Item 7F. BCWMC 1-17-19

Minnesota Wetland Conservation Act Notice of Decision

Local Government Unit (LGU) City of Plymouth		Address 3400 Plymout Plymotuh, Mi		
1. I	PROJECT INFORM	ATION		
Applicant Name City of Plymouth	Project Name CSAH 9 (Rockford F Interchange Project		Date of Application 10/11/2018	Application Number N/A
Attach site locator map.				
Type of Decision:				
	⊠ No-Loss	Exemption	n 🔲	
Replacement	Plan	☐ Banking Pl	an	
Technical Evaluation Panel Findings a	nd Recommendation (if	any):		
Approve	Approve with cond	itions		Deny
Summary (or attach): During the field review, the boundaries were reviewed and accepted by the TEP. The TEP requested the delineator to review historic aerials to assist in determining the incidental wetland status of the wet ditches and wetlands located in the project vicinity. After receiving a historic aerial review and additional information from the consultant, it was determined that Wetland 1 appears to be created at the time of the development and roadway construction. Wetland 5 appears to be a historic remnant wetland and all of the wet ditches appear to be constructed. The TEP concurred with these conclusions.				
2. LOCAL	GOVERNMENT UN	NIT DECISIO	N	
Date of Decision: 12-10-2018 Approved	oproved with conditions	(include below)		

LGU Findings and Conclusions (attach additional sheets as necessary):

has withdrawn the Wetlands LGU Authorized Sign Signing and mailing Subp. 5 provides not specified above. If a	ature: of this completed formice that a decision was	d until all applicable comes to the appropriate recipies made by the LGU under e decision exist, they have	ents in accordance with 8420.0255, the Wetland Conservation Act as been provided to the landowner
has withdrawn the Wetlands LGU Authorized Sign Signing and mailing Subp. 5 provides not specified above. If a and are available from Name Michael Thompson	ature: of this completed formice that a decision was dditional details on the	n to the appropriate recipies made by the LGU under e decision exist, they have est. Title	ents in accordance with 8420.0255, the Wetland Conservation Act as been provided to the landowner
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		wettand bank as specified	
Credit Withdi			d in the approved replacement plan.
	rawal: For replacemen	nt consisting of wetland ba	ank credits, confirmation that BWSR
			lacement wetland is located.
			must be provided to the LGU that the ent to Replacement Wetland" forms
<u> </u>	type in LGU Findings		
specified by the L	GU must be submitted	d to the LGU in accordance	e with MN Rule 8420.0522, Subp. 9
Financial Ass	urance: For project-sp	pecific replacement that is	not in-advance, a financial assurance
_		conditional upon the follo	-
Replacement Plan A	approval Conditions	. In addition to any cor	nditions specified by the LGU, the
			.01 acre)
N/A	Dalik Service Area	County	Withdrawal (sq. ft. or nearest
For Replacement Plan Bank Account #	s using credits from the Bank Service Area	ne State Wetland Bank: County	Credits Approved for
F DI (D)	t	C4-4- W-41 1D 1	
and Stormwater Pone		,	
			Vet Ditch 8, Stormwater Pond 1,
			e Wetland Conservation Act tland 1, Wet Ditch 1, Wet Ditch 2,
_		P members agreed that the	-
delineated. The incid	lental wetland request	was also discussed by the	TEP during the on-site review and
	ompleted on 11-9-201	8 with the wetland bounds	aries and types approved as
A TEP review was c			
_	ere igeniiiieg.		
stormwater ponds we		8. During the delineation,	5 wetlands, 8 wet ditches, and two
Interchange Project of stormwater ponds we	on September 25, 2018		Rockford Road) and I-494 5 wetlands, 8 wet ditches, and two

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

CIT	1	
('r	ieck	one:

Appeal of an LGU staff decision. Send petition and \$0 fee (if applicable) to:	Appeal of LGU governing body decision. Send petition and \$500 filing fee to:
_ `	Executive Director
Michael Thompson, Public Works Director	Minnesota Board of Water and Soil Resources
City of Plymouth	520 Lafayette Road North
3400 Plymouth Blvd.	St. Paul, MN 55155
Plymouth, MN	,

4. LIST OF ADDRESSEES

SWCD TEP member: Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700,
Minneapolis, MN 55415-1600 (sent electronically)
BWSR TEP member: Ben Carlson, BWSR 520 Lafayette Road North, St. Paul, MN 55401
(sent electronically)
LGU TEP member (if different than LGU Contact): Ben Scharenbroich, City of Plymouth, 3400
Plymouth Blvd, Plymouth, MN 55447 (sent electronically)
DNR TEP member: Becky Horton, MnDNR, 1200 Warner Road, St. Paul, MN 55106 (sent
electronically)
☑ DNR Regional Office (if different than DNR TEP member)
WD or WMO (if applicable): BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16145
Hillcrest Lane, Eden Prairie, MN 55346 (sent electronically)
Applicant and Landowner (if different)
Members of the public who requested notice:
Jason Spiegel, Area Hydrologist, MN DNR, 1200 Warner Road, St. Paul, MN 55106 (sent
electronically)
Hennepin County Public Works - Transportation c/o Joshua Potter, 1600 Prairie Drive,
Medina MN 55340 (sent electronically)
Minnesota Department of Transportation, c/o Jerome Adams, 1500 West County Road B2,
Roseville, MN 55113 (sent electronically)
WSB & Associates c/o Roxy Franta, 701 Xenia Avenue S, Suite 300, Minneapolis, MN 55416
(sent electronically)
Army Corps of Engineers, 180 5th Street East, Suite 700m St. Paul, MN 55101-1678 (sent
electronically)
Corps of Engineers Project Manager
BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➤ Department of Natural Resources Regional Offices: BWSR Forms 7-1-10 of 3

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess.	Reg. Env. Assess. Ecol.
Div. Ecol. Resources	Div. Ecol. Resources	Ecol.	Div. Ecol. Resources
2115 Birchmont Beach Rd.	1201 E. Hwy. 2	Div. Ecol. Resources	261 Hwy. 15 South
NE	Grand Rapids, MN	1200 Warner Road	New Ulm, MN 56073
Bemidji, MN 56601	55744	St. Paul, MN 55106	

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

>For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687 or send to:

US Army Corps of Engineers St. Paul District, ATTN: OP-R 180 Fifth St. East, Suite 700 St. Paul, MN 55101-1678

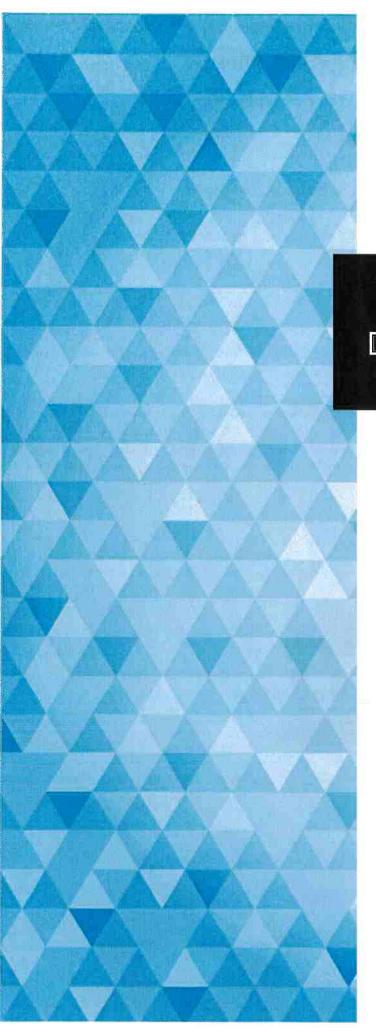
For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources Wetland Bank Coordinator 520 Lafayette Road North

St. Paul, MN 55155

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:	
☐ I-494 and Rockford Road Delineation Report	





LEVEL 2 WETLAND DELINEATION REPORT

CSAH 9 (ROCKFORD ROAD) / I-494 INTERCHANGE PROJECT

OCTOBER 1, 2018 UPDATED NOVEMBER 14, 2018

Prepared for: City of Plymouth 3400 Plymouth Boulevard Plymouth, MN 55447

WSB PROJECT NO. 011485-000



LEVEL 2 WETLAND DELINEATION REPORT

CSAH 9 (ROCKFORD ROAD) / I-494 INTERCHANGE PROJECT

For:

City of Plymouth

October 1, 2018 Updated November 14, 2018

Prepared By:



CERTIFICATION

The report was prepared by:	
	Inanta, WDC No.1317
Roxy Flanta	, WDC NO. 1317
Date: October 1, 2018	Title: Environmental Scientist
I hereby certify that this report w Certified Wetland Delineator in the	as reviewed by me and that I am a State of Minnesota.
li	He
Alison Harwoo	od, WDC No.1238
Date: October 4, 2018	Title: Senior Environmental Scientist

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SECTION I

I. Introduction

A. Project Location

The project is located at the CSAH 9 (Rockford Road) and I-494 interchange in the City of Plymouth, Hennepin County, Minnesota. The project area consists of approximately 0.30 mile of Rockford Road including Bridge No. 27W45 over I-494 and approximately 500 feet to the east and to the west of the bridge. The project also includes approximately 500 feet of the northbound entrance ramp to I-494, 600 feet of the southbound entrance ramp to I-494, 250 feet of the northbound exit ramp onto Rockford Road, and 160 feet of the southbound exit ramp onto Rockford Road. The project is located in Section 15 of Township 118 and Range 22, Major Watershed No. 20, BSA No. 7 (Figure 1, Appendix A).

B. Project Purpose

The City of Plymouth is proposing to replace the Rockford Road bridge crossing I-494, reconstruct the bridge approaches and portions of the I-494 ramps, construct a multiuse trail along the north side of Rockford Road (including bridge), reconstruct a multiuse trail along the south side of Rockford Road, reconstruct a retaining wall north of Rockford Road, and make drainage improvements. This report is intended to address all jurisdictional WCA, Public Water, or Section 404 wetlands and/or waters for final design and permitting of this project. This project was authorized by the City of Plymouth.

C. Project Scope

The scope of this project was to delineate all wetlands within the outlined project area.

D. Summary of Findings

A Level 2 wetland delineation was performed on the site. A total of four wetlands, eight wet ditches, and two stormwater ponds were identified and delineated in the preparation of this report, as summarized in **Table 1**. For a visual representation of the wetland locations and sizes, please see **Figure 6**, **Appendix B**. All potential wetland areas (mapped hydric soils, NWI signatures, and low depressional areas) were reviewed on-site and either delineated or determined to be upland.

Table 1. Summary of Delineated Wetlands, CSAH 9/I-494 Interchange, Hennepin County, Minnesota

Wetland ID	Delineation Method	No. Flags/ Transects	Eggers and Reed	Circular 39) (Cowardin)	NWI*	DNR PWI**	County Soil Survey (Hydric/ Non- Hydric)***
Wetland 1	Level 2	1-10/1	Seasonally Flooded/ Shallow Marsh/ Open Water	Type 1/3/5 (PEMA/ PEM1C/ PUBGx)	PEM1C/ PABGx	No	L23A/ L37B
Wetland 2	Level 2	1-5/1	Fresh (Wet) Meadow	Type 2 (PEMB)	PEM1A	No	L37B

SECTION I

Wetland ID	Delineation Method	No. Flags/ Transects	Eggers and Reed	Circular 39) (Cowardin)	NWI*	DNR PWI**	County Soil Survey (Hydric/ Non- Hydric)***
Wetland 3	Level 3	0/1	Seasonally Flooded Basin/ Shallow Marsh	Type 1/3 (PEMA/ PEMC)	PEM1C/ PABGx	No	U3B
Wetland 4	Level 2	1-7/0	Shallow Marsh	Type 3 (PEMC)	N/A	No	U1A
Wetland 5	Level 2	0/1	Seasonally Flooded	Type 1 (PEMA)	N/A	No	U3B/L22C2
Wet Ditch 1	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L37B
Wet Ditch 2	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L37B/U3B/ L36A
Wet Ditch 3	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L22C2/U3B
Wet Ditch 4	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L37A/L25A/ L22C2
Wet Ditch 5	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	U3B
Wet Ditch 6	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	U3B/L22C2
Wet Ditch 7	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	U1A/L22C2
Wet Ditch 8	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L22C2
Stormwater Pond 1	Level 2	0/0	Shallow Marsh/Open Water	Type 3/5 (PEMC/ PUBGx)	N/A	No	U3B/ L36A
Stormwater Pond 2	Level 2	0/0	Shallow Marsh	Type 3 (PEMC)	N/A	No	U3B/L22C2

^{* &}quot;Yes" indicates wetland is mapped in the NWI and "No" indicates the wetland is not mapped in the NWI.

^{** &}quot;NA" indicates the wetland is not mapped in the PWI. Numbers listed are the DNR ID, indicating the wetland is mapped in the PWI.

^{***}Bolded numbers indicate hydric soils.

II. Delineation Procedure

A. Off-Site Determination: Base Map Review

Topography: The landform is generally lower at the interchange where the configuration of I-494 has created low points for drainage. Rockford Road slopes from west to east. Water generally flows to the southeast towards Medicine Lake (DNR PWI No. 51465). The wetlands were located at low points adjacent to I-494, the I-494 ramps, and Rockford Road (**Figure 2**, **Appendix A**).

The *DNR Public Waters and Wetlands Map, Hennepin County, MN* (Minnesota Department of Natural Resources 1983) shows no public waters within the project area **(Figure 3, Appendix A)**.

The National Wetlands Inventory Map (Minnesota Department of Natural Resources) identified several wetlands as part of the National Wetlands Inventory (NWI) (Figure 4, Appendix A). The NWI identifies the following wetland types: PEM1C, PABGx, and PEM1A.

The Soil Survey of Hennepin County, Minnesota (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm) identified the following soils (Table 2) within the project area (Figure 5, Appendix A):

Map Symbol	Soil Unit Name	Percent Hydric	Hydric Rating
L23A	Cordova loam	95	Predominantly hydric
L37B	Angus Ioam	5	Predominantly non- hydric
L36A	Hamel, overwash-Hamel complex	45	Partially Hydric
L22C2	Lester loam	2	Predominantly non- hydric
U3B	Udorthents (cut and fill land)	0	Non-hydric
L22D2	Lester loam	0	Non-hydric
U1A	Urban land- Udorthents wet substratum	0	Non-hydric
L44A	Nessel loam	10	Predominantly non- hydric
L25A	Le Sueur Ioam	15	Predominantly non-

Table 2. Soil Survey

Antecedent Climate Conditions: Historic climate data and WETS data were obtained from the Minnesota Climatology Working Group preceding the September 25, 2018 site visit, which fell within the normal precipitation range. Records of the precipitation can be found in **Appendix D**.

B. On-Site Determination

A Level 2 field investigation was conducted by Roxy Franta (WDC No. 1317) of WSB & Associates, Inc. on September 25, 2018 within the project area. No deviation or omissions were undertaken as part of this investigation.

The project area was delineated using the routine methodology described in the *Corps of Engineers Wetlands Delineation Manual* (US Army Corps of Engineers 1987), with additional guidance provided by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0).* Wetlands were classified according to the methodologies set forth in *Wetlands of the United States (Circular 39)*, USFWS Shaw and Fredine 1971; *Classification of Wetlands and Deepwater Habitats of the United States*, Cowardin 1979; and *Wetland Plants and Plant Communities of Minnesota and Wisconsin, 2nd ed.*, Eggers and Reed 1997. The wetland types in this report are classified by the Circular 39, Cowardin, and Eggers and Reed Classifications.

Soil types were researched prior to the on-site investigation with the assistance of the *Soil Survey* of *Hennepin County* from the National Resources Conservation Service. All soil test pits were excavated to a minimum depth of 24 inches unless otherwise noted. Soil colors were described on-site per the *Munsell Soil Color Charts* (2009 Revised Edition) from the test pits in and adjacent to the wetlands. Hydric soils were identified using the current technical criteria for hydric soils developed by the NRCS in 2017 (Version 8.1). The presence of water was observed after time was allowed for movement of water through the substrate. This time varied depending upon soil characteristics.

The quadrant sampling method was employed for all sample points unless otherwise noted. Vegetation was measured as actual areal cover and may exceed 100 percent of total area due to overlap. Grasses and herbaceous vegetative cover were measured within a circular plot of a 5-foot-radius, all woody shrubs and saplings were measured within a circular plot with a 15-foot-radius, and trees and woody vines were measured in a 30-foot-radius circular plot. Regional plant identification resources were utilized in the identification of plant species, with indicator status taken from the 2016 National Wetland Plant List (US Army Corps of Engineers 2016). Plant species dominance was estimated based on the absolute percent coverage for herbaceous, shrub-sapling, and tree strata if present. In addition to the use of indicators of hydrology, hydric soils, and the presence of hydrophytic vegetation, other evidence such as topographic breaks and watershed characteristics were used to determine the wetland boundary.

Midwest Regional Supplement Routine Wetland Delineation data forms were used to record vegetation, hydrology, and soil characteristics at sample points in and adjacent to the wetlands (**Appendix B**). Sampling transects were taken along the wetland-upland boundary of the wetland. Transects and delineated wetland boundaries were field surveyed using a sub-meter accuracy hand held GPS unit. Approximate sampling points and delineated wetland edges are shown on **Figure 6**, **Appendix B**. Pictures of each wetland can be found in **Appendix C**.

III. Results and Wetland Information

The wetland delineation data forms (**Appendix B**) and photos (**Appendix C**) are attached. A summary of the delineation is below.

A. Wetland 1 Circular 39: Type 1/3/5

Cowardin: PEMA/PEM1C/PUBGx

Eggers and Reed Field Classification: Seasonally Flooded/Shallow Marsh/Open Water **Soil mapping unit:** Cordova loam, 0 to 2 percent slopes (L23A)/Angus loam, 2 to 6 percent

slopes (L37B)

No. Transects: 1 No. Additional Sample Points: 0

Wetland Flags: 10

Wetland Size (within Project Area): 0.30 acre

Wetland 1 is positioned north of Rockford Road to the west of the I-494 interchange. The wetland is adjacent to a paved parking lot to the north which contributes water to the wetland. A retaining wall is adjacent to the south. The wetland is characterized as a shallow marsh on the west end and an open water wetland on the east end. There is a seasonally flooded swale that connects between these two plant community types. The wetland has an overflow at the east edge where water flows overland downhill to Wetland 2. The wetland boundary is outlined in **Figure 6**, **Appendix B**.

Dominant vegetation in the wetland consisted of narrow-leaved cattail (*Typha angustifolia*) and reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Dry-Season Water Table (C2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of green ash (*Fraxinus pennsylvanica*) in the tree stratum and Kentucky bluegrass (*Poa pratensis*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). No hydrology indicators were identified at this sample point.

The wetland boundary was placed along a slight topographic break where there was transition from the presence of wetland hydrology to the lack of wetland hydrology.

B. Wetland 2 Circular 39: Type 2 Cowardin: PEMB

Soil mapping unit: Angus Loam, 2 to 6 percent slopes (L37B)

No. Transects: 1

No. Additional Sample Points: 0

Wetland Flags: 5

Wetland Size (within Project Area): 0.22 acre

Wetland 2 is positioned to the north of Rockford Road and to the west of the southbound exit ramp to Rockford Road, adjacent to the roadway. The wetland is located at the toe of a large hill to the south and a steep roadway slope to the east. Water overflows from Wetland 1 into Wetland 2. A wet ditch (Wet Ditch 1) also flows along the ramp from the south into Wetland 2. The wetland is characterized as fresh (wet) meadow. The wetland boundary is outlined in **Figure 6**, **Appendix B**.

Dominant vegetation in the wetland consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Dry-Season Water Table (C2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of Kentucky bluegrass (*Poa pratensis*) in the herb stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary was placed along a slight topographic break slightly above the toe of the adjacent slopes.

C. Wetland 3
Circular 39: Type 1/3
Cowardin: PEMA/PEMC

Eggers and Reed Field Classification: Seasonally Flooded Basin/Shallow Marsh

Soil mapping unit: Udorthents (cut and fill land) (U3B)

No. Transects: 1

No. Additional Sample Points: 0

Wetland Flags: 0

Wetland Size (within Project Area): 1.8 acres

Wetland 3 is positioned north of Rockford Road and east of the I-494 northbound entrance ramp. A constructed slope to a parking lot is located at the east side of the basin. The wetland has a seasonally flooded, forested perimeter to the north, east, and south. The west side of the wetland is adjacent to the entrance ramp slope. The wetland transitions from the seasonally flooded perimeter to a shallow marsh towards the center. The wetland boundary is outlined in **Figure 6**, **Appendix B**.

Dominant vegetation in the wetland consisted of common buckthorn (*Rhamnus cathartica*) and eastern cottonwood (*Populus deltoides*) in the tree stratum, common buckthorn (*Rhamnus cathartica*) in the herb stratum, and bittersweet nightshade (*Solanum dulcamara*) in the woody vine stratum. Hydric soil indicators consisted of Depleted Below Dark Surface (A11). Hydrology indicators included Water-Stained Leaves (B9).

Dominant vegetation in the upland consisted of box elder (*Acer negundo*) in the tree stratum, box elder (*Acer negundo*) and common buckthorn (*Rhamnus cathartica*) in the sapling/shrub stratum, and Virginia creeper (*Parthenocissus quinquefolia*) in the woody vine stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary was placed along a slight topographic break slightly above the toe of the adjacent slopes.

D. Wetland 4 Circular 39: Type 3 Cowardin: PEMC

Eggers and Reed Field Classification: Shallow Marsh

Soil mapping unit: Urban land-Udorthents, wet substratum, complex (U1A)

No. Transects: 0 No. Additional Sample Points: uphill of connected Wet Ditch 6

Wetland Flags: 7

Wetland Size (within Project Area): 0.54 acre

Wetland 4 is positioned east of the northbound exit ramp to Rockford Road. The wetland is located downhill of Wetland 5, Wet Ditch 6 and Wet Ditch 7. Wetland 4 outlets to the northeast. The wetland is characterized as a shallow marsh. The wetland boundary is outlined in **Figure 6**, **Appendix B**. No sample points were taken at Wetland 4, but wetland and upland sample points were taken at the top of Wetland 5, which contained similar plant community characteristics to Wetland 4.

Dominant vegetation at the wetland sample point consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary of Wetland 4 was placed along a topographic break slightly above the toe of the adjacent slopes.

E. Wetland 5 Circular 39: Type 1

Cowardin: PEMA

Eggers and Reed Field Classification: Seasonally Flooded

Soil mapping unit: Udorthents (cut and fill land) (U3B), Lester Loam (L22C2) **No. Transects:** 0 **No. Additional Sample Points:** uphill of Wet Ditch 6

Wetland Flags: 0

Wetland Size (within Project Area): 0.29 acres

Wetland 5 is positioned east of the northbound exit ramp to Rockford Road. The wetland is located uphill of Wet Ditch 6 and Wetland 4. The wetland is characterized as a seasonally flooded basin. The wetland boundary is outlined in **Figure 6**, **Appendix B**. One sample point was taken at Wetland 5.

Dominant vegetation at the wetland sample point consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary of Wetland 5 was placed along a topographic break slightly above the toe of the adjacent slopes where vegetation transitioned from upland to wetland species.

F. Additional Sampled Areas

No additional areas were sampled.

G. Additional Water Resources

In addition to the wetlands identified within this report, the project area also contained a total of eight wet ditches and two stormwater ponds. The following are descriptions of the additional water resources:

Wet Ditch 1: Wet Ditch 1 is located north of Rockford Road and west of the southbound exit ramp onto Rockford Road. The ditch flows from the corner of these two roadways to the north into Wetland 2. The areas adjacent to the east, west, and south are upland.

<u>Wet Ditch 2</u>: Wet Ditch 2 is located to the west of I-494 and to the east of the I-494 southbound exit ramp to Rockford Road. The ditch is located adjacent to a hill to the west and roadway to the east, both of which are upland areas.

