

Minnesota Wetland Conservation Act

Notice of Application

Item 8A.
BCWMC 1-16-14
Online Information

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd. Plymouth, MN, 55447
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1. PROJECT INFORMATION

Applicant Name City of Plymouth	Project Name 17625 30th Place North Drainage Maintenance	Date of Application 12/27/13	Application Number NA
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Type of Application (check all that apply):

<input type="checkbox"/> Wetland Boundary or Type	<input checked="" type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Summary and description of proposed project (attach additional sheets as necessary):

The City of Plymouth is proposing to remove accumulated debris adjacent to an outlet adjacent to 17625 30th Place North in Plymouth, MN (SE ¼ Section 19, T118N, R22W). The proposed project area is 1500 square feet.

1. This project qualifies for USACOE RGP-003 Maintenance Activity A and no further correspondence is necessary.
2. This basin is not a DNR Public Water or Public Water Wetland.

The City of Plymouth is considering this project to qualify for a No-Loss determination under 8420.0415 Subd. E.

2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person Derek Asche Water Resources Manager	Comments must be received by (minimum 15 business-day comment period): January 22, 2014
Address (if different than LGU) 3400 Plymouth Blvd. Plymouth, MN, 55447	Date, time, and location of decision: January 23, 2014 9 AM Plymouth City Hall
Phone Number and E-mail Address 763-509-5526 dasche@plymouthmn.gov	Decision-maker for this application: <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board or Council

Signature: *Derek Asche* Date: 12/27/13

3. 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: **Lynda Peterson, BWSR, 520 Lafayette Road North, St. Paul, MN, 55401-1397 (sent electronically)**
- ☐ LGU TEP member (if different than LGU Contact):
- ☒ DNR TEP member: **Melissa Doperalski, MN DNR, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)**
- ☒ DNR Regional Office (if different than DNR TEP member)
Kate Drewry, Area Hydrologist, MN DNR, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
- ☒ WD or WMO (if applicable):
Ms. Laura Jester, Administrator, Bassett Creek Watershed Management Organization, Keystone Waters LLC, 16145 Hillcrest Lane, Eden Prairie, MN 55346 (sent electronically)
- ☐ Applicant (notice only) and Landowner (if different):
Michael Ericson, 17625 30th Place North, Plymouth, MN, 55447
- ☐ Members of the public who requested notice (notice only):
- ☒ Corps of Engineers Project Manager (notice only): **Melissa Jenny, Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, MN, 55101-1678 (sent electronically)**
- ☐ BWSR Wetland Bank Coordinator (wetland bank plan applications only)

4. MAILING INFORMATION

- For a list of BWSR TEP representatives: www.bwsr.state.mn.us/contact/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:

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

5. ATTACHMENTS

In addition to the application, list any other attachments:

- ☒ **Aerial Photo**
- ☐

EXCAVATE SEDIMENT
IN CHANNEL
50 X 30

LAWNDALE LA 29T

30TH PL

17625

30TH PL

30TH AVE

Minnesota Wetland Conservation Act

Notice of Application

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd. Plymouth, MN 55447
--	--

1. PROJECT INFORMATION

Applicant Name CA Ventures	Project Name CA Ventures Property	Date of Application 12/19/13	Application Number NA
--------------------------------------	---	--	---------------------------------

Type of Application (check all that apply):

<input checked="" type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Summary and description of proposed project (attach additional sheets as necessary):

Westwood Professional Services performed a wetland delineation on the CA Ventures Property located in the NE 1/4 of the SE 1/4 of Section 36, T118N, R22W, in Plymouth, MN. Two wetlands were delineated on-site. Wetland A is a 1.8 acre, Type 5, PUBGx/R2SB5, flow through wetland associated with Bassett Creek and dominated by a narrow fringe of reed canary grass, sandbar willow, and boxelder. Wetland B is a 0.57 acre, Type 5, PUBGx, shallow open water wetland dominated by open water with an abrupt edge.

