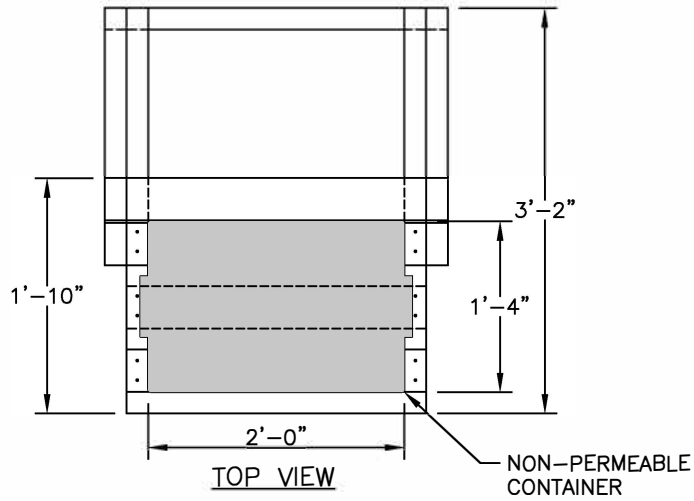
V2F A-LINE ABANDONMENT AND CAPACITY REPLACEMENT PROJECT
NORTHERN LIGHTS 2027 EXPANSION PROJECT
EQUIPMENT WASH STATION (EWS)

Northern Natural Gas.
PROJECT NO.

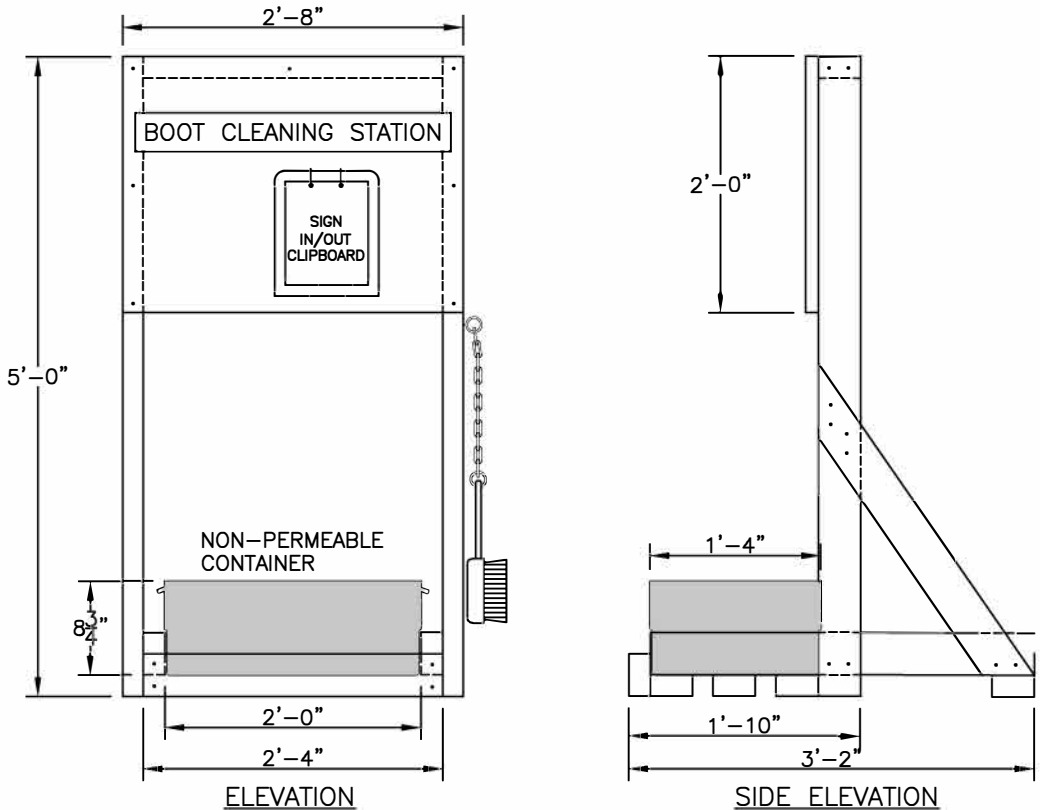
DWG. NO.
FIGURE 2
F

Figure 3

Boot Cleaning Station



TOP VIEW



ELEVATION SIDE ELEVATION

1. WASH STATIONS SHALL BE EQUIPPED WITH: A NON–PERMEABLE CONTAINER HOLDING WATER AND APPROVED CLEANING SOLUTION, SIGN IN CLIPBOARD, 5 GALLON BUCKET AND SCRUB BRUSH.
2. ALL PERSONS MUST UTILIZE THE BOOT WASH STATION BEFORE ENTERING AND EXITING HDD TRAVEL LANES (WITH NOXIOUS WEEDS PRESENT) LOCATED AS SHOWN ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE COMPANY'S INSPECTOR. BOOT CLEANING STATIONS WILL BE CONSTRUCTED BY THE CONTRACTOR. WASHINGS SHALL BE CARRIED OUT UNDER THE SUPERVISION AND THE SATISFACTION OF THE COMPANY'S INSPECTORS.
3. WASH WATER USED FOR CLEANING SHALL NOT BE ALLOWED TO ENTER ANY WATERBODY, WETLAND OR CANAL/DITCH. WATER SHALL BE DISPOSED OF AT AN APPROVED OFF–SITE DISPOSAL LOCATION.
4. CONTRACTORS WALKING THE HDD TRAVEL LANEMUST USE WASH STATION EACH TIME THEY ENTER AND EXIT A NOXIOUS WEED AREA. EACH USE SHALL BE RECORDED ON THE CLIPBOARD WITH THE NAME, COMPANY, DATE AND TIME.
5. ENTIRE BOOT CLEANING STATION WILL BE REMOVED BY CONTRACTOR ONCE WORK IN THE AREA IS COMPLETE.

FAC. CODE : N/A		REL. W.O. N/A
PL#.		CONST. YR 2027
STA# N/A		
	BY	DATE
DESIGN	ED	
DRAWN	MB	
ASBUILT		
FILE NO.: N/A		
SCALE: NTS		

Northern Natural Gas
A BERKSHIRE HATHAWAY ENERGY COMPANY

V2F A-LINE ABANDONMENT AND CAPACITY REPLACEMENT PROJECT
NORTHERN LIGHTS 2027 EXPANSION PROJECT
BOOT CLEANING STATION

Northern Natural Gas
A BERKSHIRE HATHAWAY ENERGY COMPANY
PROJECT NO.

DWG. NO.
FIGURE 3
F

Appendix 3B
Agency Correspondence

RTE Agency Correspondence V2F

Lillie, Jessica

From: Krych, Scott
Sent: Thursday, February 19, 2026 1:31 PM
To: Review.NHIS@state.mn.us; james.f.drake@state.mn.us; lisa.joyal@state.mn.us
Cc: Noland, Nathan; Knabe, Susan
Subject: Northern V2F Lake Mills M500 E-line
Attachments: V2F-Lake Mills M500 E-line_MDNR consulation_pkg_FINAL_.pdf

Hi James et. al,

I am attaching a concurrence request for the Northern V2F Ventura to Farmington A-line Abandonment and Capacity (V2F) Project – Lake Mills M500 E-line. The attached package outlines Northern's application and approaches to avoiding negative impacts to natural resources along their respective projects. Please feel free to contact me if you have any questions or additional information inquiries.

Thanks,

Scott Krych
Associate, Senior Ecologist

Direct: 1(612) 247-5218
scott.krych@stantec.com

Stantec
2080 Wooddale Drive Suite 100
Woodbury MN 55125-2920

1111 South 103rd Street
Omaha, Nebraska 68124

February 19, 2026

Mr. James Drake
Natural Heritage Review Specialist
Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

RE: **MCE-2025-00094 - Northern Natural Gas – Ventura to Farmington A-line Abandonment and Capacity Project – Lake Mills M500 E-line, Freeborn County, Minnesota**

Dear Mr. Drake:

Northern Natural Gas (Northern) is proposing to construct the Ventura to Farmington A-line Abandonment and Capacity Project (Project) (see Project Overview Map, Attachment A). Northern's pipeline system and associated appurtenances are regulated by the Federal Energy Regulatory Commission (FERC) and is responsible for compliance with the National Environmental Policy Act (NEPA) and with applicable state and local regulations such as Minnesota laws protecting state endangered, threatened and special concern species (ETS), regulated by the Minnesota Department of Natural Resources (MDNR). Northern has secured the services of Stantec Consulting Services Inc. (Stantec) to assist with consultation with the MDNR associated with ETS that may occur within the Project area.

Northern proposes to construct and operate an approximately 8.29-mile extension of its E-line in Freeborn County, Minnesota. The proposed extension will be tied-in below ground at the current terminus of the E-line in Section 33, Township 102 North, Range 22 West (Section 33, T102N, R22W), Freeborn County, Minnesota. The valve setting at this location will be removed.

The Lake Mills M500 E-line for the V2F Project will generally be installed parallel, utilizing a 25-foot offset, to existing Northern mainlines. The pipeline will be installed within a 100-foot-wide nominal construction corridor in uplands and a 75-foot-wide construction corridor in a wetland except in LMA-W013 where Northern will neck down to 50 feet. In addition to the construction corridor, Northern will utilize extra temporary workspace (ETWS), existing driveways and farm roads, temporary access roads, and staging areas during construction. A topographic figure of the Project is included in **Attachment A**.

Northern initiated consultation with the MDNR, by using the Minnesota Conservation Explorer (MCE) tool to evaluate the potential for the Project to impact state-listed species and other rare features; and received a final Natural Heritage Review letter from the MDNR

on February 6, 2025, for these Project components (Project ID: MCE-2025-00089). Attachment B includes this correspondence from the MDNR.

Ecologically Significant Areas

One moderate MBS site (Manchester 26) overlaps the Lake Mills M500 E-line at MP 42.11. The site is associated with a southern mesic prairie native plant community (Ups23a) and is a historic railroad corridor. Northern will minimize impacts to Manchester 26 and its associated native plant communities by using HDD to cross underneath them. Additionally, Northern will follow the FERC Plan and Procedures, including adherence to prescribed erosion prevention, sediment control, site stabilization, and resource protection measures, to the extent practicable. The Plan and Procedures incorporate BMPs designed to protect off-site transport of sediment and to minimize secondary disturbance to adjacent resources. Implementation of these BMPs will maintain protection of off-site plant communities, minimizing indirect impacts to them resulting from the Project.

State-listed Species

Northern completed a desktop review and an onsite field assessment of suitable habitat for listed species that have potential to occur within the Project area during the summer of 2025. The rare, threatened and endangered species (RTE) report is provided in **Attachment C**.

Common gallinule (*Gallinula galeata*), and the trumpeter swan (*Cygnus buccinator*), both state-listed special concern species, have been documented in vicinity of the Lake Mills M500 E-line. While shallow marsh habitat is present within the Project component area, areas that could support the common gallinule are either adjacent to human disturbance or will be crossed via HDD. As a result, the common gallinule is unlikely to occur within the planned Project workspace, and construction related activities will not directly impact the common gallinule.

No suitable trumpeter swan habitat was identified within the ESB and wetland complexes with suitable size and habitat capable of providing nesting for the trumpeter swan will not be crossed by the Project. Therefore, impacts on trumpeter swans are not anticipated from clearing or construction activities associated with the Lake Mills M500 E-line. Implementation of FERC Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and Wetland and Waterbody Construction and Mitigation Procedures (Procedures) will further protect wetland resources and prevent indirect impacts to potential habitat outside the Project workspace. Additional information is provided in the attached RTE report (**Attachment C**).

Northern obtained a U.S. Fish and Wildlife Services Information for Planning and Consultation (IPaC) - Official Species List from the USFWS Minnesota-Wisconsin field office on January 28, 2025 (**Attachment B**). The USFWS determined the following federally listed species may occur in the proposed Project area and may be affected by the proposed action in Minnesota:

- Monarch Butterfly (*Danaus plexippus*) – Proposed threatened

The USFWS did not identify any protected bat species, particularly the Northern long-eared bat (NLEB) (*Myotis septetrionalis*) and the tri-colored bat (TCB) (*Perimyotis*

subflavus) as occurring or having potential to occur within the Project area. Furthermore, the Project does not occur within vicinity of any known records, maternal roosts or hibernacula of these two bat species and is not within critical habitat for these species. Northern has limited tree clearing for the Lake Mills M500 E-line to 0.69 acre and will follow USFWS guidance on federally listed species. Therefore, Northern is not planning to restrict seasonal tree clearing, based on USFWS consultation.

Conclusion

Based on the results of the desktop review, 2025 onsite habitat assessment, and USFWS IPaC determinations, the Project will have no effect on the NLEB or TCB; and the Project will not impact the common gallinule or trumpeter swan.

Northern is requesting MDNR provide review and concurrence of the determinations made within this letter regarding state-listed species.

I appreciate your attention to this notification and request a review of the attached information. Should you have any questions or concerns please contact me (402-398-7226 or Terry.Plucker@nngco.com) or Scott Krych of Stantec (651-395-5211 or Scott.Krych@stantec.com).

Sincerely,

Terry Plucker
Northern Natural Gas
Environmental Compliance Manager

Enclosures: Attachment A: Project Location Figure
Attachment B: MDNR Correspondence and USFWS IPaC Official Species List
Attachment C: V2F – Lake Mills M500 E-line – Rare, Threatened, and Endangered Species Report

cc: Sue Knabe, Stantec

1111 South 103rd Street
Omaha, Nebraska 68124

Attachment A. Project Location Figure

Figure No.

1

Title

Project Location & Topography
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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(At original document size of 11x17)
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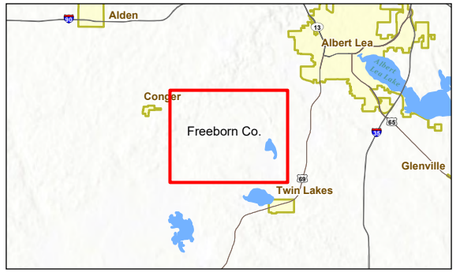
Legend
- Environmental Survey Boundary
- 1-Mile Buffer



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

Stantec

Northern Natural Gas

Figure No.

1

Title

Project Location & Topography
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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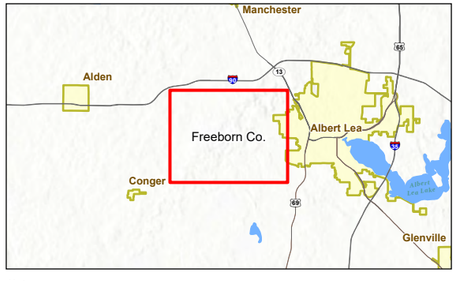
Legend
- Environmental Survey Boundary
- 1-Mile Buffer



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

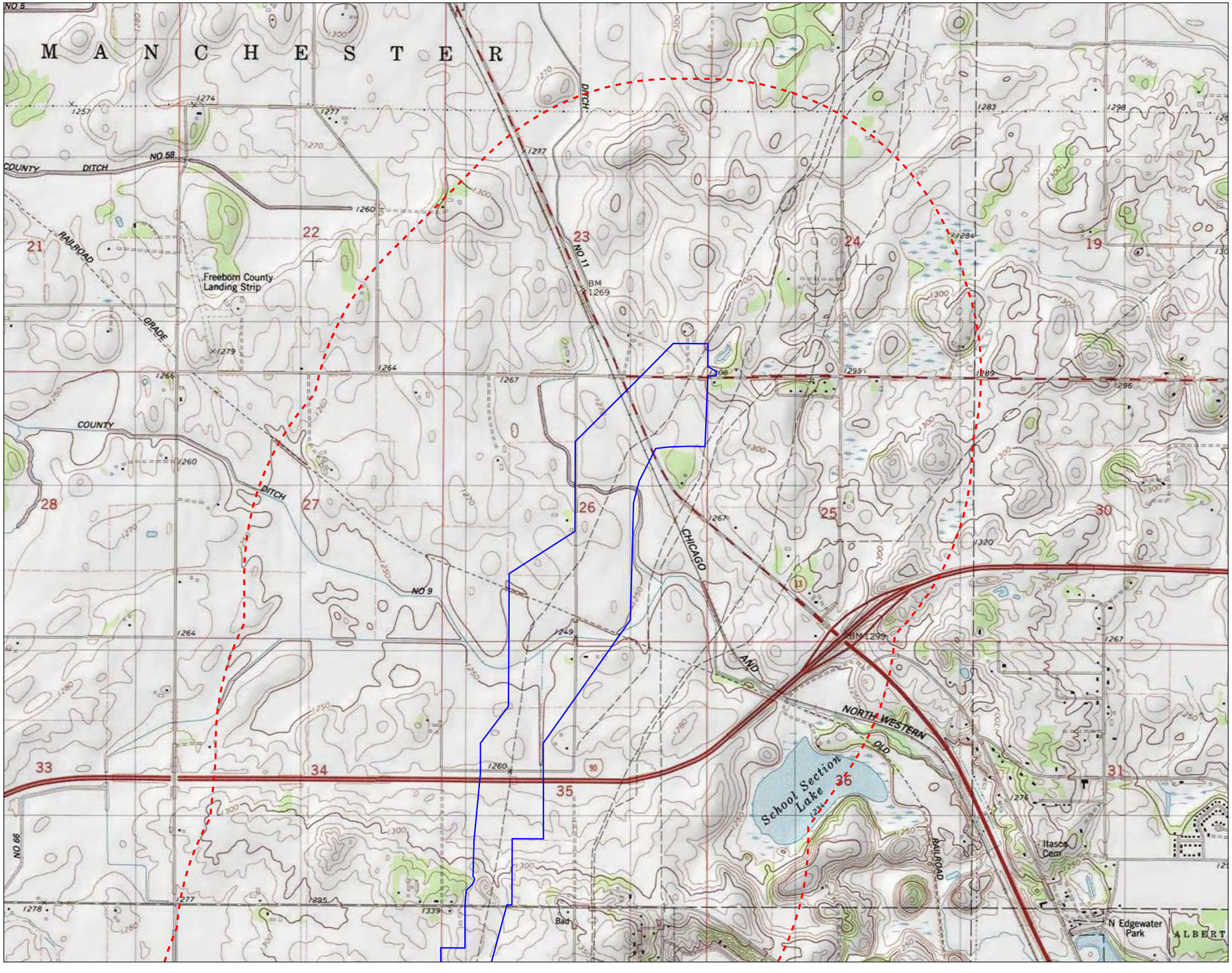


Figure No.

1

Title

Project Location & Topography
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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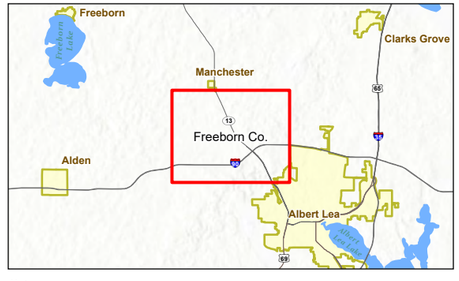
(At original document size of 11x17)
1:24,000

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

Attachment B. MDNR Correspondence and USFWS IPaC Official Species List

Formal Natural Heritage Review - Cover Page

See next page for results of review. A draft watermark means the project details have not been finalized and the results are not official.

Project Name: Lake Mills M500E Extension

Project Proposer: Northern Natural Gas

Project Type: Utilities, Pipelines (gas, petroleum)

Project Type Activities: Tree Removal;Groundwater Impacts (e.g., contamination, dewatering, change in hydrology, potential for aquifer breach);Waterbody or watercourse impacts (e.g., dewatering, discharge, excavation, fill, runoff, sedimentation, changes in hydrology));Wetland impacts (e.g., dewatering, tiling, drainage, discharge, excavation, fill, runoff, sedimentation, changes in hydrology)

TRS: T102 R22 S10, T102 R22 S11, T102 R22 S14, T102 R22 S15, T102 R22 S2, T102 R22 S22, T102 R22 S23, T102 R22 S26, T102 R22 S27, T102 R22 S28, T102 R22 S3, T102 R22 S33 +

County(s): Freeborn

DNR Admin Region(s): South

Reason Requested: Federal Environmental Assessment/Environmental Impact Assessment, NEPA checklist, PUC Site or Route Application, Watershed Plan, BER/Utility Work Plan

Project Description: Installation of 8.1 miles of 36-inch diameter existing of the Lake Mills M500E-Line natural gas pipeline in Freeborn County, MN. Construction methods include ...

Existing Land Uses: Current landuse of the project site includes agricultural land, residential homes, and utility ROW.