Wet Ditch 3: Wet Ditch 3 is located to the west of I-494 and to the east of the I-494 southbound entrance ramp onto I-494. The ditch is located adjacent to a hill to the west and a roadway to the east, both of which are upland areas.

Wet Ditch 4: Wet Ditch 4 is located to the west of the I-494 southbound entrance ramp onto I-494. The ditch is adjacent to a roadway to the east and a hill to the west, both of which are upland areas.

Wet Ditch 5: Wet Ditch 5 is located to the east of the northbound entrance ramp onto I-494. The wet ditch generally flows from north to south through an upland area into Wetland 3.

Wet Ditch 6: Wet Ditch 6 is located to the east of the northbound exit ramp onto Rockford Road. The ditch generally begins at the bottom of Wetland 5 and flows south through an upland area into Wetland 4.

Wet Ditch 7: Wet Ditch 7 is located to the east of I-494 and south of Wetland 4. The wet ditch generally flows from the south to the north through upland into Wetland 4.

Wet Ditch 8: Wet Ditch 8 is located to the west of the I-494 southbound exit ramp onto Rockford Road. The wet ditch is located between a steep hill and I-494.

Stormwater Pond 1: Pond 1 is located within the interchange to the east of I-494 and to the west of the northbound ramp onto I-494. The area is a shallow marsh near the edges and shallow open water at the center. The stormwater pond was developed within MnDOT right-of-way for drainage. Based on historic aerial photography, the stormwater pond was created in 2015. The pond was excavated from within an upland area. The general stormwater pond area is outlined in white on the photos below.





2014

2015

Stormwater Pond 2: Pond 2 is located within the interchange to the east of I-494 and to the west of the northbound exit ramp onto Rockford Road. The pond is used as an infiltration area by MnDOT and was developed between 2016 and 2017, as shown on aerial photographs. The pond was excavated from within an upland area. The general pond area is outlined in white on the photos below.





2016

SECTION IV

IV. Summary and Closing Statements

Five wetlands, eight wet ditches, and two stormwater ponds were delineated within the project area using the Level 2 method.

The wetland delineation report was completed by Roxy Franta of WSB & Associates, Inc. This delineation report is being submitted as a request for approval of Wetland Type and Boundary of the wetland described herein as well as a No Loss determination for wetland areas which appear to have been incidentally created within upland. The application for Boundary and Type/No Loss Approval is included along with this report.

SECTION V

V. References

The following sources of information were reviewed to assist in performing the wetland delineation.

Literature Sources

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APPENDIX

APPENDIX A

Figure 1: Project Location
Figure 2: Topography
Figure 3: DNR Public Waters Inventory
Figure 4: National Wetlands Inventory Figure 5: Hennepin County Soil Survey

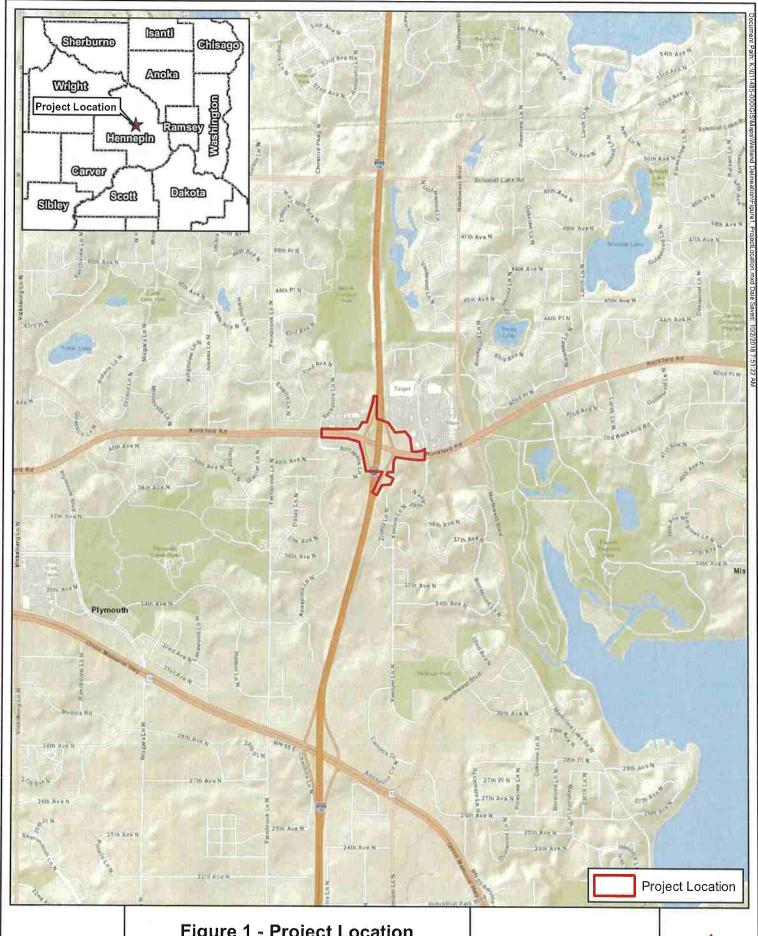
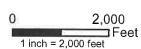




Figure 1 - Project Location







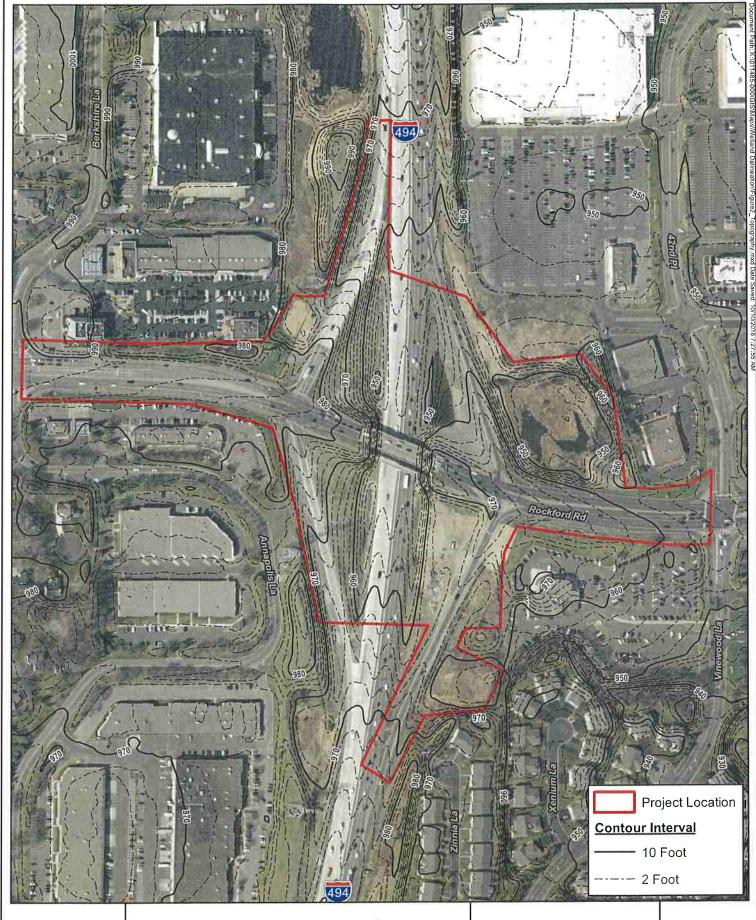




Figure 2 - Topography









Figure 3 - DNR Public Waters Inventory

Plymouth Minnesota









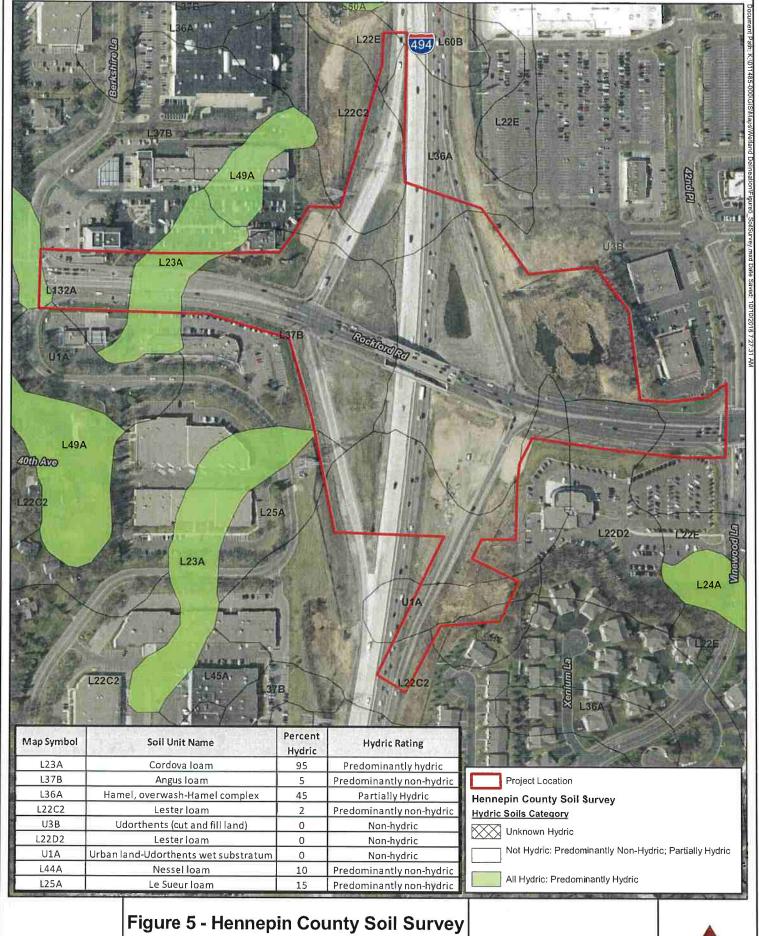


Figure 4 - National Wetlands Inventory

















APPENDIX

APPENDIX B

Figure 6: Wetland Boundary Wetland Determination Data Forms



Figure 6 - Wetland Boundary









WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project Ci	ity/County:	Plymouth/Hei	nnepin Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth	State:	MN		1-Up
Investigator(s): RF	Sect	ion, Townshi		5,118,22
Landform (hillslope, terrace, etc.): Hillslope	Local	relief (concav	re, convex, none):	Linear
Slope (%): 20 Lat: 45.029414	Long:	-93.4557	88 Datum:	WGS 84
Soil Map Unit Name Cordova loam, 0 to 2 percent slopes	_	AMI (Classification:	None
Are climatic/hydrologic conditions of the site typical for this time	e of the year?	Υ (Ι	f no, explain in remarks)	
Are vegetation, soil, or hydrology	significantl	y disturbed?	Are "normal circ	umstances"
Are vegetation , soil , or hydrology	naturally p	roblematic?		present? Yes
SUMMARY OF FINDINGS			(If needed, explain any a	answers in remarks.)
Hydrophytic vegetation present?				
Hydric soil present?	Is the	sampled are	a within a wetland?	N
Indicators of wetland hydrology present? N	f yes, o	ptional wetlar	nd site ID:	
Remarks: (Explain alternative procedures here or in a separate	e report.)			
	rea is mowe	٨		
A	rea is mowe	u.		
VEGETATION Use scientific names of plants.				
Absolut	te Dominan	Indicator	Dominance Test Work	sheet
Tree Stratum (Plot size: 30) % Cove	•	Staus	Number of Dominant Spe	
1 Fraxinus pennsylvanica 10	_ <u> </u>	FACW	that are OBL, FACW, or F	
2	_		Total Number of Domir Species Across all Str	
4			Percent of Dominant Spe	
5			that are OBL, FACW, or F	
	= Total Cove	er		
Sapling/Shrub stratum (Plot size:)			Prevalence Index Worl	ksheet
1	:		Total % Cover of:	ω 1 = 10 0
2			1000	x 1 = 0 x 2 = 20
4		-		x 3 = 285
5				x 4 = 40
0	= Total Cove	er	UPL species 0	x 5 = 0
Herb stratum (Plot size: 5)				(A) <u>345</u> (B)
1 Poa pratensis 95	Y	FAC	Prevalence Index = B/A	= 3.00
2 Glechoma hederacea 5	N	FACU	II. d l d' . V d . d' .	n la dia atauan
3	_ N	FACU FACU	Hydrophytic Vegetatio Rapid test for hydro	
5		17.00	X Dominance test is >	
6			X Prevalence index is	≤3.0*
7			Morphogical adapta	tions* (provide
8	_		supporting data in R	Remarks or on a
9			separate sheet)	10
10	= Total Cove		Problematic hydropl (explain)	nytic vegetation*
Woody vine stratum (Plot size: 30)	10tal COVE	7 1		decided by the time
1			*Indicators of hydric soil and present, unless distu	d wetland hydrology must be urbed or problematic
2			Hydrophytic	
0	= Total Cove	er	vegetation	V
	.,		present?	
Remarks: (Include photo numbers here or on a separate sheet	t)			

SOIL								Sampling Point: 1-Up
		ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the ab	sence of indicators.)
Depth	Matrix			dox Feat				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR 2/1	100					Clay Loam	
6-9	10YR 2/1	98	10YR 4/6	2	С	М	Clay Loam	
9-12	10YR 2/1	80	10YR 4/6	10	С	М	Clay Loam	
			10YR 6/3	10	D	М	Clay Loam	Fill
Type: C = 0	Concentration, D	= Depleti	ion, RM = Reduce	ed Matrix	. MS = N	L Aasked S	and Grains **Lo	cation: PL = Pore Lining, M = Matrix
	il Indicators:		,		.,	TOOTION C		Problematic Hydric Soils:
_	isol (A1)		Sar	ndy Gleve	ed Matrix	(S4)		e Redox (A16) (LRR K, L, R)
	ic Epipedon (A2)			ndy Redo		(- //		e (S7) (LRR K, L)
Blad	ck Histic (A3)			pped Ma				nese Masses (F12) (LRR K, L, R)
—— Hyd	rogen Sulfide (A	4)			ky Minera	al (F1)		w Dark Surface (TF12)
Stra	tified Layers (A5)		-	ed Matrix	, ,		ain in remarks)
	n Muck (A10)				atrix (F3)			
	leted Below Dark				Surface			
	k Dark Surface (,			ark Surfa		*Indicators of	hydrophytic vegetation and weltand
	dy Mucky Minera			dox Depr	essions ((F8)	hydrology m	ust be present, unless disturbed or
5 cr	n Mucky Peat or	Peat (S3)					problematic
	Layer (if observ	ed):						
Type: Fi					in I		Hydric soil pr	esent? Y
Depth (inche	s): 12							s >
HYDROLO								
	drology Indicate							
		of one is	required; check	all that a	(ylag		Secondar	y Indicators (minimum of two require
	Nater (A1)				Fauna (B			face Soil Cracks (B6)
	ter Table (A2)				uatic Plar	,		inage Patterns (B10)
Saturatio						Odor (C		-Season Water Table (C2)
Water Ma	t Deposits (B2)				Rnizosp	neres on		yfish Burrows (C8)
	osits (B3)			(C3) Presenc	e of Redu	uced Iron		uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1)
	t or Crust (B4)							omorphic Position (D2)
	osits (B5)			(C6)				C-Neutral Test (D5)
Inundatio	n Visible on Aeria	l Imagery	(B7)	Thin Mu	ck Surfac	e (C7)		(= -,
	Vegetated Conca		ce (B8)	Gauge o	r Well Da	ata (D9)		
-	ained Leaves (B9)		Other (E	xplain in	Remarks)	
ield Obser								
urface wate		Yes	No	X	Depth (i			
Vater table p		Yes	No No	X	Depth (i	,		Indicators of wetland
aturation pr	esent? villary fringe)	Yes	No	X	Depth (i	nches):		hydrology present? N
escribe rec	orded data (strea	ım gauge	e, monitoring well	, aerial p	notos, pr	revious ir	nspections), if availab	le:
emarks:								

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project	City/Co	ounty: P	lymouth/Hei	nnepin	Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth	•	State:	MN		Sampling Point:	1-Wet
Investigator(s): RF		— Section	on, Township	p, Range:	15	118, 22
Landform (hillslope, terrace, etc.): Toeslope		Local re	elief (concav	e, convex	, none):	Concave
Slope (%): 0 Lat: 45.029414		Long:	-93.4557	88	Datum:	WGS 84
Soil Map Unit Name Cordova loam, 0 to 2 percent slopes			/WI	Classificat	tion:	PEM1C
Are climatic/hydrologic conditions of the site typical for this	time of t	he year?	Y (I	f no, expla	ain in remarks)	
Are vegetation , soil , or hydrology	;	significantly	disturbed?		Are "normal circu	ımstances"
Are vegetation , soil , or hydrology		naturally pro	oblematic?			present? No
SUMMARY OF FINDINGS				(If need	led, explain any a	nswers in remarks.)
Hydrophytic vegetation present?						
Hydric soil present?		Is the sa	ampled are	a within a	wetland?	Υ
Indicators of wetland hydrology present?		f yes, op	tional wetlar	nd site ID:	Wetland 1	
Remarks: (Explain alternative procedures here or in a sepa	arate rep	ort.)				
There is a parking lot to the north and a retai	ining w	all to the	south. Muc	ch of the	surrounding ar	ea is mowed.
VEGETATION Use scientific names of plants.						
	solute	 Dominan	Indicator	Domina	ance Test Works	heet
		t Species	Staus		of Dominant Spec	
					OBL, FACW, or FA	
2					Number of Domin	
3					cies Across all Stra	S
4					of Dominant Spec	
5	0 =	Total Cover		that are	OBL, FACVV, OF FA	AC: 100.00% (A/B)
Sapling/Shrub stratum (Plot size: 15)		rotal Cover		Prevale	ence Index Work	sheet
1					Cover of:	
2				OBL sp	ecies 85	x 1 = 85
3				FACW	species 30	x 2 = 60
4				FAC sp		x 3 = 45
5					2000	×4 =0
1	0 =	Total Cover		UPL sp Column		x 5 = 0 (A) 190 (B)
Herb stratum (Plot size: 5)	70		OPI			10 To 100 To
	70 30	- Y	FACW	Prevale	ence Index = B/A =	1.46
	15	N	FAC	Hydror	ohytic Vegetation	Indicators:
	15	N	OBL		pid test for hydrop	
5				X Doi	minance test is >5	50%
6				X Pre	evalence index is	≤3.0*
7					rphogical adaptat	
8				,	pporting data in Re	emarks or on a
9					parate sheet)	
10	130 =	Total Cover			blematic hydroph plain)	ytic vegetation*
Woody vine stratum (Plot size: 30)	-	Total Cove				the discount of the second by
1				*Indicat	tors of hydric soil and present, unless distui	wetland hydrology must be rbed or problematic
2					drophytic	
	0 =	Total Cover			getation	
				pre	esent? Y	
Remarks: (Include photo numbers here or on a separate sh	heet)					
I .						

Sampling Point: 1-Wet

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the al	osence of indicators.)
Depth	Matrix			dox Feat				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR 2/1	100	10YR 4/6	2	С	М	Sandy Clay Loam	
6-18	10YR 2/1	95	10YR 4/6	5	С	М	Sandy Clay Loam	
0 10	1011(2)1	- 55	1011(4/0		34	IVI	Sandy Clay Loan	
				_				
	Concentration, D	= Depleti	on, RM = Reduc	ed Matrix	, MS = N	Masked S	Sand Grains. **L	ocation: PL = Pore Lining, M = Matrix
Hydric Sc	oil Indicators:						Indicators for	Problematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gleye	ed Matrix	(S4)	Coast Prair	rie Redox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sar	ndy Redo	x (S5)			ce (S7) (LRR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Manga	nnese Masses (F12) (LRR K, L, R)
—— Hyd	drogen Sulfide (A	4)		amy Mucl	, ,	al (F1)		ow Dark Surface (TF12)
Stra	atified Layers (A5)		amy Gley	•	` '		ain in remarks)
	m Muck (A10)	•		pleted Ma		. ,		
	oleted Below Dark	Surface		dox Dark				
	ck Dark Surface (pleted Da		, ,	*Indicators o	f hydrophytic vegetation and weltand
	ndy Mucky Minera			dox Depr				nust be present, unless disturbed or
	n Mucky Peat or			aox Bopi	03310113	(1 0)	riyarology ii	problematic
			,					problematic
	Layer (if observe	ed):						
Гуре: Fi							Hydric soil p	resent? Y
Depth (inche	es):18"							
HYDROLO								
Wetland Hy	drology Indicate	rs:						
	cators (minimum		required: check	all that a	nnly)		Seconda	ry Indicators (minimum of two required
	Water (A1)	01 0110 10	roquirou, criook		Fauna (B	13)		rface Soil Cracks (B6)
	ter Table (A2)				uatic Plar			` '
Saturation						Odor (C		ainage Patterns (B10) y-Season Water Table (C2)
	arks (B1)		-			,		ayfish Burrows (C8)
	nt Deposits (B2)			(C3)	1 (111203p	116163 011		sturation Visible on Aerial Imagery (C9)
	posits (B3)			_	e of Red	iced Iron		unted or Stressed Plants (D1)
	t or Crust (B4)							eomorphic Position (D2)
	osits (B5)			(C6)	Torritodo	odon m i		C-Neutral Test (D5)
	on Visible on Aeria	l Imagery	(B7)	_	ck Surfac	e (C7)		to Neutral Test (D5)
	Vegetated Conca			-	r Well Da			
	tained Leaves (B9			-		Remarks	3	
ield Obser				- ()	,		<u> </u>	
Surface water		Yes	No	X	Depth (i	nchee).		
Nater table		Yes	X No		Depth (i		16"	Indicators of wetland
Saturation p		Yes	X No		Depth (i		12"	hydrology present?
	oillary fringe)	100			Depui (i	nones).		nydrology present?
		m aqua	- manitaring wall	م امام م	L-4			11
Jeschbe rec	orded data (Strea	ını gauge	e, monitoring wei	i, aeriai p	inotos, p	revious II	nspections), if availa	bie:
Remarks:								

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project City	y/County: I	Plymouth/He	nnepin Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth	State:	MN	Sampling Point:	2-Up
Investigator(s): RF	Sect	ion, Townshi	p, Range: 1	5,118,22
Landform (hillslope, terrace, etc.):	Local	relief (concav	ve, convex, none):	Linear
Slope (%): 0 Lat: 45.029414	Long:	-93.4557	88 Datum:	WGS 84
Soil Map Unit Name Hamel, overwash-Hamel complex, 0 to 3 per	ercent slopes	JWI	Classification:	None
Are climatic/hydrologic conditions of the site typical for this time	of the year?	Y (If no, explain in remarks)	
Are vegetation, soil, or hydrology	significantl	y disturbed?	Are "normal circ	cumstances"
Are vegetation , soil , or hydrology	naturally p	roblematic?		present? No
SUMMARY OF FINDINGS			(If needed, explain any a	answers in remarks.)
Hydrophytic vegetation present?				
Hydric soil present? N	Is the	sampled are	a within a wetland?	N
Indicators of wetland hydrology present? N	f yes, o	otional wetlar	nd site ID: PEM1A	
Remarks: (Explain alternative procedures here or in a separate	report.)			
N.	Mowed area	•		
VEGETATION Use scientific names of plants.				
Absolute	e Dominan	Indicator	Dominance Test Work	sheet
Tree Stratum (Plot size: 30 % Cover	r t Species	Staus	Number of Dominant Spe	
1			that are OBL, FACW, or F	
3	-,		Total Number of Domin Species Across all Str	
4		-	Percent of Dominant Spe	
5	->		that are OBL, FACW, or F	
0	= Total Cove	er		
Sapling/Shrub stratum (Plot size: 15)	=:		Prevalence Index World	ksheet
1			Total % Cover of:	- S
2	-:		OBL species 0 FACW species 0	x 1 = 0 x 2 = 0
4				x3 = 294
5		$\overline{}$	FACU species 4	x 4 = 16
0	= Total Cove	er	UPL species 0	x5= 0
Herb stratum (Plot size: 5)	->		Column totals 102	(A) 310 (B)
1 Poa pratensis 98	Υ	FAC	Prevalence Index = B/A	= 3.04
2 Trifolium repens 2	N	FACU		
3 Cirsium arvense 2	N	FACU	Hydrophytic Vegetatio	
4			Rapid test for hydro X Dominance test is >	
5 6			Prevalence index is	
7	-8		Morphogical adapta	
8			supporting data in F	
9			separate sheet)	
10			Problematic hydrop	hytic vegetation*
102	= Total Cove	er	(explain)	
Woody vine stratum (Plot size: 30)				d wetland hydrology must be urbed or problematic
2			Hydrophytic	arbed of problematic
	= Total Cove	er	vegetation	
			present?	<u>Y</u>
Remarks: (Include photo numbers here or on a separate sheet)			3772	