2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person Derek Asche Water Resources Manager	Comments must be received by (minimum 15 business-day comment period): January 21, 2014
Address (if different than LGU) City of Plymouth 3400 Plymouth Blvd. Plymouth, MN 55447	Date, time, and location of decision: January 22, 2014 9AM Plymouth City Hall
Phone Number and E-mail Address 763-509-5526 dasche@plymouthmn.gov	Decision-maker for this application: <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board or Council

Signature: _____

Derek Asche

Date: _____

12/20/13

3. LIST OF ADDRESSEES

- ☒ HCD TEP member: Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600 (sent electronically)
- ☒ BWSR TEP member: Ms. Lynda Peterson, BWSR, 520 Lafayette Rd. N., St. Paul, MN, 55155 (sent electronically)
- ☐ LGU TEP member (if different than LGU Contact):
- ☒ DNR TEP member: Melissa Doperalski, MN DNR, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
- ☐ DNR Regional Office (if different than DNR TEP member)
Ms. Kate Drewry, DNR Division of Ecological and Water Resources, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
- ☒ WD or WMO (if applicable): BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16415 Hillcrest Lane, Eden Prairie, MN, 55346 (sent electronically)
- ☒ Applicant and Landowner (if different):
CA Ventures, 161 North Clark Street, Chicago, IL, 60601
505 Waterford Park LTD Partnership, c/o Deloitte and Touche, LLP, PO Box 131001, Carlsbad, CA, 92103-1001
FSP 505 Waterford Corp, 401 Edgewater Place, Wakefield, MA, 01880
- ☒ Members of the public who requested notice:
Kelly Kunst, Westwood Professional Services (sent electronically)
- ☒ Corps of Engineers Project Manager: Melissa Jenny, Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, MN, 55101-1678 (sent electronically)
- ☐ BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

4. MAILING INFORMATION

- For a list of BWSR TEP representatives: www.bwsr.state.mn.us/contact/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:

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

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
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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

5. ATTACHMENTS

In addition to the application, list any other attachments:

- ☒ Wetland Delineation Report for CA Ventures Property dated December 17, 2013 by Westwood
- ☐