Landcover / Habitat Impacted: Landcover types that can potentially be impacted by the project include agricultural fields, upland forests, fresh wet meadows, shrub-carrs, and hardwood ...

Waterbodies Affected: Three perennial streams, 2 intermittent stream, 10 fresh wet meadows, 1 hardwood swamp, 7 seasonally flooded basins/ farmed wetlands may potentially be ...

Groundwater Resources Affected: The project does not expect to affect any groundwater resources, if impacts occur potential sources may include hydrostatic testing, grading, excavation, ...

Previous Natural Heritage Review: No

Previous Habitat Assessments / Surveys: No

SUMMARY OF AUTOMATED RESULTS

Category	Results	Response By Category
Project Details	Comments	Tree Removal - Recommendations
Ecologically Significant Area	Comments	MBS Sites - Recommendations Potential Local Conservation Value Potential RNC under WCA

Category	Results	Response By Category
State-Listed Endangered or Threatened Species	No Comments	No Further Review Required
State-Listed Species of Special Concern	Comments	Recommendations
Federally Listed Species	No Records	Visit IPaC For Federal Review

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 6, 2025

Project ID: MCE #2025-00094

Mason Steele
Stantec
One Carlson Parkway, Suite 100
Plymouth, MN 55447

RE: Automated Natural Heritage Review of the proposed Lake Mills M500E Extension
See Cover Page for location and project details.

Dear Mason Steele,

As requested, the above project has been reviewed for potential effects to rare features. Based on this review, the following rare features may be adversely affected by the proposed project:

Project Type and/or Project Type Activity Comments

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed below, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, the DNR recommends that tree removal be avoided from June 1 through August 15.

Ecologically Significant Area

- The Minnesota Biological Survey (MBS) has identified one or more Sites of Biodiversity Significance within or adjacent to the project boundary. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Factors taken into account during the ranking process include the number of rare species documented within the site, the quality of the native plant communities in the site, the size of the site, and the context of the site within the landscape.

  High or Moderate MBS Site - One or more MBS Sites of Biodiversity Significance ranked High or Moderate may be impacted by the proposed project. Sites ranked as High contain very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes. Sites ranked as Moderate contain occurrences of rare species

and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. The DNR recommends that the project be designed to avoid impacts to these ecologically significant areas. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:

- Retain a buffer between proposed activities and the MBS Site,
- Minimize project footprint within the MBS Site,
- Operate wihin already-disturbed areas,
- Minimize vehicular disturbance within the MBS Site,
- Do not park equipment or stockpile supplies within the MBS Site,
- Do not place spoil within the MBS Site,
- Inspect and clean equipment prior to operating within the MBS Site, and follow other recommendations to prevent the spread of invasive species,
- Conduct the work under frozen ground conditions,
- Use effective erosion prevention and sediment control measures,
- Revegetate disturbed soil with native seed mixes suitable to the local habitat as soon after construction as possible,
- Use only weed-free mulches, topsoils, and seed mixes.

Areas with Potential Local Conservation Value - The proposed project may impact one or more areas that have local conservation value. These areas are ranked as Below in the MBS Sites of Biodiversity Significance layer, and are retained in the layer as negative data. These areas do not meet the minimum biodiversity threshold for statewide significance but may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat.

- One or more DNR Native Plant Communities have been identified within or adjacent to the proposed project (for a list of all the native plant community types, please run a Conservation Planning Report; spatial data can be viewed on the Explore Page). DNR Native Plant Community types and subtypes are given a Conservation Status Rank that reflects the relative rarity and endangerment of the community type in Minnesota. Conservation Status Ranks range from S1 (critically imperiled) to S5 (secure, common, widespread, and abundant).

  Rare Native Plant Communities - One or more rare native plant communities may be impacted by the proposed project. Native plant communities with a Conservation Status Rank of S1 through S3 are considered rare in the state, and the DNR recommends avoidance of these ecologically significant areas. In addition, please note that native plant communities with a Conservation Status Rank of S1 through S3 may qualify as Rare Natural Communities (RNC) under the Wetland Conservation Act (WCA). If the proposed project includes a wetland replacement plan under WCA, please contact your DNR Regional Ecologist for further evaluation. Please visit WCA Program Guidance and Information for additional information, including the Rare Natural Communities Technical Guidance.

State-Listed Endangered or Threatened Species

No state-listed endangered or threatened species have been documented in the vicinity of the project.

State-Listed Species of Special Concern

Taxonomic Group	Common Name	Scientific Name	Water Regime	Habitat	Federal Status
Vertebrate Animal	Common Gallinule	Gallinula galeata		Marsh	
Vertebrate Animal	Trumpeter Swan	Cygnus buccinator		Littoral Zone of Lake, Marsh	

- The above table identifies state-listed species of special concern that have been documented in the vicinity of your project. If suitable habitat for any of these species occurs within your project footprint or activity impact area, the project may negatively impact those species. To avoid impacting state-listed species of special concern, the DNR recommends modifying the location of project activities to avoid suitable habitat or modifying the timing of project activities to avoid the presence of the species. Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts. Species-specific comments, if any, appear below.

Federally Listed Species

The Natural Heritage Information System does not contain any records for federally listed species within one mile of the proposed project. Please note, however, that not all federally listed species are tracked within the NHIS. To ensure compliance with federal law, please conduct a federal regulatory review using the U.S. Fish and Wildlife Service's online Information for Planning and Consultation (IPaC) tool.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and the project description provided on the cover page. If project details change or construction has not occurred within one year, please resubmit the project for review before initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. For information on the environmental review process or other natural resource concerns, you may contact your DNR Regional Environmental Assessment Ecologist.

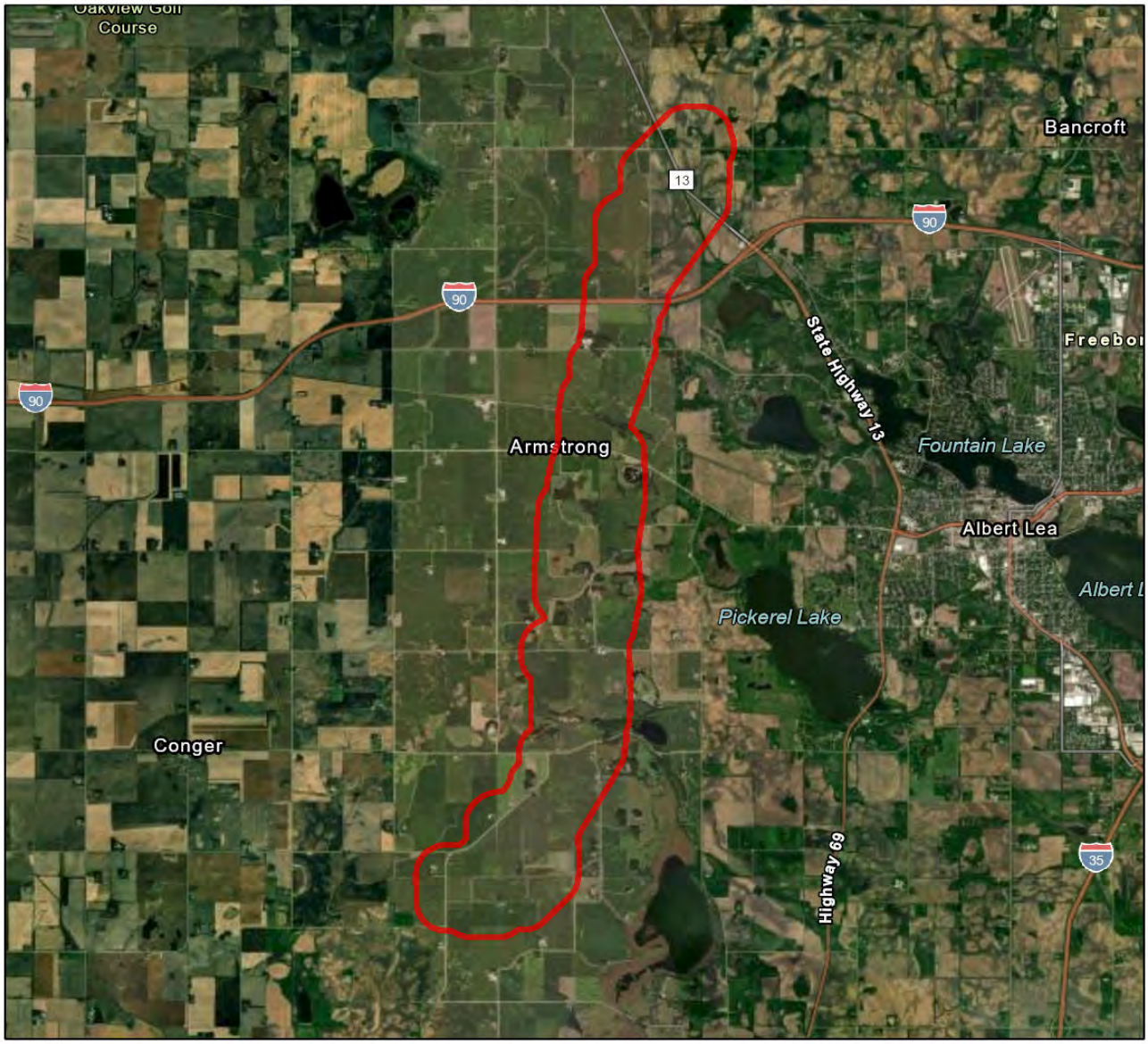
Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely, *The Natural Heritage Review Team* Natural Heritage Review Program
Review.NHIS@state.mn.us

Links: USFWS Information for Planning and Consultation (IPaC) tool
Information for Planning and Consultation (IPaC) tool
DNR Regional Environmental Assessment Ecologist Contact Info
https://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html

Lake Mills M500E Extension

Aerial Imagery With Locator Map



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Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 5,310.06

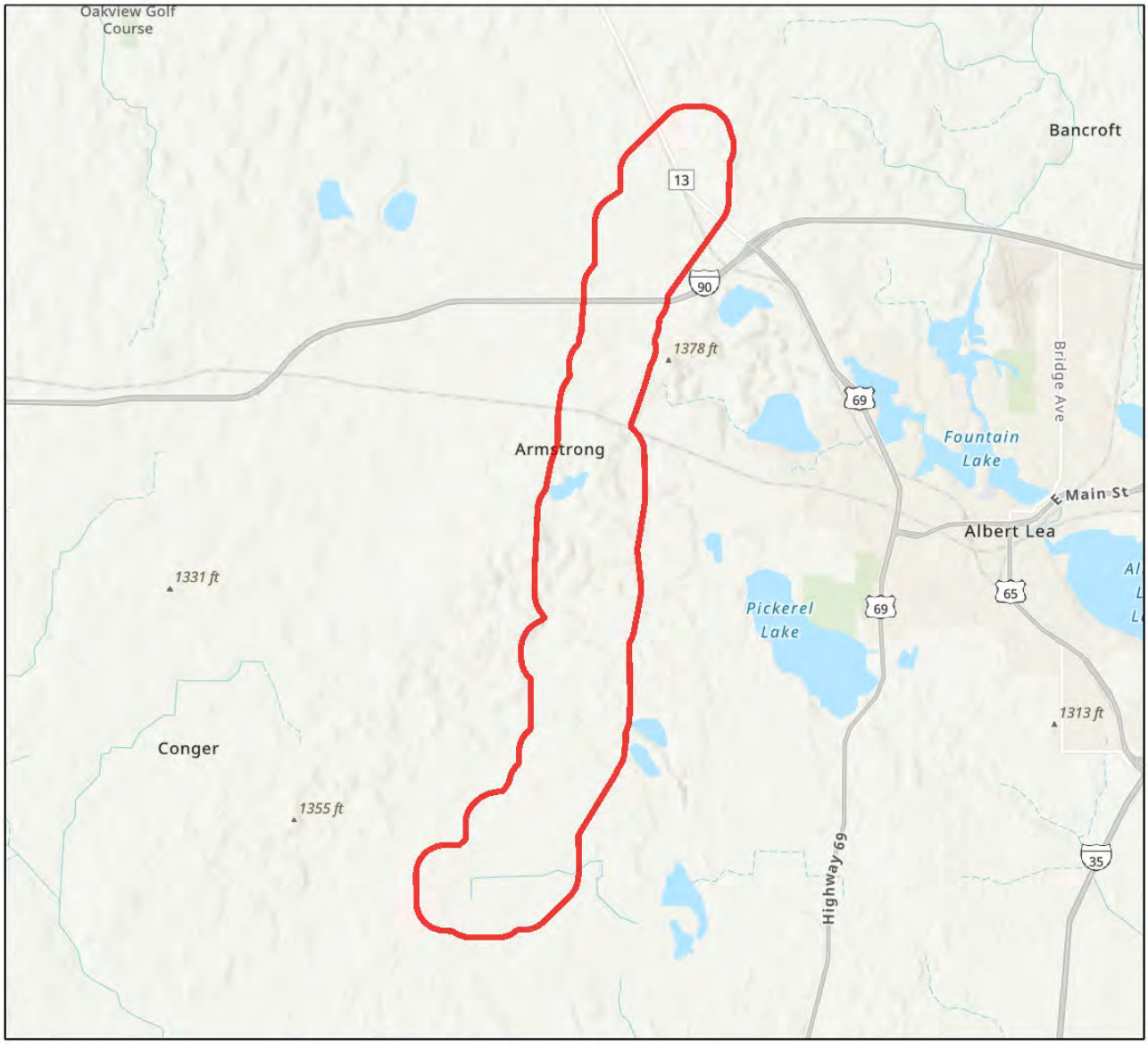
County(s): Freeborn

TRS: T102 R22 S10, T102 R22 S11, T102 R22 S14, T102 R22 S15, T102 R22 S2 +

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Earthstar Geographics
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

Lake Mills M500E Extension

USA Topo Basemap With Locator Map



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0 0.5 1 2 3 4 Miles

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County(s): Freeborn

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Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 01/28/2025 17:59:49 UTC
Project Code: 2025-0048351
Project Name: Lake Mills M500E Extension

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species
The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance
Please refer to refer to our Section 7 website for guidance and technical assistance, including step-by-step instructions for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A demonstration video showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect." In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats
Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's northern long-eared bat website.

Whooping Crane
Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States."

Other Trust Resources and Activities
Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a permit. A nest take permit is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination
While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota
Minnesota Department of Natural Resources - Endangered Resources Review Homepage
Email: Review.NHIS@state.mn.us

Wisconsin
Wisconsin Department of Natural Resources - Endangered Resources Review Homepage
Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

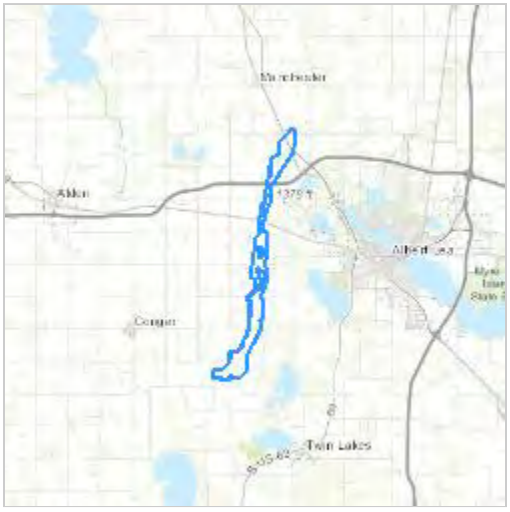
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

PROJECT SUMMARY

Project Code: 2025-0048351
Project Name: Lake Mills M500E Extension
Project Type: Natural Gas Distribution
Project Description: Installation of 8.1 miles of 36-inch diameter existing of the Lake Mills M500E-Line natural gas pipeline in Freeborn County, MN

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.649347399999996,-93.45115633661209,14z



Counties: Freeborn County, Minnesota

ENDANGERED SPECIES ACT SPECIES

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/

activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

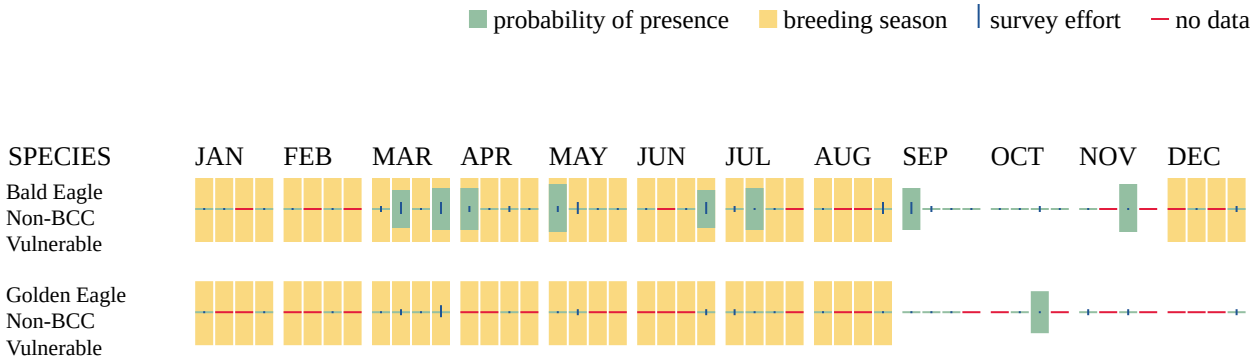
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Black Tern *Chlidonias niger surinamenisis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Franklin's Gull *Leucophaeus pipixcan* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10567	Breeds May 1 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Golden-winged Warbler *Vermivora chrysoptera* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20

NAME	BREEDING SEASON
Grasshopper Sparrow *Ammodramus savannarum perpallidus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow *Centronyx henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Northern Harrier *Circus hudsonius* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management

- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R4SBC
- R4SBCx
- R5UBFx
- R2UBHx

LAKE

- L2UBH

FRESHWATER EMERGENT WETLAND

- PEM1Af
- PEM1C
- PEM1B
- PEM1A

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1C
- PFO1A
- PFO1B
- PSS1A

FRESHWATER POND

- PUBH

IPAC USER CONTACT INFORMATION

Agency:	Stantec
Name:	Mason Steele
Address:	2080 Wooddale Dr
Address Line 2:	Ste 1
City:	Woodbury
State:	MN
Zip:	55125
Email	mason.steele@stantec.com
Phone:	6122126155

Attachment C. V2F – Lake Mills M500 E-line - Rare, Threatened, and Endangered Species Report

For filing purposes, the Rare, Threatened, and Endangered Species Report is included in Appendix 3C

Lillie, Jessica

From: Krych, Scott
Sent: Thursday, February 19, 2026 1:14 PM
To: Review.NHIS@state.mn.us; james.f.drake@state.mn.us; Joyal, Lisa (DNR)
Cc: Noland, Nathan; Knabe, Susan
Subject: Northern V2F Project -Albert Lea M500 E-line
Attachments: V2F-Albert Lea M500 E-line_MDNR consulation_pkg_FINAL.pdf

Hi James et. al,

I am attaching a concurrence request for the Northern V2F Ventural to Farmington A-line Abandonment and Capacity (V2F) Project – Albert Lea M500 E-line. The attached package outlines Northern's application and approaches to avoiding negative impacts to natural resources along their respective projects. Please feel free to contact me if you have any questions or additional information inquiries.

Thanks,

Scott Krych
Associate, Senior Ecologist

Direct: 1(612) 247-5218
scott.krych@stantec.com

Stantec
2080 Wooddale Drive Suite 100
Woodbury MN 55125-2920

1111 South 103rd Street
Omaha, Nebraska 68124

February 16, 2026

Mr. James Drake
Natural Heritage Review Specialist
Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

RE: **MCE-2025-00089 - Northern Natural Gas – Ventura to Farmington A-line Abandonment and Capacity Project - Albert Lea M500 E-line and Temporary Compression Site - La Crosse BL MNB73201 launcher /ABA05, Steele and Freeborn Counties, Minnesota**

Dear Mr. Drake:

Northern Natural Gas (Northern) is proposing to construct the Ventura to Farmington A-line Abandonment and Capacity Project (Project) (see Project Overview Map, Attachment A). Northern's pipeline system and associated appurtenances are regulated by the Federal Energy Regulatory Commission (FERC) and is responsible for compliance with the National Environmental Policy Act (NEPA) and with applicable state and local regulations such as Minnesota laws protecting state endangered, threatened and special concern species (ETS), regulated by the Minnesota Department of Natural Resources (MDNR). Northern has secured the services of Stantec Consulting Services Inc. (Stantec) to assist with consultation with the MDNR associated with ETS that may occur within the Project area.

