

# Memorandum

Date: Tuesday, April 27, 2021

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Project: Norell Ave (CSAH 3), May Township, MN

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To: Washington County

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From: HDR Engineering

Subject: Draft Environmental Permitting Memorandum

The following memorandum provides information on environmental permits and approvals that are anticipated for construction activities associated with the proposed Norell Ave/County State Aid Highway (CSAH) 3 project.

## Project Location

The project, located in May Township in northeastern Washington County, consists of rehabilitating Norell Ave/CSAH 3. Components of the rehabilitation project have yet to be defined. For the purposes of this memorandum, a 30 acre Project Area consisting of the entire public highway right-of-way (ROW) from the intersection of CSAH 3/170th St N on the north end and CSAH 3/Square Lake Trail S on the south end was reviewed. The Project Area is located in Section 9, 10, 15, 16, 21, 22 of Township 31 Range 20 in Washington County, Minnesota (Figure 1). The land uses directly adjacent to the Project Area include single family homes, the Lee and Rose Warner Nature Center, farmsteads, a railroad crossing, and various lakes including Long Lake, West Boot Lake, and East Boot Lake. On behalf of Washington County, HDR completed an off-site review and on-site review, including a wetland delineation, for regulated environmental features within the Project Area.

## Project Description

Specifics of the rehabilitation project have yet to be defined. Ground disturbance from the highway rehabilitation may include vegetation removal, grading, and site clearing. Grading for construction may be required and would consist of cutting, filling, and compaction of earth around the site to meet the rehabilitation needs.

## Methods

### Off-site Review

Readily available offsite data was reviewed to identify potentially regulated environmental and biological features that may occur in the Project Area. Data reviewed in this effort included the following resources:

- Minnesota Department of Natural Resources (MNDNR) Natural Heritage Information System (NHIS) database
- US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online tool
- MNDNR Public Waters Inventory (PWI)
- USFWS National Wetland Inventory (NWI) mapping

- Minnesota Pollution Control Agency (MPCA) Impaired Waters List
- Federal Emergency Management Agency (FEMA) Flood Insurance Rates Maps
- Washington County Zoning Maps
- Aerial Photography
- MPCA and Minnesota Department of Agriculture (MDA) What's In My Neighborhood? (WIMN) databases

For the purposes of identifying MNDNR state listed sensitive species, a one-mile buffer of the Project Area was used in reviewing NHIS data. NHIS data review occurred under conditions as defined by HDR's license agreement LA-1022 with MNDNR.

## On-site Review

HDR visited the Project Area on September 2, 2020. On-site field assessments included verification of off-site review results and an evaluation of any significant features present. Additionally an on-site wetland delineation was performed in accordance with U.S. Army Corps of Engineer (USACE) protocols. Additional features, such as wildlife conservation areas (e.g., Wildlife Management Area, Conservation Reserve Program), the presence of wildlife in the area, and the general quality of any natural land cover in or near the project area were also noted.

## Findings

The Project Area is located within the St. Paul-Baldwin Plains and Moraines Subsection as defined by the MNDNR (MNDNR 2005). The St. Paul-Baldwin Plains and Moraines Subsection is dominated by a large moraine and areas of outwash plain. The subsection encompasses part of the seven-county metropolitan area and as a result is affected by urban development. Soils in this subsection are primarily Alfisols (soils formed under forested vegetation) and Mollisols (soils formed under prairie vegetation). The drainage network is poorly developed throughout most of the subsection due to the nature of the landforms. Rural housing and agriculture are the major land uses. There are small areas of forest present in the eastern portion of the subsection, although these are becoming scarce as development continues. The current land use associated with the Project Area is maintained public highway ROW.

## Water Resources

Two mapped MNDNR PWI features and 19 wetlands were identified in the Project Area. Wetland areas delineated during the on-site delineation and mapped PWI features are shown in Figure 2.

Two impaired waters as listed by the MPCA occur within the Project Area. These waters include East Boot Lake and an unnamed creek near the southern edge of the Project Area. The unnamed creek is listed as impaired for turbidity, fish bioassessments and E. coli. East Boot Lake is listed as impaired for nutrients. The location of impaired waters is shown in Figure 1.

Two FEMA mapped floodplains are located within the Project Area. A Zone AE floodplain is mapped on West Boot Lake and East Boot Lake in the northern portion of the project area. A Zone A floodplain is mapped near the southern boundary of the Project Area. Floodplains occurring within the Project Area are shown in Figure 2.

## Environmental Contaminants

WIMN databases identified the following listings located near the Project Area:

- An underground storage tank was registered to John Berdusco located at 16363 Norell Ave. A 2,000 gallon fuel oil tank was registered with the MPCA on 04/10/86. The tank is still listed as active. No Leaking underground storage tank (UST) cases have been identified for the property.
- The Warner Nature Center located at 15375 Norell Ave N was listed as both an inactive hazardous waste generator and inactive tank site. The hazardous waste generator license registration dated back to 1985. Both a 1,000- and 4,000-gallon capacity fuel oil UST were removed and closed in-place, respectively, in 1999. No active tanks are currently registered to the site.

Impacts from these listings are not anticipated. If construction activities encounter any undocumented contaminants, the applicable contamination protocol will be taken into consideration.

## Special Status Species

Data obtained from the MNDNR and USFWS regarding state and federally protected species that may occur within or within 1 mile of the Project Area are summarized in Table 1.

**Table 1. Special Status Species.**

Species	Common Name	Federal Listed Status	State Listed Status	Habitat	Likelihood of Occurrence
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Threatened	Threatened	During summer, Northern Long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Northern Long-eared Bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances.	This species may occur within forested areas adjacent to the Project Area.
<i>Lampsilis higginsii</i>	Higgins Eye (pearly mussel)	Endangered	Endangered	The Higgins eye is a freshwater mussel of larger rivers where it is usually found in areas with deep water and moderate currents.	This species is unlikely to occur in the Project Area due to a lack of suitable habitat
<i>Epioblasma triquetra</i>	Snuffbox Mussel	Endangered	Endangered	Medium to large rivers in mud, sand, or gravel	This species is unlikely to occur in the Project Area due to a lack of suitable habitat
<i>Cumberlandia monodonta</i>	Spectaclecase	Endangered	Endangered	Spectaclecase mussels are found in large rivers where they live in areas sheltered from the main force of the river current.	This species is unlikely to occur in the Project Area due to a lack of suitable habitat
<i>Quadrula fragosa</i>	Winged Mapleleaf	Endangered	Endangered	Large rivers in riffles dominated by gravel, sand, and rubble	This species is unlikely to occur in the Project Area due to a lack of suitable habitat
<i>Emydoidea blandingii</i>	Blanding's Turtle	NA	Threatened	Upland and lowland prairie, floodplain and wet forest, peatland, small, medium and large rivers and streams	This species is known to occur within the Project Area.
<i>Lampropeltis triangulum</i>	Milksnake	NA	Watchlist	Habitat generalists that can be found near forest edges, open woodlands, prairies and grasslands, near streams and rivers, on rocky	This species may occur within the Project Area

Species	Common Name	Federal Listed Status	State Listed Status	Habitat	Likelihood of Occurrence
				hillsides, and in suburban areas and farmlands	
<i>Gallinula galeata</i>	Common Gallinule	NA	Species of Special Concern (SPC)	Freshwater cattail-bulrush marshes with equal parts open water and emergent vegetation.	This species may occur within the Project Area
<i>Buteo lineatus</i>	Red-shouldered hawk	NA	SPC	Large tracts of mature deciduous forest with scattered wetland openings.	This species may occur within the Project Area
<i>Aphanorhagma serratum</i>	Lidded Earth Moss	NA	SPC	Poorly drained soils that are subject to inundation, such as stream and river banks and floodplains or other low areas, such as within old fields.	This species may occur within the Project Area
<i>Botrychium simplex</i>	Least Moonwort	NA	SPC	Open sites, including prairies and wetlands.	This species may occur within the Project Area

## Conclusions

Based on the results of the off-site and on-site review HDR has identified permits/authorizations that may be required for construction of the project. The applicability of these permits is dependent on the final design/footprint of the project. Permits/authorizations identified based on the review are summarized in Table 2. A permit need justification for each permit/approval is also included in this section.