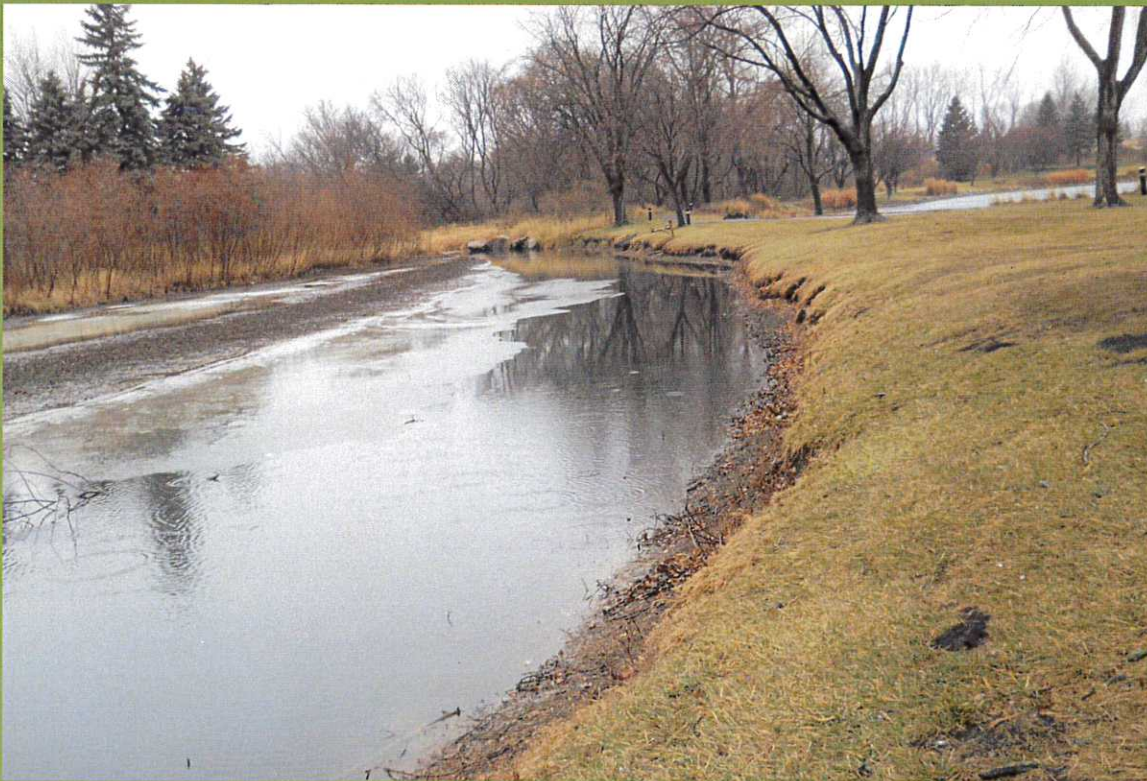


WETLAND DELINEATION REPORT

CA Ventures Property

City of Plymouth, Hennepin County, Minnesota

December 17, 2013



Prepared For:

CA Ventures
161 North Clark Street
Suite 4900
Chicago, IL 60601

Prepared By:



Wetland Delineation Report

CA Ventures Property

City of Plymouth, Hennepin County, Minnesota

Prepared for:

CA Ventures
161 North Clark Street
Suite 4900
Chicago, IL 60601

Prepared by:

Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344
(952) 937-5150

Project Number: 0002606.00

December 17, 2013

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EXHIBITS

- Exhibit 1: Site Location & USGS Topography
- Exhibit 2: National Wetlands Inventory & National Hydrography Dataset
- Exhibit 3: Soils
- Exhibit 4: MnDNR Public Waters & Wetlands
- Exhibit 5: Delineated Wetlands

APPENDICES

- Appendix A: WCA & USACE Applications
- Appendix B: Wetland Determination Data Forms
- Appendix C: Wetland Delineation Photographs

1.0 PURPOSE OF REPORT

Westwood Professional Services (Westwood) was retained by CA Ventures to conduct a wetland delineation and obtain agency concurrence on an approximately 12-acre parcel in Plymouth, Minnesota. This narrative, the attached exhibits and data forms constitute the wetland delineation report for the CA Ventures Property (herewith referred to as the Site) submitted pursuant to Minn. Rules 8420.0405. The City of Plymouth is the Local Governmental Unit (LGU) that administers the Minnesota Wetland Conservation Act (WCA). This delineation report provides the required documentation for wetland boundary determinations in conformance with the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory, Waterways Experiment Station, 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Midwest Region (US Army Engineer Research and Development Center, 2010).

Applications for WCA Wetland Boundary/Type Determination and USACE Jurisdictional Determination are included in **Appendix A**.

Derek Asche with the City of Plymouth reviewed the delineation in the field and gave preliminary approval of the wetland boundary pending receipt of a Wetland Delineation Report for the Site.

2.0 SITE LOCATION, DESCRIPTION, AND FIELD CONDITIONS

The Site is located in the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of S. 36, T118N, R22W, city of Plymouth, Hennepin County, Minnesota (**Exhibit 1**). The Site is Hennepin County PIN No. 053-3611822410013 with a physical address of 505 State Hwy No 169, Plymouth, MN 55441 which is located in the northwest quadrant of the intersection of HWY 55 (Olson Memorial Highway) and State Highway 169. The Site consisted of an existing office building and associated parking in the central part of the Site with two large wetlands along the west part. Topography sloped down from an approximately 900-foot elevation in the central part of the Site to 890 in the west part.

At the time of the site review, conditions were overcast with occasional light snow. Antecedent precipitation was normal. **Table 2.1** constitutes the Precipitation Documentation Worksheet from the Minnesota Climatology Working Group.