Northern proposes to construct and operate an approximately 2.09-mile extension of its 36-inch-diameter Albert Lea M500 E-line in Steele County, Minnesota. The proposed extension will be tied in below ground in Section 31, T105N, R21W, Steele County, Minnesota. Northern also will remove a hot tap fitting on its existing 30-inch diameter D-line and tie over from the M500 E-line to the M500 D-line at the take off to remove the existing connection. The terminus of the proposed extension will continue belowground into the south end of the Northern Lights 2027 Expansion Project - Albert Lea M500 E-line on the north side of State Highway 30, Section 19, T105N, R21W, Steele County, Minnesota. Additionally, Northern proposes to utilize temporary compression at one location in Freeborn County, Minnesota (La Crosse branch line MNB73201 launcher /ABA05), to evacuate gas from the A-line to an adjacent mainline. A topographic figure of the Project is included in **Attachment A**.

Northern initiated consultation with the MDNR, by using the Minnesota Conservation Explorer (MCE) tool to evaluate the potential for the Project to impact state-listed species and other rare features; and received a final Natural Heritage Review letter from the MDNR

on May 16, 2025, for these Project components (Project ID: MCE-2025-00089). Attachment B includes this correspondence from the MDNR.

Ecologically Significant Areas

Northern designed the Project to minimize or avoid impacts to native grasslands and forested habitats to the extent practicable. Northern does not anticipate that construction associated with the Project will have an adverse effect grasslands or wooded areas located outside construction workspaces. The Chapa-kak-say-za Wildlife Management Area (WMA) site lies approximately 315 feet northeast of the proposed construction footprint of the Albert Lea M500 E-line in Section 19, T105N, R21W, Steele County, Minnesota. Northern will follow the Federal Energy Regulatory Commission (FERC) Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and Wetland and Waterbody Construction and Mitigation Procedures (Procedures), including adherence to prescribed erosion prevention, sediment control, site stabilization, and resource protection measures, to the extent practicable. The Plan and Procedures incorporate best management practices (BMPs) designed to protect off-site transport of sediment and to minimize secondary disturbance to adjacent resources. Implementation of these BMPs will maintain protection of off-site plant communities and waterbodies present at the WMA, as well as other nearby sensitive vegetation communities.

State-listed Species

Northern completed a desktop review and an onsite field assessment of suitable habitat for listed species that have potential to occur within the Project area during the summer of 2025. The rare, threatened and endangered species report is provided in **Attachment D**.

Edible valerian (*Valeriana edulis* var. *ciliata*), a state-listed threatened species has been documented in the vicinity of the proposed Project components and potentially suitable habitat is present within them. Northern will evaluate suitable habitat areas within planned Project workspace for the presence/absence of this species during the 2026 growing season and within the species flowering season, prior to construction activities. A survey plan for conducting this evaluation, and figure specifying the locations the surveys will occur are included in **Attachment C**.

Northern obtained a U.S. Fish and Wildlife Services Information for Planning and Consultation (IPaC) - Official Species List from the USFWS Minnesota-Wisconsin field office on January 28, 2025 (**Attachment B**). The USFWS determined the following federally listed species may occur in the proposed Project area and may be affected by the proposed action in Minnesota:

- Monarch Butterfly (*Danaus plexippus*) – Proposed threatened
- Western Regal Fritillary (*Argynnis idalia occidentalis*) – Proposed threatened

The USFWS did not identify any protected bat species, particularly the Northern long-eared bat (NLEB) (*Myotis septetrionalis*) and the tri-colored bat (TCB) (*Perimyotis subflavus*) as occurring or having potential to occur within the Project area. Furthermore, the Project does not occur within vicinity of any known records, maternal roosts or hibernacula of these two bat species and is not within critical habitat for these species. Northern has limited tree clearing for the Albert Lea M500 E-line to 0.22 acre and will

follow USFWS guidance on federally listed species. No tree clearing is proposed at the temporary compression site at the La Crosse branch line MNB73201 launcher /ABA05 Therefore, Northern is not planning to restrict seasonal tree clearing, based on USFWS consultation.

Conclusion

Based on the results of the desktop review, 2025 onsite habitat assessment, and USFWS IPaC determinations, the Project will have no effect on NLEB or TCB. Due to potentially suitable habitat present within the Project area and known occurrences for the edible valerian in vicinity to the Project, Northern plans to conduct a presence/ absence survey for this species during the 2026 growing season. Northern has attached a study plan detailing the means and methods for the survey and results of the survey will be provided to the MDNR to determine avoidance measures, as necessary.

Northern is requesting MDNR provide review and concurrence of the determinations made within this letter regarding state-listed species, as well as approval of the study plan submitted for the edible valerian.

I appreciate your attention to this notification and request a review of the attached information. Should you have any questions or concerns please contact me (402-398-7226 or Terry.Plucker@nngco.com) or Scott Krych of Stantec (651-395-5211 or Scott.Krych@stantec.com).

Sincerely,

Terry Plucker
Northern Natural Gas
Environmental Compliance Manager

Enclosures: Attachment A: Project Location Figure
Attachment B: MDNR Correspondence and USFWS IPaC Official Species List
Attachment C: Edible Valerian Study Plan and Survey Figure
Attachment D: V2F – Albert Lea M500 E-line and Temporary Compression Sites at Owatonna Compressor Station and La Crosse BL MNB73201 Launcher /ABA05– Rare, Threatened, and Endangered Species Report

cc: Sue Knabe, Stantec

1111 South 103rd Street
Omaha, Nebraska 68124

Attachment A. Project Location Figure

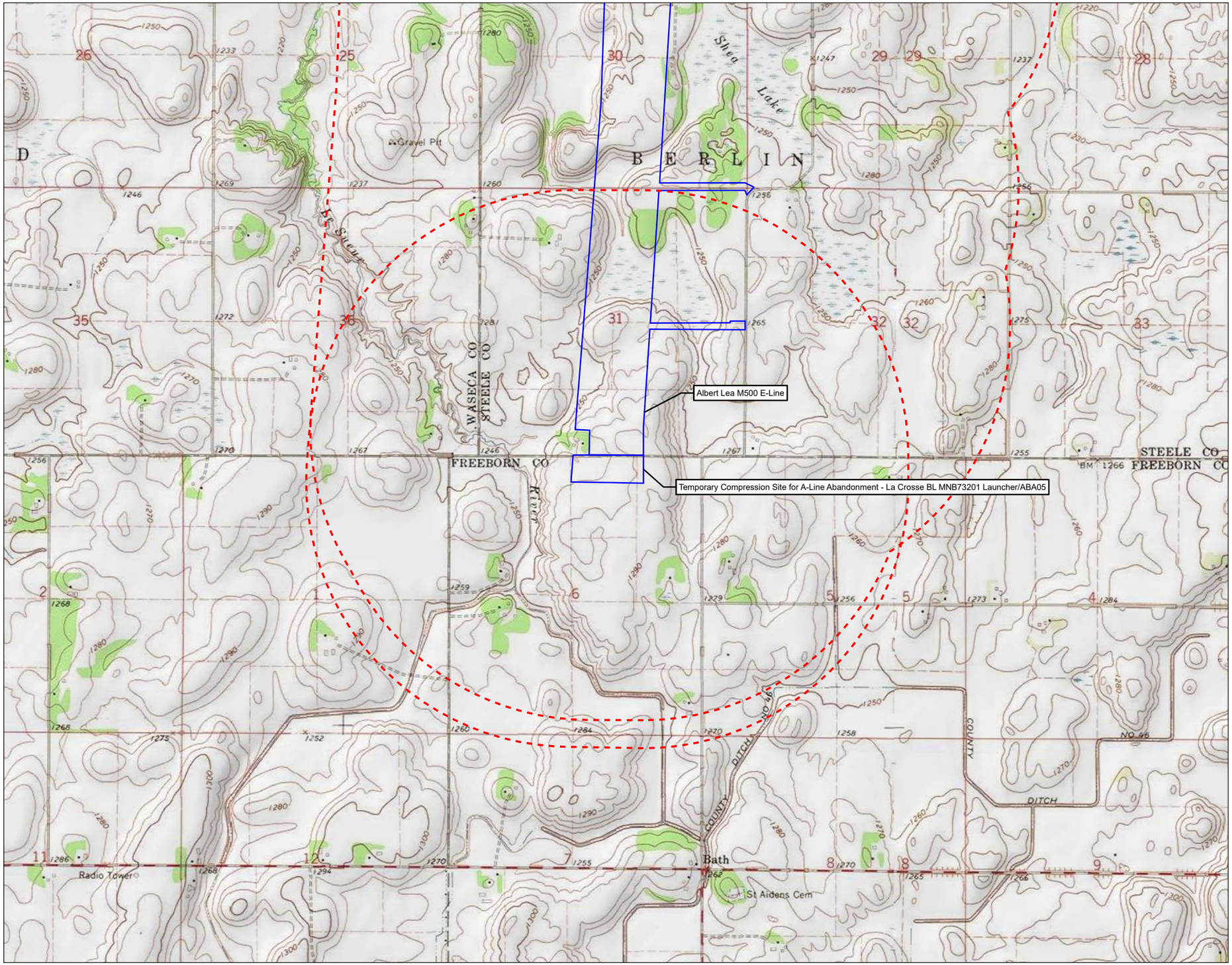


Figure No.

1

Title

Project Location & Topography
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

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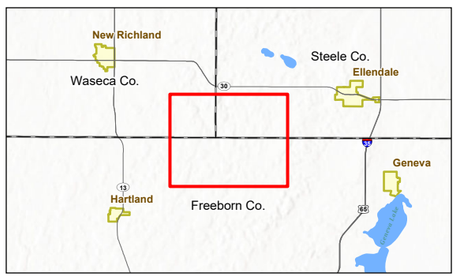
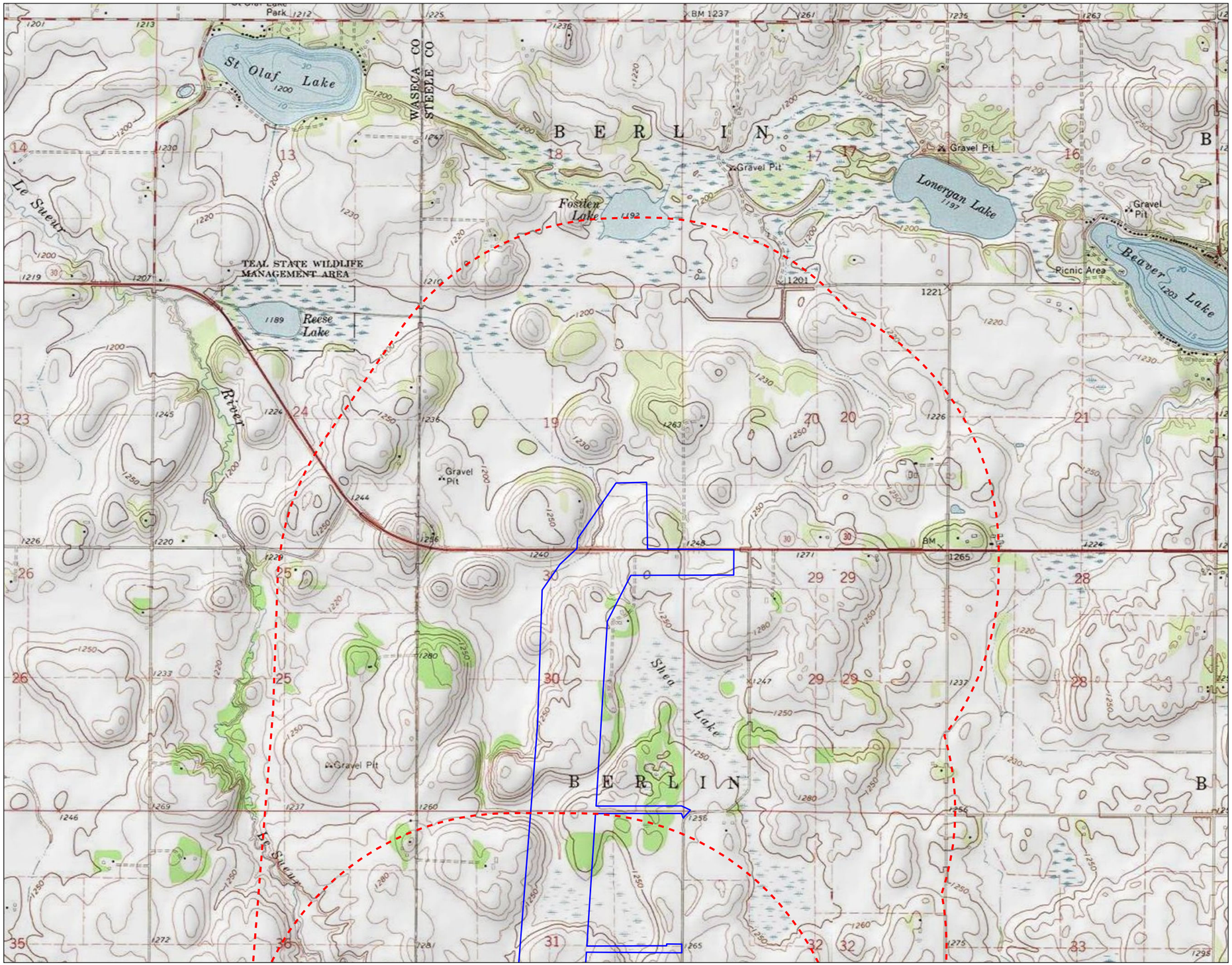
Legend
- Environmental Survey Boundary
- 1-Mile Buffer



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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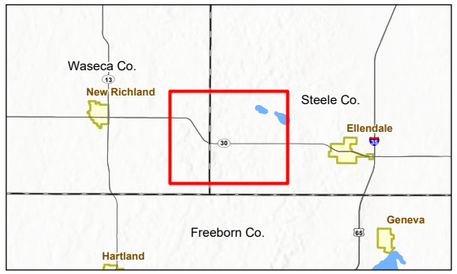

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Stantec

Northern Natural Gas

1111 South 103rd Street
Omaha, Nebraska 68124

Attachment B. MDNR Correspondence and USFWS IPaC Official Species List

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

May 16, 2025

Mason Steele
Stantec

RE: Natural Heritage Review of the proposed Albert Lea M500E Extension,
T104N R21W Section 6 and T105N R21W Sections 19-20, 29-32; Freeborn and Steele Counties

Dear Mason Steele,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00089** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) considered the wooded area in Chapa-kak-say-za WMA for a Site of Biodiversity Significance. It was determined to be *Below* the minimum biodiversity threshold for statewide significance. This area, however, may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat. As such, indirect impacts from surface runoff or the spread of invasive species should be considered during project design and implementation.

  MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be viewed using the Explore page in Minnesota Conservation Explorer (MCE) or their GIS shapefiles can be downloaded from the MN Geospatial Commons. Reference the MBS Site Biodiversity Significance and Native Plant Community websites for information on interpreting the data. To receive a list of MBS Sites of Biodiversity Significance and DNR Native Plant Communities in the vicinity of your project, create a Conservation Planning Report using the Explore page in MCE.

- If the Wetland Conservation Act (WCA) is applicable to this project, please note that one or more Native Plant Communities in the vicinity of the project may qualify as a “rare natural community” under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities

that modify a rare natural community must be denied if the local government unit determines the proposed activities will permanently adversely affect the natural community. If the proposed project includes a wetland replacement plan under WCA, please contact your DNR Regional Ecologist for further evaluation. Please visit WCA Program Guidance and Information for additional information, including the Rare Natural Communities Technical Guidance.

State-listed Species

- Edible valerian (*Valeriana edulis* var. *ciliata*), a state-listed threatened plant species, has been documented within the vicinity of the proposed project. Edible valerian favors a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. **To demonstrate avoidance, a qualified surveyor will need to determine if suitable habitat exists within the activity impact area and, if so, conduct a survey prior to any project activities.** Surveys must be conducted by a qualified surveyor and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. Visit the Natural Heritage Review page for a list of certified surveyors and more information on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit Natural Heritage Review for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, please contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake

Digitally signed by James Drake
Date: 2025.05.16 17:30:58 -05'00'

Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Haley Byron, Jennie Skancke

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 01/28/2025 17:00:47 UTC
Project code: 2025-0048270
Project Name: Albert Lea M500E Extension

Subject: Technical Assistance letter for 'Albert Lea M500E Extension' for specified threatened and endangered species that may occur in your proposed project location consistent with the Minnesota-Wisconsin Endangered Species Determination Key (Minnesota-Wisconsin DKey).

Dear Mason Steele:

The U.S. Fish and Wildlife Service (Service) received on **January 28, 2025** your effect determination(s) for the 'Albert Lea M500E Extension' (Action) using the Minnesota-Wisconsin DKey within the Information for Planning and Consultation (IPaC) system. You have submitted this key to satisfy requirements under Section 7(a)(2). The Service developed this system in accordance of with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 et seq.).

Based on your answers and the assistance of the Service's Minnesota-Wisconsin DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Monarch Butterfly (*Danaus plexippus*)	Proposed Threatened	No effect

Determination Information

Thank you for informing the Service of your "No Effect" determination(s). No further coordination is necessary for the species you determined will not be affected by the Action.

Additional Information

Sufficient project details: Please provide sufficient project details on your project homepage in IPaC (Define Project, Project Description) to support your conclusions. Failure to disclose important aspects of your project that would influence the outcome of your effects determinations may negate your determinations and invalidate this letter. If you have site-specific information that leads you to believe a different determination is more appropriate for your

project than what the Dkey concludes, you can and should proceed based on the best available information.

Future project changes: The Service recommends that you contact the Minnesota-Wisconsin Ecological Services Field Office or re-evaluate the project in IPaC if: 1) the scope or location of the proposed Action is changed; 2) new information reveals that the action may affect listed species or designated critical habitat in a manner or to an extent not previously considered; 3) the Action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project changes are final or resources committed.

Species-specific information

Bald and Golden Eagles: Bald eagles, golden eagles, and their nests are protected under the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended, 16 U.S.C. 668a-d) (Eagle Act). The Eagle Act prohibits, except when authorized by an Eagle Act permit, the "taking" of bald and golden eagles and defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The Eagle Act's implementing regulations define disturb as "… to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

The following species and/or critical habitats may also occur in your project area and **are not** covered by this conclusion:

- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened

Coordination with the Service is not complete if additional coordination is advised above for any species.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Albert Lea M500E Extension

2. Description

The following description was provided for the project 'Albert Lea M500E Extension':

> Installation of 8.1 miles of 36-inch diameter existing of the Lake Mills M500E-Line natural gas pipeline in Freeborn County, MN.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.863674450000005,-93.39550194160901,14z

QUALIFICATION INTERVIEW

1. This determination key is intended to assist the user in evaluating the effects of their actions on Federally listed species in Minnesota and Wisconsin. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes. Additionally, this key DOES NOT cover wind development, purposeful take (e.g., for research or surveys), communication towers that have guy wires or are over 450 feet in height, aerial or other large-scale application of any chemical (such as insecticide or herbicide), and approval of long-term permits or plans (e.g., FERC licenses, HCP's).

   Click **YES** to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

   Yes
2. Is the action being funded, authorized, or carried out by a Federal agency?

   No
3. Are you the Federal agency or designated non-federal representative?

   Yes
4. Does the action involve the installation or operation of wind turbines?

   No
5. Does the action involve purposeful take of a listed animal?

   No
6. Does the action involve a new communications tower?

   No
7. Does the activity involve aerial or other large-scale application of ANY chemical, including pesticides (insecticide, herbicide, fungicide, rodenticide, etc)?

   No
8. Will your action permanently affect local hydrology?

   No
9. Will your action temporarily affect local hydrology?

   Yes
10. Will your project have any direct impacts to a stream or river (e.g., Horizontal Directional Drilling (HDD), hydrostatic testing, stream/road crossings, new stormwater outfall discharge, dams, other in-stream work, etc.)?

    Yes

11. Does your project have the potential to impact the riparian zone or indirectly impact a stream/river (e.g., cut and fill; horizontal directional drilling; construction; vegetation removal; pesticide or fertilizer application; discharge; runoff of sediment or pollutants; increase in erosion, etc.)?

    Note: Consider all potential effects of the action, including those that may happen later in time and outside and downstream of the immediate area involved in the action.

    Endangered Species Act regulation defines "effects of the action" to include all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (50 CFR 402.02).

    Yes

12. Will your action disturb the ground or existing vegetation?

    Note: This includes any off-road vehicle access, soil compaction (enough to collapse a rodent burrow), digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application (herbicide, fungicide), vegetation management (including removal or maintenance using equipment or prescribed fire), cultivation, development, etc.