**Table 2: Anticipated Permits and Approvals**

Permit/Approval	Agency	Action Required	Permit Timeline
<b>Federal</b>			
Clean Water Act (CWA) Section 404 Permit	USACE	Permit would be required for fill materials placed into wetland areas	60-90 days
Endangered Species Act (ESA) Consultation	USFWS	Consultation would be required as part of the CWA Section 404 permitting process	Concurrent with CWA Section 404 Process
<b>State</b>			
CWA Section 401 Water Quality Certification	MPCA	Permit would be required as part of the CWA Section 404 permitting process	Concurrent with CWA Section 404 Process
National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Program Authorization to Discharge Stormwater associated with Construction Activity	MPCA	Permit would be required for land disturbance associated with construction activities and permanent stormwater treatment for creation of impervious surfaces	30 Days
National Historic Preservation Act	Minnesota State Historic Preservation Office (SHPO)	Consultation would be required as part of the	Concurrent with CWA Section 404 Process

Permit/Approval	Agency	Action Required	Permit Timeline
(NHPA) Section 106 Consultation		CWA Section 404 permitting process	
Public Waters Works Permit	MNDNR	Permit would be required for any work encroachment within PWI waters	60-90 days
Water Use Permit	MNDNR	Permit is required for water use or dewatering associated with construction activities if water use more than 10,000 gallons of water per day or 1 million gallons per year	30 days
Endangered and Threatened Species Permit	MNDNR	Consultation with MNDNR will be required to avoid impacts to state listed species. If avoidance is not possible a take permit may be required due to the potential for impacts to Blanding's turtle	60-90 days
Existing Environmental Contaminants	MPCA	No action required	NA
<b>Local</b>			
Minnesota Environmental Policy Act (MEPA) Review	Washington County	No Action Required	NA
Wetland Conservation Act (WCA)	Washington County Conservation District	Permit would be required for impacts to wetland areas	30-60 days
Wetland Alteration Permit	Carnelian-Marine-St. Croix Watershed District	Permit would be required for impacts to wetland areas	Concurrent with WCA Process
Stormwater Management	Carnelian-Marine-St. Croix Watershed District	Permit would be required for any additional impervious surface created as part of the project	Concurrent with WCA Process
Erosion Control	Carnelian-Marine-St. Croix Watershed District	Permit would be required for grading activities	Concurrent with WCA Process
Lake, River, Stream, and Wetland Buffer Requirements	Carnelian-Marine-St. Croix Watershed District	Permit would be required for development activities within defined buffer zones	Concurrent with WCA Process
Shoreline and Streambank Alterations	Carnelian-Marine-St. Croix Watershed District	Permit would be required for work within defined shoreland zones in the Project Area	Concurrent with WCA Process

Permit/Approval	Agency	Action Required	Permit Timeline
Watercourse and Basin Crossing	Carnelian-Marine-St. Croix Watershed District	Permit would be required for any culvert work associated with the project.	Concurrent with WCA Process
Floodplain and Drainage Alteration	Carnelian-Marine-St. Croix Watershed District	Permit would be required for any work within floodplain areas	Concurrent with WCA Process

# Permit Need Justification

## Federal Permits

### SECTION 404 PERMIT

The USACE regulates the discharge of dredged or fill material into waters of the United States including wetlands under the Section 404 of the CWA. If the project is going to dredge or fill waters of the United States, coordination with the USACE and a CWA section 404 permit would be required. The type of permit that may be required, along with and compensatory mitigation that may be required for impacts to waters of the U.S. would be dependent on the final design of the project.

### ESA CONSULTATION

Under the Section 7 of ESA, Federal agencies must review their actions to determine whether they may affect endangered or threatened species or critical habitat. To accomplish this, Federal agencies must determine whether any listed species may be present in the action area (i.e. project area) and whether that area overlaps with critical habitat. If a USACE CWA section 404 permit is required, consultation with the USFWS under section 7 of ESA would be required due to the potential for NLEB to be present within the Project Area. Consultation regarding the NLEB may be avoided if tree clearing can be avoided entirely or if needed can be conducted during winter months outside of NLEB roosting season.

## State Permits

### SECTION 401 CERTIFICATION

Under Section 401 of the CWA a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the United States unless a 401 water quality certification is issued. The MPCA is responsible for issuing water quality certifications in Minnesota. The type of permit that may be required, along with the amount of consultation that may be required with MPCA would be dependent on the final design of the project.

### NPDES/SDS PERMIT

The NPDES Stormwater Program is regulated under section 402 of the CWA, of which authority is delegated to the state level to the MPCA from the U.S. Environmental Protection Agency. The SDS is the state system which encompasses the NPDES system. When stormwater drains off a construction site, it carries sediment and other pollutants that can harm lakes, streams, and wetlands. MPCA issues coverage to construction site owners and their operators under the Construction Stormwater General Permit (MNR100001) to prevent stormwater pollution during and after construction and protect Minnesota's water resources. Stormwater runoff from Project improvements will typically follow existing drainage patterns and flow into the roadside ditches. Permit coverage will be required for any construction activity disturbing one acre or more of soil. As part of the permit, a Storm Water Pollution Prevention Plan (SWPPP) would be

required to be developed for the project. The SWPPP would be required to be developed in accordance with specifications defined under MNR100001.

#### **NHPA SECTION 106 CONSULTATION**

Under Section 106 of the NHPA, federal agencies must work with the SHPO to address historic preservation issues when planning projects or issuing funds or permits that may affect historic properties and archaeological resources listed in or determined eligible for the National Register of Historic Places. Federal agencies are required to consult with the SHPO to identify properties in project areas, determine the effects of proposed work on those properties and find ways to avoid, reduce or mitigate harm to them. If a USACE CWA section 404 permit is required, consultation with the Minnesota SHPO under section 106 of the NHPA would be required.

#### **PUBLIC WATERS WORKS PERMIT**

The MNDNR regulates activities below the Ordinary High Water Level of Public Waters under the Public Waters Work Permit Program. If it is determined that the project would encroach into any PWI waters located in the Project Area a Public Water Works permit for those activities would be required from the MNDNR. Design requirements and permit conditions of the Public Water Works Permit would be dependent on the nature and scope of impacts that may occur to public waters.

#### **WATER USE PERMIT**

The MNDNR regulates water appropriations and use through the Water Appropriation Permit Program. If it is determined that areas within the Project Area need to be dewatered in excess of 10,000 gallons per day or 1 million gallons per year, a water use permit from the MNDNR would be required.

#### **ENDANGERED AND THREATENED SPECIES PERMIT**

The MNDNR is responsible for the administration and enforcement of Minnesota's Endangered Species Law. A permit is required to take, pursue, capture, kill, dig up, dispose, destroy, purchase, import, possess, transport or sell live or dead endangered or threatened plants or animals, including their parts or seeds. Permit issuance is discretionary and based on the MNDNR's assessment of all relevant information. Due to the likelihood of Blanding's turtle occurring in the Project Area, coordination with MNDNR regarding best management practices that may be implemented to avoid impacts to Blanding's turtle will be required. If the MNDNR determines that avoidance of impacts is not possible, a Permit for the Take of Endangered or Threatened Species Incidental to a Development Project may be required.

## **Local Permits**

#### **MEPA REVIEW**

MEPA rules define the Responsible Government Unit (RGU) for multiple types of projects. For the CSAH 3 project Washington would be the RGU as defined by MEPA. The proposed project is not anticipated to trigger the mandatory category for preparing an EAW therefore no further action is required.