Table 2.1: Precipitation Documentation Worksheet (County: Hennepin, S36, T118N, R22W) Score using 1981-2010 normal period			
(values are in inches)	first prior month: November 2013	second prior month: October 2013	third prior month: September 2013
estimated precipitation total for this location:	0.58	4.60	1.32
there is a 30% chance this location will have less than: *	0.90	1.46	2.26
there is a 30% chance this location will have more than: *	2.24	3.05	4.07
type of month: dry normal wet	dry	wet	dry

monthly score	$3 * 1 = 3$	$2 * 3 = 6$	$1 * 1 = 1$
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	10 (Normal)		

3.0 WETLAND DELINEATION METHODOLOGY

Prior to delineating wetland boundaries in the field, Westwood reviewed the National Wetlands Inventory (NWI) for Hennepin County and the National Hydrography dataset (**Exhibit 2**), the Natural Resource Conservation Service (NRCS) Soil Survey Geographic database (SSURGO2) for Hennepin County (2010) (**Exhibit 3**), and the Minnesota Department of Natural Resources (MnDNR) Public Waters and Wetlands Inventory (PWI) for Hennepin County (**Exhibit 4**).

On December 3, 2013, Westwood delineated the wetlands using the level two routine determination method set forth in the USACE Wetlands Delineation Manual. Soils, vegetation, and hydrology data were recorded on data forms and are included in **Appendix B** of this report. Wetlands were classified according to Wetlands of the United States (U.S. Fish and Wildlife Service Circular 39; Shaw and Fredine; 1971) and Wetlands and Deepwater Habitats of the United States (FWS/OBS Publication 79/31; Cowardin et. al. 1979). Common names and scientific names for vegetation identified in this report and on the attached data forms generally correspond with the nomenclature used in the North American Digital Flora: National Wetland Plant List, version 3.0 (<http://wetland.plants.usace.army.mil>) (Lichvar and Kartesz; 2012).

Wetland boundaries were located using a Trimble GeoXH sub-meter accuracy global positioning unit (GPS) (**Exhibit 5**).

4.0 RESULTS

4.1 Mapping

The National Wetland Inventory Map (NWI) indicated one PUBGx and one PEM/FO1C wetland on the Site. NHD mapping indicated one waterbody and one flowline (Bassett Creek) crossing the southwest part of the Site (**Exhibit 2**). The NRCS SSURGO2 for Hennepin County indicated that soils listed in **Table 4.1** are mapped within the Site (**Exhibit 3**).

Table 4.1. Soil Summary Table			
Map Symbol ¹	Map Unit Name ²	Rating ²	Percent Hydric Soil ³
L2B, E	Malardi-Hawick complex, 1 to 6 and 18 to 35% slopes	Not hydric	0
L6A	Biscay loam, 0 to 2% slopes	Predominantly Hydric	98
L30A	Medo soils, depressional, 0 to 1% slopes	Hydric	100
L50A	Houghton and Muskego soils, depressional, 0 to 1% slopes	Hydric	100

M-W	Water, miscellaneous	N/A	N/A
U2A	Udorthents, wet substratum, 0 to 2% slopes	Not Hydric	0
¹ – Soils determined using GIS geospatial query clipping the NRCS Soil Survey Geographic (SSURGO2) spatial data by Project boundaries. ² – As indicated in the SSURGO2 database ³ – As indicated in the SSURGO2 database. Where percentages are small (e.g. < 15 %) the hydric soil is likely an inclusion that is not recognized in the map unit name. The absence of a value does not necessarily indicate the absence of hydric soils, but that the relative percentages of included minor soils has not been determined.			

A MnDNR Public Watercourse (Bassett Creek) is indicated crossing the southwest part of the Site (Exhibit 4). No other MnDNR Public Waters, Wetlands, or Watercourses are indicated on or adjacent to the Site.

4.2 Delineated Wetland Descriptions

Westwood delineated two wetlands (Wetlands A and B) on the Site. Data forms are provided in Appendix B and photographs in **Appendix C**. The dominant vegetation described below reflects the overall vegetative community of the delineated feature. The dominant vegetation listed on data forms in Appendix B refers to the vegetation at the sample points and can differ from descriptions of overall dominants.