    Yes

13. Will your action include spraying insecticides?

    No

14. Does your action area occur entirely within an already developed area?

    Note: Already developed areas are already paved, covered by existing structures, manicured lawns, industrial sites, or cultivated cropland, AND do not contain trees that could be roosting habitat. Be aware that listed species may occur in areas with natural, or semi-natural, vegetation immediately adjacent to existing utilities (e.g. roadways, railways) or within utility rights-of-way such as overhead transmission line corridors, and can utilize suitable trees, bridges, or culverts for roosting even in urban dominated landscapes (so these are not considered "already developed areas" for the purposes of this question). If unsure, select NO..

    No

15. [Hidden Semantic] Does the action area intersect the monarch butterfly species list area?

    Automatically answered

    Yes

16. Under the ESA, monarchs remain warranted but precluded by listing actions of higher priority. The monarch is a candidate for listing at this time. The Endangered Species Act does not establish protections or consultation requirements for candidate species. Some Federal and State agencies may have policy requirements to consider candidate species in planning. We encourage implementing measures that will remove or reduce threats to these species and possibly make listing unnecessary.

    If your project will have no effect on monarch butterflies (for example, if your project won't affect their habitat or individuals), then you can make a "no effect" determination for this project.

    Are you making a "no effect" determination for monarch?

    No

IPAC USER CONTACT INFORMATION

Agency:	Stantec
Name:	Mason Steele
Address:	2080 Wooddale Dr
Address Line 2:	Ste 1
City:	Woodbury
State:	MN
Zip:	55125
Email	mason.steele@stantec.com
Phone:	6122126155

Northern Natural Gas

1111 South 103rd Street
Omaha, Nebraska 68124

Attachment C. Edible Valerian Study Plan and Survey Figure

Study Plan and Botanical Survey Methods for the V2F Project Albert Lea M500 E-line Extension and Temporary Compression Site - La Crosse BL MNB73201 launcher /ABA05, Steele and Freeborn Counties, Minnesota

January 2026

Prepared for:

Northern Natural Gas Company
1111 South 103rd Street
Omaha, Nebraska 68124

Prepared by:

Stantec Consulting Services Inc.
1802 Wooddale Drive
Woodbury, MN 55125

Stantec Project Number: 172608813

Table of Contents

LIST OF TABLES

LIST OF APPENDICES

Abbreviations

DNR	Department of Natural Resources
ECS	Ecological Classification System
ESA	Endangered Species Act of 1973
ETS	Endangered Threatened and Special Concern Species
MBS	Minnesota Biological Survey
NHI	Natural Heritage Inventory
NHIS	Natural Heritage Information System
Northern	Northern Natural Gas
V2F	Ventura to Farmington A-line Abandonment and Capacity Project

1.0 INTRODUCTION

Northern Natural Gas (Northern) is proposing to construct the Albert Lea M500 E-line extension and utilize temporary compression for the A-line abandonment at the La Crosse branch line MNB73201 launcher /ABA05, as part of the Ventura to Farmington A-line Abandonment and Capacity Project (Project) in Steele and Freemont Counties, Minnesota in 2027 (Figure 1, Appendix A). Northern's pipeline system and associated appurtenances are regulated by the Federal Energy Regulatory Commission (FERC) and is responsible for compliance with the National Environmental Policy Act (NEPA) and with applicable state and local regulations such as Minnesota laws protecting state endangered, threatened and special concern species (ETS), regulated by the Minnesota Department of Natural Resources (MDNR).

Northern initiated consultation with the MDNR, by using the Minnesota Conservation Explorer (MCE) tool to evaluate the potential for the Project to impact state-listed species and other rare features; and received a final Natural Heritage Review letter from the MDNR on May 16, 2025, for these Project components (Project ID: MCE-2025-00089). The response letter received from the MDNR on May 16, 2025, identified known elemental occurrences of the edible valerian (*Valeriana edulis* var. *ciliata;* state-threatened) within one mile of the Project. Northern has secured the services of Stantec Consulting Services Inc. (Stantec) to assist with consultation with the MDNR associated with ETS that may occur within the Project area. Based on known occurrences within vicinity of the Project, Stantec is proposing species specific surveys for the edible valerian within suitable habitat areas. Stantec is requesting MDNR approval of the survey study plan presented in this document.

The edible valerian is a state-threatened vascular plant species that inhabits moist prairies, wet meadows and calcareous fens, that occur in calcium rich/alkaline soils (MDNR 2025a).The Albert Lea M500 E-line and temporary compression site at the La Crosse branch line MNB73201 launcher /ABA05 contains prairie and/or wet meadow habitats that may be suitable for this species and occurs within the Des Moines Lobe glacial deposits, which are characterized by calcium-rich soils. However, edible valerian requires some degree of vegetative cover to provide suitable conditions (e.g. microclimates, sandy substrate, access to groundwater, canopy closer) and is sensitive to a variety of disturbances. Typically, severely degraded habitat is not regarded as suitable edible valerian.

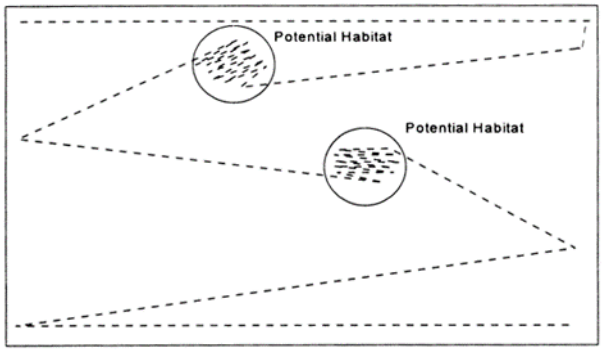
Stantec completed a desktop review using GIS data, Minnesota Biological Survey (MBS) data, aerial imagery, and observations collected during the 2025 field habitat surveys to identify areas within the Project that contain suitable habitat for edible valerian. Figure 2 in Appendix A shows the locations of habitat delineated as potentially suitable to support the species.

2.0 SURVEY METHODS

Stantec will follow MDNR's published rare plant survey guidance by conducting targeted field surveys for edible valerian during its 2026 flowering window. To maximize detectability and ensure compliance with rare plant survey protocols, surveyors will complete searcher directed

meander survey method, walking 10 to 20 meters spaced parallel transects and adjusting spacing as needed in dense vegetation or complex terrain to ensure full visual coverage. (See Figure 1 below).

Figure 1. Meander Survey Method



2.1 Screening Procedures

The following screening criteria will guide the 2026 survey for edible valerian. These criteria are intended to identify habitat areas where the likelihood of supporting the species is low, allowing biologists to prioritize survey efforts in habitats with the highest potential to contain edible valerian.

2.1.1 Screen I. Habitat Type Criteria

Prior to and during fieldwork, Stantec will identify and delineate potential habitat using the Minnesota Ecological Classification System (ECS), following the *Minnesota DNR Field Guide to the Native Plant Communities of Minnesota: Eastern Broadleaf Forest* (DNR 2006). ECS community assignments will be used to characterize site conditions, evaluate native plant community associations, and refine the selection of areas with the highest likelihood of supporting the species. All observations will be documented with sub-meter GPS, photographs, habitat descriptions, and phenological notes.

2.1.2 Screen II. Seasonal Survey Periods

Northern plans to survey for edible valerian during the spring season (May - June) when the species is flowering.

Table 1. Optimal Survey Period for Edible Valerian

Species	APR				MAY				JUNE				JULY				AUG				SEPT				OCT			
Valeriana edulis var.																												

*Shaded areas represent optimal survey periods. + indicates extended survey period when identifiable characteristics are likely present. (Sources: MDNR - Accessed January 2026).

3.0 SURVEYOR QUALIFICATIONS

A qualified Stantec botanist, experienced in conducting sensitive species surveys across all three Minnesota ecological provinces and throughout the Midwest, will complete the edible valerian habitat evaluations and field surveys for the Project. The survey study area encompasses the proposed workspace limits where proposed Project activities intersect with mapped suitable habitat within Steele and Freemont Counties, Minnesota (Figure 2, Appendix A).

Stantec surveyor Scott Krych, has conducted surveys to identify rare plants, birds, and other wildlife for over 35 years and is familiar with Minnesota DNR rare species reporting and survey requirements. He has prepared applications and successfully completed tests to be included on the Minnesota DNR's list of qualified botanical surveyors.

4.0 REFERENCES

Minnesota Department of Natural Resources, Division of Ecological Resources. 2008. Rare Species Guide: An online encyclopedia of Minnesota's rare native plants and animals [Web Application]. Minnesota Department of Natural Resources, St. Paul. Minnesota www.dnr.state.mn.us/rsg. Accessed January 2026.

Appendix A FIGURES

Figure 2 filed as CUI//PRIV - Do Not Release and is included in the P&C volume

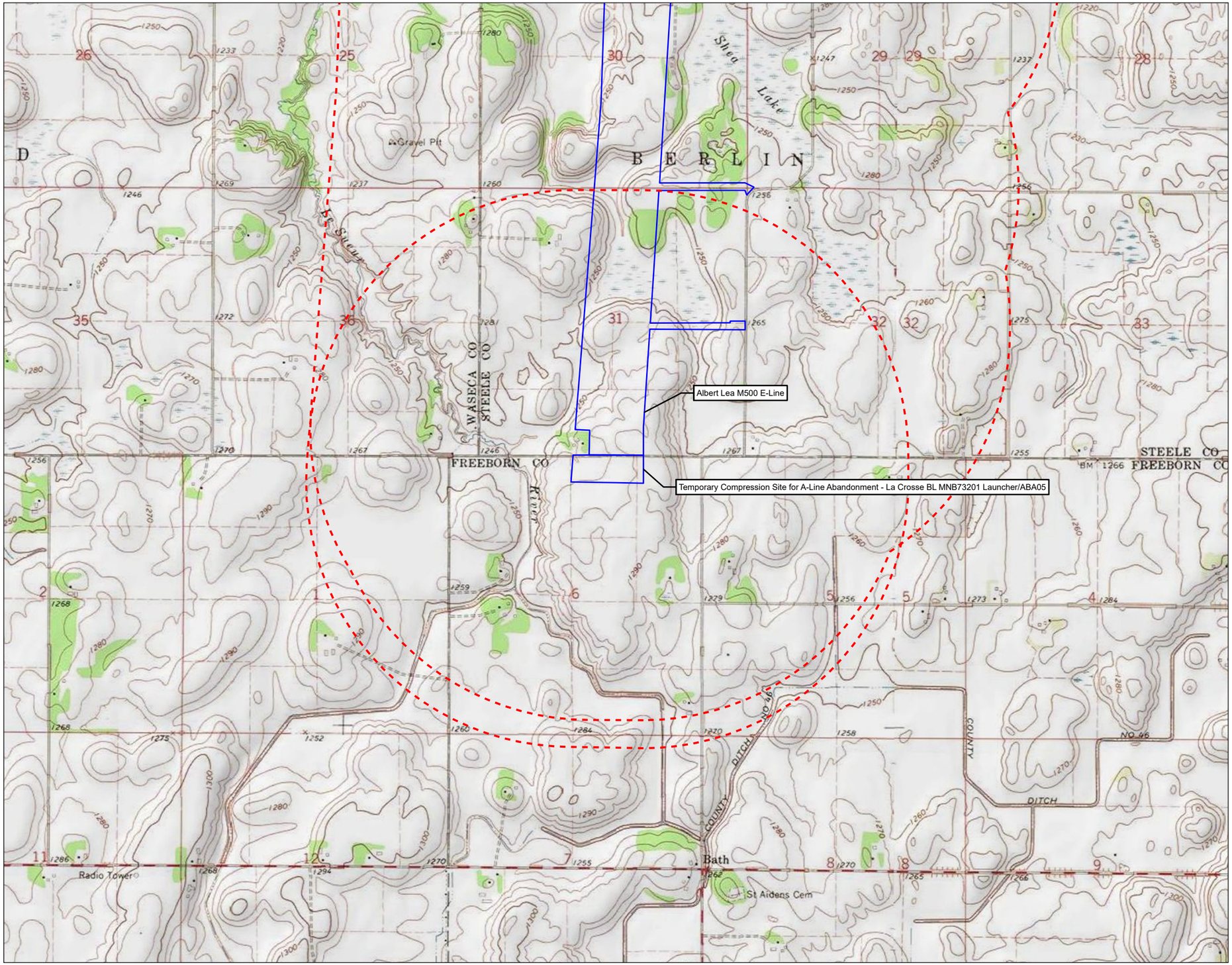


Figure No.

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Project Location & Topography
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Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

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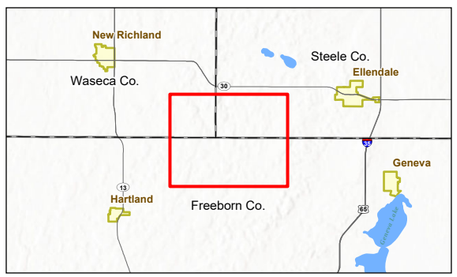

Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

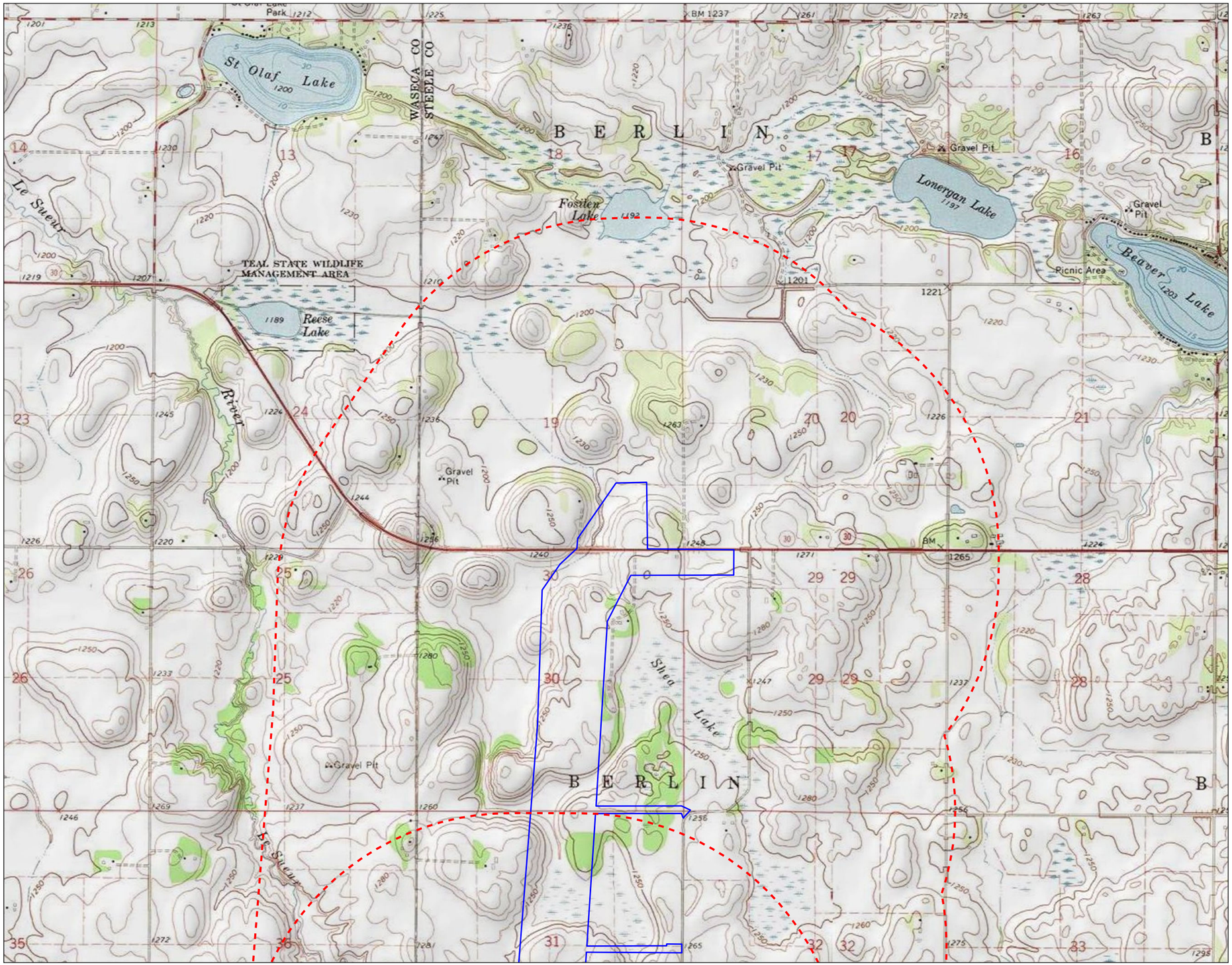

Figure No.

1

Title

Project Location & Topography
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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(At original document size of 11x17)
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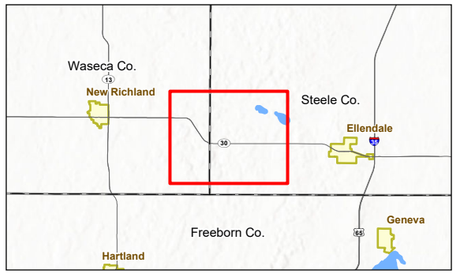
Legend

- Environmental Survey Boundary
- 1-Mile Buffer



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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

Northern Natural Gas

1111 South 103rd Street
Omaha, Nebraska 68124

Attachment D. V2F – Albert Lea M500 E-line and Temporary Compression Sites at Owatonna Compressor Station and La Crosse BL MNB73201 Launcher /ABA05– Rare, Threatened, and Endangered Species Report

For filing purposes, the Rare, Threatened, and Endangered Species Report is included in Appendix 3C

Lillie, Jessica

From: Krych, Scott
Sent: Thursday, February 19, 2026 1:18 PM
To: Review.NHIS@state.mn.us; Drake, James F (DNR); Joyal, Lisa (DNR)
Cc: Noland, Nathan; Knabe, Susan
Subject: Northern V2F-Faribault M500 D-line
Attachments: V2F-Faribault M500 D-line_MDNR consulation_pkgr_FINAL.pdf

Hi James et. al,

I am attaching a concurrence request for the Northern V2F Ventura to Farmington A-line Abandonment and Capacity (V2F) Project – Faribault M500 D-line. The attached package outlines Northern's application and approaches to avoiding negative impacts to natural resources along their respective projects. Please feel free to contact me if you have any questions or additional information inquiries.

Thanks,

Scott Krych
Associate, Senior Ecologist

Direct: 1(612) 247-5218
scott.krych@stantec.com

Stantec
2080 Wooddale Drive Suite 100
Woodbury MN 55125-2920

1111 South 103rd Street
Omaha, Nebraska 68124

February 16, 2026

Mr. James Drake
Natural Heritage Review Specialist
Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

RE: **MCE-2025-00090 - Northern Natural Gas – Ventura to Farmington A-line Abandonment and Capacity Project - Faribault M500 D-line, Dakota County, Minnesota**

Dear Mr. Drake:

Northern Natural Gas (Northern) is proposing to construct the Ventura to Farmington A-line Abandonment and Capacity Project (Project) (see Project Overview Map, Attachment A). Northern's pipeline system and associated appurtenances are regulated by the Federal Energy Regulatory Commission (FERC) and is responsible for compliance with the National Environmental Policy Act (NEPA) and with applicable state and local regulations such as Minnesota laws protecting state endangered, threatened and special concern species (ETS), regulated by the Minnesota Department of Natural Resources (MDNR). Northern has secured the services of Stantec Consulting Services Inc. (Stantec) to assist with consultation with the MDNR associated with ETS that may occur within the Project area.

Northern proposes to construct and operate a non-contiguous 7.50-mile extension of its 30-inch-diameter Faribault M500 D-line. The proposed extension will be tied in below ground at the current terminus of the D-line in Section 16, T112N, R20W, Dakota County, Minnesota. The aboveground valve setting at this location also will be removed. The downstream tie-in will be completed below grade to the D-line, located in Section 14, T113N, R20W, Dakota County, Minnesota. Northern also will remove the two aboveground valve settings on the east side of Essex Avenue at this location. Lastly, Northern will install a new block valve and associated valves and piping within its expanded E-Line to D-Line regulator station, located on the north side of 245th Street, in Section 14, T113N, R20W, Dakota County, Minnesota. Northern currently plans to expand this facility in the summer of 2026 as part of a separate project with a different utility. A topographic figure of the Project is included in **Attachment A**.

Northern initiated consultation with the MDNR, by using the Minnesota Conservation Explorer (MCE) tool to evaluate the potential for the Project to impact state-listed species and other rare features (MCE 2025-00090). A final letter was received from the MDNR on June 2, 2025. Species and rare features identified in this letter are detailed below.

Attachment B includes this correspondence from the MDNR.