Sampling Point:

2-Up

Depth	<u>Matrix</u>		Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	ire	Remarks
0-6	10YR 2/1	100					Loam		
6-12	10YR 2/2	100					Loam		
						 			
				-					
				ļ					
ype: C = (Concentration, D	= Depleti	ion, RM = Reduc	ed Matri	x. MS = N	/lasked S	Sand Grains.	**Location	on: PL = Pore Lining, M = Matrix
	il Indicators:				,				lematic Hydric Soils:
	isol (A1)		Sa	ndv Glev	ed Matrix	(S4)			edox (A16) (LRR K, L, R)
	ic Epipedon (A2)			ndy Red		- ()			7) (LRR K, L)
	ck Histic (A3)			-	atrix (S6)				Masses (F12) (LRR K, L, R)
-	rogen Sulfide (A	1)			ky Minera	al (F1)		_	ark Surface (TF12)
	tified Layers (A5)				ed Matrix			(explain in	
	n Muck (A10)				atrix (F3)			, F	,
	leted Below Dark	Surface		-	Surface				
	k Dark Surface (ark Surfa		*Indica	tors of hyd	rophytic vegetation and weltand
—— Sar	dy Mucky Minera	I (S1)			ressions (be present, unless disturbed or
5 cr	n Mucky Peat or	Peat (S3		·		` ,	,	3)	problematic
strictive	Layer (if observe	2d):							
SHICHVE	Layer (III observi	∍uj.				I.	1000000		-42 N
ne. Fi	II						المناهدين الماسات	!!	
					-		Hydric	soil prese	nt? N
epth (inche					-		Hydric :	soil prese	nt?N
epth (inche	es): <u>12"</u>				-		Hydric :	soil prese	nt?N
pth (inche	es): 12"	ors:			-		Hydric :	soil prese	nt?IN
epth (inche emarks: YDROLO etland Hy	DGY drology Indicate		reauired: check	all that a	- - (vlgg				
epth (inche emarks: YDROLO etland Hy imary India	DGY drology Indicate		required; check			813)		condary In	dicators (minimum of two requi
YDROLO etland Hy mary India	DGY drology Indicate		required; check	Aquatic	Fauna (B			condary In Surface	dicators (minimum of two requi Soil Cracks (B6)
Pth (inches marks: PDROLC etland Hy mary India Surface	DGY drology Indicator cators (minimum Water (A1) ter Table (A2)		required; check	Aquatic True Ac	Fauna (B Juatic Plar	nts (B14)	<u>Se</u>	condary In Surface Drainag	dicators (minimum of two requi Soil Cracks (B6) e Patterns (B10)
pth (inche marks: /DROLO etland Hy mary India Surface High Wa Saturatio	DGY drology Indicator cators (minimum Water (A1) ter Table (A2)		required; check	Aquatic True Ac Hydroge	Fauna (B Juatic Plar en Sulfide	nts (B14) Odor (C	<u>Se</u>	condary In Surface Drainag Dry-Sea	dicators (minimum of two requi Soil Cracks (B6) e Patterns (B10) ason Water Table (C2)
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WETLAND DETERMINATION DATA FORM - Midwest Region

Applicant/Coverer City of Plymouth State	Project/Site CSAH 9/I-494 Interchange Project City	y/County: I	Plymouth/Her	nnepin Sampling Date:	9/25/18
Local relief (concave, convex, none): None	Applicant/Owner: City of Plymouth	State:	MN	Sampling Point:	2-Wet
Slope (%): 0	Investigator(s): RF	Sect	ion, Township	o, Range:	5,118,22
Soll Map Unit Name Hamel, overwash-Hamel complex, O to 3 percent slopes Are climatichydrologic conditions of the site typical for this time of the year? Y (fro, explain in remarks) Are vegetation , soil , or hydrology significantly disturbed? Are "normal circumstances" present? (if needed, explain any answers in remarks.) SUMMARY OF FINDINGS SUMMARY OF FINDINGS With classification: Y Hydrolydrology Are "normal circumstances" present? (if needed, explain any answers in remarks.) Hydrolydrology expeatance Hydrolydrology present? Y Is the sampled area within a wetland? Y Findicators of wetland hydrology present? YEGETATION - Use scientific names of plants. VEGETATION - Use scientific names of plants. VEGETATIO	Landform (hillslope, terrace, etc.): Toeslope	Local	relief (concav	e, convex, none):	None
Are climatichydrologic conditions of the site typical for this time of the year? Y (iff no, explain in remarks) Are vegetation	Slope (%): 0 Lat: 45.029414	Long:	-93.45578	B8 Datum:	WGS 84
Are vegetation soil or hydrology naturally problematic? Are vegetation soil or hydrology naturally problematic? Hydrophylic vegetation present? Hydrophylic vegetation present? Hydric soil present in the semants. Hydric soil present in the semants in the semants is not a separate report. Hydric soil present in the semants. Hydric soil present in the semants in the semants is not a separate report. Hydric soil present in the semants is not a separate report. Hydric soil present in the semants is not a separate report. Hydric soil present, leads in the semants is not a separate report. Hydric soil present, leads in the semants is not a separate report. Hydric soil present, leads in the semants is not a separate report. Hydric soil present, l	Soil Map Unit Name Hamel, overwash-Hamel complex, 0 to 3 per	ercent slopes	1WI C	Classification:	
Are vegetation soil not by the subman of the stratum (Plot size: 15) and the subman of the stratum (Plot size: 15) and the subman of the stratum (Plot size: 5) and the subman of the stratum (Plot size: 5) and the subman of the stratum (Plot size: 5) and the subman of the stratum (Plot size: 5) and the subman of the stratum (Plot size: 5) and the subman of the stratum (Plot size: 5) and the subman of the stratum (Plot size: 5) and the subman of the subman of the stratum (Plot size: 5) and the subman of the	Are climatic/hydrologic conditions of the site typical for this time	of the year?	<u>Y</u> (l	f no, explain in remarks)	
Hydrophytic vegotation present? Y	Are vegetation, soil, or hydrology	significantl	y disturbed?	Are "normal circ	umstances"
Hydrophytic vegetation present?	Are vegetation, soil, or hydrology	naturally p	roblematic?		-
Hydric soil present? Y Y		mr.		(If needed, explain any a	answers in remarks.)
Indicators of wetland hydrology present? Y					
VEGETATION Use scientific names of plants.	-		· ·		
VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30) Absolute Cover to Species Dominan Indicator Status Dominant Indicator Status Dominant Species Indicator Status Number of Dominant Species Indicator Status Number of Dominant Species Indicator Indicator Indicator Species Indicator Species Indicator Indicator Indicator I	Indicators of wetland hydrology present? Y	f yes, o	otional wetlan	d site ID: PEM1A	
Absolute Norman Indicator Status Number of Dominant Species Status Species Status Number of Dominant Species Status Species Status Number of Dominant Species Status Status Species Status Status Species Status	Remarks: (Explain alternative procedures here or in a separate	report.)			
Absolute Norman Indicator Status Number of Dominant Species Status Species Status Number of Dominant Species Status Species Status Number of Dominant Species Status Status Species Status Status Species Status					
Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)	VEGETATION Use scientific names of plants.				
that are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species charts are OBL, FACW, or FAC: 1 (B) Fercent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B) Sapling/Shrub stratum (Plot size: 15) Sapling/Shrub stratum (Plot size: 15) Left Stratum (Plot size: 5) Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B) Prevalence Index Worksheet Total % Cover of: OBL species 0 x1 = 0 FACW species 17 x3 = 51 FAC species 17 x3 = 51 FACU species 0 x4 = 0 UPL species 0 x5 = 0					
Species Across all Strata: 1 (B)	Tree Stratum (Plot size:30) % Cover	r t Species	Staus		
Sapling/Shrub stratum (Plot size: 15) O = Total Cover Prevalence Index Worksheet Total % Cover of: OBL species O x 1 = O FACW species 100 x 2 = 200 FACW species 100 x	2	-1			
Sapling/Shrub stratum (Plot size: 15)	4	_:			
Prevalence Index Worksheet Total % Cover of: OBL species 0	5			that are OBL, FACW, or F.	AC: 100.00% (A/B)
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Perb stratum	5				
1 Phalaris arundinacea 95 Y FACW Prevalence Index = B/A = 2.15 2 Poa pratensis 15 N FACW Hydrophytic Vegetation Indicators:	0	= Total Cove	er		
2 Poa pratensis 15 N FACW 3 Solidago gigantea 5 N FACW 4 ————————————————————————————————————	Herb stratum (Plot size: 5)			Column totals 117	(A) 251 (B)
3 Solidago gigantea 5 N FACW 4 S SOLIDAGO GIGANTES 5 N FACW 5 Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is ≤3.0* Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30) 1 Solanum dulcamara 2 FAC PRACE PHydrophytic vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is ≤3.0* Problematic supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation present? Y	1 Phalaris arundinacea 95	Y	FACW	Prevalence Index = B/A	= 2.15
Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is ≤3.0* Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30) Solanum dulcamara 2 FAC FAC Hydrophytic Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation present? Y					
X Dominance test is >50% X Prevalence index is ≤3.0* Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)	3 Solidago gigantea 5	_ <u>N</u>	FACW_		
X Prevalence index is ≤3.0* X Prevalence index is ≤3.0* Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) Y	4				
Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30) Solanum dulcamara 2 FAC PAC Present, unless disturbed or problematic Hydrophytic vegetation Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation present? Y	6	=:			
8 supporting data in Remarks or on a separate sheet) 10 Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic 2 FAC Hydrophytic vegetation present? Y	7			· · · · · ·	
Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic *Indicators of hydrophytic *Indicators of hydro	8				
Moody vine stratum (Plot size: 30) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	9			separate sheet)	
Woody vine stratum (Plot size: 30) 1 Solanum dulcamara 2 FAC 2 = Total Cover Present, unless disturbed or problematic vegetation present? Y	1000	= Total Cove	er .		nytic vegetation*
1 Solanum dulcamara 2 FAC present, unless disturbed or problematic Hydrophytic vegetation present? Y		-7		1.	wetland hydrology must be
2 = Total Cover vegetation present? Y			FAC		
present? Y	2				
Remarks: (Include photo numbers here or on a separate sheet)	2	= Total Cove	er		<u>Y</u>
	Remarks: (Include photo numbers here or on a separate sheet)				

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Sampling Point:

2-Wet

Profile Des	cription: (Descr	ibe to th	e depth needed	l to docu	ment the	e indicat	or or confirm the ab	sence of indicators.)
Depth	Matrix			dox Feat				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10YR 2/1	95	10YR 5/8	5	С	М	Mucky Loam	
5-18	10YR 2/1	60	10YR 7/1	30	D	M		
3-10	10111 2/1	00			_		Clay Loam	
			10YR 5/8	10	С	М	Clay Loam	
18-24	10YR 2/1	100					Clay Loam	
						-		
				-				
*Type: C = 0	Concentration, D	= Depleti	ion, RM = Reduc	ed Matrix	c, MS = N	Masked S	Sand Grains. **Lo	cation: PL = Pore Lining, M = Matrix
	oil Indicators:							roblematic Hydric Soils:
His	tisol (A1)		Sa	ndy Gley	ed Matrix	(S4)		e Redox (A16) (LRR K, L, R)
	tic Epipedon (A2)			ndy Redo		,		e (S7) (LRR K, L)
	ck Histic (A3)			ipped Ma				nese Masses (F12) (LRR K, L, R)
	drogen Sulfide (A4	4)		amy Mucl	, ,	al (F1)		w Dark Surface (TF12)
	atified Layers (A5	•		amy Gley	•	, ,		nin in remarks)
	m Muck (A10)	,		pleted Ma			— Other (expire	III III Temanoj
	oleted Below Dark	Surface		dox Dark				ì
	ck Dark Surface (pleted Da			#10 P 1 6	1 6 1 6 1 6 1 6 1
	ndy Mucky Minera							hydrophytic vegetation and weltand
				dox Depr	essions	(18)	nyarology m	ust be present, unless disturbed or
	m Mucky Peat or	Peat (53)					problematic
Restrictive	Layer (if observe	ed):						
Туре:							Hydric soil pr	esent? Y
Depth (inche	es):				•			
Remarks:								
i vernans.								
HYDROL								
Wetland Hy	drology Indicate	ors:						
Primary Indi	cators (minimum	of one is	required; check	all that a	(ylqq		Secondar	y Indicators (minimum of two required)
	Water (A1)				Fauna (B	313)		face Soil Cracks (B6)
	iter Table (A2)				uatic Plar	•		inage Patterns (B10)
Saturation			-			Odor (C		-Season Water Table (C2)
1	larks (B1)			_				yfish Burrows (C8)
	nt Deposits (B2)			(C3)				uration Visible on Aerial Imagery (C9)
	posits (B3)		_		e of Red	uced Iron		nted or Stressed Plants (D1)
	at or Crust (B4)			_				omorphic Position (D2)
	oosits (B5)			(C6)			Annual Control of the	C-Neutral Test (D5)
	on Visible on Aeria	l Imagery	(B7) —	_	ck Surfac	ce (C7)		3,104,4,7,5
	Vegetated Conca		ESTATE TO STATE OF THE PARTY OF	_	or Well Da			
	tained Leaves (B9			_		Remarks	;)	
Field Obser			-	- '			·	
Surface wat		Yes	No	Х	Depth (inches).		
Water table		Yes	X No		Depth (12	Indicators of wotland
Saturation p		Yes	X No			inches):	12	Indicators of wetland
	pillary fringe)	165		-	- pehm (mones).		hydrology present? Y
		_				. 10		
Describe red	corded data (strea	am gauge	e, monitoring we	II, aerial p	onotos, p	revious i	nspections), if availab	ole:
D								
Remarks:								

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project City	y/County: F	Plymouth/Her	nnepin Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth	State:	MN	Sampling Point:	3-Up
Investigator(s): RF	Secti	on, Township	, Range: 15	,118,22
Landform (hillslope, terrace, etc.): Hillslope	Local r	elief (concav	e, convex, none):	Linear
Slope (%): 30 Lat: 45.029414	Long:	-93.45578	38 Datum:	WGS 84
Soil Map Unit Name Hamel, overwash-Hamel complex, 0 to 3 per	ercent slopes		Classification:	None
Are climatic/hydrologic conditions of the site typical for this time	of the year?	<u>Y</u> (It	no, explain in remarks)	
Are vegetation, soil, or hydrology	significantly	disturbed?	Are "normal circu	ımstances"
Are vegetation, soil, or hydrology	naturally pr	oblematic?		present? Yes
SUMMARY OF FINDINGS	-r		(If needed, explain any a	nswers in remarks.)
Hydrophytic vegetation present? Y			15 64	
Hydric soil present?			within a wetland?	N
Indicators of wetland hydrology present? N	f yes, op	tional wetlan	d site ID: PEM1A	
Remarks: (Explain alternative procedures here or in a separate	report.)			
Constructed slo	ope adiacent	to parking	lot.	
00/10/140100 0/10		. то рапти. Э		
VEGETATION Use scientific names of plants.				
Absolute		Indicator	Dominance Test Works	
Tree Stratum (Plot size: 30) % Covel 1 Acer negundo 80	r t Species Y	Staus FAC	Number of Dominant Spec that are OBL, FACW, or FA	
2	-100		Total Number of Domina	
3			Species Across all Stra	
4			Percent of Dominant Spec	
5			that are OBL, FACW, or FA	AC: 75.00% (A/B)
80 Sapling/Shrub stratum (Plot size: 15)	= Total Cove	r	Prevalence Index Work	shoot
Sapling/Shrub stratum (Plot size: 15) 1 Acer negundo 10	Υ	FAC	Total % Cover of:	Silect
2 Rhamnus cathartica 10	- '	FAC		x 1 = 0
3			FACW species 0	x 2 = 0
4				x 3 =300
5	- 			x 4 =
	= Total Cove	r		6.5 = 0 (A) 320 (B)
Herb stratum (Plot size: 5			Prevalence Index = B/A =	
			Frevalence muex - b/A	
3	-13:	====	Hydrophytic Vegetation	Indicators:
4			Rapid test for hydrop	
5			X Dominance test is >5	
6			Prevalence index is s	
7	-0		Morphogical adaptati	**
8			supporting data in Re separate sheet)	emarks or on a
10			Problematic hydroph	vtic vegetation*
0	= Total Cove	r	(explain)	
Woody vine stratum (Plot size: 30)			*Indicators of hydric soil and	wetland hydrology must be
1 Parthenocissus quinquefolia 5	_ Y	FACU	present, unless distur	bed or problematic
2	- Tatal Caus		Hydrophytic vegetation	
5	= Total Cove	r	present? Y	
Remarks: (Include photo numbers here or on a separate sheet)				
,				

Depth

(Inches)

0-24

Sampling Point: 3-Up Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Features Color (moist) % Loc** Color (moist) Type* Texture Remarks 10YR 2/2 100 Loam Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: Histisol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L) Black Histic (A3) Iron-Manganese Masses (F12) (LRR K, L, R) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) 2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and weltand Sandy Mucky Mineral (S1) Redox Depressions (F8) hydrology must be present, unless disturbed or 5 cm Mucky Peat or Peat (S3) problematic Restrictive Layer (if observed): Hydric soil present? Depth (inches):

HYDROLOGY

Type:

Remarks:

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check	all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water-Stained Leaves (B9)	Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Field Observations: Surface water present? Yes No Water table present? Yes No Saturation present? Yes No (includes capillary fringe)	X Depth (inches): X Depth (inches): X Depth (inches):	Indicators of wetland hydrology present? N
Describe recorded data (stream gauge, monitoring well	I, aerial photos, previous inspections)	, if available:
Remarks:		

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project	City/County:	Plymouth/Hei	nnepin Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth	State:	MN		3-Wet
Investigator(s): RF	Sect	ion, Townshi	p, Range:	5,118,22
Landform (hillslope, terrace, etc.): Hillslope	Local	relief (concav	ve, convex, none):	Concave
Slope (%): 20 Lat: 45.029414	Long:	-93.4557	88 Datum:	WGS 84
Soil Map Unit Name Udorthents (cut and fill land), 0 to 6 per	ent slopes	/WI	Classification:	None
Are climatic/hydrologic conditions of the site typical for this ti	me of the year?	Υ (Ι	f no, explain in remarks)	
Are vegetation , soil , or hydrology	significantl	ly disturbed?	Are "normal circ	umstances"
Are vegetation , soil , or hydrology	naturally p	roblematic?		present?_Yes_
SUMMARY OF FINDINGS			(If needed, explain any a	answers in remarks.)
Hydrophytic vegetation present?				
Hydric soil present?	Is the	sampled are	a within a wetland?	Υ
Indicators of wetland hydrology present?	f yes, o	ptional wetlar	nd site ID: PEM1C	
Remarks: (Explain alternative procedures here or in a separa	ate report.)			
	,			
VEGETATION Use scientific names of plants.				
Abso	lute Dominan	Indicator	Dominance Test Works	sheet
Tree Stratum (Plot size: 30) % Co	over t Species	Staus	Number of Dominant Spec	
1 Rhamnus cathartica 85		FAC	that are OBL, FACW, or Fa	AC:(A)
2 Populus deltoides 70) Y	FAC	Total Number of Domir	
3	_	·——	Species Across all Stra	· · ·
5			Percent of Dominant Specthat are OBL, FACW, or Face	
15	5 = Total Cove	er er		(**2)
Sapling/Shrub stratum (Plot size: 15)			Prevalence Index Work	sheet
1		,	Total % Cover of:	
2				x 1 =0
3				x 2 = 0
5				$\begin{array}{ccc} $
	= Total Cove	er er		x5= 0
Herb stratum (Plot size: 5)		51		(A) 726 (B)
1 Rhamnus cathartica 85	5 Y	FAC	Prevalence Index = B/A	25.540
2				
3			Hydrophytic Vegetation	n Indicators:
4			Rapid test for hydro	
5			X Dominance test is >	
6			X Prevalence index is	
8			Morphogical adapta supporting data in R	
9		·	supporting data in K	emarks or on a
10			Problematic hydroph	nvtic vegetation*
85	= Total Cove	er	(explain)	, ,
Woody vine stratum (Plot size: 30)			*Indicators of hydric soil and	wetland hydrology must be
1 Solanum dulcamara 2		FAC	present, unless distu	irbed or problematic
2			Hydrophytic vegetation	
2	= Total Cove	er	present?	/
Remarks: (Include photo numbers here or on a separate she	et)			
Tromaino. (moidde priote nambers nere of on a separate she				

Sampling Point:

3-Wet

Depth	Profile Des	cription: (Descri	ibe to th	e depth needed	to docu	ment the	indicat	or or confirm the a	bsence of indicators.)
0-3 10YR 2/1 100									
3-9 10YR 2/2 98 10YR 6/1 2 D M Loam 9-24 10YR 4/1 98 10YR 7/8 2 C M Sandy Loam Type: C = Concentration, D = Dopletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Network of the Phydric Soil Indicators: Histisol (A1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S5) Dark Surface (S7) (LRR K, L, R) Histisol (A2) Sandy Matrix (S5) Dark Surface (S7) (LRR K, L) Inon-Managanese Masses (F12) (LRR K, L, Very Shallow Dark Surface (S7) (LRR K, L) Inon-Managanese Masses (F12) (LRR K, L) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) Depleted Matrix (F3) Depleted Matrix (F3) Charm Surface (F12) Depleted Matrix (F3) Charm Surface (F12) Depleted Dark Surface (F12) Thick Dark Surface (A11) Redox Depressions (F8) Thick Dark Surface (A12) Depleted Dark Surface (F7) Redox Depressions (F8) Thick Dark Surface (A12) Depleted Dark Surface (F7) Thick Dark Surface (A12) The Aquatic Feature (B13) Surface (A12) The Aquatic Feature (B13) Surface (A12) Depleted Dark Surface (F1) Depleted Dark Surface (F1) Thick Dark Surface (F1) Thick Dark Surface (F1) Thick Dark Surface (F1) Depleted (A12) Depleted Dark Surface (F1) Depleted (A12) Surface (F1) Depleted (A12) De	(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
3-9 10VR 2/2 98 10VR 6/1 2 D M Loam 9-24 10VR 4/1 98 10VR 7/8 2 C M Sandy Loam "Type: C = Concentration, D = Deplation, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = N	0-3	10YR 2/1	100					Loam	
9-24 10VR 4/1 96 10VR 7/8 2 C M Sandy Loam Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = N Hydric Soil Indicators:	3-9	10YR 2/2	98	10VR 6/1	2	D	M		
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = N Hydric Soli Indicators: Hististo (A1)									
Hydric Soil Indicators: Histisol (A1) Sandy Gleyed Matrix (S4) Histisol (A2) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Sturface (F12) (LRR K, L, Very Shallow Sturface (F12) (LRR K, L) (F12) (Very Shallow Sturface (F12) (LRR K, L) (F12) (LR K,	9-24	101K 4/1	98	10YR //8	2	C	IV!	Sandy Loam	
Hydric Soil Indicators: Histisol (A1) Sandy Gleyed Matrix (S4) Histisol (A2) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Sturface (F12) (LRR K, L, Very Shallow Sturface (F12) (LRR K, L) (F12) (Very Shallow Sturface (F12) (LRR K, L) (F12) (LR K,									
Hydric Soil Indicators: Histisol (A1) Sandy Gleyed Matrix (S4) Histisol (A2) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Sturface (F12) (LRR K, L, Very Shallow Sturface (F12) (LRR K, L) (F12) (Very Shallow Sturface (F12) (LRR K, L) (F12) (LR K,									
Hydric Soil Indicators: Histsol (A1) Histo Epipedon (A2) Black Histo (A3) Stripped Matrix (S6) Loamy Gleyed Matrix (S6) Phydrogen Sulfide (A4) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Thick Dark Surface (A11) Beleated Below Dark Surface (A11) Thick Dark Surface (A12) Beleated Below Dark Surface (A11) Beleated Below Dark Surface (A12) Beleated Below Dark Surface (A12) Beleated Matrix (F3) Thick Dark Surface (A12) Beleated Below Dark Surface (F6) Thick Dark Surface (A12) Beleated Below Dark Surface (F6) Thick Dark Surface (A12) Beleated Below Dark Surface (F6) Beleated Matrix (F3) Beleated Below Dark Surface (F6) Beleated Below Dark Surface (F6) Beleated Below Dark Surface (F6) Beleated Below Dark Surface (F7) Belated Below Dark Surface (F8)									
Hydric Soil Indicators: Histisol (A1) Sandy Gleyed Matrix (S4) Histisol (A2) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Sturface (F12) (LRR K, L, Very Shallow Sturface (F12) (LRR K, L) (F12) (Very Shallow Sturface (F12) (LRR K, L) (F12) (LR K,									
Hydric Soil Indicators: Histiso (A1) Sandy Gleyed Matrix (S4) Black Histis (A3) Stripped Matrix (S6) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (F12) (LRR K, L, Very Shallow Dark Surface (F12) (LRR K, L) Thick Dark Surface (A12) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Surface Wally Peat or Peat (S3) Water Marks (B1) Surface Wally Indicators (minimum of two reported to the first of the fi									
Hydric Soil Indicators: Histiso (A1) Sandy Gleyed Matrix (S4) Black Histis (A3) Stripped Matrix (S6) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (F12) (LRR K, L, Very Shallow Dark Surface (F12) (LRR K, L) Thick Dark Surface (A12) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Surface Wally Peat or Peat (S3) Water Marks (B1) Surface Wally Indicators (minimum of two reported to the first of the fi	T 0 (
Histisol (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dark Surface (S7) (LRR K, L, R) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) Z om Muck (A10) Depleted Matrix (F3) X Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Restrictive Layer (if observed): Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B8) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Sean Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Roots Crayfish Burrows (C3) Sediment Deposits (B2) (C3) True Reduction in Tilled Soils Geomorphic Position (D2) Inno Deposits (B3) Presence of Reduced Iron (C4) Subnet or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Inno Deposits (B3) C(6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegletaled Concave Surface (B8) Other (Explain in Remarks) Water-Stained Leaves (B9) Other (Explain in Remarks) Water table present? Yes No X Depth (inches): Veter table			= Depleti	on, RM = Reduce	ed Matrix	., MS = N	lasked S		
Histic Epipedon (A2) Black Histic (A3) Stripped Matrix (S6) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, L) Stratified Layers (A5) Loamy Wlucky Mineral (F1) Very Shallow Dark Surface (F12) Young Stratified Layers (A5) Depleted Matrix (F2) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Some Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric soil present? Hydric soil present? Hydric soil present? Hydric soil present (B1) Surface Water (A1) Aquatic Fauna (B13) Surface Water (A1) High Water Table (A2) Hydrogen Sulfide Odor (C1) Water Marks (B1) Sufface Mater (A1) Hydrogen Sulfide Odor (C1) Water Marks (B1) Sufface Soil Cracks (B6) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Sufface Soil Cracks (B6) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Roots Crayfish Burrows (C3) Saturation (A3) Hydrogen Sulfide Odor (C1) Sufface Soil Cracks (B6) Fresence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B3) Pressence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B3) Pressence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Water-Stained Leaves (B9) Other (Explain in remarks) Iron Mack Sufface (C7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Water-Stained Leaves (B9) Other (Explain in Remarks) Depth (inches): Indicators of wetland hydrology present? Yes No X Depth (inches): Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	-								
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Remarks:	Jescribe red	corded data (strea	ım gauge	e, monitoring well	, aeriai p	notos, pi	revious ii	rspections), if availa	able:
Comains.									
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	Remarks:								
	Remarks:								

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project	City/Co		ymouth/Hen		25/18
Applicant/Owner: City of Plymouth	-	State:	MN		-Up
Investigator(s): RF			n, Township		
Landform (hillslope, terrace, etc.): Hillslope			-	e, convex, none): Linear	•
Slope (%): 25 Lat: 45.029414		Long:	-93.45578		4
Soil Map Unit Name Hamel, overwash-Hamel complex, 0 t		-	NWI C	lassification: None	
Are climatic/hydrologic conditions of the site typical for this				no, explain in remarks)	
Are vegetation , soil , or hydrology		- significantly		Are "normal circumstances	0
Are vegetation , soil , or hydrology		naturally pro		present	
SUMMARY OF FINDINGS				(If needed, explain any answers in I	remarks.)
Hydrophytic vegetation present? Y					
Hydric soil present?		Is the sa	impled area	within a wetland?	
Indicators of wetland hydrology present? N		f yes, opt	ional wetlan	d site ID:	
Remarks: (Explain alternative procedures here or in a sepa	parate repo	ort.)			
America adicement to 1.404	1 to the	usat and á	oor doolo	robin to the cost	
Area is adjacent to I-494	4 to the v	vest and a	i car deale	rship to the east.	
VEGETATION Use scientific names of plants.					
Ab	osolute [Dominan	Indicator	Dominance Test Worksheet	
Tree Stratum (Plot size: 30) %	Cover t	Species	Staus	Number of Dominant Species	
1				that are OBL, FACW, or FAC:1	—— ^(A)
2	(:			Total Number of Dominant	(D)
3				Species Across all Strata: 1	(B)
5				Percent of Dominant Species that are OBL, FACW, or FAC: 100.0	00% (A/B)
	0 = 7	Total Cover			V 1= /
Sapling/Shrub stratum (Plot size: 15)			ı	Prevalence Index Worksheet	
1				Total % Cover of:	
2	= 1/1			OBL species0 _ x 1 =	0
3					120
4					15 80
5	0 = 7	Total Cover			25
Herb stratum (Plot size: 5)		Total Gover			240 (B)
	45	Υ	FACW	Prevalence Index = B/A = 2.6	
	15	N .	FACW		-
	10	N	FACU	Hydrophytic Vegetation Indicator	rs:
4 Setaria faberi	8	N	FACU	Rapid test for hydrophytic vege	etation
5 Tanacetum vulgare	5	N .	UPL	X Dominance test is >50%	
6 Poa pratensis	5	N -	FAC	X Prevalence index is ≤3.0*	
7 Cirsium arvense	2	N	FACU	Morphogical adaptations* (prov	
8			-	supporting data in Remarks or separate sheet)	on a
10				Problematic hydrophytic vegeta	ation*
	90 =7	Total Cover		(explain)	
Woody vine stratum (Plot size: 30)				*Indicators of hydric sail and wetland hydr	rology must be
j				present, unless disturbed or proble	
2				Hydrophytic	
	0 = 7	Total Cover		vegetation present?	
Pomarke: (Include phote numbers here or an a concrete a	cheet)				
Remarks: (Include photo numbers here or on a separate s	sileet)				

	cription: (Descr	ibe to tr						and aboution	
Depth	Matrix	0.1	Redox Features						
(Inches)	Color (moist)	%	Color (moist)	7	Type*	Loc**	Textu	re	Remarks
0-12	10YR 5/3	90	10YR 4/6	10	С	М	Clay/Fill		
ype: C = 0	Concentration, D	= Deplet	ion, RM = Redu	ced Matri	x, MS = N	Masked S	and Grains.	**Location	n: PL = Pore Lining, M = Matri
	oil Indicators:								ematic Hydric Soils:
His	tisol (A1)		S	andy Gley	ed Matrix	x (S4)	Coast	Prairie Red	lox (A16) (LRR K, L, R)
His	tic Epipedon (A2)			andy Red) (LRR K, L)
	ck Histic (A3)			tripped Ma	, ,		Iron-N	langanese l	Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	,		oamy Muc					k Surface (TF12)
	atified Layers (A5)		oamy Gley		, ,	Other	(explain in I	remarks)
	m Muck (A10)	0.1		epleted M	. ,				
	leted Below Dark		` '	edox Darl					
	ck Dark Surface (epleted D					ophytic vegetation and weltan
	ndy Mucky Minera m Mucky Peat or			edox Dep	ressions	(F8)	hydrol		e present, unless disturbed or
	ii wucky real or	real (33	9)						problematic
	Layer (if observ	ed):							
/pe: F	ill	ed):			-:		Hydric s	soil present	t? <u>N</u>
ype: F epth (inche	ill	ed):			- : - :		Hydric s	soil present	t? <u>N</u>
	ill	ed):			-:		Hydric s	soil present	t? <u>N</u>
ype: F epth (inche	ill	ed):			- : - :		Hydric s	soil present	t? <u>N</u>
ype: F epth (inche	ill	ed):			-: -:		Hydric s	soil present	t? <u>N</u>
/pe: F epth (inch	ill	ed):			-: -:		Hydric s	soil present	t? <u>N</u>
/pe: F epth (incho emarks:	ill es): 12	ed):			: ::		Hydric s	soil present	t? <u>N</u>
rpe: Fepth (incherents:	ill es): 12				-: -::		Hydric s	soil present	t? <u>N</u>
/pe: Fepth (inche) Pemarks: YDROLG etland Hy	DGY	ors:	s required; chec	k all that a	apply)				
ype: Fepth (inchesemarks: YDROLC etland Hy imary Indi	ogy	ors:	s required; chec		apply)	313)		condary Indi	icators (minimum of two requi
ype: Fepth (inchesemarks: YDROLO etland Hy imary Indi Surface High Wa	OGY rdrology Indicate cators (minimum Water (A1) ater Table (A2)	ors:	required; chec	Aquatic True Ac	Fauna (B quatic Plar	nts (B14)	Sec	condary Indi Surface S	icators (minimum of two requi
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WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CSAH 9/I-494 Interchange Project	City/County:			9/25/18
Applicant/Owner: City of Plymouth	State	: MN	Sampling Point:	5-Wet
Investigator(s): RF	Se	ction, Township	o, Range:	5,118,22
Landform (hillslope, terrace, etc.): Toeslope	Loca	al relief (concav	re, convex, none):	Concave
Slope (%): 20 Lat: 45.029414	Long:	-93.45578	88 Datum:	WGS 84
Soil Map Unit Name Udorthents (cut and fill land), 0 to 6 pe	ercent slopes (U3	B) VWI	Classification:	None
Are climatic/hydrologic conditions of the site typical for this	s time of the year	? Y (I	f no, explain in remarks)	
Are vegetation , soil , or hydrology	significa	ntly disturbed?	Are "normal circ	umstances"
Are vegetation , soil , or hydrology	naturally	problematic?		present? Yes
SUMMARY OF FINDINGS			(If needed, explain any a	nswers in remarks.)
Hydrophytic vegetation present? Y				
Hydric soil present?	Is the	e sampled area	a within a wetland?	Υ
Indicators of wetland hydrology present?	f yes,	optional wetlar	nd site ID: None	
Remarks: (Explain alternative procedures here or in a sep	arate report.)			
Area is adjacenet to I-49-	4 to the west a	nd a car deal	ership to the east.	
VEGETATION Use scientific names of plants.				
	solute Domina	n Indicator	Dominance Test Works	sheet
Tree Stratum (Plot size: 30) %	Cover t Specie	s Staus	Number of Dominant Spec	cies
1			that are OBL, FACW, or F	AC:(A)
2			Total Number of Domin	
3			Species Across all Stra	8
5		-)	Percent of Dominant Spec that are OBL, FACW, or Fa	
·	0 = Total Co	ver		W
Sapling/Shrub stratur (Plot size: 15)			Prevalence Index Work	sheet
1		02 75	Total % Cover of:	
2				x1 = 0
3				x 2 = 200 x 3 = 0
5			-	x4 = 0
	0 = Total Co	ver	· -	x5= 0
Herb stratum (Plot size: 5)				(A) 200 (B)
1 Phalaris arundinacea	100 Y	FACW	Prevalence Index = B/A	= 2.00
2				
3			Hydrophytic Vegetation	
4			Rapid test for hydron	
5			X Dominance test is > 5 X Prevalence index is:	
6	/	*		
8		*	Morphogical adaptat supporting data in R	**
9		-	separate sheet)	
10			Problematic hydroph	ytic vegetation*
	100 = Total Co	ver	— (explain)	
Woody vine stratum (Plot size: 30)			*Indicators of hydric soil and present, unless distu	
2			Hydrophytic	
	0 = Total Co	ver	vegetation present?	,
Remarks: (Include photo numbers here or on a separate s	heet)			

SOIL Sampling Point: 5-Wet Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Depth Matrix (Inches) % Color (moist) Color (moist) Loc** Texture Remarks Type* 0 - 1210YR 2/1 98 10YR 4/6 2 M Loam Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: Histisol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) 2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) X Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and weltand Sandy Mucky Mineral (S1) Redox Depressions (F8) hydrology must be present, unless disturbed or problematic 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Hydric soil present? Y Depth (inches): Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Drainage Patterns (B10) High Water Table (A2) True Aquatic Plants (B14) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Roots Cravfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) (C3) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) X Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils Iron Deposits (B5) (C6)X FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface water present? Yes No Depth (inches): Water table present? Yes No Indicators of wetland Depth (inches): Saturation present? No Depth (inches): hydrology present? (includes capillary fringe)

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX

APPENDIX C

Wetland Photos



Photo 1 - Wetland 2 facing north



Photo 2 - Wet Ditch 4 facing south



Photo 4 - Wetland 5 facing south



Photo 5 - Wetland 3 facing north



Photo 7a - Stormwater Pond 1 facing northwest



Photo 6 - Wet Ditch 5 facing northwest



Photo 7b - Stormwater Pond 1 facing southwest



Photo 8 - Wet Ditch 2 facing southeast



Photo 10 - Stormwater Pond 2 facing northwest



Photo 9 - Wet Ditch 3 facing northeast

APPENDIX

APPENDIX D

Antecedent Precipitation Data

Minnesota State Climatology Office

State Climatology Office - DNR Division of Ecological and Water Resources

University of Minnesota

home | current conditions | journal | past data | summaries | agriculture | other sites | about us



Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: Hennepin township number: 118N township name: Plymouth range number: 22W nearest community: Plymouth section number: 15

Aerial photograph or site visit date:

Tuesday, September 25, 2018

Score using 1981-2010 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: August 2018	second prior month: July 2018	third prior month: June 2018
estimated precipitation total for this location:	3.32R	3.63R	4.34R
there is a 30% chance this location will have less than:	3.26	2.55	3.42
there is a 30% chance this location will have more than:	5.12	4.52	5.64
type of month: dry normal wet	normal	normal	normal
monthly score	3 * 2 = 6	2 * 2 = 4	1 * 2 = 2
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)		12 (Normal)

Other Resources:

- retrieve daily precipitation data
- view radar-based precipitation estimates
- view weekly precipitation maps
- Evaluating Antecedent Precipitation Conditions (BWSR)

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: City of Plymouth (Michael Thompson) **Mailing Address:** 3400 Plymouth Boulevard, Plymouth, MN 55447

Phone: 763-509-5501

E-mail Address: mthompson@plymouthmn.gov

Authorized Contact (do not complete if same as above):

Mailing Address:

Phone:

E-mail Address:

Agent Name: WSB & Associates (Roxy Franta)

Mailing Address: 701 Xenia Ave S, Suite 300, Minneapolis, MN 55416

Phone: 763-762-2844

E-mail Address: rfranta@wsbeng.com

PART TWO: Site Location Information

County: Hennepin

City/Township: Plymouth

Parcel ID and/or Address: I-494 interchange at Rockford Road Legal Description (Section, Township, Range): S 15, T118N, R22W

Lat/Long (decimal degrees): 45.028443, -93.452465

Attach a map showing the location of the site in relation to local streets, roads, highways. Figure 1

Approximate size of site (acres) or if a linear project, length (feet): 0.30 miles of CSAH 9, entrance and exit ramps

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform 4345 2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted **prior to** this application then describe that here and provide the Corps of Engineers project number.

No known delineation approval has been granted for the project area.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

The City of Plymouth is proposing to replace the Rockford Road bridge crossing interstate I-494, reconstruct the bridge approaches and portions of the I-494 ramps, construct a multiuse trail along the north side of Rockford Road (including bridge), reconstruct a multiuse trail along the south side of Rockford Road, reconstruct a retaining wall north of Rockford Road, and make drainage improvements.

PART FIVE: Applicant Signature

PART FIVE: Applicant Signature
Check here if you are requesting a <u>pre-application</u> consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.
By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.
Signature: 10/17/2018 Date:
I hereby authorize WSB & Associates (Roxy Franta) to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.
9

Attachment A Request for Delineation Review, Wetland Type Determination, or **Jurisdictional Determination**

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District

(Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):
Wetland Type Confirmation
Delineation Concurrence. Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address th jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).
Preliminary Jurisdictional Determination. A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.
Approved Jurisdictional Determination. An approved jurisdictional determination (AJD) is an official Corps determination that iurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.
In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the Guidelines for Submitting Wetland Delineations in Minnesota (2013).

nttp://www.mvp.usace.army.mii/wiissions/Regulatory/Delineation/DGulaance.aspx

Attachment B

Supporting Information for Applications Involving Exemptions, No Loss Determinations, and Activities Not Requiring Mitigation

Complete this part **if** you maintain that the identified aquatic resource impacts in Part Four do not require wetland replacement/compensatory mitigation OR **if** you are seeking verification that the proposed water resource impacts are either exempt from replacement or are not under CWA/WCA jurisdiction.

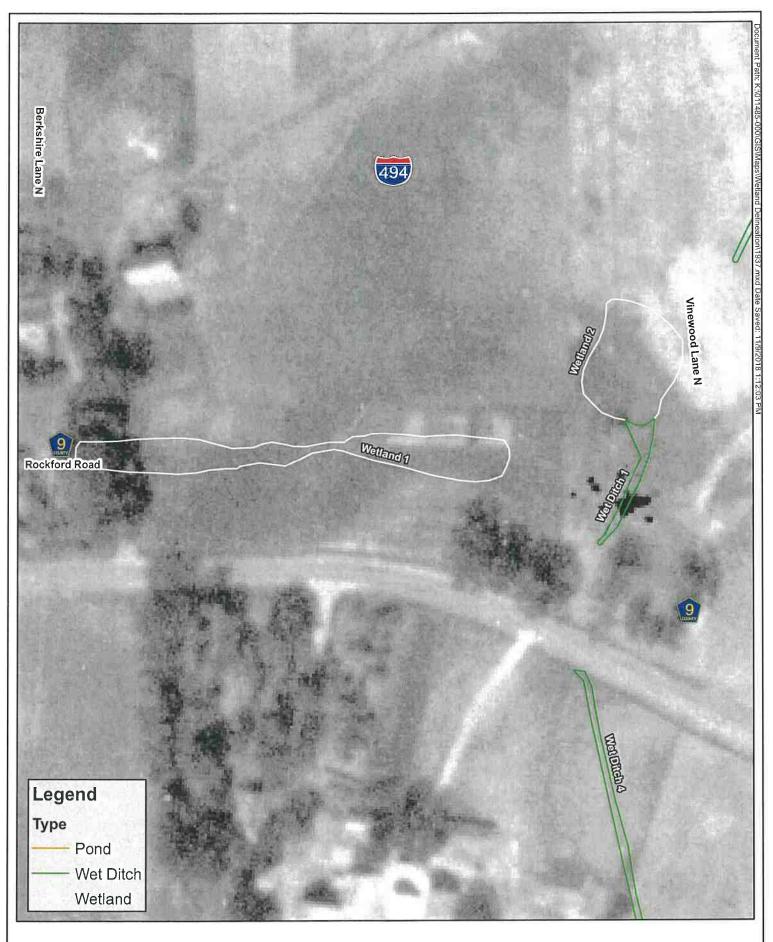
Identify the specific exemption or no-loss provision for which you believe your project or site qualifies:

MN Rules 8420.0105 SCOPE Subpart 2.D.

Provide a detailed explanation of how your project or site qualifies for the above. Be specific and provide and refer to attachments and exhibits that support your contention. Applicants should refer to rules (e.g. WCA rules), guidance documents (e.g. BWSR guidance, Corps guidance letters/public notices), and permit conditions (e.g. Corps General Permit conditions) to determine the necessary information to support the application. Applicants are strongly encouraged to contact the WCA LGU and Corps Project Manager prior to submitting an application if they are unsure of what type of information to provide:

Incidental wetlands are wetland areas that were created in non-wetland areas, not for the purpose of creating wetlands. Often, incidental wetlands occur as wet ditches along roadsides where drainage is concentrated. Eight wet ditches and two stormwater ponds were identified during the wetland delineation which appear to have been incidentally created in upland. Descriptions of the following aquatic resources are included in Section III.F of the attached delineation report.

- Wetland 1 A review of historic aerial photography shows that few wetland signatures occur at the location of
 the existing wetland and that the historic wetland was likely located to the north of the existing wetland 1. The
 historic aerial photos are included on the following pages.
- Wet Ditch 1 Constructed during the development of I-494.
- Wet Ditch 2 Constructed during the development of I-494.
- Wet Ditch 3 Constructed during the development of I-494.
- Wet Ditch 4 Constructed during the development of I-494.
- Wet Ditch 5 Constructed during the development of I-494.
- Wet Ditch 6 Constructed during the development of I-494.
- Wet Ditch 7 Constructed during the development of I-494.
- Wet Ditch 8 Constructed during the development of I-494.
- Stormwater Pond 1 Constructed during the development of I-494.
- Stormwater Pond 2 Constructed during the development of I-494.