#### **WCA/ WETLAND ALTERATION**

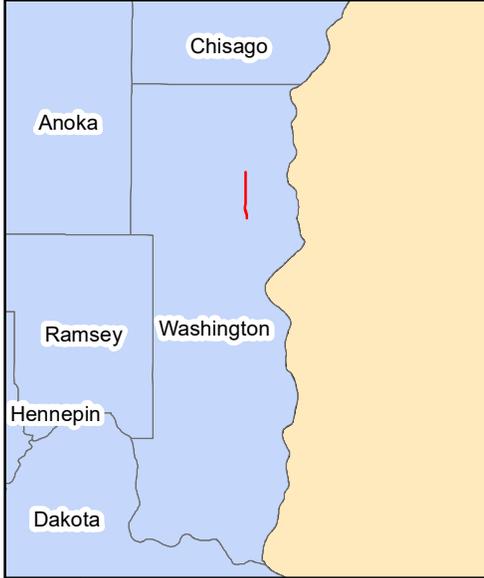
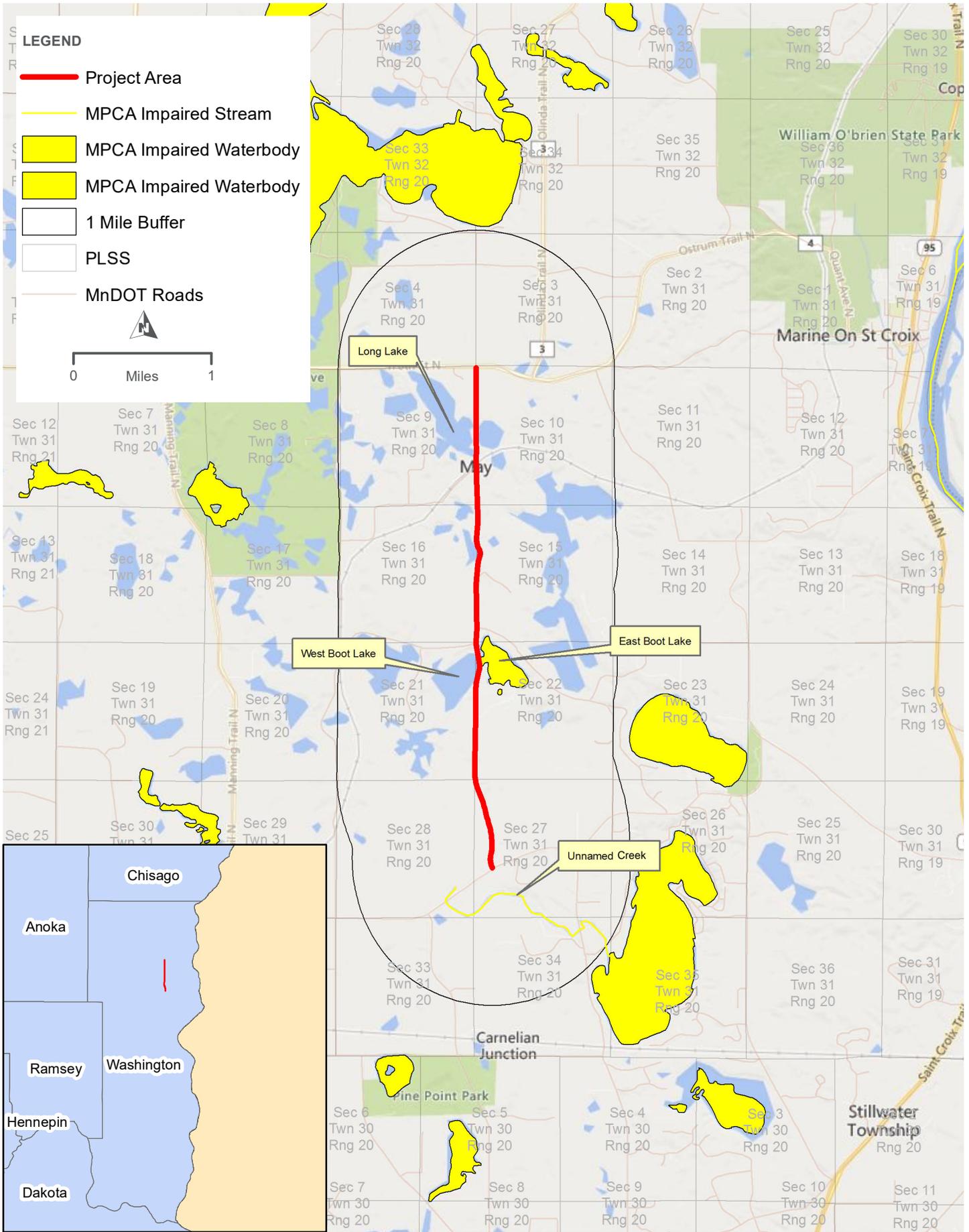
WCA serves to avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands in Minnesota. WCA is administered at the local level by the Local Government Unit (LGU), the LGU for the CSAH 3 project would be Washington County Conservation District. The type of permit that may be required, along with potential wetland replacement that may be required for impacts to wetlands would be dependent on the final design of the project.

## CARNELIAN-MARINE-ST. CROIX WATERSHED DISTRICT PERMITS

Carnelian-Marine-St. Croix Watershed District has several development related environmental permits that may be applicable to the project. Permits and regulations are defined under the Carnelian-Marine-St. Croix Watershed District Rules under the authority of MN Statute 103D –Watershed Districts. The applicability of watershed district permits would be dependent on the final design and specifications of the project. If any watershed district permits are identified as being required, a pre-application with Carnelian-Marine-St. Croix Watershed District would be necessary to determine required permit applications materials. Application for all Carnelian-Marine-St. Croix Watershed District would be compiled into one Development Permit Application submitted to Carnelian-Marine-St. Croix Watershed District D.

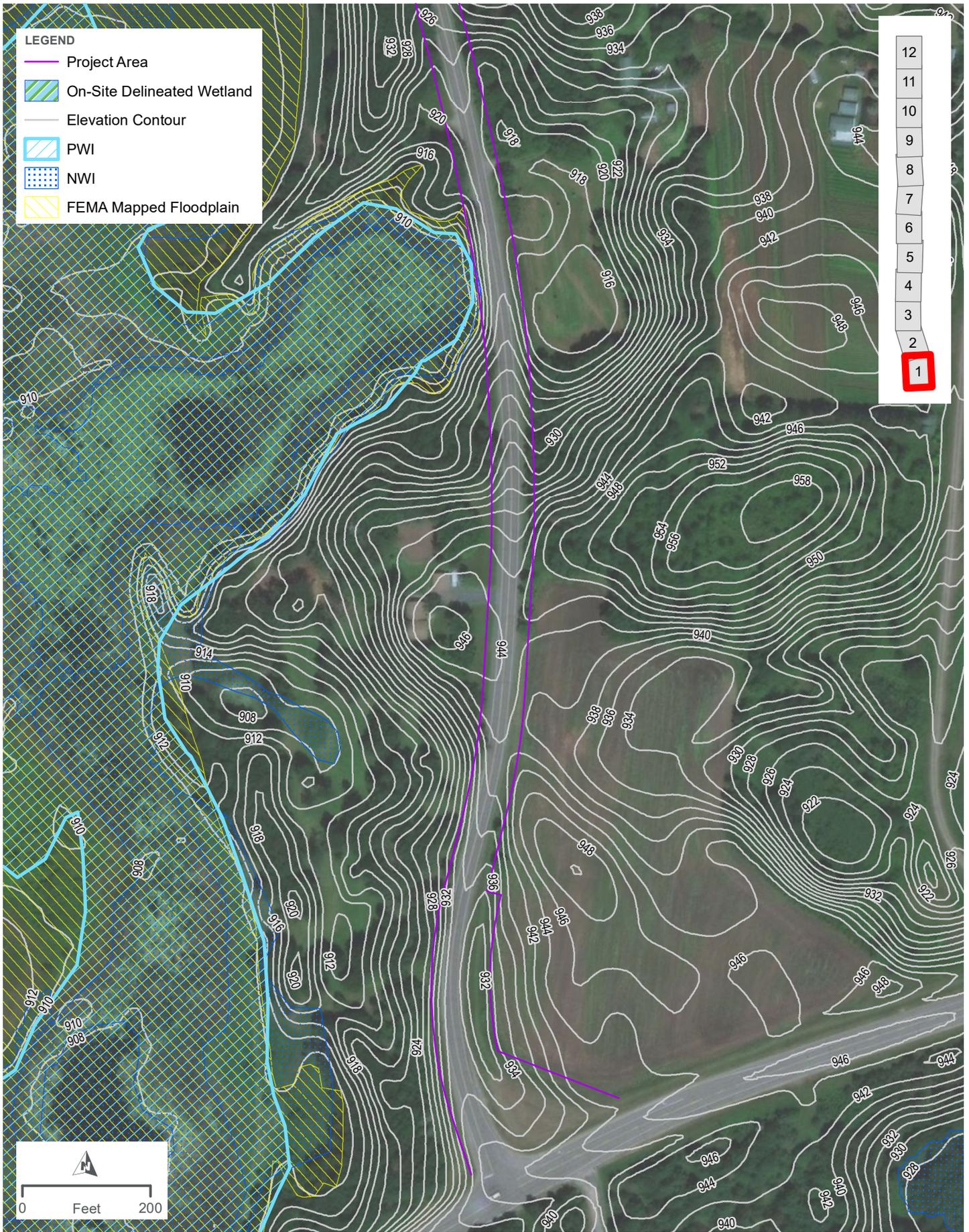
- **Stormwater Management** – A stormwater management plan (similar to the SWPPP plan developed as part of the NDPEs/SDS permitting process) would be required to be prepared in accordance with Carnelian-Marine-St. Croix Watershed District rules for the Project.
- **Erosion Control** – An erosion and sediment control plan (similar to the SWPPP plan developed as part of the NDPEs/SDS permitting process) would be required to be prepared in accordance with Carnelian-Marine-St. Croix Watershed District rules for the Project.
- **Lake, River, Stream and Wetland Buffer Requirements** – All work associated with the crossing of a waterbody or wetland must in accordance with Carnelian-Marine-St. Croix Watershed District rules.
- **Shoreline and Streambank Alterations** – A Permit is required for any disturbance activities that would affect the natural shoreline or streambank partially or wholly below the ordinary high water mark of a waterbody.
- **Wetland Alteration** – Carnelian-Marine-St. Croix Watershed District is responsible for administering watershed level rules which regulate impacts to wetland resources under Rule 8 – Wetland Management of Carnelian-Marine-St. Croix Watershed District Rules. Any impacts to wetland resources would require coordination with Carnelian-Marine-St. Croix Watershed District .
- **Watercourse and Basin Crossing** - A permit is required for the placement of roadways within the bed of any waterbody.
- **Floodplain and Drainage Alteration** – A permit is required for any work that may alter or fill land below the 100-year flood elevation of any waterbody.