Ecologically Significant Areas

Northern designed the Project to minimize or avoid impacts to native grasslands and forested habitats to the extent possible; and does not anticipate that construction associated with the Project will have an adverse effect grasslands or wooded areas located outside Northern's proposed pipeline right of way and planned temporary workspace areas. Two Minnesota Biological Survey (MBS) sites of Biodiversity Significance with a ranking of Moderate are cited in the June 2, 2025, letter from the MDNR.

- One MBS Site of Moderate Biodiversity Significance (Eureka 27) overlaps the Faribault M500 D-line between MP 102.06 and MP 102.18. This site is associated with a Red Oak – White Oak Forest native plant community (MHs37a). Northern will minimize impacts to Eureka 27 and its associated native plant communities by using HDD to cross underneath them. Additionally, Northern will follow the FERC Plan and Procedures, including adherence to prescribed erosion prevention, sediment control, site stabilization, and resource protection measures, to the extent practicable. The Plan and Procedures incorporate BMPs designed to protect off-site transport of sediment and to minimize secondary disturbance to adjacent resources. Implementation of these BMPs will maintain protection of off-site plant communities and waterbodies present at the WMA, minimizing indirect impacts to it resulting from the Project.
- A second MBS site, Chub Lake South, which includes a Red Oak–Sugar Maple–Basswood–(Bitternut Hickory) Forest (MHs38c) and a Sedge Meadow (WMn82b) is within vicinity of the Project. However, the MDNR NHIS review for the Faribault M500 D-line incorporates a one-mile buffer, and the Chub Lake South features are outside the Project's ESB, approximately 2,000 feet west of MP 105.50 (MDNR 2025). Therefore, the Faribault M500 D-line will have no effect on the Chub Lake South MBS site. Therefore, no effects on this MBS site are anticipated.

State-listed Species

Northern completed a desktop review and an onsite field assessment of suitable habitat for listed species that have potential to occur within the Project area during the summer of 2025.

Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species has been documented in the vicinity of the proposed Project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. For Northern's proposed Project, Blanding's turtles are documented at Chub Lake, which is located 0.5 mile west of the Project near MP 101.50 at its nearest point. No Blanding's turtles were identified within the Project areas during field habitat assessments that occurred July and August 2025. Furthermore, Galaxie Avenue is located between the Project and Chub Lake. This road is a significant barrier for Blanding's turtles to enter into the Project area.

Northern will not propose species surveys but rather assume the presence of Blanding's turtles where Blanding's turtles have been documented and suitable habitat is present. Northern identified suitable habitat for the Blanding's turtle within the following areas:

- Wetland FAR-W63 and associated Chub Creek riparian corridor between MP 98.28 and 99.4,
- Wetland FAR-W75 and associated open water FAR-OW01, and surrounding area between MP 101.31 and 102.16, and
- Wetland FAR-W78 and surrounding area between MP 102.77 and 103.41.

Northern will implement FERC Plan and Procedures which include BMPs necessary to minimize erosion and sedimentation runoff from the workspaces. Northern plans to use horizontal directional drills (HDDs) to cross under all waterbodies crossed by the Project. Additionally, Northern will install turtle fence between the HDD entry and HDD exit points adjacent to or within suitable Blanding's turtle habitat; and will implement avoidance measures at locations identified on Figure 2 (**Attachment A**), in accordance with the MDNR NHIS review letter (MCE-2025-00090) dated June 2, 2025, to avoid incidental take of Blanding's turtles during Project construction. Northern will implement the following required avoidance measures:

- Avoid wetland and aquatic impacts during hibernation season, between September 15 and April 15, if the area is suitable for hibernation.
- Limit erosion and sediment control to wildlife friendly erosion control.
- Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
- Inspect trenches, holes, or depressions prior to starting work each day and immediately prior to filling. Upon completion, bore holes and trenches must be filled.
- Upon completion, pits and trenches must be filled and ideally restored to pre-construction contours and re-vegetated with native species suitable to the local habitat.
- The Blanding's turtle flyer must be given to all contractors working in the area.
- Report any sightings using the MDNR Plant and Animal Observation Form.
- If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

Northern also will follow MDNR recommendations to buffer wetlands that contain suitable habitat for the Blanding's turtle by at least ten feet where possible and implement recommended measures from List 1 or List 2, if needed, on the Blanding's turtle fact sheet, to the extent practicable (Blanding's Turtle Fact Sheet). Northern will train construction personnel regarding identification of the Blanding's turtle and the proper implementation of the MDNR requirements. Figure 2 in Attachment A provides locations of potentially suitable habitat areas in proximity to known Blanding's turtle occurrences that are within or adjacent to planned Project workspace where Northern will implement MDNR requirements.

Loggerhead shrikes (*Lanius ludovicianus*), a state-listed endangered bird have been documented in the vicinity of the Project. Loggerhead shrikes continue to decline in this region of the state and most of the sightings for this species in the vicinity of the Project are over 20 years old. Additionally, Northern plans to perform vegetation clearing for the

Project in February/March 2027, outside of this species peak breeding season. Northern will also conduct nest surveys for this species, as necessary, prior to construction of the pipeline in 2028 as part of their compliance with the Migratory Bird Treaty Act to avoid incidental take of the loggerhead shrike and migratory nesting birds that may be present within the Project area. If needed, pre-construction nest surveys will be completed for this species in areas where Northern plans to clear sites with suitable habitat during the loggerhead shrikes breeding season (i.e. wooded fencerows, shelterbelts, old fields, orchards, cemeteries, grassy roadsides, and farmyards) and in accordance with the procedures stated in Section 3.4 of the attached rare, threatened and endangered species (RTE) report (**Attachment C**).

Big tick trefoil (*Desmodium cuspidatum*), a state-listed threatened plant and discoid beggarticks (*Bidens discoidea*) and water willow (*Decodon verticillatus*), both state-listed as species of special concern are documented in the Project vicinity. Big tick trefoil records are from the MHs37a community surrounding Chub Lake, within mesic upland hardwood forest communities dominated by oak species, sugar maple and basswood. None of these community types will be affected by the Project, which lies within existing right-of-way over 0.5 miles east of the known occurrences.

A mesic hardwood forest native plant community is also present within the moderate-quality MBS site Eureka 27, which is crossed by the Faribault M500 D-line between MP 102.06 and 102.18. Northern plans to cross this area using HDD, and implementation of FERC Plan and Procedures will protect the MBS site from indirect construction-related impacts.

Field surveys conducted in July and August 2025 found no big tick trefoil occurrences. Surveyors noted the presence of invasive common buckthorn, which has degraded the habitat. As a result, big tick trefoil is unlikely to occur within the Project area, and the Project is expected to have no impact on the species.

Both records of discoid beggarticks and water-willow occur in emergent wetland around the south end of Chub Lake, which is outside the Project ESB. Therefore, these species are anticipated to not occur within the Faribault M500 D-line and the Project component will have no impact on the discord beggarticks or water-willow. Additionally, the application of FERC Plan and Procedures will protect these areas from indirect effects associated with the construction of the Project.

Trumpeter swan (*Cygnus buccinator*), a state-listed species of special concern may occur in the vicinity of the Project. Wetland complexes with suitable size and habitat capable of providing nesting for the trumpeter swan will not be crossed by the Project; therefore, impacts to trumpeter swans are not anticipated from clearing or construction activities. Additionally, the application of FERC Plan and Procedures will protect wetland resources near the Project and no impacts to the swans are expected.

Northern plans to cross under Chub Creek and its associated riparian corridor using HDD methods and will follow FERC Plan and Procedures to minimize erosion and sedimentation runoff from the Project. Therefore, state-listed mussels potentially occurring in Chub Creek will not be affected directly by construction or indirectly by runoff or erosion from the Project. The application and monitoring of erosion control and stormwater BMPs will detain runoff from the Project from entering Chub Creek.

Northern obtained a U.S. Fish and Wildlife Services Information for Planning and Consultation (IPaC) - Official Species List from the USFWS Minnesota-Wisconsin field office on January 28, 2025 (**Attachment B**). The USFWS determined the following federally listed species may occur in the proposed Project area and may be affected by the proposed action in Minnesota:

- Whooping Crane (*Grus americana*) – Experimental population, non-essential
- Monarch Butterfly (*Danaus plexippus*) – Proposed threatened
- Western Regal Fritillary (*Argynnis idalia occidentalis*) – Proposed threatened

The USFWS did not identify any protected bat species, particularly the Northern long-eared bat (NLEB) (*Myotis septetrionalis*) and the tri-colored bat (TCB) (*Perimyotis subflavus*) as occurring or having potential to occur within the Project area. Furthermore, the Project does not occur within vicinity of any known records, maternal roosts or hibernacula of these two bat species and is not within critical habitat for these species. Northern has limited tree clearing for the Project to 1.65 acres and will follow USFWS guidance on federally listed species. Therefore, Northern is not planning to restrict seasonal tree clearing, based on USFWS consultation.

Conclusion

Based on the results of the desktop review, 2025 onsite habitat assessment, USFWS IPaC determinations, implementation of MDNR recommendations listed within this document, the Project will have no effect on NLEB, TCB, trumpeter swan, big tick trefoil, discoid beggarticks, and the water-willow. Northern also will follow MDNR required avoidance measures for the Blanding's turtle and implement mitigative measures discussed in this letter for the loggerhead shrike to minimize impacts and avoid incidental take of these species. Further discussion of listed species is provided in the RTE report (**Attachment C**).

Northern is requesting MDNR provide review and concurrence of the determinations made within this letter regarding state-listed species. Northern is also requesting the MDNR remove timing restrictions for tree clearing associated with potential impacts to protected bat species based on USFWS determinations and that there are no known occurrences of these species within vicinity of the Project.

I appreciate your attention to this notification and request a review of the attached information. Should you have any questions or concerns please contact me (402-398-7226 or Terry.Plucker@nngco.com) or Scott Krych of Stantec (651-395-5211 or Scott.Krych@stantec.com).

Sincerely,

Terry Plucker
Northern Natural Gas
Environmental Compliance Manager

Enclosures: Attachment A: Project Location and Blanding's Turtle Suitable Habitat Figure
Attachment B: MDNR Correspondence and USFWS IPaC Official Species List
Attachment C: V2F-Faribault M500 D-line and Temporary Compression Site Northfield #1 Rare, Threatened, and Endangered Species Report

cc: Sue Knabe, Stantec

Attachment A. Project Location and Blanding's Turtle Suitable Habitat Figure

Figure 2 filed as CUI//PRIV - Privileged and Confidential included in separate volume

Figure No.

1

Title

Project Location & Topography
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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(At original document size of 11x17)
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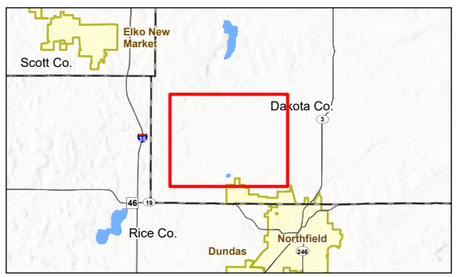
Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

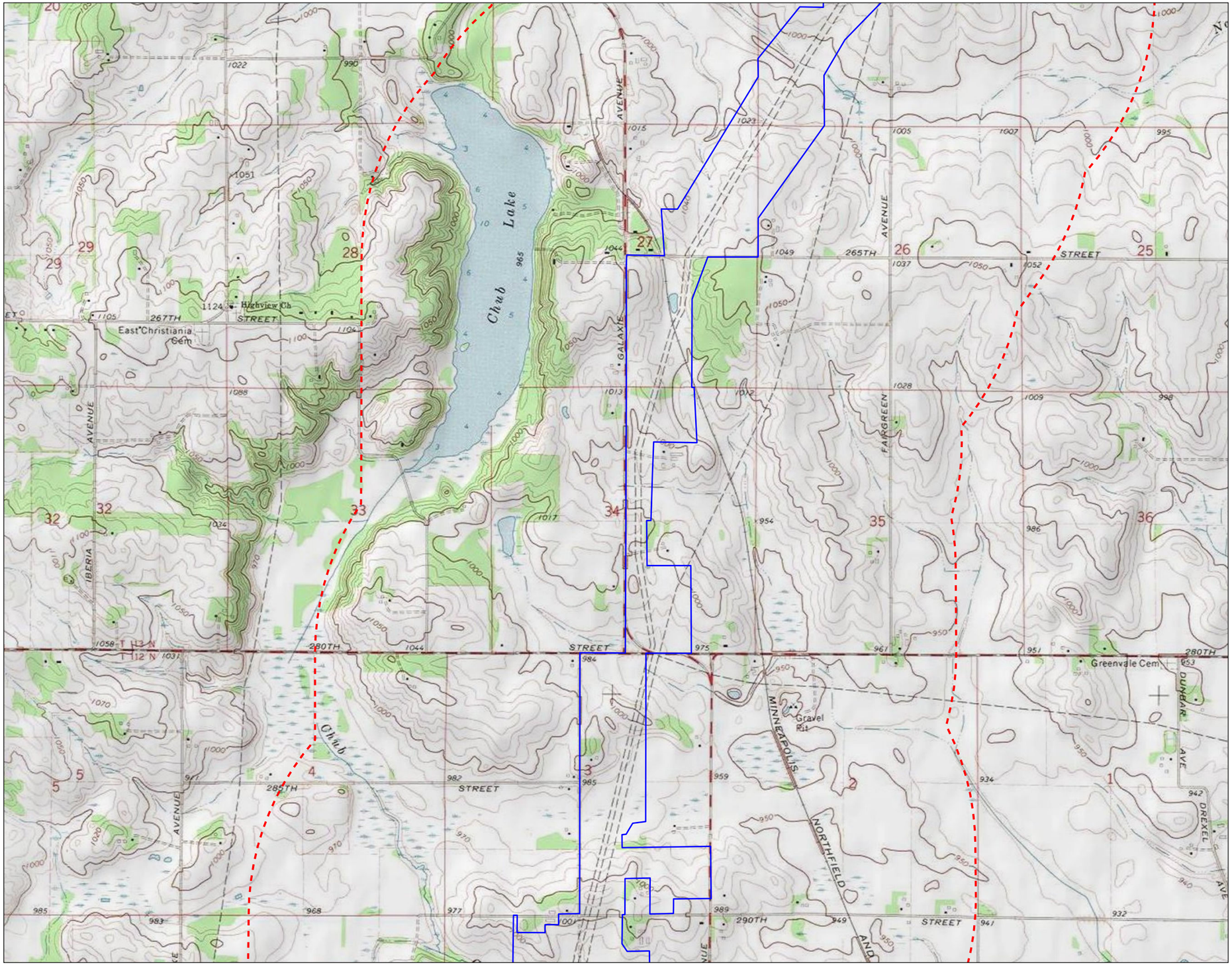

Figure No.

1

Title

Project Location & Topography
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
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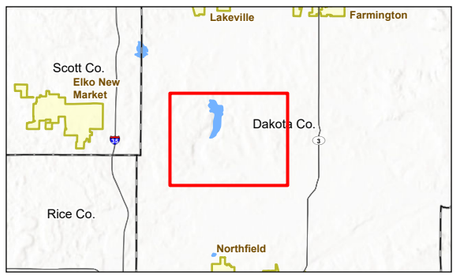

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Stantec

Northern Natural Gas

Figure No.

1

Title

Project Location & Topography
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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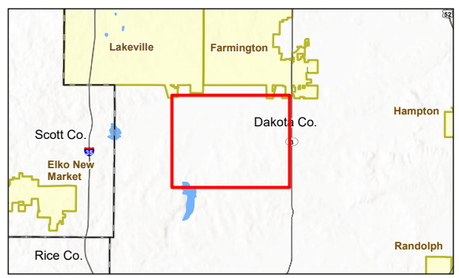

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Stantec

Northern Natural Gas

Attachment B. MDNR Correspondence and USFWS IPaC Official Species List

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

June 2, 2025

Mason Steele
Stantec

RE: Natural Heritage Review of the proposed Faribault M500D Extension,
T112N R20W Sections 2-4, 9-11, 14-16, 21-22, T113N R20W Sections 11-15, 22-23, 26-27, 33-35; Dakota County

Dear Mason Steele,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00090** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

The Minnesota Biological Survey (MBS) has identified two Sites of *Moderate* Biodiversity Significance that overlap the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *Moderate* contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. These MBS Sites have three native plant communities mapped within the proposed project area. These are Red Oak – White Oak Forest (MHs37a) and Red Oak – Sugar Maple – Basswood – (Bitternut Hickory) Forest (MHs38c), both with conservation ranks of S3: Vulnerable to Extirpation, and Sedge Meadow (WMn82b), which has a conservation rank of S4: Apparently Secure. The DNR recommends that the project be designed to avoid impacts to these ecologically significant areas. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:

- As much as possible, operate within already-disturbed areas.
- Avoid MBS Sites and native plant communities ranked S1, S2, or S3.
- Retain a buffer between proposed activities and the MBS Site.
- Minimize vehicular disturbance in the MBS Site (allow only vehicles/equipment necessary for construction activities).
- Do not park equipment or stockpile supplies in the MBS Site.
- Do not place spoil in the MBS Site or other sensitive areas.

- If possible, conduct the work under frozen ground conditions.
- Use effective erosion prevention and sediment control measures.
- Inspect and clean equipment prior to operation and follow recommendations to prevent the spread of invasive species.
- Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible.
- Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.

MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be viewed using the Explore page in Minnesota Conservation Explorer (MCE) or their GIS shapefiles can be downloaded from the MN Geospatial Commons. Reference the MBS Site Biodiversity Significance and Native Plant Community websites for information on interpreting the data. To receive a list of MBS Sites of Biodiversity Significance and DNR Native Plant Communities in the vicinity of your project, create a Conservation Planning Report using the Explore page in MCE.

- If the Wetland Conservation Act (WCA) is applicable to this project, please note that native plant communities with a Conservation Status Rank of S1 through S3 or wetlands within *High* or *Outstanding* MBS Sites of Biodiversity Significance may qualify as Rare Natural Communities (RNC) under WCA. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a RNC must be denied if the local government unit determines the proposed activities will permanently adversely affect the RNC. If the proposed project includes a wetland replacement plan under WCA, please contact your DNR Regional Ecologist for further evaluation. Please visit WCA Program Guidance and Information for additional information, including the RNC Technical Guidance.

State-listed Species

- Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been documented in the vicinity of the proposed project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. Factors believed to contribute to the decline of this species include collisions with vehicles, wetland drainage and degradation, and the development of upland habitat. Any added mortality can be detrimental to populations of Blanding's turtles, as these turtles have a low reproduction rate that depends upon a high survival rate to maintain population levels.

  This project has the potential to impact this rare turtle through direct fatalities and habitat disturbance/destruction due to activities associated with the proposed project. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. As such, **the following avoidance measures are required**:
  - Avoid wetland and aquatic impacts during hibernation season, between September 15 and April 15, if the area is suitable for hibernation.
  - Limit erosion and sediment control to wildlife friendly erosion control.

- Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
- Inspect trenches, holes, or depressions prior to starting work **each day** and immediately prior to filling. Upon completion, bore holes and trenches must be filled.
- Upon completion, pits and trenches must be filled and ideally restored to pre-construction contours and re-vegetated with native species suitable to the local habitat.
- The Blanding's turtle flyer must be given to all contractors working in the area.
- Report any sightings using the DNR Plant and Animal Observation Form.
- If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

Additional Blanding's turtle avoidance measures may include, but are not limited to, the following recommendations:

- Buffer wetlands and waterbodies by at least 10 feet.
- Recommendations from List 1 of the Blanding's turtle fact sheet. If greater protection for turtles is desired, implement recommendations from List 2.

Please contact Review.NHIS@state.mn.us **to confirm that the above required avoidance measures will be implemented or to inform us that they are not feasible.** If the measures are not feasible, a project-specific avoidance plan will likely be needed.

- Loggerhead shrikes (*Lanius ludovicianus*), a state-listed endangered bird, have been documented in the vicinity of the project site. Loggerhead shrikes use grasslands that contain short grass and scattered perching sites such as hedgerows, shrubs, or small trees. They can be found in native prairie, pastures, shelterbelts, old fields or orchards, cemeteries, grassy roadsides, and farmyards. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. Given the potential for this species to be found in the vicinity of the project, **tree and shrub removal is required to be avoided during the breeding season, April through July.**

  Please contact Review.NHIS@state.mn.us **to confirm that the above avoidance measure will be implemented or to inform us that avoidance is not feasible.** If avoidance is not feasible, a qualified surveyor needs to conduct a survey for active nests before any trees or shrubs are removed. Requirements for surveys and lists of DNR certified surveyors can be found on the Natural Heritage Review website.