1937 CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth







CSAH 9 (Rockford Road)/I-494 Interchange Project
City of Plymouth







CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth

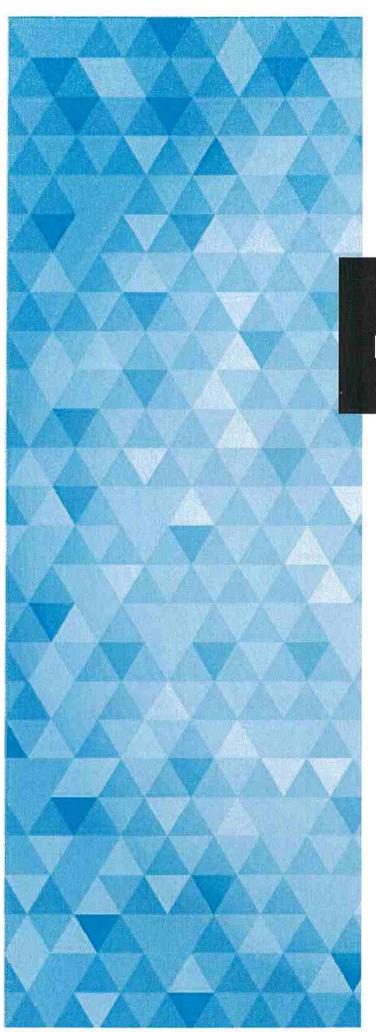






CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth







LEVEL 2 WETLAND DELINEATION REPORT

CSAH 9 (ROCKFORD ROAD) / I-494 INTERCHANGE PROJECT

OCTOBER 1, 2018 UPDATED NOVEMBER 14, 2018 UPDATED NOVEMBER 28, 2018

Prepared for: City of Plymouth 3400 Plymouth Boulevard Plymouth, MN 55447

WSB PROJECT NO. 011485-000



LEVEL 2 WETLAND DELINEATION REPORT

CSAH 9 (ROCKFORD ROAD) / I-494 INTERCHANGE PROJECT

For:

City of Plymouth

October 1, 2018 Updated November 14, 2018 Updated November 28, 2018

Prepared By:



CERTIFICATION

1.1	Inanto
Roxy Franta,	WDC No.1317
Date: October 1, 2018	Title: Environmental Scientis
I hereby certify that this report wa Certified Wetland Delineator in the S	as reviewed by me and that I am a State of Minnesota.
ai i	He
Alison Harwood	d, WDC No.1238

Title: Senior Environmental Scientist

The report was prepared by:

Date: October 4, 2018

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SECTION I

I. Introduction

A. Project Location

The project is located at the CSAH 9 (Rockford Road) and I-494 interchange in the City of Plymouth, Hennepin County, Minnesota. The project area consists of approximately 0.30 mile of Rockford Road including Bridge No. 27W45 over I-494 and approximately 500 feet to the east and to the west of the bridge. The project also includes approximately 500 feet of the northbound entrance ramp to I-494, 600 feet of the southbound entrance ramp to I-494, 250 feet of the northbound exit ramp onto Rockford Road, and 160 feet of the southbound exit ramp onto Rockford Road. The project is located in Section 15 of Township 118 and Range 22, Major Watershed No. 20, BSA No. 7 (**Figure 1, Appendix A**).

B. Project Purpose

The City of Plymouth is proposing to replace the Rockford Road bridge crossing I-494, reconstruct the bridge approaches and portions of the I-494 ramps, construct a multiuse trail along the north side of Rockford Road (including bridge), reconstruct a multiuse trail along the south side of Rockford Road, reconstruct a retaining wall north of Rockford Road, and make drainage improvements. This report is intended to address all jurisdictional WCA, Public Water, or Section 404 wetlands and/or waters for final design and permitting of this project. This project was authorized by the City of Plymouth.

C. Project Scope

The scope of this project was to delineate all wetlands within the outlined project area.

D. Summary of Findings

A Level 2 wetland delineation was performed on the site. A total of four wetlands, eight wet ditches, and two stormwater ponds were identified and delineated in the preparation of this report, as summarized in **Table 1**. For a visual representation of the wetland locations and sizes, please see **Figure 6**, **Appendix B**. All potential wetland areas (mapped hydric soils, NWI signatures, and low depressional areas) were reviewed on-site and either delineated or determined to be upland.

Table 1. Summary of Delineated Wetlands, CSAH 9/I-494 Interchange, Hennepin County, Minnesota

Wetland ID	Delineation Method	No. Flags/ Transects	Eggers and Reed	Circular 39) (Cowardin)	NWI*	DNR PWI**	County Soil Survey (Hydric/ Non- Hydric)***
Wetland 1	Level 2	1-10/1	Seasonally Flooded/ Shallow Marsh/ Open Water	Type 1/3/5 (PEMA/ PEM1C/ PUBGx)	PEM1C/ PABGx	No	L23A /L37B
Wetland 2	Level 2	1-5/1	Fresh (Wet) Meadow	Type 2 (PEMB)	PEM1A	No	L37B

SECTION I

Wetland ID	Delineation Method	No. Flags/ Transects	Eggers and Reed	Circular 39) (Cowardin)	NWI*	DNR PWI**	County Soil Survey (Hydric/ Non- Hydric)***
Wetland 3	Level 3	0/1	Seasonally Flooded Basin/ Shallow Marsh	Type 1/3 (PEMA/ PEMC)	PEM1C/ PABGx	No	U3B
Wetland 4	Level 2	1-7/0	Shallow Marsh	Type 3 (PEMC)	N/A	No	U1A
Wetland 5	Level 2	0/1	Seasonally Flooded	Type 1 (PEMA)	N/A	No	U3B/L22C2
Wet Ditch 1	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L37B
Wet Ditch 2	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L37B/U3B/ L36A
Wet Ditch 3	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L22C2/U3B
Wet Ditch 4	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L37A/L25A/ L22C2
Wet Ditch 5	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	U3B
Wet Ditch 6	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	U3B/L22C2
Wet Ditch 7	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	U1A/L22C2
Wet Ditch 8	Level 2	0/0	Seasonally Flooded Basin	Type 1 (PEMA)	N/A	No	L22C2
Stormwater Pond 1	Level 2	0/0	Shallow Marsh/Open Water	Type 3/5 (PEMC/ PUBGx)	N/A	No	U3B/ L36A
Stormwater Pond 2	Level 2	0/0	Shallow Marsh	Type 3 (PEMC)	N/A	No	U3B/L22C2

st "Yes" indicates wetland is mapped in the NWI and "No" indicates the wetland is not mapped in the NWI.

^{** &}quot;NA" indicates the wetland is not mapped in the PWI. Numbers listed are the DNR ID, indicating the wetland is mapped in the PWI.

^{***}Bolded numbers indicate hydric soils.

II. Delineation Procedure

A. Off-Site Determination: Base Map Review

Topography: The landform is generally lower at the interchange where the configuration of I-494 has created low points for drainage. Rockford Road slopes from west to east. Water generally flows to the southeast towards Medicine Lake (DNR PWI No. 51465). The wetlands were located at low points adjacent to I-494, the I-494 ramps, and Rockford Road (**Figure 2**, **Appendix A**).

The DNR Public Waters and Wetlands Map, Hennepin County, MN (Minnesota Department of Natural Resources 1983) shows no public waters within the project area (Figure 3, Appendix A).

The *National Wetlands Inventory Map* (Minnesota Department of Natural Resources) identified several wetlands as part of the National Wetlands Inventory (NWI) **(Figure 4, Appendix A)**. The NWI identifies the following wetland types: PEM1C, PABGx, and PEM1A.

The Soil Survey of Hennepin County, Minnesota (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm) identified the following soils (**Table 2**) within the project area (**Figure 5, Appendix A**):

Map Symbol	Soil Unit Name	Percent Hydric	Hydric Rating
L23A	Cordova loam	95	Predominantly hydric
L37B	Angus Ioam	5	Predominantly non- hydric
L36A	Hamel, overwash-Hamel complex	45	Partially Hydric
L22C2	Lester loam	2	Predominantly non- hydric
U3B	Udorthents (cut and fill land)	0	Non-hydric
L22D2	Lester loam	0	Non-hydric
U1A	Urban land- Udorthents wet substratum	0	Non-hydric
L44A	Nessel loam	10	Predominantly non- hydric
L25A	Le Sueur loam	15	Predominantly non- hydric

Table 2. Soil Survey

Antecedent Climate Conditions: Historic climate data and WETS data were obtained from the Minnesota Climatology Working Group preceding the September 25, 2018 site visit, which fell within the normal precipitation range. Records of the precipitation can be found in **Appendix D**.

B. On-Site Determination

A Level 2 field investigation was conducted by Roxy Franta (WDC No. 1317) of WSB & Associates, Inc. on September 25, 2018 within the project area. No deviation or omissions were undertaken as part of this investigation.

The project area was delineated using the routine methodology described in the *Corps of Engineers Wetlands Delineation Manual* (US Army Corps of Engineers 1987), with additional guidance provided by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0).* Wetlands were classified according to the methodologies set forth in *Wetlands of the United States (Circular 39),* USFWS Shaw and Fredine 1971; *Classification of Wetlands and Deepwater Habitats of the United States,* Cowardin 1979; and *Wetland Plants and Plant Communities of Minnesota and Wisconsin, 2nd ed.*, Eggers and Reed 1997. The wetland types in this report are classified by the Circular 39, Cowardin, and Eggers and Reed Classifications.

Soil types were researched prior to the on-site investigation with the assistance of the *Soil Survey* of *Hennepin County* from the National Resources Conservation Service. All soil test pits were excavated to a minimum depth of 24 inches unless otherwise noted. Soil colors were described on-site per the *Munsell Soil Color Charts* (2009 Revised Edition) from the test pits in and adjacent to the wetlands. Hydric soils were identified using the current technical criteria for hydric soils developed by the NRCS in 2017 (Version 8.1). The presence of water was observed after time was allowed for movement of water through the substrate. This time varied depending upon soil characteristics.

The quadrant sampling method was employed for all sample points unless otherwise noted. Vegetation was measured as actual areal cover and may exceed 100 percent of total area due to overlap. Grasses and herbaceous vegetative cover were measured within a circular plot of a 5-foot-radius, all woody shrubs and saplings were measured within a circular plot with a 15-foot-radius, and trees and woody vines were measured in a 30-foot-radius circular plot. Regional plant identification resources were utilized in the identification of plant species, with indicator status taken from the 2016 National Wetland Plant List (US Army Corps of Engineers 2016). Plant species dominance was estimated based on the absolute percent coverage for herbaceous, shrub-sapling, and tree strata if present. In addition to the use of indicators of hydrology, hydric soils, and the presence of hydrophytic vegetation, other evidence such as topographic breaks and watershed characteristics were used to determine the wetland boundary.

Midwest Regional Supplement Routine Wetland Delineation data forms were used to record vegetation, hydrology, and soil characteristics at sample points in and adjacent to the wetlands (**Appendix B**). Sampling transects were taken along the wetland-upland boundary of the wetland. Transects and delineated wetland boundaries were field surveyed using a sub-meter accuracy hand held GPS unit. Approximate sampling points and delineated wetland edges are shown on **Figure 6**, **Appendix B**. Pictures of each wetland can be found in **Appendix C**.

III. Results and Wetland Information

The wetland delineation data forms (**Appendix B**) and photos (**Appendix C**) are attached. A summary of the delineation is below.

A. Wetland 1

Circular 39: Type 1/3/5

Cowardin: PEMA/PEM1C/PUBGx

Eggers and Reed Field Classification: Seasonally Flooded/Shallow Marsh/Open Water **Soil mapping unit:** Cordova loam, 0 to 2 percent slopes (L23A)/Angus loam, 2 to 6 percent

slopes (L37B)

No. Transects: 1 No. Additional Sample Points: 0

Wetland Flags: 10

Wetland Size (within Project Area): 0.30 acre

Wetland 1 is positioned north of Rockford Road to the west of the I-494 interchange. The wetland is adjacent to a paved parking lot to the north which contributes water to the wetland. A retaining wall is adjacent to the south. The wetland is characterized as a shallow marsh on the west end and an open water wetland on the east end. There is a seasonally flooded swale that connects between these two plant community types. The wetland has an overflow at the east edge where water flows overland downhill to Wetland 2. Based on a review of historic aerial photography, it appears that Wetland 1 was created in upland. The wetland boundary is outlined in **Figure 6**, **Appendix B**.

Dominant vegetation in the wetland consisted of narrow-leaved cattail (*Typha angustifolia*) and reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Dry-Season Water Table (C2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of green ash (*Fraxinus pennsylvanica*) in the tree stratum and Kentucky bluegrass (*Poa pratensis*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). No hydrology indicators were identified at this sample point.

The wetland boundary was placed along a slight topographic break where there was transition from the presence of wetland hydrology to the lack of wetland hydrology.

B. Wetland 2 Circular 39: Type 2 Cowardin: PEMB

Eggers and Reed Field Classification: Fresh (Wet) Meadow **Soil mapping unit:** Angus Loam, 2 to 6 percent slopes (L37B) **No. Transects:** 1 **No. Additional Sample Points:** 0

Wetland Flags: 5

Wetland Size (within Project Area): 0.22 acre

Wetland 2 is positioned to the north of Rockford Road and to the west of the southbound exit ramp to Rockford Road, adjacent to the roadway. The wetland is located at the toe of a large hill to the south and a steep roadway slope to the east. Water overflows from Wetland 1 into Wetland 2. A wet ditch (Wet Ditch 1) also flows along the ramp from the south into Wetland 2. The wetland is characterized as fresh (wet) meadow. The wetland boundary is outlined in **Figure 6**, **Appendix B**

Dominant vegetation in the wetland consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Dry-Season Water Table (C2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of Kentucky bluegrass (*Poa pratensis*) in the herb stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary was placed along a slight topographic break slightly above the toe of the adjacent slopes.

Circular 39: Type 1/3
Cowardin: PEMA/PEMC

Eggers and Reed Field Classification: Seasonally Flooded Basin/Shallow Marsh

Soil mapping unit: Udorthents (cut and fill land) (U3B)

No. Transects: 1

No. Additional Sample Points: 0

Wetland Flags: 0

Wetland Size (within Project Area): 1.8 acres

Wetland 3 is positioned north of Rockford Road and east of the I-494 northbound entrance ramp. A constructed slope to a parking lot is located at the east side of the basin. The wetland has a seasonally flooded, forested perimeter to the north, east, and south. The west side of the wetland is adjacent to the entrance ramp slope. The wetland transitions from the seasonally flooded perimeter to a shallow marsh towards the center. The wetland boundary is outlined in **Figure 6**, **Appendix B**.

Dominant vegetation in the wetland consisted of common buckthorn (*Rhamnus cathartica*) and eastern cottonwood (*Populus deltoides*) in the tree stratum, common buckthorn (*Rhamnus cathartica*) in the herb stratum, and bittersweet nightshade (*Solanum dulcamara*) in the woody vine stratum. Hydric soil indicators consisted of Depleted Below Dark Surface (A11). Hydrology indicators included Water-Stained Leaves (B9).

Dominant vegetation in the upland consisted of box elder (*Acer negundo*) in the tree stratum, box elder (*Acer negundo*) and common buckthorn (*Rhamnus cathartica*) in the sapling/shrub stratum, and Virginia creeper (*Parthenocissus quinquefolia*) in the woody vine stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary was placed along a slight topographic break slightly above the toe of the adjacent slopes.

D. Wetland 4 Circular 39: Type 3

Cowardin: PEMC

Eggers and Reed Field Classification: Shallow Marsh

Soil mapping unit: Urban land-Udorthents, wet substratum, complex (U1A)

No. Transects: 0 No. Additional Sample Points: uphill of connected Wet Ditch 6

Wetland Flags: 7

Wetland Size (within Project Area): 0.54 acre

Wetland 4 is positioned east of the northbound exit ramp to Rockford Road. The wetland is located downhill of Wetland 5, Wet Ditch 6 and Wet Ditch 7. Wetland 4 outlets to the northeast. The wetland is characterized as a shallow marsh. The wetland boundary is outlined in **Figure 6**, **Appendix B**. No sample points were taken at Wetland 4, but wetland and upland sample points were taken at the top of Wetland 5, which contained similar plant community characteristics to Wetland 4.

Dominant vegetation at the wetland sample point consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary of Wetland 4 was placed along a topographic break slightly above the toe of the adjacent slopes.

E. Wetland 5 Circular 39: Type 1 Cowardin: PEMA

Eggers and Reed Field Classification: Seasonally Flooded

Soil mapping unit: Udorthents (cut and fill land) (U3B), Lester Loam (L22C2)

No. Transects: 0

No. Additional Sample Points: uphill of Wet Ditch 6

Wetland Flags: 0

Wetland Size (within Project Area): 0.29 acres

Wetland 5 is positioned east of the northbound exit ramp to Rockford Road. The wetland is located uphill of Wet Ditch 6 and Wetland 4. The wetland is characterized as a seasonally flooded basin. The wetland boundary is outlined in **Figure 6**, **Appendix B**. One sample point was taken at Wetland 5.

Dominant vegetation at the wetland sample point consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Geomorphic Position (D2) and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of reed canary grass (*Phalaris arundinacea*) in the herb stratum. No hydric soil indicators or hydrology indicators were identified at this sample point.

The wetland boundary of Wetland 5 was placed along a topographic break slightly above the toe of the adjacent slopes where vegetation transitioned from upland to wetland species.

F. Additional Sampled Areas

No additional areas were sampled.

G. Additional Water Resources

In addition to the wetlands identified within this report, the project area also contained a total of eight wet ditches and two stormwater ponds. The following are descriptions of the additional water resources:

Wet Ditch 1: Wet Ditch 1 is located north of Rockford Road and west of the southbound exit ramp onto Rockford Road. The ditch flows from the corner of these two roadways to the north into Wetland 2. The areas adjacent to the east, west, and south are upland.

<u>Wet Ditch 2</u>: Wet Ditch 2 is located to the west of I-494 and to the east of the I-494 southbound exit ramp to Rockford Road. The ditch is located adjacent to a hill to the west and roadway to the east, both of which are upland areas.

Wet Ditch 3: Wet Ditch 3 is located to the west of I-494 and to the east of the I-494 southbound entrance ramp onto I-494. The ditch is located adjacent to a hill to the west and a roadway to the east, both of which are upland areas.

Wet Ditch 4: Wet Ditch 4 is located to the west of the I-494 southbound entrance ramp onto I-494. The ditch is adjacent to a roadway to the east and a hill to the west, both of which are upland areas.

Wet Ditch 5: Wet Ditch 5 is located to the east of the northbound entrance ramp onto I-494. The wet ditch generally flows from north to south through an upland area into Wetland 3.

Wet Ditch 6: Wet Ditch 6 is located to the east of the northbound exit ramp onto Rockford Road. The ditch generally begins at the bottom of Wetland 5 and flows south through an upland area into Wetland 4.

Wet Ditch 7: Wet Ditch 7 is located to the east of I-494 and south of Wetland 4. The wet ditch generally flows from the south to the north through upland into Wetland 4.

Wet Ditch 8: Wet Ditch 8 is located to the west of the I-494 southbound exit ramp onto Rockford Road. The wet ditch is located between a steep hill and I-494.

Stormwater Pond 1: Pond 1 is located within the interchange to the east of I-494 and to the west of the northbound ramp onto I-494. The area is a shallow marsh near the edges and shallow open water at the center. The stormwater pond was developed within MnDOT right-of-way for drainage. Based on historic aerial photography, the stormwater pond was created in 2015. The pond was excavated from within an upland area. The general stormwater pond area is outlined in white on the photos below.





2014

2015

Stormwater Pond 2: Pond 2 is located within the interchange to the east of I-494 and to the west of the northbound exit ramp onto Rockford Road. The pond is used as an infiltration area by MnDOT and was developed between 2016 and 2017, as shown on aerial photographs. The pond was excavated from within an upland area. The general pond area is outlined in white on the photos below.





2016

SECTION IV

IV. Summary and Closing Statements

Five wetlands, eight wet ditches, and two stormwater ponds were delineated within the project area using the Level 2 method.

The wetland delineation report was completed by Roxy Franta of WSB & Associates, Inc. This delineation report is being submitted as a request for approval of Wetland Type and Boundary of the wetland described herein as well as a No Loss determination for wetland areas which appear to have been incidentally created within upland. The application for Boundary and Type/No Loss Approval is included along with this report.

SECTION V

V. References

The following sources of information were reviewed to assist in performing the wetland delineation.

Literature Sources

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APPENDIX

APPENDIX A

Figure 1: Project Location
Figure 2: Topography
Figure 3: DNR Public Waters Inventory
Figure 4: National Wetlands Inventory
Figure 5: Hennepin County Soil Survey