## FIGURES



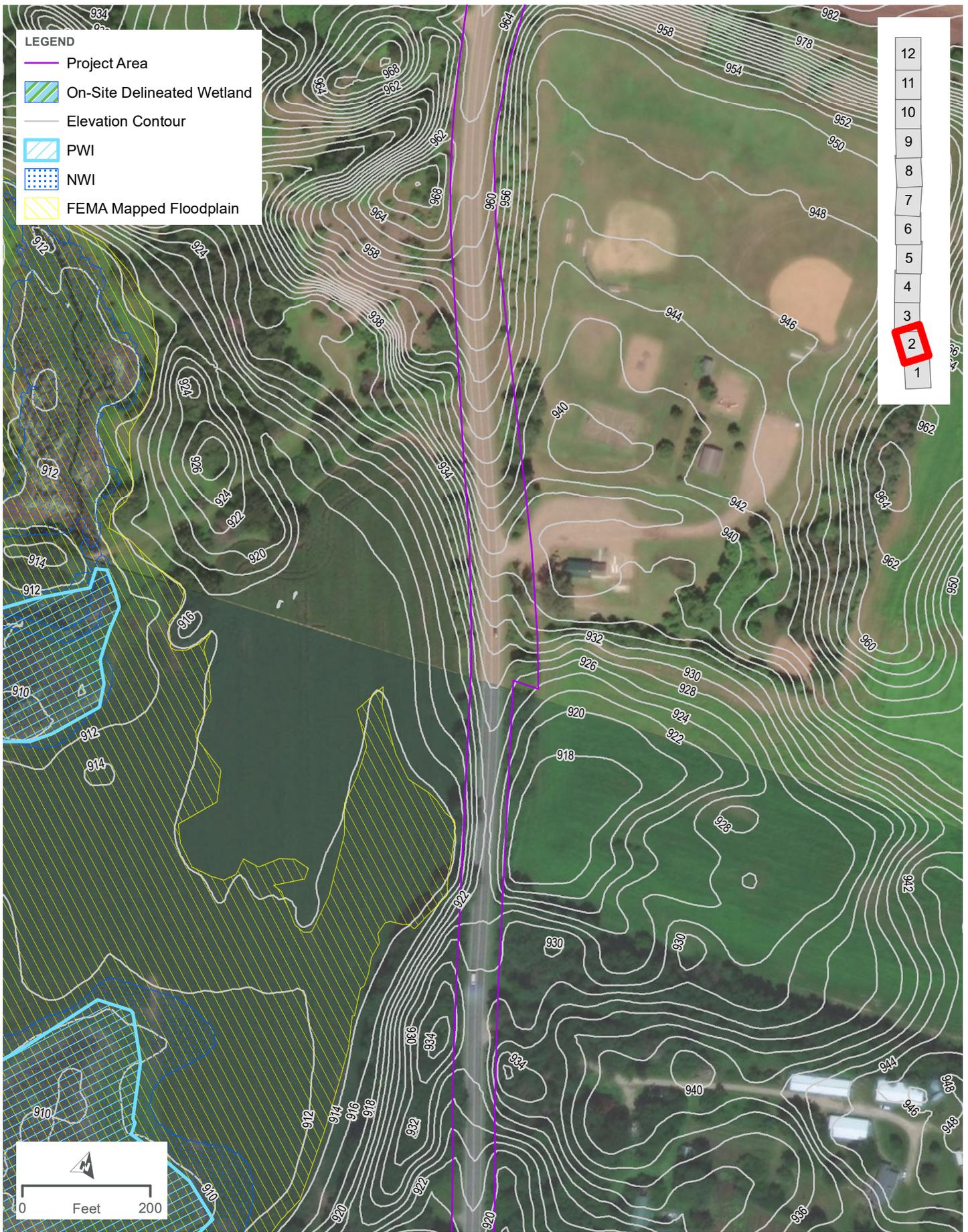
**FIGURE 1. PROJECT LOCATION**  
**CSAH 3/NORELL AVE**  
**WASHINGTON COUNTY**





**FIGURE 2 ENVIRONMENTAL RESOURCES**  
**CSAH 3/NORELL AVE**  
**WASHINGTON COUNTY**





**LEGEND**

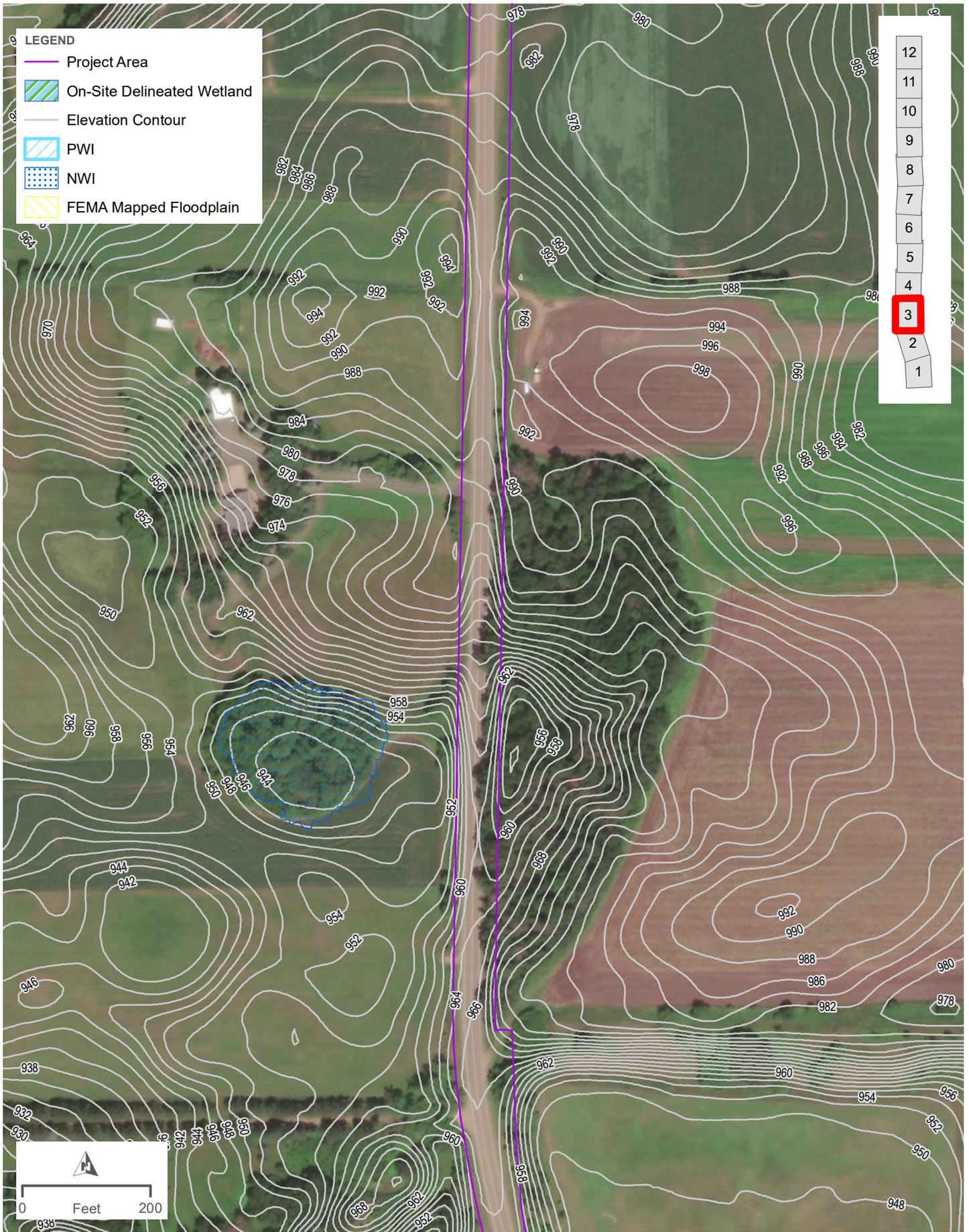
- Project Area