- Big tick trefoil (*Desmodium cuspidatum*), a state-listed threatened plant species, and discoid beggarticks (*Bidens discoidea*) and water-willow (*Decodon verticillatus*), both state-listed as species of special concern, have been documented in the vicinity of the proposed project. Big tick trefoil is very closely associated with mesic hardwood forests, particularly the type dominated by oaks (*Quercus* spp.), sugar maple (*Acer saccharum)*, and basswood (*Tilia americana)*, while discoid beggarticks and water-willow

occur in wet meadows, marshes, and along the edges of rivers. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. **If there will be impacts to mesic hardwood forest native plant communities then, to demonstrate avoidance, a qualified surveyor will need to determine if suitable habitat exists within the activity impact area and, if so, conduct a survey prior to any project activities.**

Surveys must be conducted by a qualified surveyor and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. Visit the Natural Heritage Review page for a list of certified surveyors and more information on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

- Trumpeter swans (*Cygnus buccinator*), a state-listed species of special concern, have been documented nesting in the vicinity of the proposed project. During the breeding season, trumpeter swans select small ponds and lakes with extensive beds of cattails, bulrush, sedges, and/or horsetail. Ideal habitat includes about 100 m of open water for take-off, stable levels of unpolluted water, emergent vegetation, low levels of human disturbance, and the presence of muskrat (*Ondatra zibethicus*) houses and American beaver (*Castor canadensis*) lodges for use as nesting platforms. If any of the wetlands on site provide suitable habitat, swans may choose to nest in these wetlands. The DNR recommends avoiding construction activities during the nesting season, late April through early June, near suitable nesting habitat.

- State-listed mussels have been documented in Chub Creek in the vicinity of the proposed project. Mussels are particularly vulnerable to deterioration in water quality, especially increased siltation. As such, effective erosion prevention and sediment control practices must be implemented and maintained near the river throughout the duration of the project and incorporated into any stormwater management plan.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit Natural Heritage Review for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, please contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake

Digitally signed by James Drake
Date: 2025.06.02 11:01:05 -05'00'

Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Melissa Collins, Jennie Skancke, Amanda Weise

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 01/28/2025 17:33:25 UTC
Project Code: 2025-0048314
Project Name: Fairbault M500D Extension

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species
The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance
Please refer to refer to our Section 7 website for guidance and technical assistance, including step-by-step instructions for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A demonstration video showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect." In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats
Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's northern long-eared bat website.

Whooping Crane
Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States."

Other Trust Resources and Activities
Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a permit. A nest take permit is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination
While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota
Minnesota Department of Natural Resources - Endangered Resources Review Homepage
Email: Review.NHIS@state.mn.us

Wisconsin
Wisconsin Department of Natural Resources - Endangered Resources Review Homepage
Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

PROJECT SUMMARY

Project Code: 2025-0048314
Project Name: Fairbault M500D Extension
Project Type: Natural Gas Distribution
Project Description: Installation of 7.1 miles of 30-inch-diameter extension of the Faribault M500D-Line natural gas pipeline in Dakota County, MN

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.52952565,-93.2076497825044,14z

Counties: Dakota County, Minnesota

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Western Regal Fritillary *Argynnis idalia occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Prairie Bush-clover *Lespedeza leptostachya* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4458	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

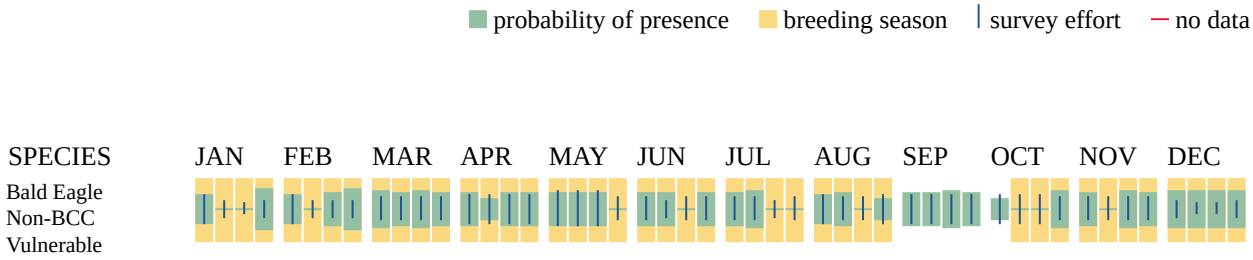
Probability of Presence (▪)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31

NAME	BREEDING SEASON
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
Cerulean Warbler *Setophaga cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 21 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Golden-winged Warbler *Vermivora chrysoptera* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Grasshopper Sparrow *Ammodramus savannarum perpallidus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow *Centronyx henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Kentucky Warbler *Geothlypis formosa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Le Conte's Sparrow *Ammospiza leconteii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9469	Breeds Jun 1 to Aug 15
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Long-eared Owl *asio otus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631	Breeds Mar 1 to Jul 15

NAME	BREEDING SEASON
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Ruddy Turnstone *Arenaria interpres morinella* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10633	Breeds elsewhere
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental

Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

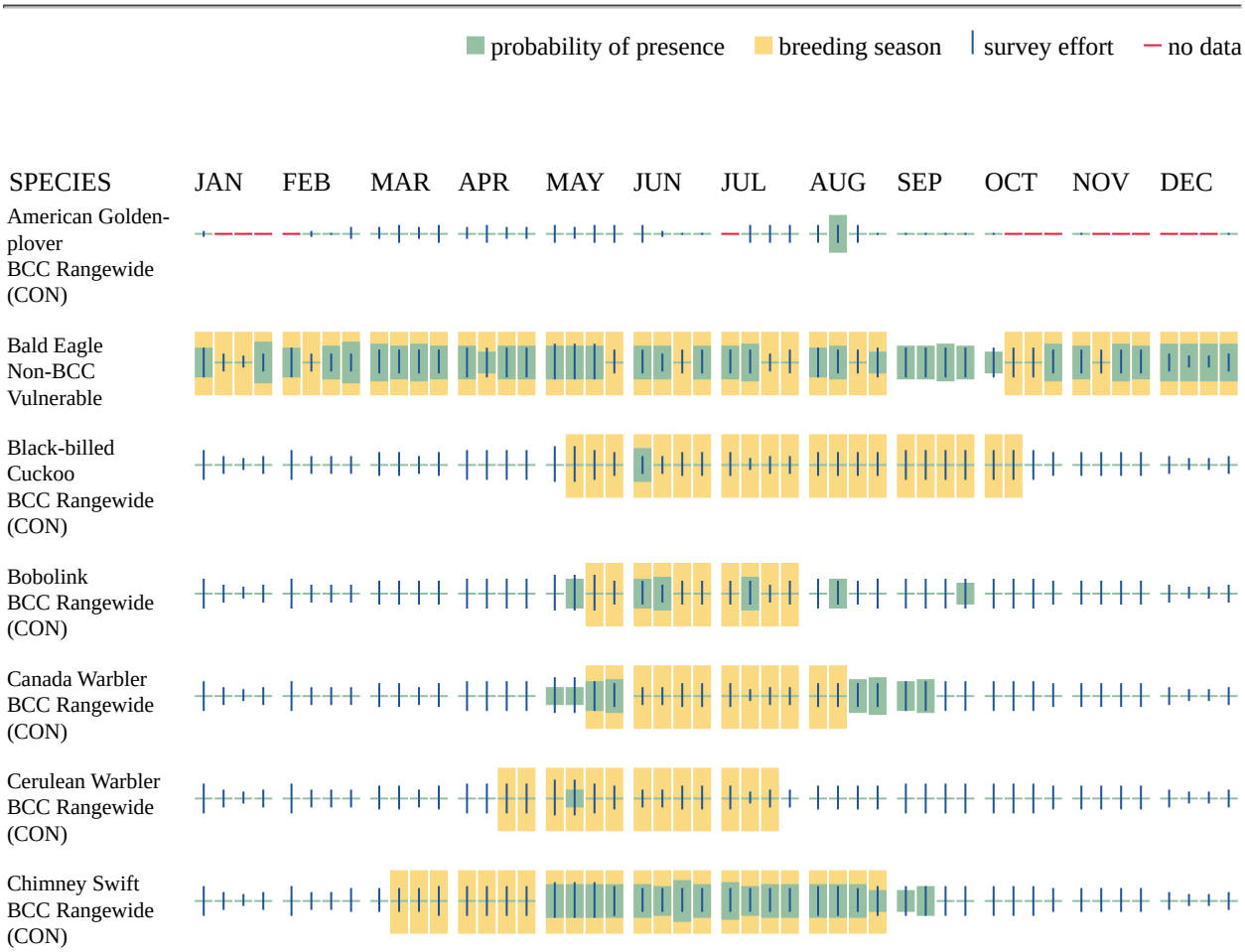
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

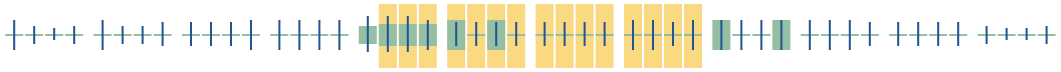
Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.




Golden-winged Warbler BCC Rangewide (CON)
Grasshopper Sparrow BCC - BCR
Henslow's Sparrow BCC Rangewide (CON)
Kentucky Warbler BCC Rangewide (CON)
Le Conte's Sparrow BCC Rangewide (CON)
SPECIES
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Lesser Yellowlegs BCC Rangewide (CON)
Long-eared Owl BCC Rangewide (CON)
Pectoral Sandpiper BCC Rangewide (CON)
Prothonotary Warbler BCC Rangewide (CON)
Red-headed Woodpecker BCC Rangewide (CON)
Ruddy Turnstone BCC - BCR
Rusty Blackbird BCC - BCR
Semipalmated Sandpiper BCC - BCR
Short-billed Dowitcher BCC Rangewide (CON)
Western Grebe BCC Rangewide (CON)

Wood Thrush
BCC Rangewide
(CON)



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1Cd
- PEM1Af
- PEM1C
- PEM1A
- PEM1Ad

FRESHWATER POND

- PUBFx

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A
- PFO1Ad
- PSS1A
- PFO1/SS1A

RIVERINE

- R2UBH

- R4SBC

IPAC USER CONTACT INFORMATION

Agency:	Stantec
Name:	Mason Steele
Address:	2080 Wooddale Dr
Address Line 2:	Ste 1
City:	Woodbury
State:	MN
Zip:	55125
Email	mason.steele@stantec.com
Phone:	6122126155

Attachment C. V2F-Faribault M500 D-line and Temporary Compression Site Northfield #1 Rare, Threatened, and Endangered Species Report

For filing purposes, the Rare, Threatened, and Endangered Species Report is included in Appendix 3C

From:	Knabe, Susan
To:	Anthony Cortilet
Cc:	Noland, Nathan; Haider, Jessica; Galer, Bruce; Terry Plucker (terry.plucker@nngco.com)
Subject:	Northern Natural Gas- Noxious Weed Control Plan, V2F and NL27 Projects
Date:	Tuesday, February 17, 2026 11:21:14 AM
Attachments:	image001.png image002.png image003.png image004.png

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Hello Anthony,

On behalf of Northern Natural Gas (Northern), Stantec Consulting Services Inc. (Stantec) is submitting the Noxious Weed Control Plan for Northern's combined FERC filing of the Ventura to Farmington A-line Abandonment and Capacity Replacement Project and the Northern Lights 2027 Expansion Project for your review and comment. Construction will be completed between 2027 and 2029. Northern is planning to submit its application to FERC at the end of February and they will be issued a FERC docket # shortly thereafter.

Due to the file size, I am uploading the plan and figures onto a OneDrive Folder that is linked here
I will also share the folder with you as well via a separate email.

Please contact Terry Plucker, Nate Noland, or me with any comments or questions.
Thank you in advance for your review.
Sue

Susan Knabe
Senior Principal

Mobile: 920-655-7215
susan.knabe@stantec.com

Stantec

With every community, we redefine what's possible.

For filing purposes, the Noxious Weed Control Plan is included in Appendix 3A

RTE Agency Correspondence NL27

Lillie, Jessica

From: Knabe, Susan
Sent: Thursday, February 19, 2026 3:14 PM
To: Nick Utrup
Cc: Terry Plucker (terry.plucker@nngco.com); Noland, Nathan; Galer, Bruce
Subject: Northern Lights 2027 Expansion Project – IPaC Determinations and Request for USFWS Informal Coordination

Tracking:

Recipient	Delivery	Read
Nick Utrup		
Terry Plucker (terry.plucker@nngco.com)		
Noland, Nathan	Delivered: 2/19/2026 3:14 PM	Read: 2/19/2026 5:17 PM
Galer, Bruce	Delivered: 2/19/2026 3:14 PM	

Hello Nick

Northern Natural Gas (Northern) is proposing its Northern Lights 2027 Expansion Project (Project) in Minnesota. The Project includes ten proposed natural gas pipeline segments totaling 28.43 miles, a compressor station uprate, and associated aboveground appurtenances in Minnesota for firm transportation requirements associated with Northern's customers. The Project is in Freeborn, Steele, Scott, Carver, Martin, Stearns, Jackson, Watonwan, Isanti, Morrison, and Washington counties.

On behalf of Northern, Stantec completed USFWS IPaC species lists and Determination Keys for the ten pipeline components that include facility modifications. Stantec also completed habitat assessments for all project workspaces in the summer/fall of 2025. The results of our field work is provided in the Rare, Threatened, and Endangered Species Reports (RTE) completed for each pipeline component. The IPaC reports and Determination Keys are included in our RTE reports. The RTE reports are all provided in the attached One Drive for your review.

Regarding the Project schedule, Northern anticipates receiving a FERC notice to proceed with construction in February 2027 and will begin tree removal shortly thereafter; Northern is planning to have tree removal completed by April 14, 2027. Full pipeline and facility construction is anticipated to begin in May or June 2027 and continue through November 2027.

Based on the project-specific information entered into the IPaC, there are two species that Northern will request informal coordination with USFWS staff: the northern long-eared bat and the rusty patched bumble bee. The remainder of the species in the IPAC reports received a "no effect" or not likely to adversely affect determination so we are not requesting consultation on those species.

NLEB
The following determinations were generated by IPaC for the northern long-eared bat (NLEB):

- **Lake Mills M500 E-line** – Not Likely to Adversely Affect (NLAA); 0.40 acres of tree clearing
- **Paynesville 2nd branch line** – May Affect; 3.43 acres of tree clearing
- **Willmar 3rd branch line upstream** – NLAA; 2.45 acres of tree clearing
- **Willmar 3rd branch line downstream** – May Affect; 0.94 acres of tree clearing
- **Worthington 2nd branch line** – NLAA; 0.08 acres of tree clearing

The USFWS IPaC official species lists did not include NLEB for the remaining five Project components (Albert Lea M500 E-line, Welcome 2nd line, Springfield 2nd branch line, Minnesota Interconnect 2nd branch line, and Alexandria 2nd branch line). Additionally, the tricolored bat was not identified as potentially occurring for any Project component.

Stantec conducted a bat habitat assessment during the leaf-off period in December 2026. Based on the assessment results, areas included in the proposed tree removal acreage contain suitable NLEB habitat. For the two Project

components that received a “May Affect” determination (Paynesville 2nd branch line and Willmar 3rd branch line downstream), we request USFWS concurrence that completing tree removal between November 1 and April 14 would result in a NLAA determination for NLEB. If Northern does not receive a FERC Notice to Proceed in time to complete tree removal prior to April 14 (the start of NLEB summer occupancy in Minnesota), we request informal coordination with USFWS to determine the appropriate next steps required to obtain a No Effect or NLAA determination.

RPBB

The Willmar 3rd branch line upstream received a “May Affect” determination for the rusty patched bumble bee (RPBB). The western portion of the Willmar 3rd branch line (beginning at MP 3.91), as well as the Willmar 24-inch branch line receiver (WIL-ETWS-017), overlap RPBB High Potential Zones and proposed critical habitat. Based on Stantec’s habitat surveys, the Willmar 3rd branch line upstream does not contain suitable RPBB overwintering habitat. Forested areas within the workspaces are dominated by buckthorn and understory species, and no even-aged woodlands were observed. However, woodland edges may provide suitable nesting habitat. The Project area also contains preferred RPBB forage species across meadow and wetland habitats, including goldenrods, wild bergamot (*Monarda fistulosa*), common milkweed (*Asclepias syriaca*), jewelweed (*Impatiens capensis*), Joe-Pye weed (*Eutrochium maculatum*), willows, and basswood. Northern plans to conduct RPBB surveys in 2026 to determine presence or probable absence. Based on survey results, Northern will follow USFWS recommendations to avoid effects to RPBB and proposed critical habitat to obtain a NLAA determination. In March 2026, Stantec will submit a RPBB survey plan to USFWS for approval.

We are providing this information for your review and request your coordination regarding the species discussed above. Please let us know if you have any questions or concerns regarding the Determination Keys. IPaC reports and bat habitat assessment worksheets are also available upon request.

I will also forward you a direct link to our OneDrive folder in case the link inserted doesn’t work.
Thank you and we appreciate your assistance in advance.

Sue

Susan Knabe
Senior Principal

Mobile: 920-655-7215
susan.knabe@stantec.com

For filing purposes, the RTE Reports for NL27 are included in Appendix 3C

From:	Knabe, Susan
To:	Anthony Cortilet
Cc:	Noland, Nathan; Haider, Jessica; Galer, Bruce; Terry Plucker (terry.plucker@nngco.com)
Subject:	Northern Natural Gas- Noxious Weed Control Plan, V2F and NL27 Projects
Date:	Tuesday, February 17, 2026 11:21:14 AM
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Susan Knabe
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Mobile: 920-655-7215
susan.knabe@stantec.com

Stantec

With every community, we redefine what's possible.

For filing purposes, the Noxious Weed Control Plan is included in Appendix 3A

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 20, 2026

Mia Bauer
Stantec

RE: Natural Heritage Review of the proposed Northern Lights 2027 Albert Lea M500E-line,
T105N R21W Sections 5-8, 17-20; Steele County

Dear Mia Bauer,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00989** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) has identified a Site of *Moderate* Biodiversity Significance adjacent to the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *Moderate* contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. This Site has a mapped Southern Mesic Oak-Basswood Forest native plant community. This community has a state conservation rank of Vulnerable to Extirpation (S3). The DNR recommends that the project be designed to avoid impacts to this ecologically significant area. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:
    - As much as possible, operate within already-disturbed areas.
    - Avoid MBS Sites and native plant communities ranked S1, S2, or S3.
    - Retain a buffer between proposed activities and the MBS Site.
    - Minimize vehicular disturbance in the MBS Site (allow only vehicles/equipment necessary for construction activities).
    - Do not park equipment or stockpile supplies in the MBS Site.
    - Do not place spoil in the MBS Site or other sensitive areas.
    - If possible, conduct the work under frozen ground conditions.
    - Use effective erosion prevention and sediment control measures.

  - Inspect and clean equipment prior to operation and follow recommendations to prevent the spread of invasive species.
  - Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible.
  - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.

- The Minnesota Biological Survey (MBS) considered four areas adjacent or that overlap the proposed project for Sites of Biodiversity Significance. They were determined to be *Below* the minimum biodiversity threshold for statewide significance. These areas, however, may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat. As such, indirect impacts from surface runoff or the spread of invasive species should be considered during project design and implementation near these areas.

- MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be viewed using the Explore page in Minnesota Conservation Explorer (MCE) or their GIS shapefiles can be downloaded from the MN Geospatial Commons. Reference the MBS Site Biodiversity Significance and Native Plant Community websites for information on interpreting the data. To receive a list of MBS Sites of Biodiversity Significance and DNR Native Plant Communities in the vicinity of your project, create a Conservation Planning Report using the Explore page in MCE.

- If the Wetland Conservation Act (WCA) is applicable to this project, please note that one or more Native Plant Communities in the vicinity of the project may qualify as a "rare natural community" under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a rare natural community must be denied if the local government unit determines the proposed activities will permanently adversely affect the natural community. If the proposed project includes a wetland replacement plan under WCA, please contact your DNR Regional Ecologist for further evaluation. Please visit WCA Program Guidance and Information for additional information, including the Rare Natural Communities Technical Guidance.