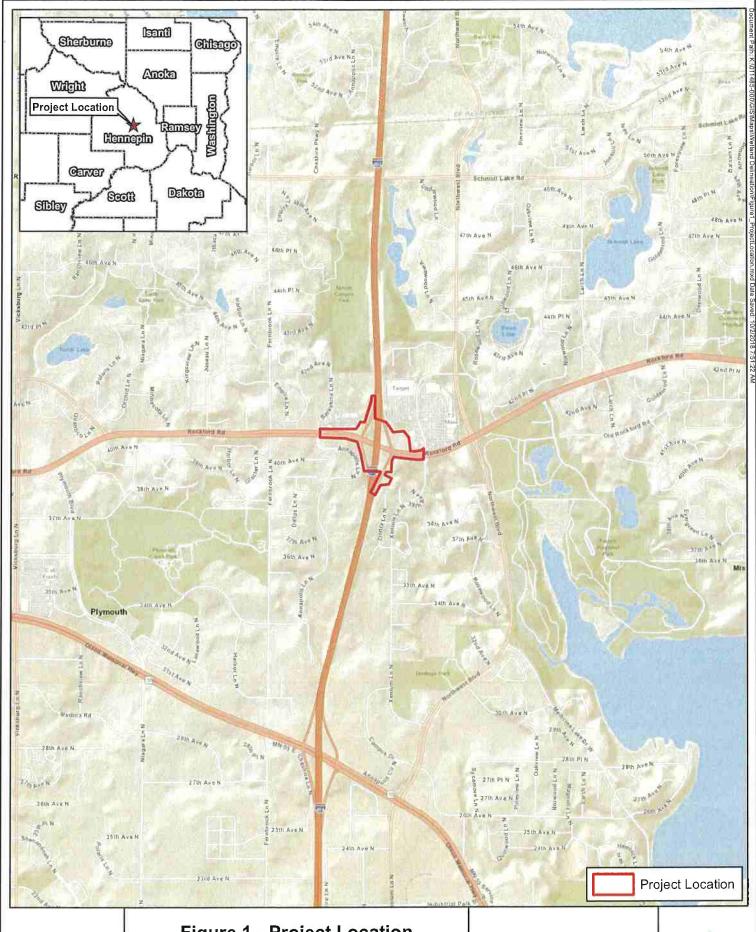




Figure 1 - Project Location

CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth



2,000 ⊐Feet 1 inch = 2,000 feet



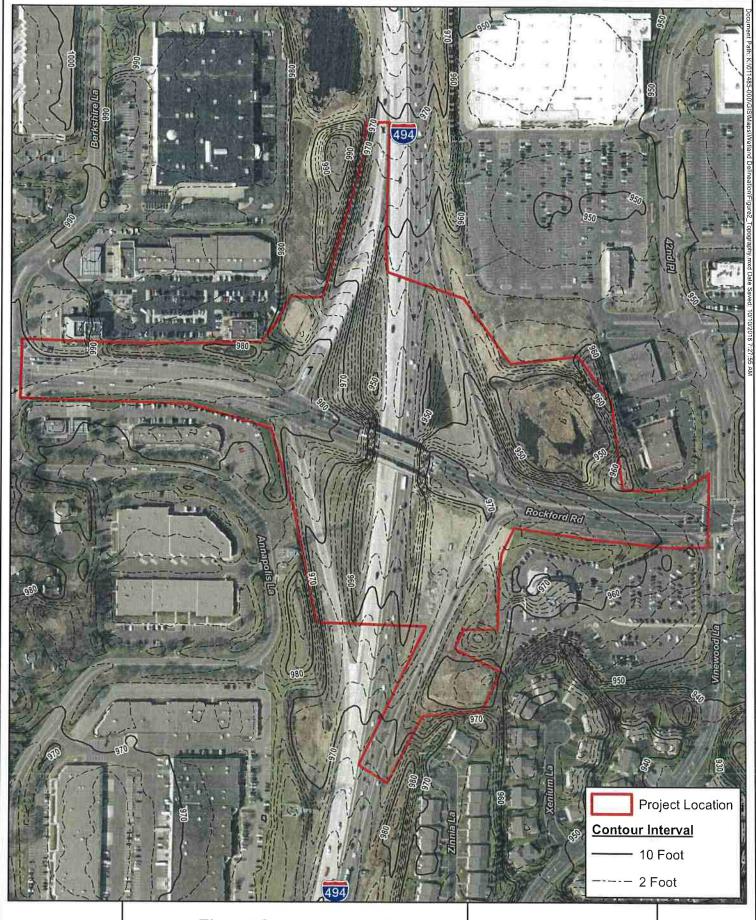




Figure 2 - Topography

CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth





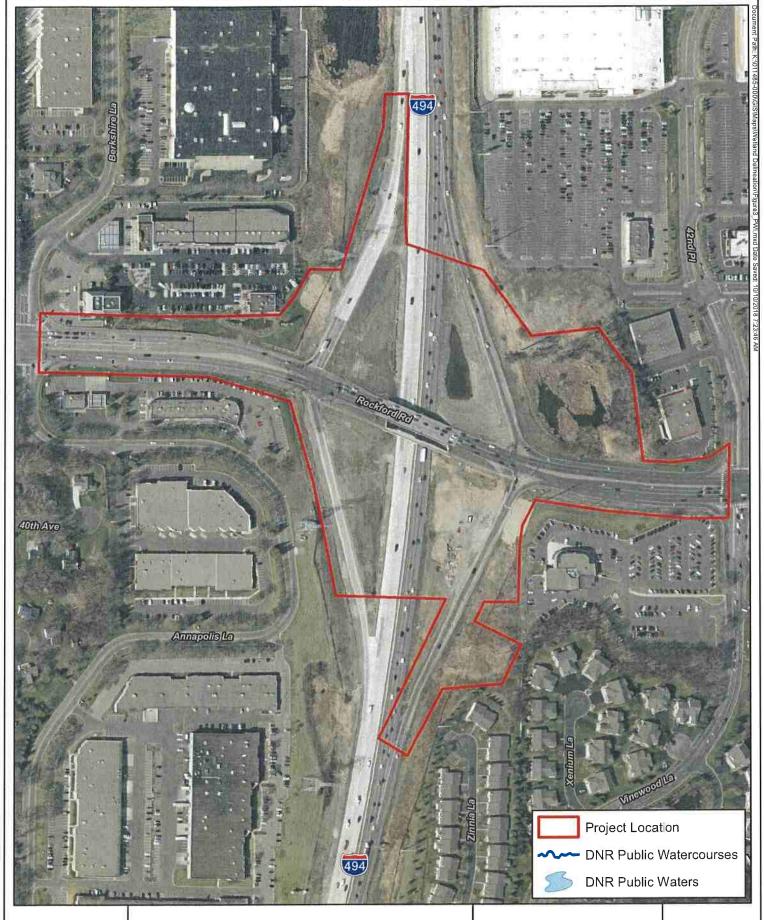




Figure 3 - DNR Public Waters Inventory

CSAH 9 (Rockford Road)/l-494 Interchange Project City of Plymouth



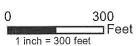




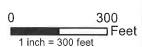




Figure 4 - National Wetlands Inventory

CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth







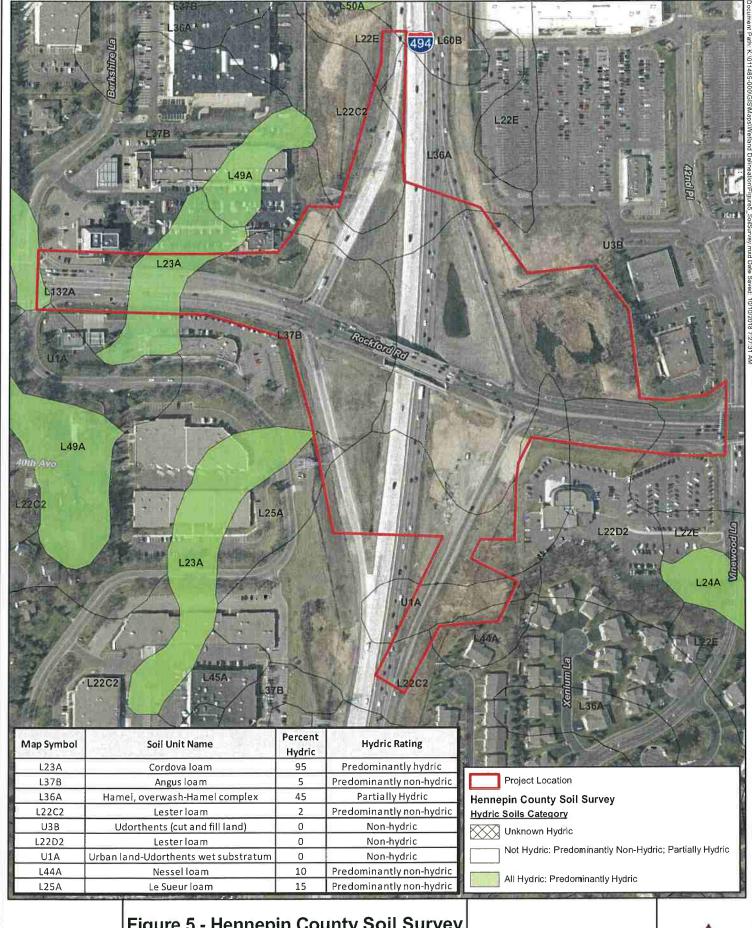




Figure 5 - Hennepin County Soil Survey

CSAH 9 (Rockford Road)/I-494 Interchange Project City of Plymouth



300 ⊐Feet 1 inch = 300 feet



APPENDIX

APPENDIX B

Figure 6: Wetland Boundary Wetland Determination Data Forms

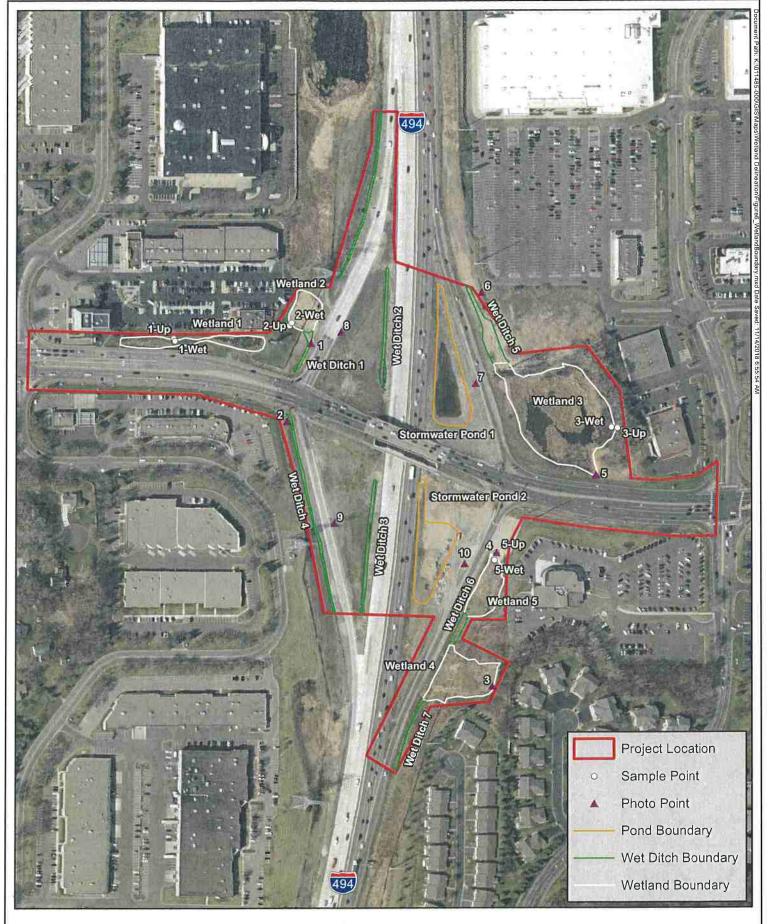


Figure 6 - Wetland Boundary









Project/Site CSAH 9/I-494 Interchange Project	City/0	County: F	Plymouth/Her	nnepin Sampling Date	9/25/18
Applicant/Owner: City of Plymouth		State:	MN	Sampling Point	t: 1-Up
Investigator(s): RF		Secti	on, Township	o, Range:	15,118,22
Landform (hillslope, terrace, etc.): Hillslope		 Local r	elief (concav	e, convex, none):	Linear
Slope (%): 20 Lat: 45.029414		Long:	-93.45578	B8 Datum:	WGS 84
Soil Map Unit Name Cordova loam, 0 to 2 percent slopes			VWI C	Classification:	None
Are climatic/hydrologic conditions of the site typical for this	s time of	the year?	Y (I	f no, explain in remarks)	
Are vegetation , soil , or hydrology		significantl	y disturbed?	Are "normal cir	rcumstances"
Are vegetation , soil , or hydrology		naturally p	roblematic?	7 To Horman on	present? Yes
SUMMARY OF FINDINGS				(If needed, explain any	answers in remarks.)
Hydrophytic vegetation present?					
Hydric soil present?		Is the s	sampled area	a within a wetland?	N
Indicators of wetland hydrology present?		f yes, or	otional wetlar	d site ID:	
Remarks: (Explain afternative procedures here or in a sepa	arate re	port)			
Procedures (Explain disentative procedures field of in a sept	arato ro	port.)			
	Area	a is mowe	d.		
VEGETATION Use scientific names of plants.					
·	solute	Dominan	Indicator	Dominance Test Wor	ksheet
32	Cover	t Species	Staus	Number of Dominant Sp	
1 Fraxinus pennsylvanica	10	·Y	FACW	that are OBL, FACW, or	
2				Total Number of Dom	ninant
3				Species Across all S	Strata:(B)
4				Percent of Dominant Sp	
<u> </u>	10 =	Total Cove	·	that are OBL, FACW, or	FAC: 100.00% (A/B)
Sapling/Shrub stratur (Plot size: 15)	10	- Total Cove	;1	Prevalence Index Wo	orkshoot
1				Total % Cover of:	TROTICE!
2			· · · · · · · · · · · · · · · · · · ·	OBL species 0	x 1 = 0
3				FACW species 10	x 2 = 20
4				FAC species 95	x 3 = 285
5	_			FACU species 10	_ x 4 =40
Herb stratum (Plot size: 5)	0 =	Total Cove	er	UPL species 0 Column totals 115	$-\frac{x}{(0)} = \frac{0}{245}$
N =	95	Υ	EAC	-	
2 Glechoma hederacea	5		FACU FACU	Prevalence Index = B/	A = <u>3.00</u>
3 Taraxacum officinale	3	— <u>N</u>	FACU	Hydrophytic Vegetati	ion Indicators:
4 Cirsium arvense	2	N	FACU		ophytic vegetation
5			**	X Dominance test is	
6				X Prevalence index	is ≤3.0*
7			·	Morphogical adapt	\ 1
9				supporting data in	Remarks or on a
10				separate sheet)	-L. C
	105 =	Total Cove	er	Problematic hydro (explain)	pnytic vegetation*
Woody vine stratum (Plot size: 30)		210(010000	′'		
					and wetland hydrology must be sturbed or problematic
2				Hydrophytic	
	0 =	Total Cove	r	vegetation	V
Describe Archeste what we to				present?	<u>Y</u>
Remarks: (Include photo numbers here or on a separate s	neet)				

1-Up

Depth	cription: (Descr	ibe to the	e depth needed	to aocu	ment the	Indicat	or or confirm the abser	ice of indicators.)
	<u>Matrix</u>		Red	dox Feat	_			
(Inches)	Color (moist)	%	Color (moist)	<u></u> %	Type*	Loc**	Texture	Remarks
0-6	10YR 2/1	100					Clay Loam	
6-9	10YR 2/1	98	10YR 4/6	2	С	М	Clay Loam	
9-12	10YR 2/1	80	10YR 4/6	10	С	М	Clay Loam	
			10YR 6/3	10	D	М	Clay Loam	Fill
			1011(0/3	10		101	Olay Louin	1
	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S		on: PL = Pore Lining, M = Matrix
Hydric Sc	oil Indicators:							lematic Hydric Soils:
Hist	tisol (A1)				ed Matrix	(S4)		edox (A16) (LRR K, L, R)
Hist	tic Epipedon (A2)			idy Redo			Dark Surface (S	
Blac	ck Histic (A3)			pped Ma				e Masses (F12) (LRR K, L, R)
Hyd	drogen Sulfide (A4	1)			ky Minera			ark Surface (TF12)
	atified Layers (A5))			ed Matrix		Other (explain i	n remarks)
	m Muck (A10)				atrix (F3)			
	oleted Below Dark				Surface			
	ck Dark Surface (rk Surfa		-	rophytic vegetation and weltand
	ndy Mucky Minera			lox Depr	essions ((F8)	hydrology must	be present, unless disturbed or
5 cr	m Mucky Peat or	Peat (S3)					problematic
Restrictive	Layer (if observe	ed):						
Type: Fi	ill,						Hydric soil prese	nt?Y
Depth (inche	es): 12							
Remarks:								
HYDROLO	OGY							
Wetland Hy	drology Indicate	ors:						
Primary India	cators (minimum		required; check	all that a	oply)		Secondary Ir	dicators (minimum of two required)
			required; check			13)		dicators (minimum of two required)
Surface	cators (minimum Water (A1) ater Table (A2)		required; check	Aquatic	oply) Fauna (B uatic Plar		Surface	
Surface	Water (A1) ater Table (A2)		required; check	Aquatic True Aq	Fauna (B uatic Plar		Surface Drainag	Soil Cracks (B6)
Surface High Wa Saturation	Water (A1) ater Table (A2)		required; check	Aquatic True Aqu Hydroge	Fauna (B uatic Plar n Sulfide	nts (B14) Odor (C1	Surface Drainag Dry-Se	e Soil Cracks (B6) ge Pattems (B10)
Surface High Wa Saturatio Water M	Water (A1) ater Table (A2) on (A3)		required; check	Aquatic True Aqu Hydroge	Fauna (B uatic Plar n Sulfide	nts (B14) Odor (C1	Surface Drainag Dry-Se Living Roots Satural	e Soil Cracks (B6) ge Pattems (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9)
Surface High Wa Saturatio Water M Sedimen Drift Dep	Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B2) Inter Table (B2) Inter Table (B3)		required; check	Aquatic True Aqu Hydroge Oxidized (C3) Presenc	Fauna (B uatic Plar n Sulfide I Rhizosp e of Redu	nts (B14) Odor (C1 heres on uced Iron	Surface Drainag Dry-Se Living Roots Crayfis Saturat (C4) Stunted	e Soil Cracks (B6) ge Pattems (B10) geson Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9) If or Stressed Plants (D1)
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Surface High Wa Saturatic Water M Sedimen Drift Dep Algal Ma	Water (A1) Ater Table (A2) Ater Table (A2) Ater (A3) Ater (B1) At Deposits (B2) Aterior Crust (B4) Aterior (B5)	of one is		Aquatic True Aqu Hydroge Oxidized (C3) Presenc Recent I (C6)	Fauna (B uatic Plar n Sulfide I Rhizosp e of Redu ron Redu	ots (B14) Odor (C' heres on uced Iron action in T	Surface Drainag Dry-Se Living Roots Crayfis Saturat (C4) Stunted Geomo	e Soil Cracks (B6) ge Pattems (B10) geson Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9) If or Stressed Plants (D1)
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Project/Site CSAH 9/I-494 Interchange Project	Citv/0	County: P	lymouth/Her	nnepin Sampling Date: 9/25/18
Applicant/Owner: City of Plymouth	,	State:	MN	Sampling Point: 1-Wet
Investigator(s): RF			on, Township	
Landform (hillslope, terrace, etc.): Toeslope			100	e, convex, none): Concave
Slope (%): 0 Lat: 45.029414		Long:	-93.4557	**
Soil Map Unit Name Cordova loam, 0 to 2 percent slopes				Classification: PEM1C
Are climatic/hydrologic conditions of the site typical for this	time of	f the year?		f no, explain in remarks)
Are vegetation , soil , or hydrology		_	disturbed?	Are "normal circumstances"
Are vegetation , soil , or hydrology		naturally pr		present? No
SUMMARY OF FINDINGS		, , , , , ,		(If needed, explain any answers in remarks.)
Hydrophytic vegetation present?	- 1			(a trace) of praint any another in termainer,
Hydric soil present?		Is the s	ampled area	a within a wetland?
Indicators of wetland hydrology present?			tional wetlar	***************************************
Remarks: (Explain alternative procedures here or in a sepa				
Themaiks. (Explain alternative procedures here of in a sepa	arate re	port.)		
There is a parking lot to the north and a reta	ining v	wall to the	south. Muc	ch of the surrounding area is mowed.
VECETATION Has a size US				
VEGETATION Use scientific names of plants.				B
	solute Cover	Dominan t Species	Indicator Staus	Dominance Test Worksheet
1	50761	r opecies	Otaus	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across all Strata: 2 (B)
4				Percent of Dominant Species
5				that are OBL, FACW, or FAC: 100.00% (A/B)
Cooling/Chrush estatum (Diet size)	0 :	= Total Cove	•	
Sapling/Shrub stratum (Plot size: 15)				Prevalence Index Worksheet Total % Cover of:
2				OBL species 85 x 1 = 85
3				FACW species 30 x 2 = 60
4			,	FAC species 15 x 3 = 45
5				FACU species 0 x 4 = 0
	0 =	Total Cove	r	UPL species 0 x 5 = 0
Herb stratum (Plot size: 5)				Column totals 130 (A) 190 (B)
	70	Y	OBL	Prevalence Index = B/A =1.46
	30 15	<u>Y</u>	FACW	Hadanahadi Vandadi I II I
	15	N	FAC OBL	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation
5				X Dominance test is >50%
6				X Prevalence index is ≤3.0*
7				Morphogical adaptations* (provide
8				supporting data in Remarks or on a
9				separate sheet)
10	120	- T-4-1 O		Problematic hydrophytic vegetation*
Woody vine stratum (Plot size: 30)	30 =	= Total Cove	r	(explain)
1				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2				Hydrophytic
· · · · · · · · · · · · · · · · · · ·	0 =	Total Cove	,——	vegetation
				present? Y
Remarks: (Include photo numbers here or on a separate sh	neet)			

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the ab	sence of indicators.)
Depth	Matrix			dox Feat				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR 2/1	100	10YR 4/6	2	С	М	Sandy Clay Loam	
6-18	10YR 2/1	95	10YR 4/6	5	С	М	Sandy Clay Loam	
				-	-			
*Type: C = 0	Concentration, D	= Deplet	ion, RM = Reduc	ed Matrix	, MS = N	lasked S	and Grains. **Lo	cation: PL = Pore Lining, M = Matrix
	il Indicators:							roblematic Hydric Soils:
-	risol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie	e Redox (A16) (LRR K, L, R)
	ic Epipedon (A2)			ndy Redo			Dark Surface	e (S7) (LRR K, L)
Blac	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mangar	nese Masses (F12) (LRR K, L, R)
Hyd	lrogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very Shallov	v Dark Surface (TF12)
Stra	atified Layers (A5)	Loa	amy Gley	ed Matrix	k (F2)	Other (expla	in in remarks)
2 cr	n Muck (A10)				atrix (F3)			
Dep	leted Below Dark	Surface	(A11) X Red	dox Dark	Surface	(F6)		
	ck Dark Surface (,			ark Surfa			hydrophytic vegetation and weltand
	dy Mucky Minera	, ,		dox Depr	essions	(F8)	hydrology mi	ust be present, unless disturbed or
5 cr	n Mucky Peat or	Peat (S3	5)					problematic
Restrictive	Layer (if observ	ed):						
Type: Fi	II						Hydric soil pre	esent? Y
Depth (inche	es): 18"				5			
Remarks:								
l.								
HYDROLO	OGY							
Wetland Hy	drology Indicate	ors:						
Primary India	cators (minimum	of one is	required; check	all that a	(ylqq		Secondar	y Indicators (minimum of two required)
	Water (A1)				Fauna (B	13)		face Soil Cracks (B6)
	ter Table (A2)				uatic Plar			inage Patterns (B10)
Saturation					en Sulfide			Season Water Table (C2)
Water M	arks (B1)		-	_				yfish Burrows (C8)
Sedimen	t Deposits (B2)			(C3)			Satu	uration Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)			Presenc	e of Redu	uced Iron	(C4) Stur	nted or Stressed Plants (D1)
	t or Crust (B4)			Recent	Iron Redu	iction in T		morphic Position (D2)
	osits (B5)			(C6)			X FAC	C-Neutral Test (D5)
the state of the s	on Visible on Aeria		· · · · · · · · · · · · · · · · · · ·	_	ick Surfac			
	Vegetated Conca		ce (B8)	_	or Well Da	, ,		
	ained Leaves (B9)		Other (E	xplain in	Remarks)	
Field Obser								
Surface water		Yes	No	X	Depth (i			
Water table		Yes	X No		Depth (i		16"	Indicators of wetland
Saturation p		Yes	X No		Depth (i	nches):	12"	hydrology present? Y
(includes cap								
Describe rec	orded data (strea	am gaug	e, monitoring wel	l, aerial p	photos, p	revious ir	nspections), if availab	e:
Remarks:		-						
romains.								