- ▨ On-Site Delineated Wetland
- Elevation Contour
- ▨ PWI
- ▨ NWI
- ▨ FEMA Mapped Floodplain

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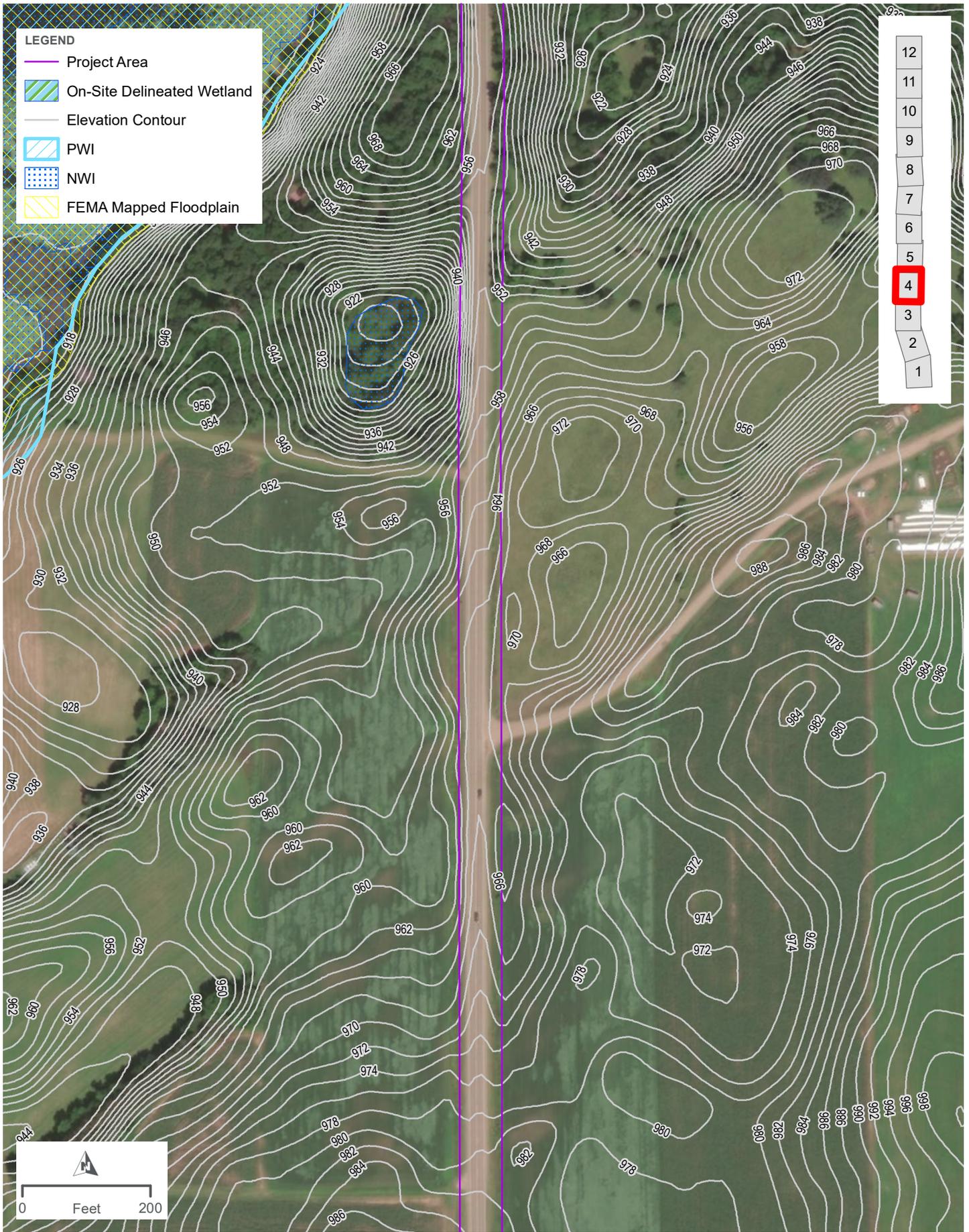
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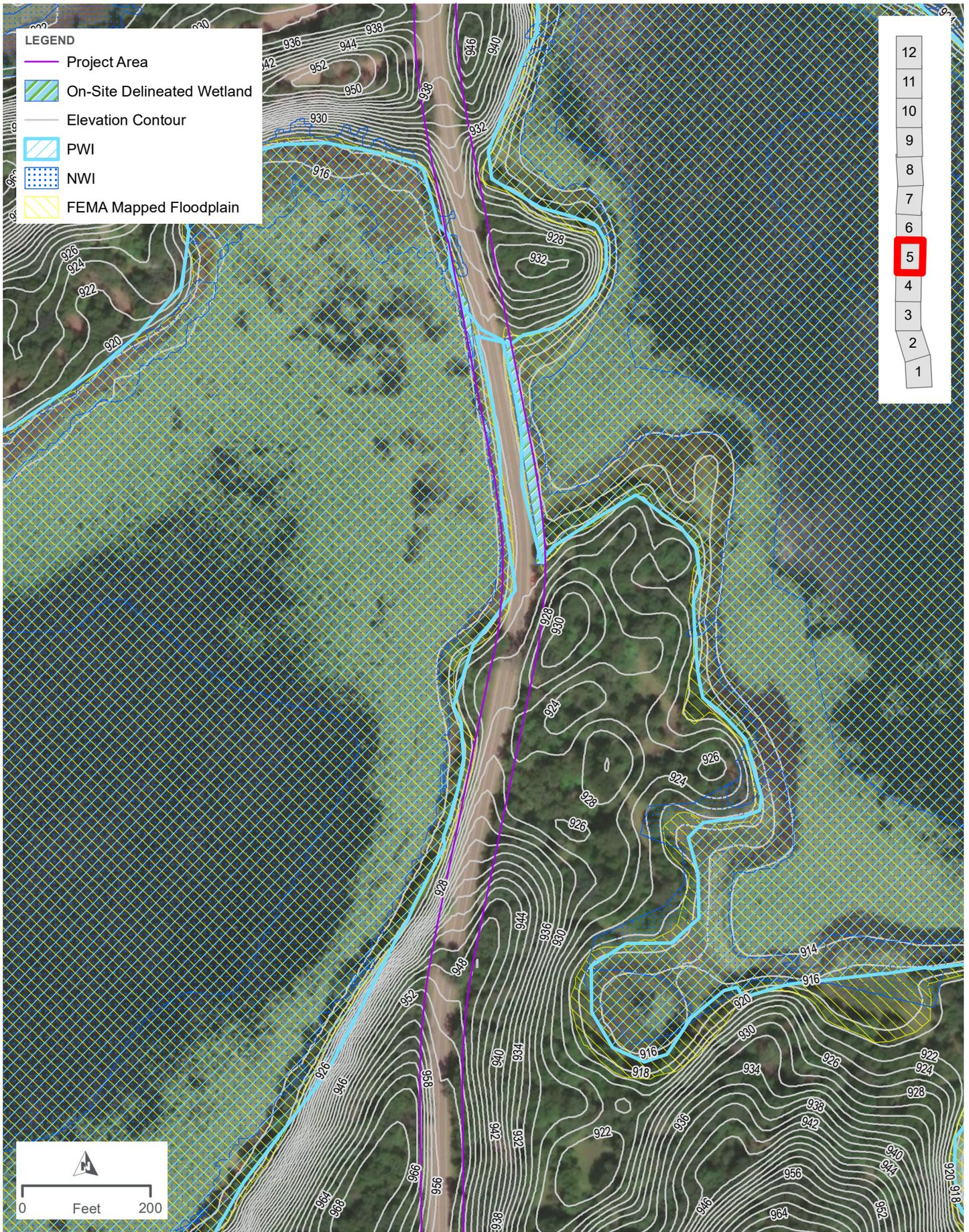