State-listed Species

- Edible valerian (*Valeriana edulis* var. *ciliata*), a state-listed threatened plant species, has been documented within the vicinity of the proposed project. Edible valerian favors a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. **To demonstrate avoidance, a qualified surveyor will need to determine if suitable habitat exists within the activity impact area and, if so, conduct a survey prior to any project activities.**

  Surveys must be conducted by a qualified surveyor and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. Visit the Natural Heritage Review page for a list of

certified surveyors and more information on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- Please visit the DNR Rare Species Guide for more information on the habitat use of state-listed species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit Natural Heritage Review for additional information regarding this process, survey guidance, and

other related information. For information on the environmental review process or other natural resource concerns, please contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake

Digitally signed by James Drake
Date: 2026.02.20 10:34:36 -06'00'

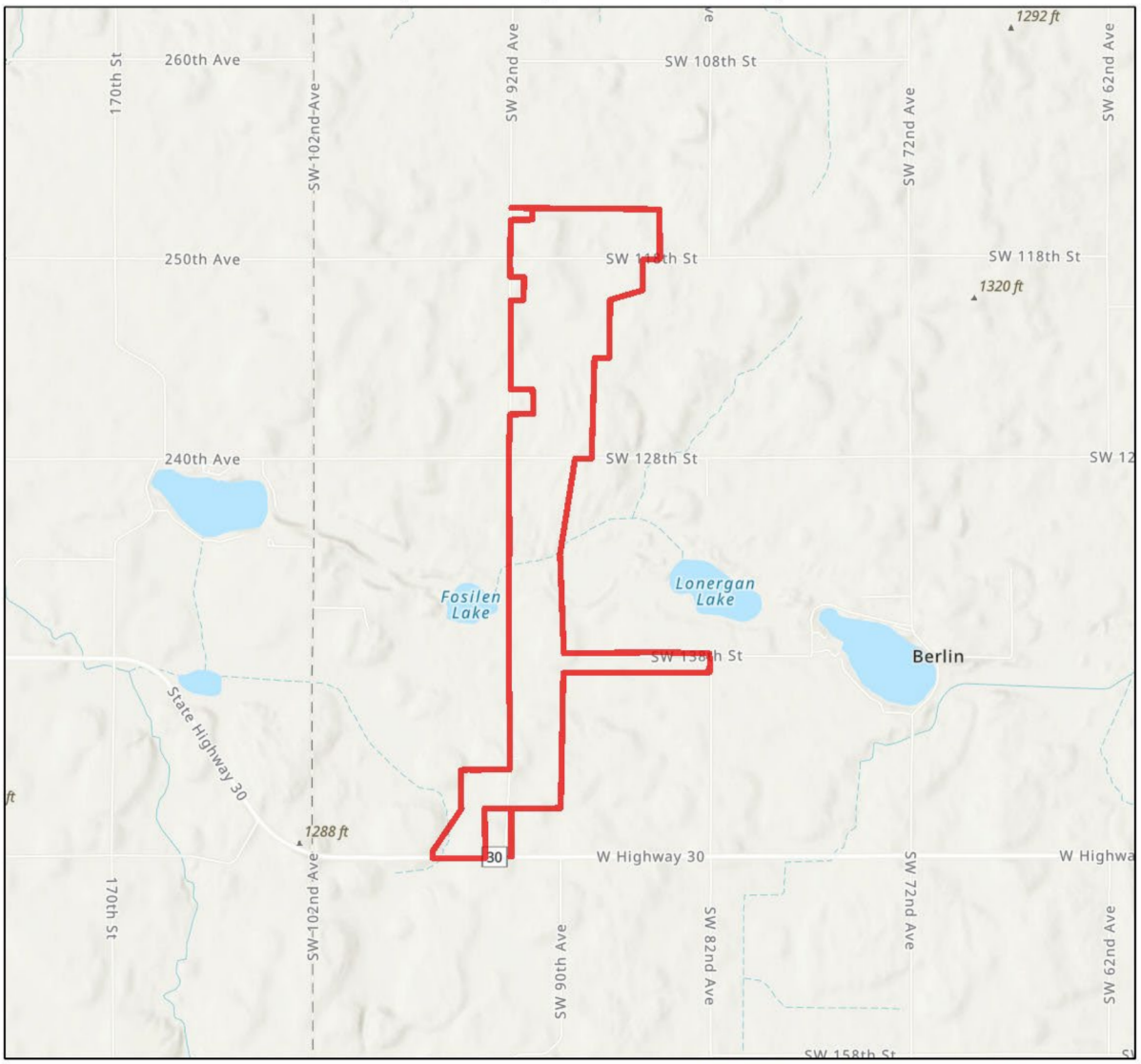
Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Haley Byron, Jennie Skancke, Megan Benage

For more project details, see the MCE-generated Final Project Report, available on the MCE project page.

Northern Lights 2027 Albert Lea M500E-line

USA Topo Basemap With Locator Map



N
W E
S

0 0.3 0.6 1.2 1.8 2.4 Miles

Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 834.37

County(s): Steele

TRS: T105 R21 S17, T105 R21 S18, T105 R21 S19, T105 R21 S20, T105 R21 S5 +

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 20, 2026

Mia Bauer
Stantec

RE: Natural Heritage Review of the proposed Northern Lights 2027 Paynesville 2nd Branch Line,
T123N R31W Sections 21-22, 27-29; Stearns County

Dear Mia Bauer,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00993** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) has identified a Site of *High* Biodiversity Significance along Kolling Creek near the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *High* contain very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes. This Site has records of Hill's thistle (*Cirsium pumilum* var. *hillii*), a state-listed species of special concern. The DNR recommends that the project be designed to avoid impacts to these ecologically significant areas. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:
    - As much as possible, operate within already-disturbed areas.
    - Avoid MBS Sites.
    - Retain a buffer between proposed activities and the MBS Site.
    - Minimize vehicular disturbance in the MBS Site (allow only vehicles/equipment necessary for construction activities).
    - Do not park equipment or stockpile supplies in the MBS Site.
    - Do not place spoil in the MBS Site or other sensitive areas.
    - If possible, conduct the work under frozen ground conditions.
    - Use effective erosion prevention and sediment control measures.

  - Inspect and clean equipment prior to operation and follow recommendations to prevent the spread of invasive species.
  - Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible.
  - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.

- Big Lake has been identified as a Lake of *Moderate* Biological Significance. Lakes of Biological Significance were ranked as *Outstanding, High, or Moderate* based on unique plant and animal presence. This lake has records of rare fish and plants. As such, it is important that effective erosion prevention and sediment control practices be implemented and maintained near the lake throughout the duration of the project. Indirect impacts, such as the introduction or spread of invasive species, should also be considered and minimized.

- Ecologically Significant Areas can be viewed using the Explore page in Minnesota Conservation Explorer (MCE) or their GIS shapefiles can be downloaded from the MN Geospatial Commons. Reference the MBS Site Biodiversity Significance and Native Plant Community websites for information on interpreting the data. To receive a list of Ecologically Significant Areas in the vicinity of your project, create a Conservation Planning Report using the Explore page in MCE.

- Two calcareous fens (Big Lake SW*, ID# 24729* and Roscoe North*, ID# 24694*) have been documented within the vicinity of the proposed project area. Sterile sedge (*Carex sterilis*) and hair-like beak rush (*Rhynchospora capillacea*), state-listed threatened plants, have been documented in these fens. A calcareous fen is a rare and distinctive peat-accumulating wetland that is legally protected in Minnesota. The Wetlands Conservation Act, authorized by Minnesota Statutes, section 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan approved by the commissioner of the Department of Natural Resources. Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. For more information regarding calcareous fens, please see the Calcareous Fen Fact Sheet. To minimize stormwater impacts, please refer to the Minnesota Pollution Control Agency's General Principles for Erosion Prevention and Sediment Control in the Minnesota Stormwater Manual. Please note that calcareous fens are "Special Waters" and a buffer zone may be required.

  Calcareous fens may be impacted by activities within the fen, activities that affect surface water flows (e.g., stormwater flow, erosion), or activities that affect groundwater hydrology (e.g., groundwater pumping, contamination, or discharge). To ensure compliance with WCA, please contact the Calcareous Fen Program Coordinator, Keylor Andrews (Keylor.Andrews@state.mn.us). **If it is determined the project will impact the fen in any way, including indirect impacts through the alteration of hydrological conditions, a botanical survey is required**. Surveys must be conducted by a qualified surveyor and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. Visit the Natural Heritage Review page for a list of certified surveyors and more information

on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

- If the Wetland Conservation Act (WCA) is applicable to this project, please note that wetlands within *High* or *Outstanding* MBS Sites of Biodiversity Significance may qualify as "rare natural communities" under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a rare natural community must be denied if the local government unit determines the proposed activities will permanently adversely affect the natural community. If the proposed project includes a wetland replacement plan under WCA, please contact your DNR Regional Ecologist for further evaluation. Please visit WCA Program Guidance and Information for additional information, including the Rare Natural Communities Technical Guidance.

State-listed Species

- The pugnose shiner (*Miniellus anogenus*), a state-listed threatened fish species, and least darter (*Etheostoma microperca*), a state-listed fish species of special concern, have been documented in nearby lakes. These species prefer clear, low velocity lakes and streams with an abundance of submerged vegetation such as eelgrass, Canadian elodea, pondweed, and muskgrass. As these species are intolerant of environmental degradation, especially turbidity and siltation, it is important that effective erosion and sediment control practices be implemented and maintained for the duration of the project. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. **Provided the pipeline will be directionally bored under Kolling Creek, as proposed, the DNR does not believe impacts to pugnose shiners are likely.** Bore pits should be placed away from the water's edge and erosion control methods should be employed to prevent excavation material from entering the water. Upon completion, pits should be filled, graded to preconstruction contours, and re-vegetated with native plant species. Please contact the NH Review Team (Review.NHIS@state.mn.us) if plans change and there will be disturbance to the creek as further action may be needed.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- Please visit the DNR Rare Species Guide for more information on the habitat use of state-listed species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

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Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake
Digitally signed by James Drake
Date: 2026.02.20 17:31:35 -06'00'

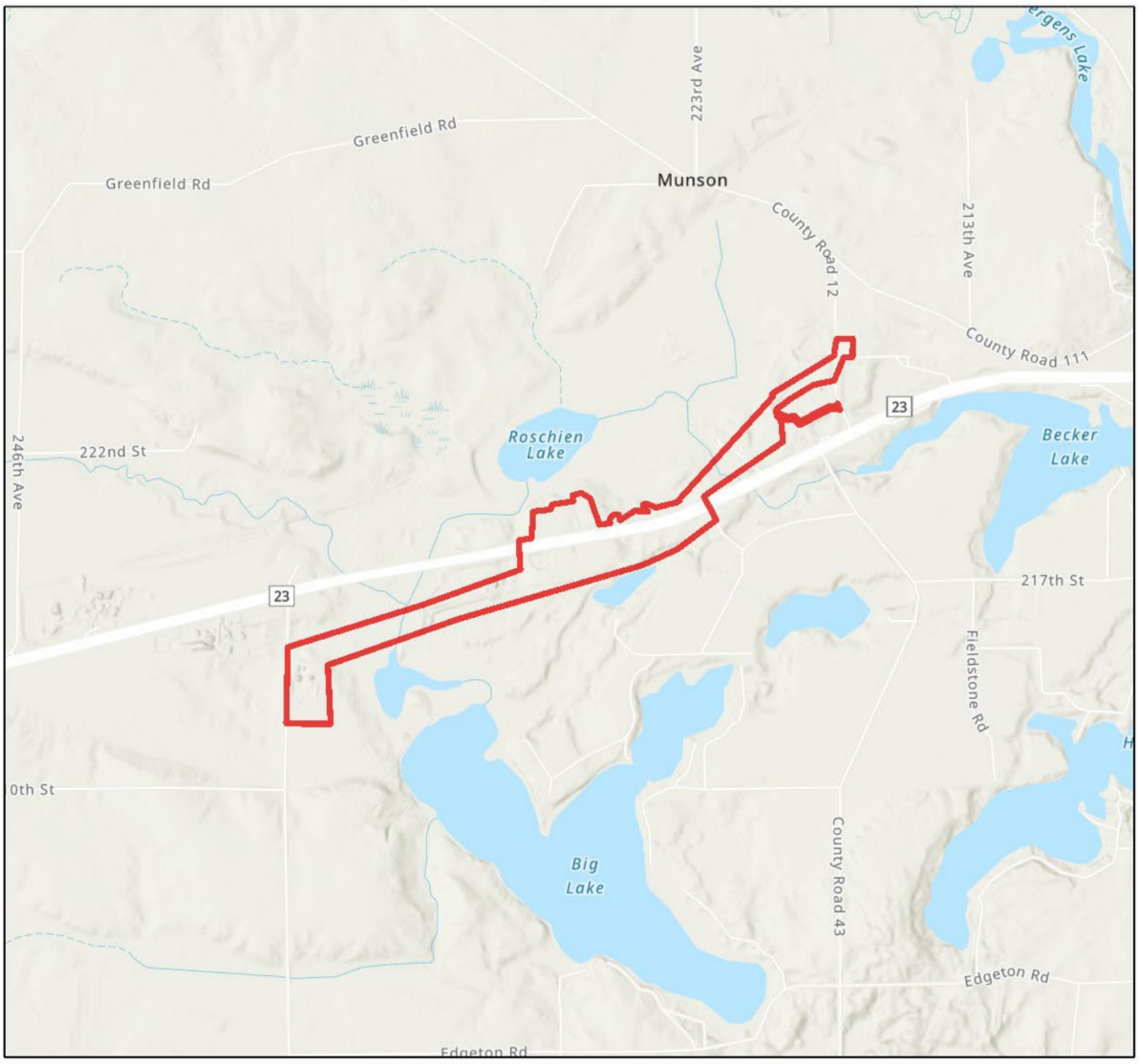
Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Melissa Collins, Jennie Skancke, Amanda Weise, Keylor Andrews

For more project details, see the MCE-generated Final Project Report, available on the MCE project page.

Northern Lights 2027 Paynesville 2nd Branch Line

USA Topo Basemap With Locator Map



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Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 226.39

County(s): Stearns

TRS: T123 R31 S21, T123 R31 S22, T123 R31 S27, T123 R31 S28, T123 R31 S29

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 24, 2026

Mia Bauer
Stantec

RE: Natural Heritage Review of the proposed Northern Lights 2027 Worthington 2nd Branch Line, T102N R36W Section 20, 28-30, T102N R37W Section 25; Jackson County

Dear Mia Bauer,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00997** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

State-listed Species

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**
- Please visit the DNR Rare Species Guide for more information on the habitat use of state-listed species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit Natural Heritage Review for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, please contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake
Digitally signed by James Drake
Date: 2026.02.24 15:49:18 -06'00'

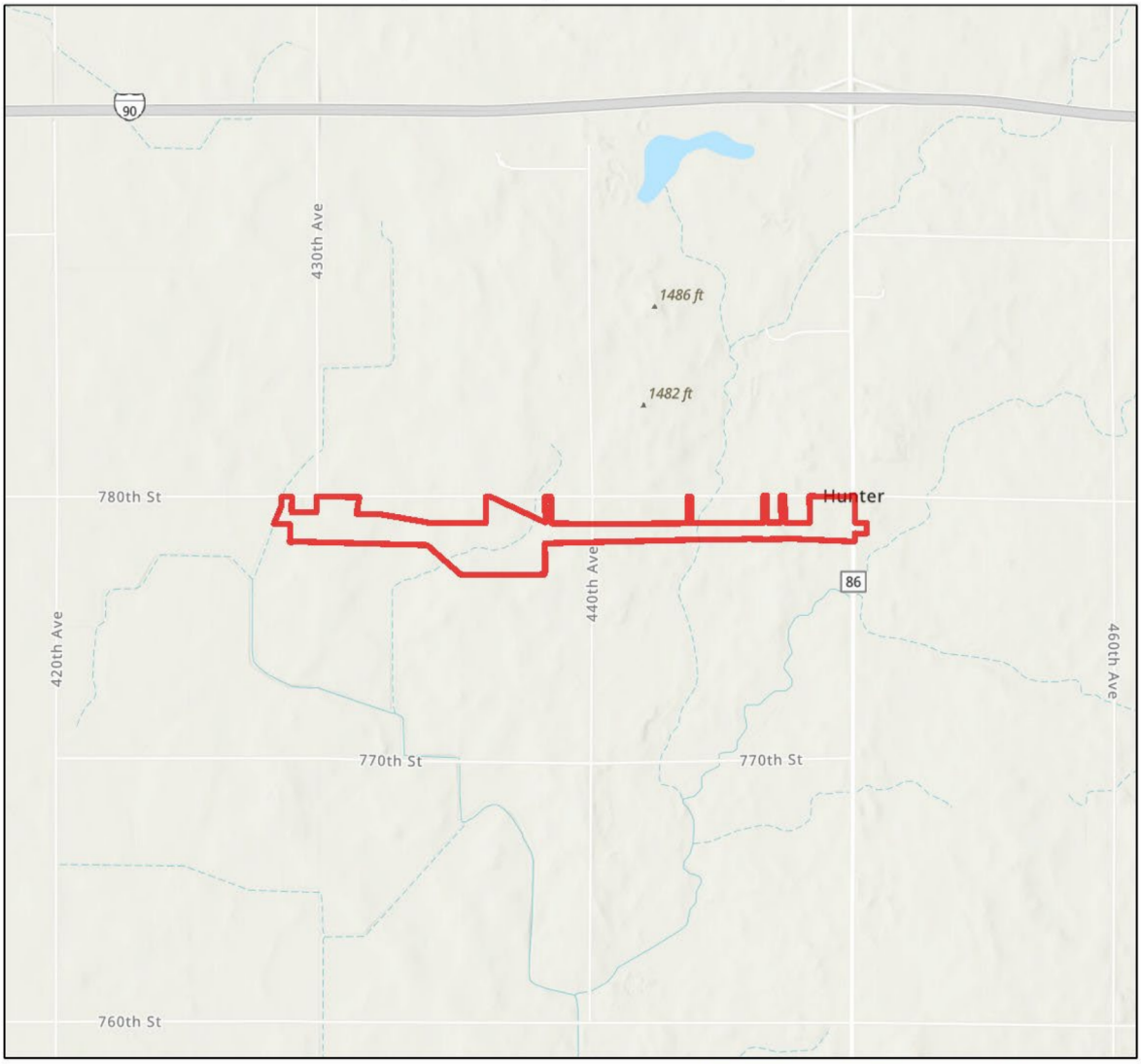
Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Haley Byron

For more project details, see the MCE-generated Final Project Report, available on the MCE project page.

Northern Lights 2027 Worthington 2nd Branch Line

USA Topo Basemap With Locator Map



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Miles

Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 172.12

County(s): Jackson

TRS: T102 R36 S20, T102 R36 S28, T102 R36 S29, T102 R36 S30, T102 R37 S25

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 23, 2026

Mia Bauer
Stantec

RE: Natural Heritage Review of the proposed Northern Lights 2027 Welcome 2nd Branch Line,
T101N R33W Sections 11-12; Martin County

Dear Mia Bauer,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00995** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. **Based on the project details provided with the request, I do not believe the proposed project will negatively affect any known occurrences of rare features**. To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

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other related information. For information on the environmental review process or other natural resource concerns, please contact your DNR Regional Environmental Assessment Ecologist.

Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

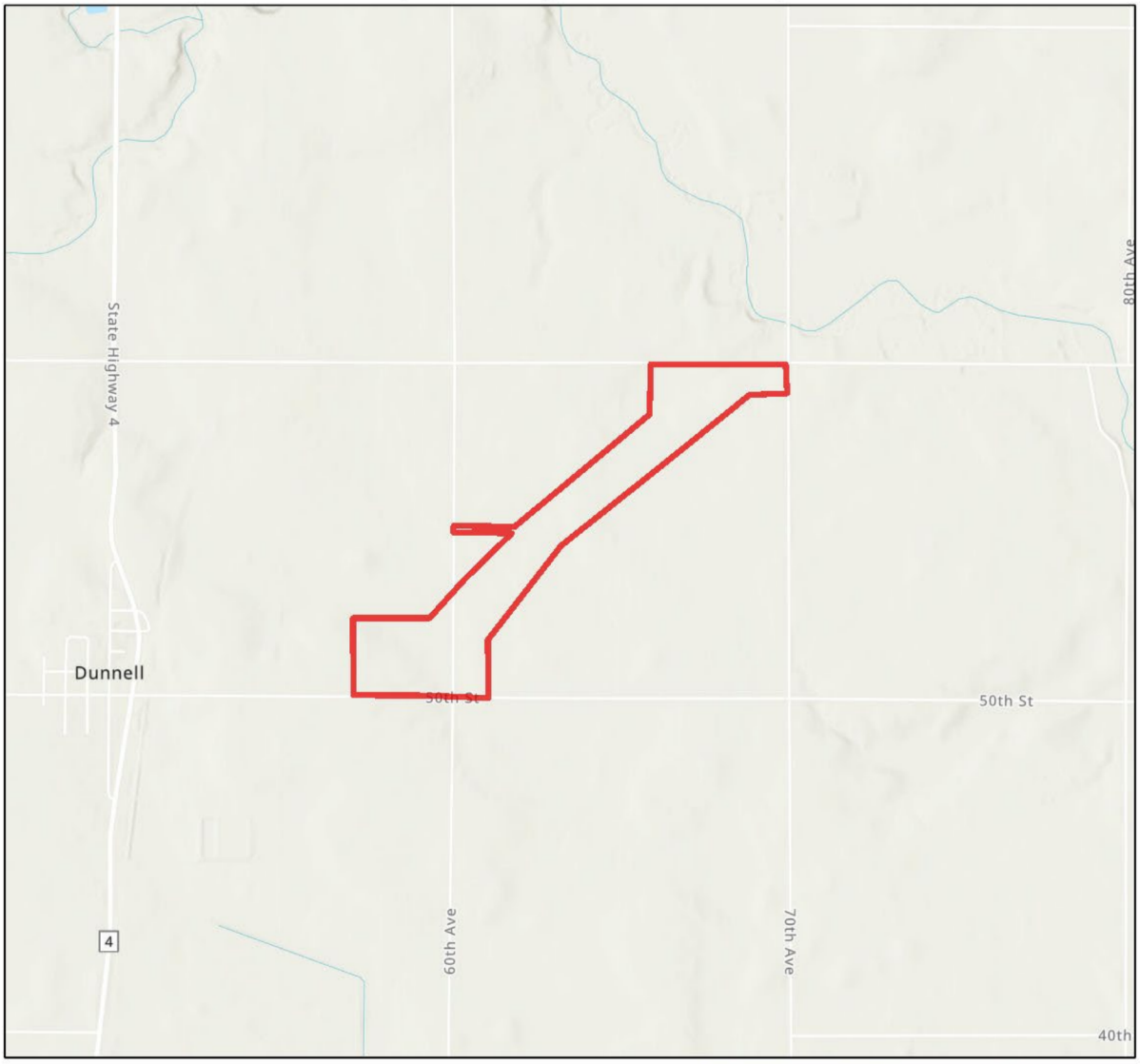
James Drake

Natural Heritage Review Specialist
james.f.drake@state.mn.us

For more project details, see the MCE-generated Final Project Report, available on the MCE project page.

Northern Lights 2027 Welcome 2nd Branch Line

USA Topo Basemap With Locator Map



N
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0 0.17 0.35 0.7 1.05 1.4
Miles

Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 178.76

County(s): Martin

TRS: T101 R33 S11, T101 R33 S12

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 23, 2026

Mia Bauer
Stantec

RE: Natural Heritage Review of the proposed **Northern Lights 2027 Springfield 2nd Branch Line**,
T107N R32W Sections 1-2, 12, T107W R31W Sections 7, 17-18, 20, 28-29, 33-35; Watonwan County

Dear Mia Bauer,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00994** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) has identified two Sites of *Moderate* Biodiversity Significance along the Watonwan River that overlap or are adjacent to the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *Moderate* contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. These Sites have two examples of mapped Silver Maple – (Virginia Creeper) Floodplain Forest, which has a state conservation rank of Vulnerable to Extirpation (S3). The DNR recommends that the project be designed to avoid impacts to these ecologically significant areas. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:
    - As much as possible, operate within already-disturbed areas.
    - Avoid MBS Sites and native plant communities ranked S1, S2, or S3.
    - Retain a buffer between proposed activities and the MBS Site.
    - Minimize vehicular disturbance in the MBS Site (allow only vehicles/equipment necessary for construction activities).
    - Do not park equipment or stockpile supplies in the MBS Site.
    - Do not place spoil in the MBS Site or other sensitive areas.
    - If possible, conduct the work under frozen ground conditions.
    - Use effective erosion prevention and sediment control measures.

  - Inspect and clean equipment prior to operation and follow recommendations to prevent the spread of invasive species.
  - Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible.
  - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.

- The Minnesota Biological Survey (MBS) considered four areas overlapping or adjacent to the proposed project for Sites of Biodiversity Significance. They were determined to be *Below* the minimum biodiversity threshold for statewide significance. These areas, however, may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat. As such, indirect impacts from surface runoff or the spread of invasive species should be considered during project design and implementation.

- MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be viewed using the Explore page in Minnesota Conservation Explorer (MCE) or their GIS shapefiles can be downloaded from the MN Geospatial Commons. Reference the MBS Site Biodiversity Significance and Native Plant Community websites for information on interpreting the data. To receive a list of MBS Sites of Biodiversity Significance and DNR Native Plant Communities in the vicinity of your project, create a Conservation Planning Report using the Explore page in MCE.

- If the Wetland Conservation Act (WCA) is applicable to this project, please note that one or more Native Plant Communities in the vicinity of the project may qualify as a "rare natural community" under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a rare natural community must be denied if the local government unit determines the proposed activities will permanently adversely affect the natural community. If the proposed project includes a wetland replacement plan under WCA, please contact your DNR Regional Ecologist for further evaluation. Please visit WCA Program Guidance and Information for additional information, including the Rare Natural Communities Technical Guidance.

State-listed Species

- Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been documented in the vicinity of the proposed project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. Factors believed to contribute to the decline of this species include collisions with vehicles, wetland drainage and degradation, and the development of upland habitat. Any added mortality can be detrimental to populations of Blanding's turtles, as these turtles have a low reproduction rate that depends upon a high survival rate to maintain population levels.

  The proposed project has the potential to impact this rare turtle through direct fatalities and habitat disturbance/destruction. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the

take of threatened or endangered species without a permit. **As such, please contact** Review.NHIS@state.mn.us **to confirm that the following measures will be implemented:**

- Avoid wetland and aquatic impacts during overwintering season, between September 15 and April 15, if the area is suitable for overwintering.
  - Wetlands and aquatic habitats that freeze solid to the bed (no liquid water) are not suitable overwintering habitat. However, Blanding's turtles will overwinter in wetlands and aquatic habitat where ice has closed over the water's surface.
- Limit erosion and sediment control to wildlife friendly erosion control.
- Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
- Inspect trenches, holes, or depressions prior to starting work **each day** and immediately prior to filling. Upon project completion, bore holes and trenches must be filled.
- The Blanding's turtle flyer must be given to all contractors working in the area.
- Report any sightings using the DNR Plant and Animal Observation Form.
- If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

If the above measures are not feasible, please contact Review.NHIS@state.mn.us as a project-specific avoidance plan will likely be needed to demonstrate avoidance.

Additional Blanding's turtle avoidance measures may include, but are not limited to, the following recommendations:

- Recommendations from List 1 of the Blanding's turtle fact sheet. If greater protection for turtles is desired, implement recommendations from List 2.
- Avoid hydro-mulch products that contain any materials with synthetic (plastic) fiber additives, as the fibers can re-suspend and flow into waterbodies.

- Great Plains toad (*Anaxyrus cognatus*), a state-listed species of special concern, was documented in the vicinity of the proposed project. This species is found in remnant prairies and grasslands in western Minnesota. They breed from May to July in highly ephemeral water-filled prairie depressions and have adapted to breed in flooded agricultural fields. The use of wildlife-friendly materials, as prescribed above to help protect Blanding's turtles, will also minimize impacts to this rare species.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- Please visit the DNR Rare Species Guide for more information on the habitat use of state-listed species and recommended measures to avoid or minimize impacts.

- Please report incidental sightings of state-listed species via the DNR Plant and Animal Observation Form.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

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Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake

Digitally signed by James Drake
Date: 2026.02.23 16:17:47 -06'00'

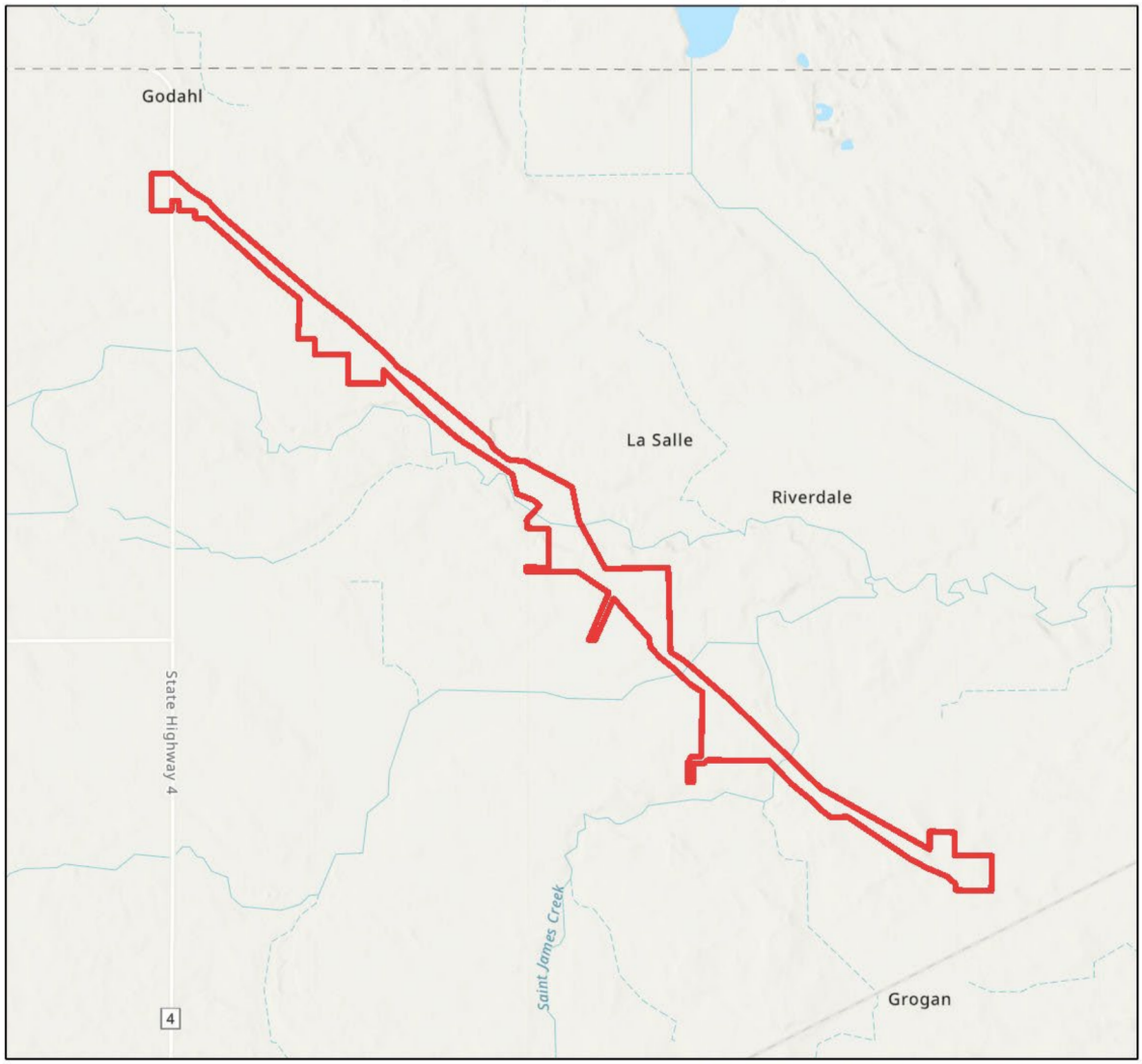
Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Haley Byron, Megan Benage, Jennie Skancke

For more project details, see the MCE-generated Final Project Report, available on the MCE project page.

Northern Lights 2027 Springfield 2nd Branch Line

USA Topo Basemap With Locator Map



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Miles

Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 912.01

County(s): Watonwan

TRS: T107 R31 S17, T107 R31 S18, T107 R31 S19, T107 R31 S20, T107 R31 S21 +

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

February 23, 2026

Mia Bauer
Stantec

RE: Natural Heritage Review of the proposed Northern Lights 2027 Willmar 3rd Branch Line Upstream, T114N R21W Sections 19-21, 28; Scott County

Dear Mia Bauer,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00996** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- A calcareous fen (Kelleher Park, ID# 41531) has been documented within the vicinity of the proposed project area. Sterile sedge (*Carex sterilis*) and stream parsnip (*Berula erecta*), both state-listed threatened plants, have been documented within the fen. A calcareous fen is a rare and distinctive peat-accumulating wetland that is legally protected in Minnesota. The Wetlands Conservation Act, authorized by Minnesota Statutes, section 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan approved by the commissioner of the Department of Natural Resources. Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. For more information regarding calcareous fens, please see the Calcareous Fen Fact Sheet. To minimize stormwater impacts, please refer to the Minnesota Pollution Control Agency's General Principles for Erosion Prevention and Sediment Control in the Minnesota Stormwater Manual. Please note that calcareous fens are "Special Waters" and a buffer zone may be required.

  Calcareous fens may be impacted by activities within the fen, activities that affect surface water flows (e.g., stormwater flow, erosion), or activities that affect groundwater hydrology (e.g., groundwater pumping, contamination, or discharge). To ensure compliance with WCA, please contact the Calcareous Fen Program Coordinator, Keylor Andrews (Keylor.Andrews@state.mn.us). **If it is determined the**

project will impact the fen in any way, including indirect impacts through the alteration of hydrological conditions, a botanical survey is required. Surveys must be conducted by a qualified surveyor and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. Visit the Natural Heritage Review page for a list of certified surveyors and more information on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

State-listed Species

- Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been documented in the vicinity of the proposed project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. Factors believed to contribute to the decline of this species include collisions with vehicles, wetland drainage and degradation, and the development of upland habitat. Any added mortality can be detrimental to populations of Blanding's turtles, as these turtles have a low reproduction rate that depends upon a high survival rate to maintain population levels.

  The proposed project has the potential to impact this rare turtle through direct fatalities and habitat disturbance/destruction. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. **As such, please contact Review.NHIS@state.mn.us to confirm that the following measures will be implemented:**
  - Avoid wetland and aquatic impacts during overwintering season, between September 15 and April 15, if the area is suitable for overwintering.
    - Wetlands and aquatic habitats that freeze solid to the bed (no liquid water) are not suitable overwintering habitat. However, Blanding's turtles will overwinter in wetlands and aquatic habitat where ice has closed over the water's surface.
  - Limit erosion and sediment control to wildlife friendly erosion control.
  - Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
  - Inspect trenches, holes, or depressions prior to starting work **each day** and immediately prior to filling. Upon project completion, bore holes and trenches must be filled.
  - The Blanding's turtle flyer must be given to all contractors working in the area.
  - Report any sightings using the DNR Plant and Animal Observation Form.
  - If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

  If the above measures are not feasible, please contact Review.NHIS@state.mn.us as a project-specific avoidance plan will likely be needed to demonstrate avoidance.

Additional Blanding's turtle avoidance measures may include, but are not limited to, the following recommendations:

- Recommendations from List 1 of the Blanding's turtle fact sheet. If greater protection for turtles is desired, implement recommendations from List 2.
- Avoid hydro-mulch products that contain any materials with synthetic (plastic) fiber additives, as the fibers can re-suspend and flow into waterbodies.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- The area of interest overlaps with a U.S Fish and Wildlife Service (USFWS) Rusty Patched Bumble Bee High Potential Zone. The rusty patched bumble bee *(Bombus affinis)* is federally listed as endangered and is anticipated to be listed as an endangered species in Minnesota in 2026. This species is likely to be present in suitable habitat (shrub/tree cover and the surrounding 100 feet of vegetation) within High Potential Zones and may be impacted by a variety of land management activities including, but not limited to, prescribed fire, tree-removal, haying, grazing, herbicide use, pesticide use, land-clearing, soil disturbance or compaction, or use of non-native bees. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. I**f the project will impact more than two acres of suitable habitat within the high potential zone, avoidance measures or a permit to take may be needed when the endangered status becomes effective.** Updates to the status of this species will be posted at Endangered and Threatened Species Permits.

- Please visit the DNR Rare Species Guide for more information on the habitat use of state-listed species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit Natural Heritage Review for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, please contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake
Digitally signed by James Drake
Date: 2026.02.23 17:30:15 -06'00'

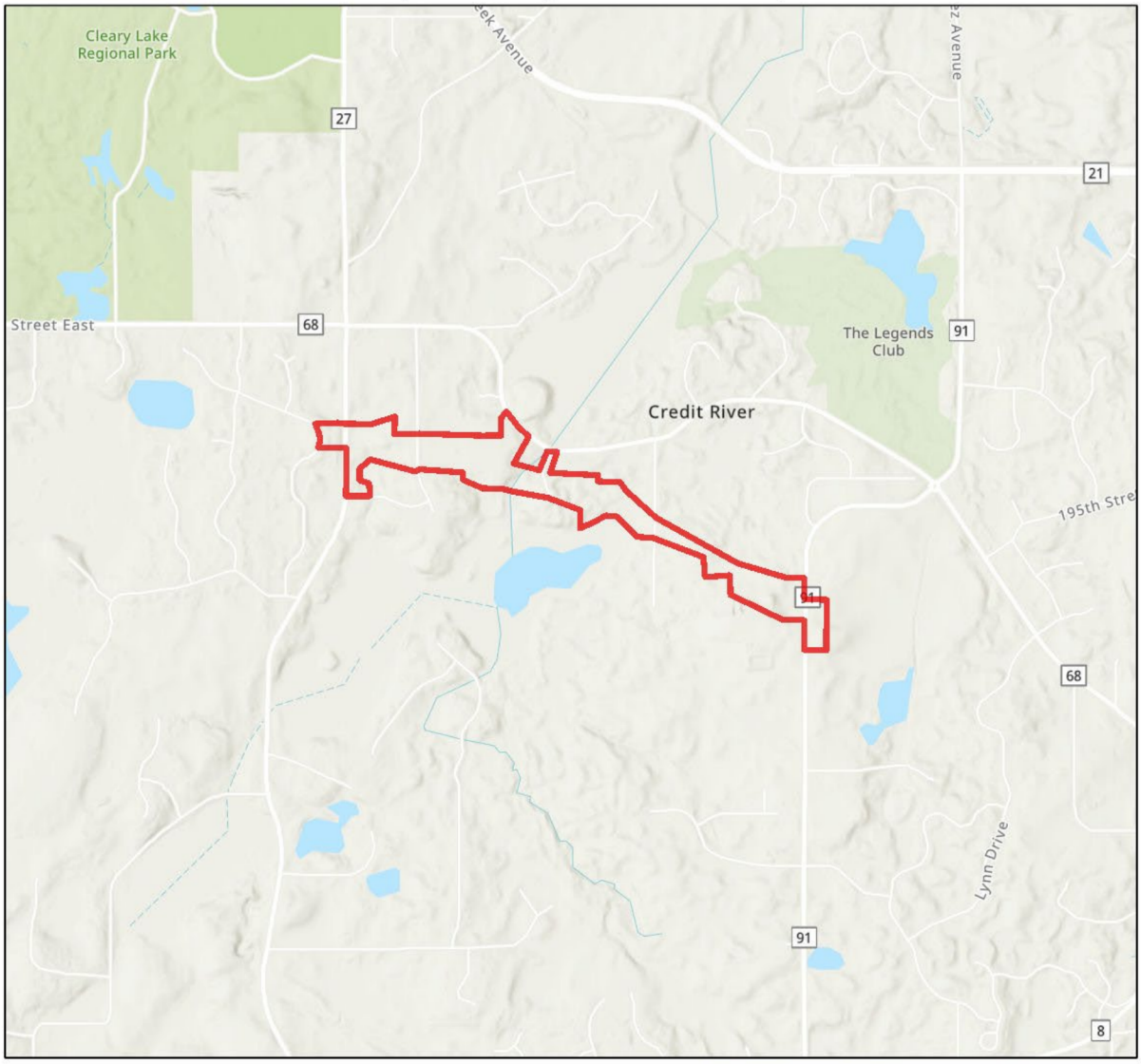
Natural Heritage Review Specialist
james.f.drake@state.mn.us

Cc: Melissa Collins, Keylor Andrews

For more project details, see the MCE-generated Final Project Report, available on the MCE project page.

Northern Lights 2027 Willmar 3rd Branch Line Upstream

USA Topo Basemap With Locator Map



N
W E
S

0 0.2 0.4 0.8 1.2 1.6 Miles

Project Boundary

Project Type: Utilities, Pipelines (gas, petroleum)

Project Size (acres): 129.39

County(s): Scott

TRS: T114 R21 S19, T114 R21 S20, T114 R21 S21, T114 R21 S28

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Metropolitan Council, MetroGIS, Three Rivers Park District, MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/