Project/Site CSAH 9/I-494 Interchange Project	City/0	County:	Plymouth/Her	nnepin Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth	-	State:	MN	Sampling Point:	2-Up
Investigator(s): RF		Sec	tion, Township	o, Range:	5,118,22
Landform (hillslope, terrace, etc.): Hillslope)	 Local	relief (concav	re, convex, none):	Linear
Slope (%): 0 Lat: 45.029414		Long:	-93.4557		WGS 84
Soil Map Unit Name Hamel, overwash-Hamel complex, 0	to 3 per			Classification:	None
Are climatic/hydrologic conditions of the site typical for thi	is time of	f the year?	Y (I	f no, explain in remarks)	
Are vegetation , soil , or hydrology	/	significant	tly disturbed?	Are "normal circu	ımetancee"
Are vegetation , soil , or hydrology	,——	naturally p	problematic?	7 TO THOMPSHOO	present? No
SUMMARY OF FINDINGS				(If needed, explain any a	nswers in remarks.)
Hydrophytic vegetation present? Y					
Hydric soil present?		Is the	sampled are	a within a wetland?	N
Indicators of wetland hydrology present?		f yes, c	ptional wetlar	nd site ID: PEM1A	
Remarks: (Explain alternative procedures here or in a sep	narate re	aport)		*	
Trainer (Explain alternative procedures here of in a sep	Jarate 10	port.)			
	Mc	owed area	a.		
VECETATION Lies escentific normal of plants					
VEGETATION Use scientific names of plants.		Danis	la dia atau	Dominance Test Works	baat
	osolute Cover	Dominan t Species	Indicator Staus	Number of Dominant Spec	
1		. • p • • • • •	Otado	that are OBL, FACW, or FA	
2		-	· · · · · · · · · · · · · · · · · · ·	Total Number of Domina	\
3			···	Species Across all Stra	ata: 1 (B)
4				Percent of Dominant Spec	
5			3).	that are OBL, FACW, or FA	AC: 100.00% (A/B)
Sapling/Shrub stratum (Plot size: 15)	0 :	= Total Cov	er	Daniel and today West	
Sapling/Shrub stratum (Plot size: 15)				Prevalence Index Work Total % Cover of:	sneet
2			···		x 1 = 0
3					x 2 = 0
4			0,		x 3 = 294
5					x 4 = 16
	0 :	= Total Cov	er		x 5 =0
Herb stratum (Plot size: 5					(A) <u>310</u> (B)
1 Poa pratensis	98	Y	FAC	Prevalence Index = B/A :	3.04
2 Trifolium repens 3 Cirsium arvense	2	N	FACU	Hardward Wardati	
4		N_	FACU	Hydrophytic Vegetation Rapid test for hydrop	
5			S(X Dominance test is >5	
6				Prevalence index is:	
7				Morphogical adaptat	ions* (provide
8				supporting data in Re	
9				separate sheet)	
10	100	- T-4-1 O	61	Problematic hydroph	ytic vegetation*
Woody vine stratum (Plot size: 30)	102	= Total Cov	er	— (explain)	
1				*Indicators of hydric soil and present, unless distu	
2				Hydrophytic	rood of problematio
·	0 :	Total Cov	er	vegetation	
				present? Y	,
Remarks: (Include photo numbers here or on a separate s	sheet)				

Sampling Point:

2-Up

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	indicat	or or confirm th	ne absence of i	ndicators.)
Depth	Matrix		Red	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	e	Remarks
0-6	10YR 2/1	100					Loam	ĺ	
6-12	10YR 2/2	100					Loam		
	101112	100			-		Loan		
					-				
									5 (11 N N N N N
	Concentration, D	= Deplet	on, RM = Reduce	ed Matrix	, MS = M	lasked S	and Grains.		= Pore Lining, M = Matrix
-	il Indicators:								c Hydric Soils:
	tisol (A1)				ed Matrix	(S4)			(LRR K, L, R)
	tic Epipedon (A2)			ndy Redo				urface (S7) (LR	
	ck Histic (A3)			pped Ma				_	es (F12) (LRR K, L, R)
	lrogen Sulfide (A			-	ky Minera			hallow Dark Sur	
	atified Layers (A5)			ed Matrix	(F2)	Other (explain in rema	rks)
-	m Muck (A10)				atrix (F3)				
	oleted Below Darl				Surface				
	ck Dark Surface (ark Surfac				ic vegetation and weltand
Sar	ndy Mucky Minera	ıl (S1)	Red	dox Depr	essions ((F8)	hydrolo		sent, unless disturbed or
5 cr	m Mucky Peat or	Peat (S3)					probl	ematic
Restrictive	Layer (if observ	ed):							
Type: F		/					Hydric so	oil present?	N
Depth (inche							,	·	
Remarks:	707.								
HYDROL	OGY								
Wetland Hy	drology Indicate	rs:							
Primary Indi	cators (minimum	of one is	required; check	all that a	(ylaq		Seco	ondary Indicator	s (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	13)	-	Surface Soil Ci	racks (B6)
	iter Table (A2)			True Aq	uatic Plar	its (B14)	_	Drainage Patte	erns (B10)
Saturation	on (A3)			Hydroge	n Sulfide	Odor (C	1)	Dry-Season W	ater Table (C2)
Water M	arks (B1)			Oxidized	Rhizosp	heres on	Living Roots	Crayfish Burro	ws (C8)
Sedimer	nt Deposits (B2)			(C3)			_		ble on Aerial Imagery (C9)
	oosits (B3)				e of Redu			_	essed Plants (D1)
	it or Crust (B4)				ron Redu	ction in T	illed Soils	_ Geomorphic P	, ,
	osits (B5)			(C6)			_	FAC-Neutral T	est (D5)
	on Visible on Aeria				ck Surfac				
	Vegetated Conca		ce (B8)		or Well Da				
	tained Leaves (B9)		Other (E	xplain in	Remarks)		
Field Obser									
Surface wat		Yes	No	X	Depth (i				
Water table		Yes	No No	X	Depth (i				rs of wetland
Saturation p		Yes	No	X	Depth (i	ncnes):	<u> </u>	nydrold	ogy present? N
	pillary fringe)							1	
Describe red	corded data (strea	ım gaug	e, monitoring well	, aerial p	hotos, pr	revious ii	nspections), if av	/ailable:	
Remarks:									

Project/Site CSAH 9/I-494 Interchange Project	City/	County:	Plymouth/He	nnepin Sampling Date:	9/25/18
Applicant/Owner: City of Plymouth		State:	MN	Sampling Point:	2-Wet
Investigator(s): RF		Sec	tion, Townshi	p, Range: 15	5,118,22
Landform (hillslope, terrace, etc.): Toeslope		Loca	I relief (concav	/e, convex, none):	None
Slope (%): 0 Lat: 45.029414		Long:	-93.4557	88 Datum:	WGS 84
Soil Map Unit Name Hamel, overwash-Hamel complex, 0 t	o 3 per	cent slopes	s VWI	Classification:	
Are climatic/hydrologic conditions of the site typical for this	time c	of the year?	Y (If no, explain in remarks)	
Are vegetation , soil , or hydrology		significan	tly disturbed?	Are "normal circu	metances"
Are vegetation , soil , or hydrology		naturally	problematic?	7 tro Horman circu	present?
SUMMARY OF FINDINGS				(If needed, explain any ar	
Hydrophytic vegetation present?					
Hydric soil present?	0	Is the	sampled are	a within a wetland?	Υ
Indicators of wetland hydrology present?				nd site ID: PEM1A	
Remarks: (Explain alternative procedures here or in a sepa	oroto r				
Tomans, (Explain alternative procedures here of in a sept	arate it	eport.)			
VEGETATION Use scientific names of plants.					
	solute	Dominan		Dominance Test Works	
Tree Stratum (Plot size: 30) %	Cover	t Species	Staus	Number of Dominant Spec that are OBL, FACW, or FA	
3				Total Number of Domini Species Across all Stra	
4				Percent of Dominant Spec	ies
5			21	that are OBL, FACW, or FA	C: 100.00% (A/B)
Sopling/Shrub strature / Diet size.	0	= Total Cov	er er		
Sapling/Shrub stratum (Plot size: 15)				Prevalence Index Work Total % Cover of:	sheet
2			2V		x1= 0
3					2 = 200
4				-	x 3 = 51
5				FACU species 0	x 4 = 0
7	0	= Total Cov	er er		x 5 = 0
Herb stratum (Plot size: 5)				Column totals117	(A) <u>251</u> (B)
	95	- Y	FACW	Prevalence Index = B/A :	2.15
2 Poa pratensis 3 Solidago gigantea	15	N	FAC		
3 Solidago gigantea	5	N	FACW	Hydrophytic Vegetation	
5				Rapid test for hydrop X Dominance test is >5	
6		-	-:	X Prevalence index is	
7			P(Morphogical adaptati	
8				supporting data in Re	
9			21	separate sheet)	
10	115	= Total Cov	er	Problematic hydroph (explain)	ytic vegetation*
Woody vine stratum (Plot size:)				*Indicators of hydric soil and	wetland hydrology must be
1_Solanum dulcamara	2		FAC_	present, unless distu	
2	2	= Total Cov	ver	Hydrophytic vegetation	
December (for help to the form)				present? Y	
Remarks: (Include photo numbers here or on a separate s	heet)				

Sampling Point:

2-Wet

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the	e absence of i	ndicators.)
Depth	Matrix			dox Feat					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture		Remarks
0-5	10YR 2/1	95	10YR 5/8	5	С	M	Mucky Loam		
5-18	10YR 2/1	60	10YR 7/1	30	D	М	Clay Loam		
			10YR 5/8	10	С	М	Clay Loam		
18-24	10YR 2/1	100	30111070				Clay Loam		
10-24	1011 2/1	100		-			Clay Loain		
*Type: C = (Concentration, D	- Depleti	on RM = Reduc	ed Matrix	. MS = N	/lasked S	and Grains.	**Location: PL	= Pore Lining, M = Matrix
	oil Indicators:	Dopioti	on, run ruduo	od Man	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				c Hydric Soils:
	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)			416) (LRR K, L, R)
	tic Epipedon (A2)			ndy Redo		. (01)		rface (S7) (LR	
	ck Histic (A3)			ipped Ma					es (F12) (LRR K, L, R)
	drogen Sulfide (A	1)		amy Mucl		al (F1)		allow Dark Su	
	atified Layers (A5	•		amy Gley	-			xplain in rema	
	m Muck (A10)	,		pleted Ma				xpiair iir i oiria	,,,,,
	oleted Below Dark	Surface		dox Dark					
	ck Dark Surface (·	pleted Da			*Indicator	s of hydronhyt	ic vegetation and weltand
	ndy Mucky Minera			dox Depr					sent, unless disturbed or
	m Mucky Peat or			dox Dopi	00010170	(. 0)	nyarolog		ematic
			<u> </u>						
	Layer (if observ	ed):					i Ukudula sal		V
Type:							Hydric soi	I present?	<u>Y</u>
Depth (inche	es):								
HYDROLO	OGY								
Wetland Hy	drology Indicate	ors:							
Primary Indi	cators (minimum	of one is	required; check	all that a	pply)		Secor	ndary Indicator	s (minimum of two required
	Water (A1)				Fauna (B	13)	· ·	Surface Soil C	
	iter Table (A2)				uatic Plar			Drainage Patte	ems (B10)
— Saturatio				_		Odor (C	1) X	Dry-Season W	ater Table (C2)
Water M	arks (B1)		-	Oxidized	d Rhizosp	heres on	Living Roots	Crayfish Burro	ws (C8)
Sedimer	nt Deposits (B2)			(C3)				Saturation Visi	ble on Aerial Imagery (C9)
Drift Dep	oosits (B3)			Presenc	e of Redu	uced Iron	(C4)		essed Plants (D1)
Algal Ma	at or Crust (B4)			Recent I	ron Redu	iction in T	illed Soils	Geomorphic P	
Iron Dep	osits (B5)			(C6)			X	FAC-Neutral T	est (D5)
	on Visible on Aeria			-	ck Surfac				
Sparsely	Vegetated Conca	ve Surfa	ce (B8)	_	or Well Da	, ,			
Water-S	tained Leaves (B9)		Other (E	xplain in	Remarks)		
Field Obser	vations:								
Surface wate		Yes	No	X	Depth (i				
Water table		Yes	X No		Depth (i		12		rs of wetland
Saturation p		Yes	X No		Depth (i	inches):	9	hydrole	ogy present? Y
	pillary fringe)								
Describe rec	corded data (strea	am gauge	e, monitoring wel	I, aerial p	hotos, p	revious in	nspections), if ava	ailable:	
Remarks:									

Project/Site CSAH 9/I-494 Interchange Project	City/C	ounty: P	lymouth/Her	nepin Sam	pling Date:	9/25/18
Applicant/Owner: City of Plymouth		State:	MN	Sam	pling Point:	3-Up
Investigator(s): RF		Section	on, Township	, Range:	15,	118,22
Landform (hillslope, terrace, etc.): Hillslop	е	— Local re	elief (concav	e, convex, nor	ne):	Linear
Slope (%): 30 Lat: 45.029414		Long:	-93.45578	B8 Dati	um:	WGS 84
Soil Map Unit Name Hamel, overwash-Hamel complex, (to 3 perc	-	/WI C	Classification:		None
Are climatic/hydrologic conditions of the site typical for the	nis time of	the year?	<u>Y</u> (I	f no, explain ir	remarks)	1
Are vegetation , soil , or hydrolog	ly .	significantly			"normal circun	istances"
Are vegetation , soil , or hydrolog	Jy	naturally pro	oblematic?	, 0	Trottma on our	present? Yes
SUMMARY OF FINDINGS				(If needed, e	explain any ans	swers in remarks.)
Hydrophytic vegetation present?						
Hydric soil present?		Is the sa	ampled area	within a wet	land?	N
Indicators of wetland hydrology present?		f yes, op	tional wetlan	d site ID:	PEM1A	 X
Remarks: (Explain alternative procedures here or in a se	enarate rei	oort)				Y
		,	to parking	lot.		
VEGETATION Use scientific names of plants.						
	Absolute	Dominan	Indicator	Dominance	Test Worksh	eet
·	% Cover	t Species	Staus		ominant Specie	
1 Acer negundo		<u> </u>	FAC_		FACW, or FAC	`
2					ber of Dominar	
4			·		Across all Strata ominant Specie	
5					FACW, or FAC	
	80 =	Total Cover			,	
Sapling/Shrub stratum (Plot size: 15)				Prevalence	Index Works	neet
1 Acer negundo	10	Y	FAC	Total % Cov	er of:	
2 Rhamnus cathartica	10	Y	FAC	OBL species		1 =0
3				FACW spec		2 = 0
5				FAC species FACU speci		3 = <u>300</u> 4 = <u>20</u>
	20 =	Total Cover		UPL species		5 = 0
Herb stratum (Plot size: 5)		70101 00701		Column tota		
1					Index = B/A =	3.05
2			-	1 TO VAIO I GO	maox biji	
3				Hydrophyti	c Vegetation	ndicators:
4				Rapid te	est for hydroph	ytic vegetation
5		-			nce test is >50	
6				— Prevale	nce index is ≤3	3.0*
8					gical adaptatio	**
9				supporti	ing data in Rer e sheet)	narks or on a
10					e sheet) natic hydrophyl	ic vegetation*
	0 =	Total Cover		(explain		.o rogolation
Woody vine stratum (Plot size: 30)						etland hydrology must be
1 Parthenocissus quinquefolia	5	Υ	FACU	prese	ent, unless disturb	, ,,
2				Hydrop	-	
		Total Cover	•	vegetat present		_
Remarks: (Include photo numbers here or on a separate	sheet)					

SOIL	Sampling Point:

Profile Desc	ription: (Descri	be to th	e depth needed	to docu	ment the	indicat	or or confirm the a	bsence of indicators.)
Depth	<u>Matrix</u>		Red	ox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-24	10YR 2/2	100					Loam	
					<u> </u>			
*Type: C = C	oncentration, D =	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S	and Grains. **L	ocation: PL = Pore Lining, M = Matrix
Hydric So	il Indicators:							Problematic Hydric Soils:
Hist	isol (A1)			-	ed Matrix	(S4)		rie Redox (A16) (LRR K, L, R)
	ic Epipedon (A2)			dy Redo				ce (S7) (LRR K, L)
	k Histic (A3)			oped Ma	. ,			anese Masses (F12) (LRR K, L, R)
	rogen Sulfide (A			-	ky Minera			ow Dark Surface (TF12)
	tified Layers (A5)				ed Matrix		Other (expl	lain in remarks)
	Muck (A10)				atrix (F3)			
	leted Below Dark				Surface			C
	k Dark Surface (,			ark Surfa essions (f hydrophytic vegetation and weltand
	dy Mucky Minera n Mucky Peat or l			iox Debi	essions ((FO)	nydrology n	nust be present, unless disturbed or problematic
	- 31		,			,		problematio
1.00	_ayer (if observe	∍d):					0.00	
Type:	- \				.		Hydric soil p	resent? N
Depth (inche	s):							
Remarks:								
LIVEROLG	2014							
HYDROLC								
	drology Indicato							
		of one is	required; check					ary Indicators (minimum of two require
	Vater (A1)				Fauna (B			urface Soil Cracks (B6)
	er Table (A2)		-		uatic Plar			ainage Patterns (B10)
Saturatio	, ,					Odor (C		y-Season Water Table (C2)
Water Ma	. ,			(C3)	Rnizosp	neres on		ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
	t Deposits (B2) osits (B3)			` '	e of Redu	uced Iron		unted or Stressed Plants (D1)
	t or Crust (B4)							eomorphic Position (D2)
Iron Depo				(C6)	701111000			C-Neutral Test (D5)
	n Visible on Aeria	I Imagery	(B7)		ck Surfac	e (C7)		
	Vegetated Conca		· · · —		r Well Da	. ,		
	ained Leaves (B9)					Remarks)	
Field Obser	vations:							
Surface water	r present?	Yes	No	X	Depth (i	nches):		
Water table p	resent?	Yes	No	X	Depth (i	nches):		Indicators of wetland
Saturation pr		Yes	No	X	Depth (i	nches):		hydrology present?N
(includes cap								
Describe rec	orded data (strea	ım gauge	e, monitoring well	, aerial p	hotos, p	revious ir	nspections), if availa	ble:
Remarks:								
Nemaiks.								

3-Up

Project/Site CSAH 9/I-494 Interchange Project	City/	County: F	Plymouth/Hei	nnepin S	ampling Date:	9/25/18
Applicant/Owner: City of Plymouth		State:	MN	Sa	ampling Point:	3-Wet
Investigator(s): RF		Secti	on, Townshi	p, Range:	15,	118,22
Landform (hillslope, terrace, etc.): Hillslo	ре	Local r	elief (concav	e, convex, r	none):	Concave
Slope (%): 20 Lat: 45.029414		Long:	-93.4557	88 D	atum:	WGS 84
Soil Map Unit Name Udorthents (cut and fill land), 0 to	6 percent s		JWI (Classification	n:	None
Are climatic/hydrologic conditions of the site typical for	this time o	of the year?	Υ (Ι	f no, explair	n in remarks)	
Are vegetation , soil , or hydrolo	ogy	significantly	disturbed?		re "normal circum	istances"
Are vegetation , soil , or hydrolo	ogy ———	naturally pr	oblematic?	,,	no monnaronoun	present? Yes
SUMMARY OF FINDINGS				(If needed	d, explain any ans	swers in remarks.)
Hydrophytic vegetation present? Y						
Hydric soil present? Y		Is the s	ampled area	a within a w	vetland?	Υ
Indicators of wetland hydrology present?	2	f yes, op	tional wetlar	nd site ID:	PEM1C	
Remarks: (Explain alternative procedures here or in a	sanarata r	aport)				<u> </u>
Tremains. (Explain alternative procedures here of in a s	separate it	aport.)				
VEGETATION Use scientific names of plants	S.					
	Absolute	Dominan	Indicator	Dominan	ce Test Worksh	eet
Tree Stratum (Plot size:30)	% Cover	t Species	Staus	Number of	f Dominant Specie	s
1 Rhamnus cathartica	85	Y	FAC	that are Of	BL, FACW, or FAC	:3 (A)
2 Populus deltoides	70	Y	FAC	1	umber of D omi nar	
3): :	:		es Across all Strata	
5			·		f Dominant Specie	
·	155	= Total Cove		lilat are Of	BL, FACW, or FAC	C:100.00%_ (A/B)
Sapling/Shrub stratum (Plot size: 15)		. 5101 5510		Prevalen	ce Index Worksl	neet
1				Total % C		
2				OBL spec	cies 0 x	1 = 0
3				FACW sp		2 = 0
				FAC spec		3 = 726
5		= Total Cove	 -3	FACU spec		4 = 0
Herb stratum (Plot size: 5)		- Total Cove	•	Column to		5 = 0 726 (B)
1 Rhamnus cathartica	85	Υ	FAC		ce Index = B/A =	726 (B) 3.00
2			FAC	Fievalend	be muex - b/A -	3.00
3				Hydroph	ytic Vegetation	indicators:
4			•		test for hydroph	
5				X Domi	nance test is >50	%
6				X Preva	alence index is ≤3	3.0*
7					hogical adaptatio	
8					orting data in Rer	narks or on a
9				-	rate sheet)	0
-10	85	= Total Cove		(expla	ematic hydrophy	tic vegetation*
Woody vine stratum (Plot size: 30)		Total Gove		D 		
1 Solanum dulcamara	2		FAC		s of hydric soil and w esent, unless disturb	etland hydrology must be ed or problematic
2				Hydr	ophytic	
	2	= Total Cove	r		tation	
				prese	ent? Y	=
Remarks: (Include photo numbers here or on a separa	te sheet)					

~	\sim	
~	11	

Sampling Point:

3-Wet

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abse	nce of indicators.)
Depth	Matrix			dox Feat				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-3	10YR 2/1	100					Loam	
3-9	10YR 2/2	98	10YR 6/1	2	D	М	Loam	
	10YR 4/1		10YR 7/8	2	С	M	Sandy Loam	
9-24	10113 4/1	98	1011/1/10		-	IVI	Sandy Loan	
*Typo: C = 0	Concentration D	- Doploti	on DM = Doduce	d Matrix	, MC = N	Applyed S	and Grains **Loca	tion: PL = Pore Lining, M = Matrix
		= Depleti	on, RM = Reduce	ed Matrix	K, IVIS – IV	lasked 5		blematic Hydric Soils:
	il Indicators:		Car	du Clave	ad Matrix	(01)		Redox (A16) (LRR K, L, R)
	isol (A1)				ed Matrix	(54)		S7) (LRR K, L)
	ic Epipedon (A2)			dy Redo				se Masses (F12) (LRR K, L, R)
	ck Histic (A3)	4.\		pped Ma	, ,	-1 /54\		
	rogen Sulfide (A			-	ky Minera		Other (explain	Dark Surface (TF12)
	tified Layers (A5)			ed Matrix		Other (explain	in remarks)
	n Muck (A10)	. 0 .			atrix (F3)			
	leted Below Dark				Surface		*1 12 1	described and scattered
	ck Dark Surface (,			ark Surfa			drophytic vegetation and weltand
	dy Mucky Minera			iox Depr	essions	(F8)	nyarology mus	t be present, unless disturbed or
5 cr	n Mucky Peat or	Peat (S3	·)					problematic
	Layer (if observ	ed):						
Type:					_		Hydric soil pres	ent?Y
Depth (inche	es):							
HYDROLO	OGY							
Wetland Hy	drology Indicate	ors:						
Primary Indi	cators (minimum	of one is	required; check	all that a	pply)		Secondary I	ndicators (minimum of two required
	Water (A1)				 Fauna (B	13)		e Soil Cracks (B6)
	ter Table (A2)				uatic Plar			age Patterns (B10)
Saturation						Odor (C	Dry-So	eason Water Table (C2)
— Water M	arks (B1)			Oxidized	Rhizosp	heres on	Living Roots Crayfi	sh Burrows (C8)
Sedimer	it Deposits (B2)			(C3)			Satura	ation Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)			Presenc	e of Redu	uced Iron		ed or Stressed Plants (D1)
	t or Crust (B4)			Recent I	Iron Redu	iction in T		orphic Position (D2)
	osits (B5)			(C6)			FAC-N	leutral Test (D5)
	on Visible on Aeria	-			ck Surfac	, ,		
	Vegetated Conca		ce (B8)		or Well Da			
X Water-St	ained Leaves (B9)		Other (E	xplain in	Remarks)	
Field Obser								
Surface water		Yes	No	X	Depth (i			De Dan II net I net I net
Water table		Yes	No	X	Depth (i			ndicators of wetland
Saturation p		Yes	No	X	Depth (i	ncnes):		hydrology present? Y
	oillary fringe)							
Describe rec	orded data (strea	am gaug	e, monitoring well	, aerial p	hotos, p	revious ir	nspections), if available:	
Remarks:								

Project/Site CSAH 9/I-494 Interchange Project	City/	County:	Plymouth/Hei	nnepin Sampling Date	9/25/18
Applicant/Owner: City of Plymouth		State:	MN	Sampling Point	 :: 5-Up
Investigator(s): RF		Sec	tion, Townshi		15,118,22
Landform (hillslope, terrace, etc.): Hillslope				re, convex, none):	Linear
Slope (%): 25 Lat: 45.029414		Long:	-93.4557		WGS 84
Soil Map Unit Name Hamel, overwash-Hamel complex, 0	to 3 per			Classification:	None
Are climatic/hydrologic conditions of the site typical for this				f no, explain in remarks)	None
			ly disturbed?		
		•		Are "normal cir	
Are vegetation , soil , or hydrology SUMMARY OF FINDINGS		naturally p	problematic?	(If no and all assorbein assor	present? Yes
				(If needed, explain any	answers in remarks.)
Hydric soil present? N				a within a wetland?	N
Indicators of wetland hydrology present? N		r yes, c	ptional wetlar	nd site ID:	
Remarks: (Explain alternative procedures here or in a sep	arate re	eport.)			
Area is adiacont to L404	1 to the	a woot one	l a aon daoi	anahin ta tha aaat	
Area is adjacent to I-494	+ to the	e west and	a car deale	ership to the east.	
VEGETATION Use scientific names of plants.					
	solute	Dominan	Indicator	Dominance Test Wor	ksheet
Tree Stratum (Plot size: 30) %	Cover	t Species	Staus	Number of Dominant Sp	ecies
1				that are OBL, FACW, or	FAC: 1 (A)
2				Total Number of Dom	
3				Species Across all S	trata:1 (B)
4				Percent of Dominant Sp	
3	0	T-1-10		that are OBL, FACW, or	FAC: 100.00% (A/B)
Sapling/Shrub stratum (Plot size: 15)		= Total Cov	er	Prevalence Index Wo	wko b a a t
1				Total % Cover of:	rksneet
2		-		OBL species 0	x 1 = 0
3		-		FACW species 60	x 2 = 120
4		•	-	FAC species 5	x 3 = 15
5				FACU species 20	x 4 = 80
· · · · · · · · · · · · · · · · · · ·	0	= Total Cov	er	UPL species 5	x 5 = 25
Herb stratum (Plot size: 5)				Column totals 90	(A)240(B)
1 Phalaris arundinacea	45	Y	_FACW_	Prevalence Index = B/	A =2.67
2 Solidago gigantea	15	N	FACW		
3 Trifolium repens	10	N	FACU	Hydrophytic Vegetati	
4 Setaria faberi 5 Tanacetum vulgare	5	N	FACU		ophytic vegetation
6 Poa pratensis	5	N	FAC	X Dominance test is X Prevalence index i	
7 Cirsium arvense	2	N	FACU		
8			17.00	Morphogical adapt supporting data in	
9		-) ?	separate sheet)	rtemants of off a
10		*		Problematic hydro	phytic vegetation*
	90	= Total Cov	er	(explain)	,
Woody vine stratum (Plot size: 30)				*Indicators of hydric soil a	nd wetland hydrology must be
1				present, unless dis	sturbed or problematic
2				Hydrophytic	
	0	= Total Cov	er	vegetation present?	Υ
Demontra (Include abote a				hieseitt!	<u> </u>
Remarks: (Include photo numbers here or on a separate s	sneet)				