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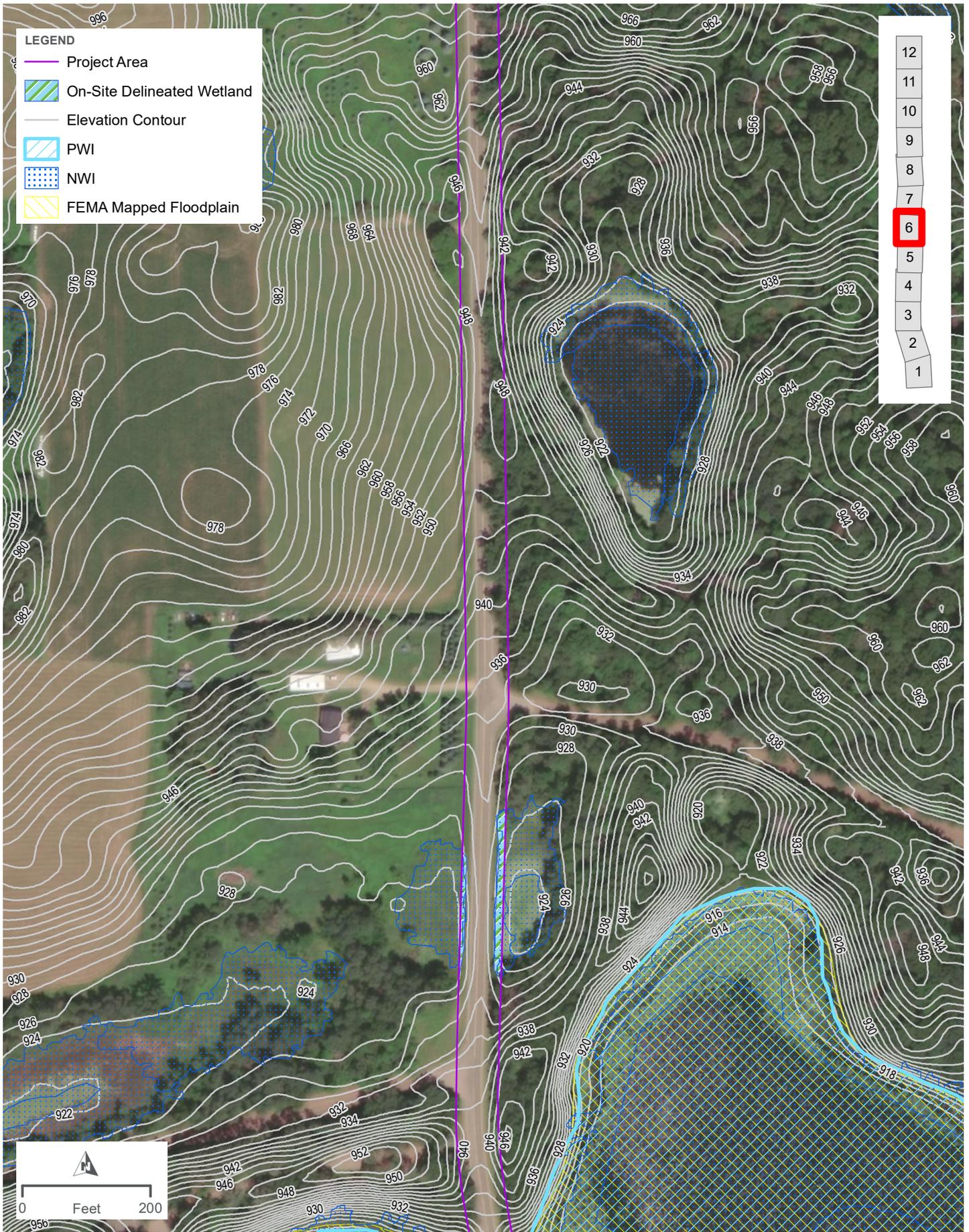
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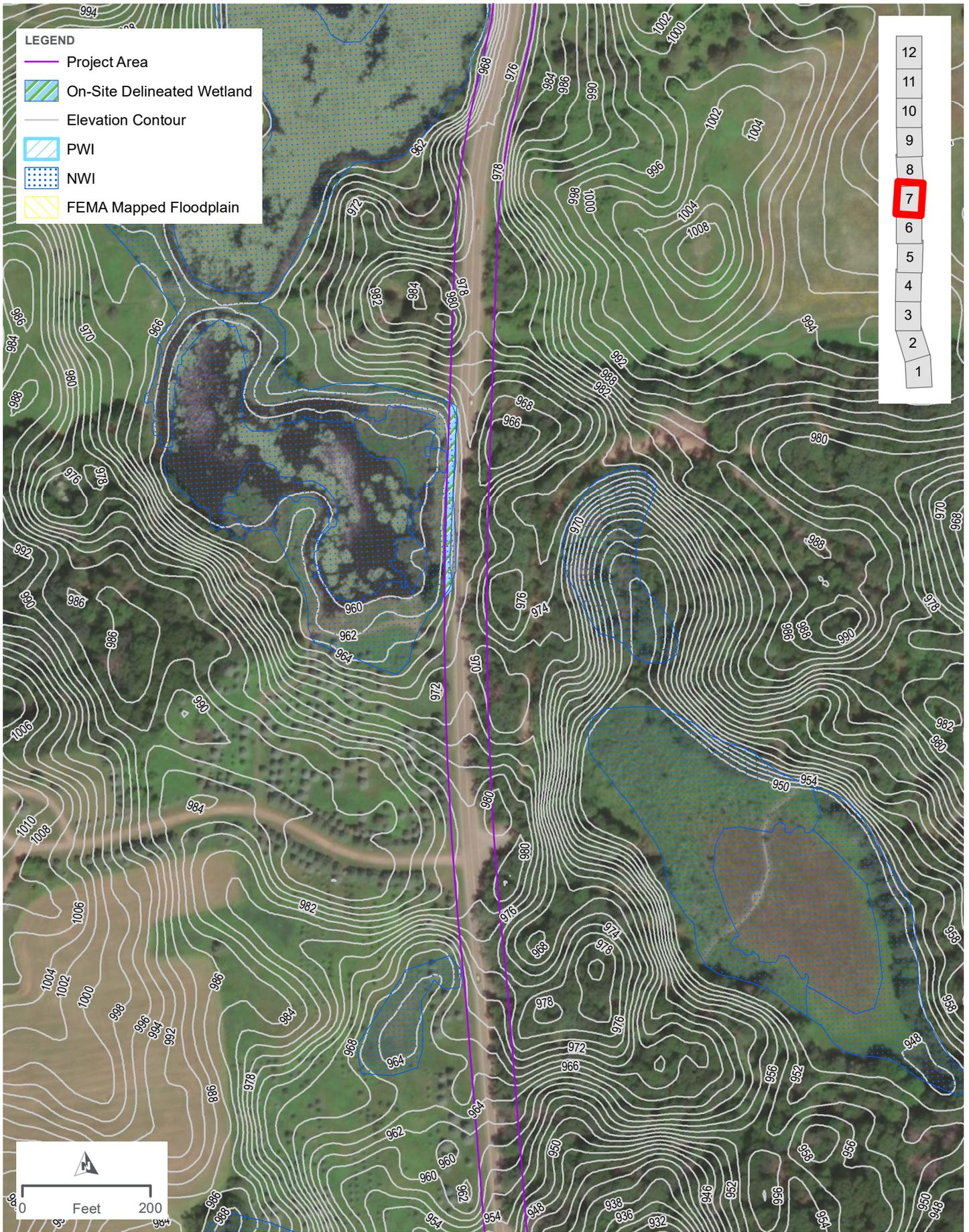
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