Sampling Point:

5-Up

Depth	Matrix			dox Feat			_		
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	re	Remarks
0-12	10YR 5/3	90	10YR 4/6	10	С	М	Clay/Fill		
		Ň							
							<u> </u>		
	Concentration, D	= Depleti	ion, RM = Reduce	ed Matrix	c, MS = N	Masked S			on: PL = Pore Lining, M = Mat
-	il Indicators:		_			(5.4)			lematic Hydric Soils:
	tisol (A1)				ed Matrix	(S4)			edox (A16) (LRR K, L, R)
	tic Epipedon (A2)			ndy Redo					7) (LRR K, L) • Masses (F12) (LRR K, L, R)
	ck Histic (A3)	4.\			trix (S6)	-1/54)		•	ark Surface (TF12)
	Irogen Sulfide (A4			-	ky Minera ed Matrix	, ,		explain ir)	, ,
	atified Layers (A5) n Muck (A10)	,			atrix (F3)		Other	(explain ii	i remaiks)
	oleted Below Dark	Surface			Surface				
	ck Dark Surface (· /		ark Surfa		*Indicat	are of hyd	rophytic vegetation and welta
	idy Mucky Minera	,			essions				pe present, unless disturbed of
	n Mucky Peat or i			ox Bopi	00010110	(10)	Hydron	ogy masti	problematic
		,							
	Layer (if observe	ea):					Hudrin o	oil prese	n+2 N
ъ. Г	31								
					-		Tiyano s	on prese	nt?N
epth (inche					: :		Tiyuno s	on prese	N:
/pe: Fi epth (inche emarks:					•		Tiyuno 3	on prese	K:N
epth (inche							- Tryuno s	on prese	K:N
epth (inche					-		e e	on prese	K:
epth (inche					-		e e	on preser	
epth (inche	es): <u>12</u>						H H	on prese	K:
pth (inchermarks:	DGY	ors:			-		a a	on prese	K:
pth (inche marks: DROLC etland Hy	OGY drology Indicate		required check	all that a	naly)		н		
pth (inche emarks: YDROLO etland Hy mary Indi	DGY drology Indicato		required; check		****	:13)	н	ondary Inc	dicators (minimum of two requ
YDROLC etland Hy mary Indi Surface	DGY drology Indicate cators (minimum Water (A1)		required; check	Aquatic	Fauna (B	•	н	ondary Inc	dicators (minimum of two requ Soil Cracks (B6)
YDROLO etland Hy imary Indi Surface High Wa	DGY drology Indicato cators (minimum Water (A1) ter Table (A2)		required; check	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)	Sec	condary Ind Surface Drainag	dicators (minimum of two requ Soil Cracks (B6) e Pattems (B10)
YDROLO etland Hy mary Indi Surface High Wa Saturatio	DGY drology Indicator cators (minimum Water (A1) ter Table (A2) on (A3)		required; check	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	Sec 	condary Ind Surface Drainag Dry-Sea	dicators (minimum of two requ Soil Cracks (B6) e Pattems (B10) Ison Water Table (C2)
PDROLO Catland Hy Mary Indi Surface High Wa Saturatic Water M	DGY drology Indicato cators (minimum Water (A1) ter Table (A2)		required; check :	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	Sec	condary Ind Surface Drainag Dry-Sea Crayfish	dicators (minimum of two requ Soil Cracks (B6) e Pattems (B10)
pth (inche marks: /DROLO etland Hy mary Indi Surface High Wa Saturatio Water M Sedimer	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1)		required; check	Aquatic True Aq Hydroge Oxidized (C3)	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (Coheres on	Sec ————————————————————————————————————	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati	dicators (minimum of two requisions (B6) e Pattems (B10) son Water Table (C2) Burrows (C8)
DROLO etland Hy mary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)		required; check	Aquatic True Aq Hydroge Oxidized (C3) Presence	Fauna (B uatic Plar en Sulfide d Rhizosp ee of Redu	nts (B14) Odor (Coheres on uced Iron	Sec ————————————————————————————————————	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor	dicators (minimum of two requisions) Soil Cracks (B6) Pattems (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (Coor Stressed Plants (D1) Phic Position (D2)
DROLO etland Hy mary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)		required; check	Aquatic True Aq Hydroge Oxidized (C3) Presence	Fauna (B uatic Plar en Sulfide d Rhizosp ee of Redu	nts (B14) Odor (Conheres on uced Iron	Sec 	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor	dicators (minimum of two requisions) Soil Cracks (B6) Pattems (B10) Ison Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (Cor Stressed Plants (D1)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aeria	of one is	(B7)	Aquatic True Aq Hydroge Oxidized (C3) Present Recent I (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp ee of Redu Iron Redu ck Surfac	nts (B14) Odor (Control of the control of the contr	Sec 	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor	dicators (minimum of two requisions) Soil Cracks (B6) Pattems (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (Coor Stressed Plants (D1) Phic Position (D2)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	DGY drology Indicated cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) osits (B5) on Visible on Aeria vegetated Conca	of one is I Imagery ve Surfa	(B7)	Aquatic True Aq Hydroge Oxidized (C3) Presend Recent I (C6) Thin Mu Gauge C	Fauna (B uatic Plar en Sulfide d Rhizosp ee of Redu fron Redu ck Surfac or Well Da	nts (B14) Odor (Control of the control of the contr	Sec 1) Living Roots (C4) Tilled Soils	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor	dicators (minimum of two requisions) Soil Cracks (B6) Pattems (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (Coor Stressed Plants (D1) Phic Position (D2)
YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-S	DGY drology Indicated cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aeria vegetated Concatained Leaves (B9)	of one is I Imagery ve Surfa	(B7)	Aquatic True Aq Hydroge Oxidized (C3) Presend Recent I (C6) Thin Mu Gauge C	Fauna (B uatic Plar en Sulfide d Rhizosp ee of Redu Iron Redu ck Surfac	nts (B14) Odor (Control of the control of the contr	Sec 1) Living Roots (C4) Tilled Soils	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor	dicators (minimum of two requisions) Soil Cracks (B6) Pattems (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (Coor Stressed Plants (D1) Phic Position (D2)
YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-Seld Obser	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) arks (B3) to or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9) vations:	of one is I Imagery ve Surfa	(B7)	Aquatic True Aq Hydroge Oxidized (C3) Presend Recent I (C6) Thin Mu Gauge C	Fauna (Buatic Plaren Sulfided Rhizospee of Reduler Reduced Surfaced Reduced Re	nts (B14) Odor (Control of the control of the contr	Sec 1) Living Roots (C4) Tilled Soils	ondary Ind Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor	dicators (minimum of two requisions) Soil Cracks (B6) Pattems (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (Coor Stressed Plants (D1) Phic Position (D2)
YDROLC etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-S' eld Obser	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) arks (B3) arks (B3) arks (B5) on Visible on Aeria Vegetated Concatained Leaves (B9) vations:	of one is	y (B7) ce (B8)	Aquatic True Aq Hydroge Oxidized (C3) Presend Recent I (C6) Thin Mu Gauge of Other (E	Fauna (Buatic Plaren Sulfided Rhizospee of Reduction Reduction Well Dataset Language Period (Burnard Period (B	nts (B14) Odor (Control of the control of the contr	Sec 1) Living Roots (C4) Tilled Soils	condary Inc Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor FAC-Ne	dicators (minimum of two requisions) Soil Cracks (B6) e Pattems (B10) ison Water Table (C2) i Burrows (C8) on Visible on Aerial Imagery (C or Stressed Plants (D1) phic Position (D2) utral Test (D5)
YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-S eld Obser	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) arks (B3) to or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9) vations: er present?	of one is I Imagery ve Surface) Yes Yes	y (B7) ce (B8) No	Aquatic True Aq Hydroge Oxidized (C3) Presend Recent I (C6) Thin Mu Gauge of Other (E	Fauna (Buatic Plaren Sulfided Rhizospee of Reduction Reduction Well Date Depth (in Depth (in Depth (in Suntage Page 1)	nts (B14) Odor (Control of the control of the contr	Sec 1) Living Roots (C4) Tilled Soils	condary Inc Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor FAC-Ne	dicators (minimum of two requisions) Soil Cracks (B6) e Patterns (B10) ison Water Table (C2) i Burrows (C8) on Visible on Aerial Imagery (Cor Stressed Plants (D1) phic Position (D2) utral Test (D5)
YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-S eld Obser urface wate ater table aturation p	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) arks (B3) arks (B3) at or Crust (B4) osits (B5) on Visible on Aeria vegetated Conca tained Leaves (B9) vations: er present? present?	of one is	y (B7) ce (B8)	Aquatic True Aq Hydroge Oxidized (C3) Presend Recent I (C6) Thin Mu Gauge of Other (E	Fauna (Buatic Plaren Sulfided Rhizospee of Reduction Reduction Well Dataset Language Period (Burnard Period (B	nts (B14) Odor (Control of the control of the contr	Sec 1) Living Roots (C4) Tilled Soils	condary Inc Surface Drainag Dry-Sea Crayfish Saturati Stunted Geomor FAC-Ne	dicators (minimum of two requisions) Soil Cracks (B6) e Pattems (B10) ison Water Table (C2) i Burrows (C8) on Visible on Aerial Imagery (C or Stressed Plants (D1) phic Position (D2) utral Test (D5)
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Project/Site CSAH 9/I-494 Interchange Project	City/Co	unty: PI	ymouth/Hen	nepin Sampling Date: 9/25/1	8
Applicant/Owner: City of Plymouth		State:	MN	Sampling Point: 5-We	t
Investigator(s): RF		Sectio	n, Township	, Range: 15,118,22	
Landform (hillslope, terrace, etc.): Toeslope)	Local re	elief (concav	e, convex, none): Concave	
Slope (%): 20 Lat: 45.029414		Long:	-93.45578	The state of the s	
Soil Map Unit Name Udorthents (cut and fill land), 0 to 6 p			/WI C	lassification: None	
Are climatic/hydrologic conditions of the site typical for this				no, explain in remarks)	
Are vegetation , soil , or hydrology		- significantly		Are "normal circumstances"	
Are vegetation , soil , or hydrology	-	naturally pro	blematic?	present?	Yes
SUMMARY OF FINDINGS				(If needed, explain any answers in rem	
Hydrophytic vegetation present?					
Hydric soil present?		Is the sa	ampled area	within a wetland?	
Indicators of wetland hydrology present?		f yes, opt	ional wetlan	d site ID: None	
Remarks: (Explain alternative procedures here or in a sep	parate ren	ort)			
Tromands. (Explain alternative procedures here of in a sep	varate rept	Jit.)			
Area is adjacenet to I-49	4 to the	west and	a car deal	ership to the east.	
VECETATION Line orientific names of plants					
VEGETATION Use scientific names of plants.	analuta F	Danein an	la alfa a ta a	Dominance Test Worksheet	
		Dominan Species	Indicator Staus	Number of Dominant Species	
1		0,000.00		that are OBL, FACW, or FAC: 1	(A)
2				Total Number of Dominant	- ` ′
3				Species Across all Strata: 1	(B)
4				Percent of Dominant Species	
5		F 1 1 0		that are OBL, FACW, or FAC: 100.00%	_ (A/B)
Sapling/Shrub stratum (Plot size: 15)	0 = 7	Total Cover		Prevalence Index Worksheet	
1				Total % Cover of:	
2				OBL species $0 \times 1 = 0$	
3				FACW species 100 x 2 = 200	0
4				FAC species 0 x 3 = 0	
5				FACU species 0 x 4 = 0	-3
Host stratum (Dist size: 5	= T	Total Cover		UPL species $0 \times 5 = 0$	
Herb stratum (Plot size: 5)	(Column totals 100 (A) 200	(B)
1 Phalaris arundinacea 2	100		FACW_	Prevalence Index = B/A = 2.00	_
3				Hydrophytic Vegetation Indicators:	
4				Rapid test for hydrophytic vegetat	ion
5				X Dominance test is >50%	0.,
6				X Prevalence index is ≤3.0*	
7				Morphogical adaptations* (provide)
8				supporting data in Remarks or on	а
9				separate sheet)	
10	100 = 7	Total Cover		Problematic hydrophytic vegetatio (explain)	n*
Woody vine stratum (Plot size: 30)	100 - 1	I Otal Covel			
1				*Indicators of hydric soil and wetland hydrolo present, unless disturbed or problema	
2				Hydrophytic	
	0 = 7	Total Cover		vegetation	
				present? Y	
Remarks: (Include photo numbers here or on a separate s	sheet)				

SOIL			
SOIL			

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abs	sence of indicators.)
Depth	<u>Matrix</u>		Re	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	10YR 2/1	98	10YR 4/6	2	С	М	Loam	
						-		
				-				
*Type: C = (Concentration, D	= Deplet	ion, RM = Reduce	ed Matrix	k. MS = N	/lasked S	Sand Grains. **Loc	cation: PL = Pore Lining, M = Matrix
	oil Indicators:	200.01	,		,,			roblematic Hydric Soils:
	tisol (A1)		Sar	ndv Glev	ed Matrix	(S4)		Redox (A16) (LRR K, L, R)
	tic Epipedon (A2)			ndy Redo		. ()		e (S7) (LRR K, L)
	ck Histic (A3)			_	atrix (S6)			ese Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	4)			ky Minera	al (F1)		Dark Surface (TF12)
	atified Layers (A5	•		-	ed Matri			in in remarks)
	m Muck (A10)	,			atrix (F3)			,
	oleted Below Darl	Surface			Surface			
	ck Dark Surface (` ′		ark Surfa	• •	*Indicators of	hydrophytic vegetation and weltand
	ndy Mucky Minera				ressions			ust be present, unless disturbed or
	m Mucky Peat or					`	,	problematic
	Layer (if observ					_		
Type:	Layer (II observ	eu).				1	Hydric soil pre	esent? Y
Depth (inche	<i>36).</i>				-		riyano son pre	
Remarks:					-			
HYDROLO)GY							
	drology Indicate	ors.						
_			required; check	all that a	nnly)		Socondan	/ Indicators (minimum of two required)
	Water (A1)	or one is	required, check		Fauna (B	13)		ace Soil Cracks (B6)
	iter Table (A2)				uatic Plar			nage Patterns (B10)
Saturation					en Sulfide			Season Water Table (C2)
	arks (B1)		•					rfish Burrows (C8)
	nt Deposits (B2)			(C3)	a200p			ration Visible on Aerial Imagery (C9)
	oosits (B3)				e of Redu	uced Iron		ited or Stressed Plants (D1)
	t or Crust (B4)		_					morphic Position (D2)
Iron Dep	osits (B5)			(C6)			X FAC	-Neutral Test (D5)
Inundati	on Visible on Aeria	l Imager	y (B7)	Thin Mu	ick Surfac	e (C7)		
Sparsely	Vegetated Conca	ve Surfa	ce (B8)	Gauge	or Well Da	ata (D9)		
X Water-S	tained Leaves (B9)		Other (E	Explain in	Remarks	5)	
Field Obser	vations:							
Surface wat	•	Yes	No	X	Depth (i			
Water table		Yes	No	X	Depth (i			Indicators of wetland
Saturation p		Yes	No	X	Depth (i	inches):		hydrology present? Y
	pillary fringe)							
Describe red	corded data (strea	am gaug	e, monitoring well	l, aerial p	ohotos, p	revious i	nspections), if availabl	e:
Remarks:								

Sampling Point:

5-Wet

APPENDIX

APPENDIX C

Wetland Photos



Photo 1 - Wetland 2 facing north



Photo 3 - Wetland 4 facing northwest



Photo 2 - Wet Ditch 4 facing south



Photo 4 - Wetland 5 facing south



Photo 5 - Wetland 3 facing north



Photo 7a - Stormwater Pond 1 facing northwest



Photo 6 - Wet Ditch 5 facing northwest

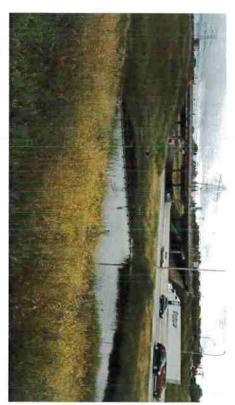


Photo 7b - Stormwater Pond 1 facing southwest



Photo 8 - Wet Ditch 2 facing southeast



Photo 10 - Stormwater Pond 2 facing northwest



Photo 9 - Wet Ditch 3 facing northeast

APPENDIX

APPENDIX D

Antecedent Precipitation Data

Minnesota State Climatology Office

State Climatology Office - DNR Division of Ecological and Water Resources

University of Minnesota

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Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: Hennepin township number: 118N township name: Plymouth range number: 22W nearest community: Plymouth section number: 15

Aerial photograph or site visit date:

Tuesday, September 25, 2018

Score using 1981-2010 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: August 2018	second prior month: July 2018	third prior month: June 2018
estimated precipitation total for this location:	3.32R	3.63R	4.34R
there is a 30% chance this location will have less than:	3.26	2.55	3.42
there is a 30% chance this location will have more than:	5.12	4.52	5.64
type of month: dry normal wet	normal	normal	normal
monthly score	3 * 2 = 6	2 * 2 = 4	1 * 2 = 2
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)		12 (Normal))

Other Resources:

- retrieve daily precipitation data
- view radar-based precipitation estimates
- view weekly precipitation maps
- Evaluating Antecedent Precipitation Conditions (BWSR)

Minnesota Wetland Conservation Act **Notice of Decision**

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd Plymotuh, MN 554477			
1. I	PROJECT INFORMA	ATION		
Applicant Name Wayzata Public Schools	Project Name Sunset Hills Element		Date of Application 11/06/2018	Application Number N/A
Attach site locator map.				
Type of Decision:				
	☐ No-Loss	Exemption	on \square	
Replacement	Plan	☐ Banking Pl	an	
Technical Evaluation Panel Findings a	nd Recommendation (if	any):		
Approve	Approve with cond	itions		Deny
Summary (or attach): A TEP was help boundaries. The TEP noted two channel connected the two basins of wetland criteria; however, would be covere accepted as delineated.	mels on the site. One on Wetland 1. The TEP agre	the north side o	f Wetland 1 and nannels did not:	d one meet
	GOVERNMENT UN	IT DECISIO	N	
Date of Decision: 12-10-2018 Approved	oproved with conditions	(include below))	
LGU Findings and Conclusions (attach	additional sheets as nec	essary):		

BWSR Forms 7-1-10 of 3

School site on Septer delineated on Novem larger basins on the s resource. A channel is resource; however; d	nber 27, 2018. The TE ber 16, 2018. The TE ite did not meet wetla s also depicted on the oes not meet wetland	EP reviewe P noted that nd criterian north side criteria. It	ed the delineated at the linear cha ; however, wou e of Wetland 1 a should also be	within the Sunset Hills Elementary d boundaries and accepted as annel that appears between the two ld be considered an aquatic and appears to be an aquatic noted that the larger basin along I figure 2 has been requested from	
The wetland boundar	y and type for Wetlan	d 1 is appı	coved		
For Replacement Plan	s using credits from th	ne State W	etland Bank:	- 4	
Bank Account # N/A	Bank Service Area	County		Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)	
Financial Assesspecified by the L (List amount and t	GU must be submitted ype in LGU Findings	pecific repl I to the LC).	acement that is GU in accordance	not in-advance, a financial assurance with MN Rule 8420.0522, Subp. 9	
BWSR "Declarati	on of Restrictions and	d Covenar	nts" and "Conse	must be provided to the LGU that the ent to Replacement Wetland" forms lacement wetland is located.	
				ank credits, confirmation that BWSR d in the approved replacement plan.	
Wetlands	may not be impacte	d until all	applicable cor	nditions have been met!	
LGU Authorized Sign	ature'				
Signing and mailing Subp. 5 provides not specified above. If a	of this completed formice that a decision was	s made by e decision	the LGU under	ents in accordance with 8420.0255, the Wetland Conservation Act as a been provided to the landowner	
Name	* *		Title		
Michael Thompson City of Plymouth		9	Public Works Director		
Signature	10.		Date	Phone Number and E-mail	
1/1/N	the		12/10/2018	763-509-5501	
				mthompson@plymouth.gov	

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:	<i>a</i>		
Appeal of an LGU staff decision. Send	Appeal of LGU governing body decision.		
petition and \$0 fee (if applicable) to:	Send petition and \$500 filing fee to:		
	Executive Director		
Michael Thompson, Public Works Director	Minnesota Board of Water and Soil Resources		
City of Plymouth	520 Lafayette Road North		
3400 Plymouth Blvd.	St. Paul, MN 55155		
Plymouth, MN			

4. LIST OF ADDRESSEES

 ⊠ SWCD TEP member: Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN 55415-1600 (sent electronically) □ BWSR TEP member: Ben Carlson, BWSR 520 Lafayette Road North, St. Paul, MN 55401
(sent electronically)
LGU TEP member (if different than LGU Contact): Ben Scharenbroich, City of Plymouth, 3400
Plymouth Blvd, Plymouth, MN 55447 (sent electronically)
DNR TEP member: Becky Horton, MnDNR, 1200 Warner Road, St. Paul, MN 55106 (sent
electronically)
DNR Regional Office (if different than DNR TEP member)
WD or WMO (if applicable): BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16145
Hillcrest Lane, Eden Prairie, MN 55346 (sent electronically)
Applicant and Landowner (if different)
Members of the public who requested notice:
Arlee Carlson, Sunde Land Surveying, 9001 East Bloomington Freeway, Suite 118,
Bloomington, MN 55420 (sent electronically)
Scott Thelen, Pinnacle Engineering, Inc., 11541 95 th Ave North, Minneapolis, MN 55369 (sent electronically)
 ☐ Corps of Engineers Project Manager BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

>For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA areas.pdf

>For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR TEP contacts.pdf

Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region: Reg. Env. Assess.	Southern Region:
Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.		Reg. Env. Assess. Ecol.
Div. Ecol. Resources	Div. Ecol. Resources	Ecol.	Div. Ecol. Resources

2115 Birchmont Beach Rd.	1201 E. Hwy. 2	Div. Ecol. Resources	261 Hwy. 15 South
NE	Grand Rapids, MN	1200 Warner Road	New Ulm, MN 56073
Bemidji, MN 56601	55744	St. Paul, MN 55106	

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

>For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687 or send to:

US Army Corps of Engineers St. Paul District, ATTN: OP-R 180 Fifth St. East, Suite 700 St. Paul, MN 55101-1678

> For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources

Wetland Bank Coordinator 520 Lafayette Road North St. Paul, MN 55155

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:	
☐ Figure 2. Delineated Boundaries	



			8
	E		