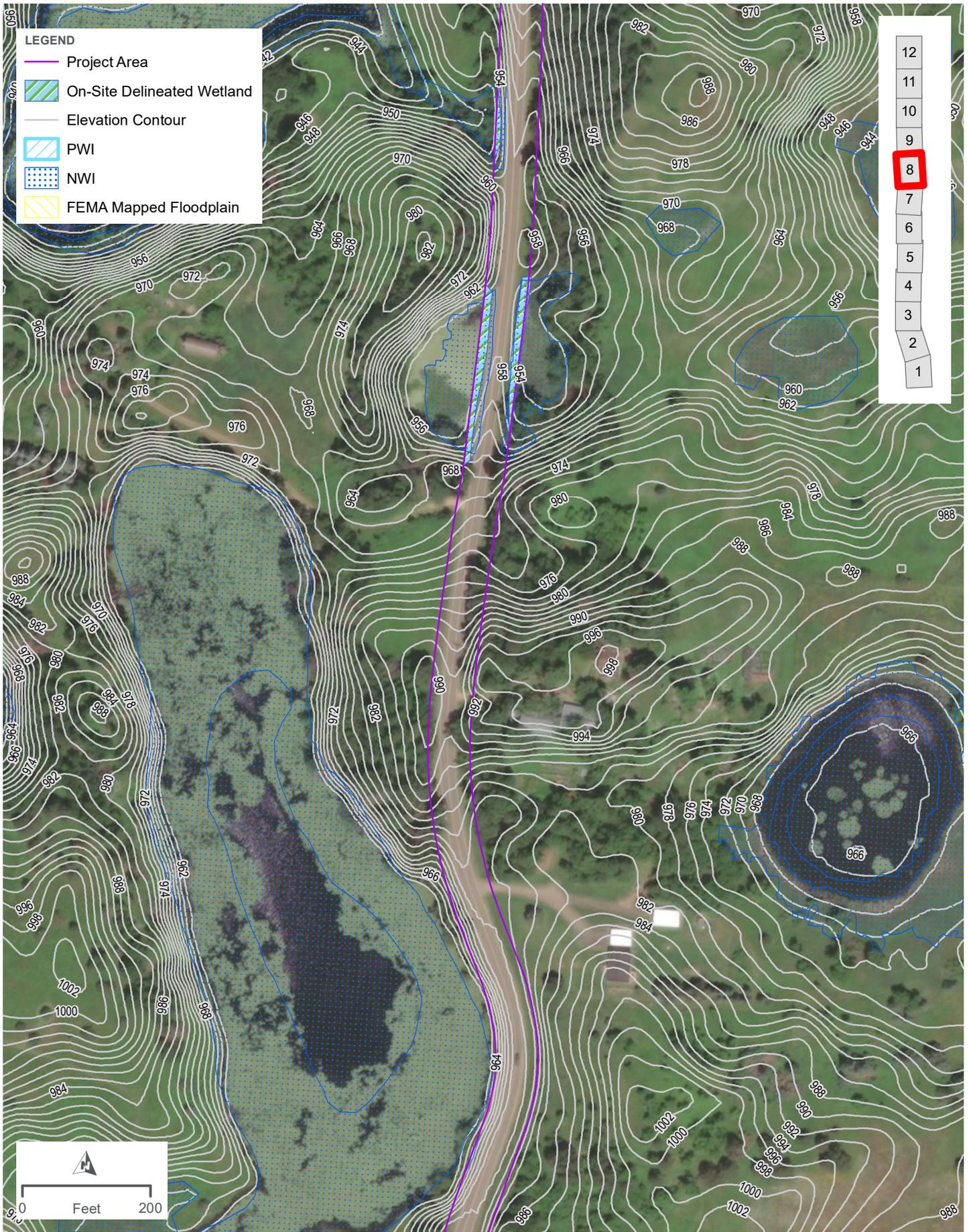
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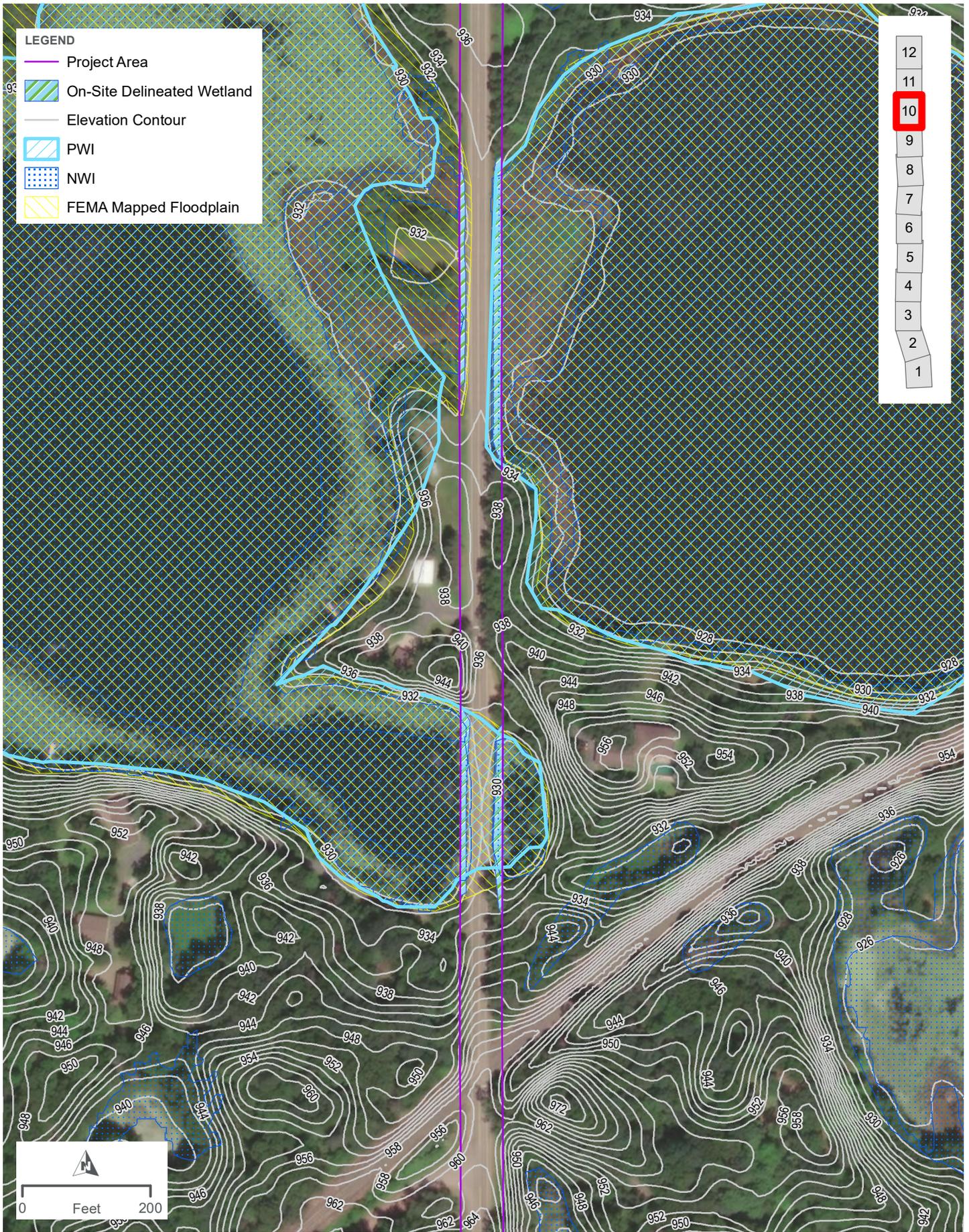
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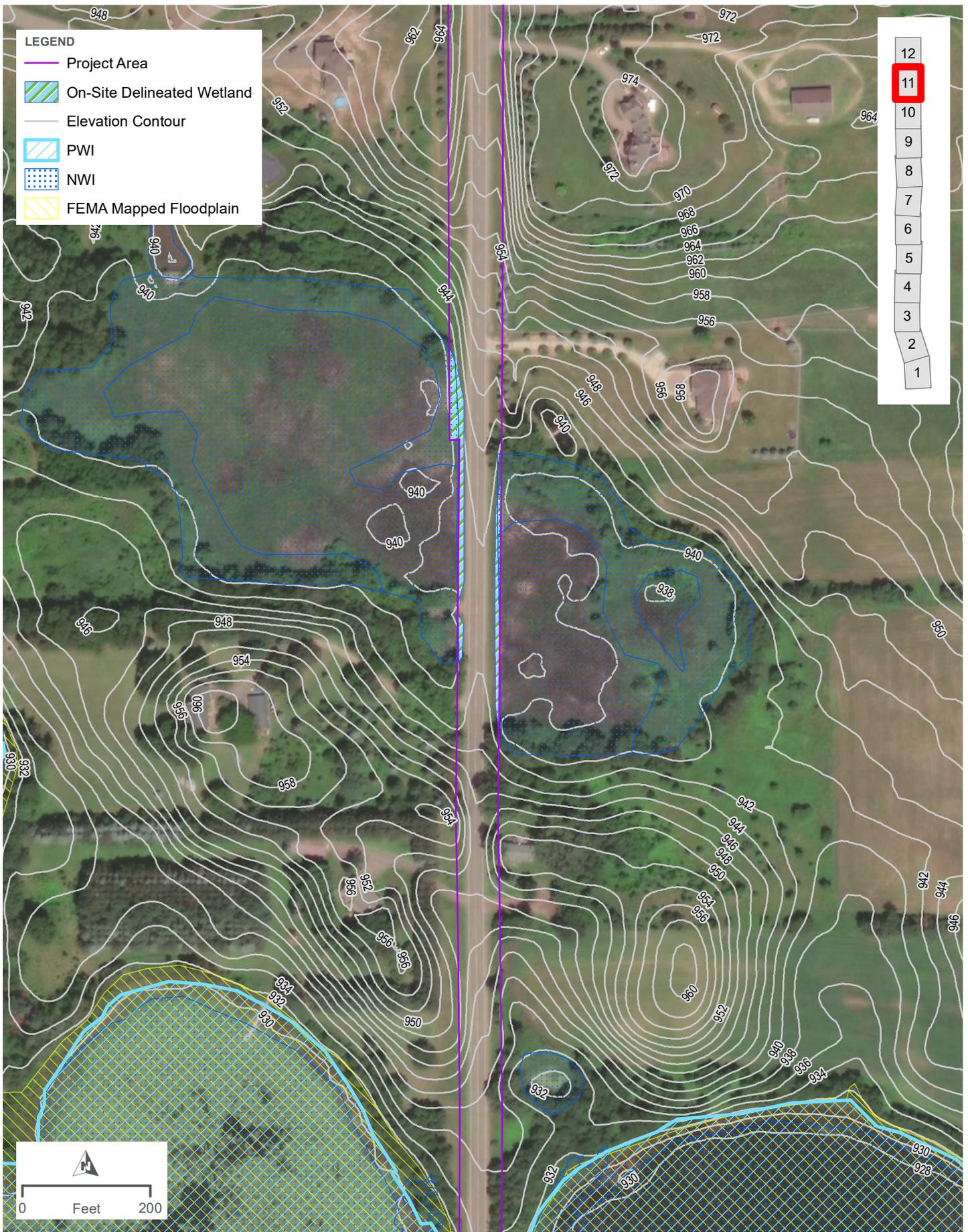
**LEGEND**

- Project Area
- On-Site Delineated Wetland
- Elevation Contour
- PWI
- NWI
- FEMA Mapped Floodplain

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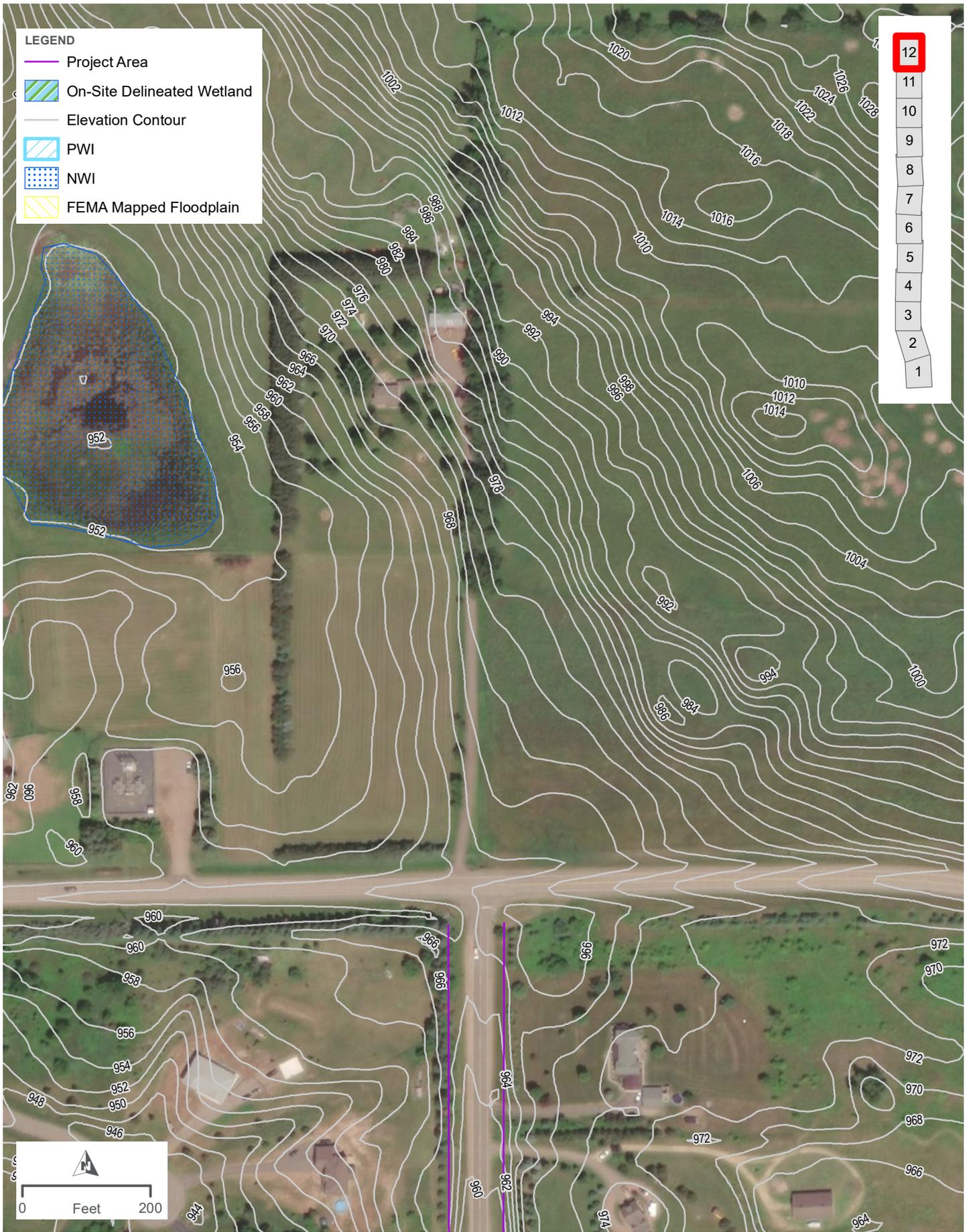
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