Wetland A was a 1.80-acre, Type 5 (PUBGx/R2SB5) flow-through wetland associated with Bassett Creek that drained south from the Site. Wetland A was generally unvegetated except for a narrow fringe of reed canary grass, scattered sandbar willow and boxelder along the south and west edges that are not actively landscaped. Soils observed below the wetland boundary met the S4 field indicator for hydric soils (Sandy gleyed matrix). Observed hydrology indicators are included on the sample data forms.

Adjacent upland mostly consisted of a maintained landscape of Kentucky bluegrass lawn and scattered mature trees, except for the roadside slope along the southern edge of Wetland A. Soils observed in the upland sample plot consisted of a mix of sand, gravel and clay fill material under an approximately 8-inch layer of sandy loam. Soils were without redoximorphic features and no primary or secondary indicators of wetland hydrology were observed.

The delineated boundary followed an abrupt change in topography and plant communities. Wetland A corresponded to an area of mapped water on the soil survey, a PUBGx wetland on the NWI, a flowline and waterbody on the NHD, and a MnDNR Public Watercourse (Bassett Creek).

Wetland B was a 0.57-acre, Type 5 (PUBGx) shallow open water wetland that extended north from the Site. Wetland B consisted of unvegetated open water with an abrupt, landscaped slope along the waters' edge. Soils observed in the wetland and upland sample plots were similar to those observed for Wetland A. Observed hydrology indicators are included on the sample data forms.

The delineated boundary followed an abrupt change in topography. Wetland B corresponded to portions of an NWI-mapped PEM/FO1C wetland and an area of mapped water on the soil survey. Wetland B was not indicated on NHD or PWI mapping.

4.3 Wetland Delineation Summary

ID	Size (acre)	Type	Mapped Soils	Vegetation (at sample locations)		Mapped NWI, PWI, NHD?
				Wetland	Upland	
1	1.80	Type 5 (PUBGx/R2 SB5)	Water-Miscellaneous	Bare ground	Kentucky bluegrass	NWI, NHD, PWI
2	0.57	Type 5 (PUBGx)	Water-Miscellaneous	Bare ground	Kentucky bluegrass	NWI

5.0 CONCLUSIONS

Westwood delineated and flagged two wetlands on the CA Ventures Property which were reviewed in the field on December 6, 2013 by the City of Plymouth. Westwood requests that the City of Plymouth, as the LGU, and the USACE process the enclosed applications (Appendix A).

6.0 LITERATURE CITED

- Cowardin, L.M. , V.M. Carter , F.C. Golet , and E.T. LaRoe . 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Biological Services Program, Washington, DC, USA. FWS/OBS-79/31. 103pp.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Lichvar, R.W. 2013. The National Wetlands Plant List. 2013 Wetland Ratings. Phytoneuron: in Press.
- North American Digital Flora: National Wetland Plant List, Version 3.0 (<http://wetland.plants.usace.army.mil>) (Lichvar and Kartesz; 2012).
- Shaw, S.P. and C.G. Fredine. 1971. Wetlands of the United States. U.S. Fish and Wildlife Circular 39. U.S. Department of the Interior, Washington, D.C. 67 pp.
- U. S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-27. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- United States Department of Agriculture, Natural Resources Conservation Service, 2010. Field Indicators of Hydric Soils in the United States, Version 7.0. C.M. Vasilas, G.W. Hurt, and C.V. Noble (eds.). USDA NRCS, in cooperation with the National Technical Committee for Hydric Soils.

7.0 CERTIFICATION

We certify that, to the best of our knowledge and belief, the wetland delineation completed for this Site is consistent with current wetland delineation practices and guidelines. We have the specific qualifications, education, training, and experience to complete wetland delineations and determinations in accordance with federal and state requirements.

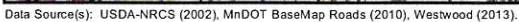
Sincerely,

WESTWOOD PROFESSIONAL SERVICES



Kelly S. Kunst, WDC, PWS
Sr. Environmental Scientist
Professional Wetland Scientist No. 1757
MN Certified Wetland Delineator No. 1114

Exhibits



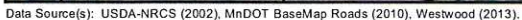
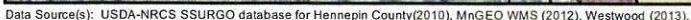


EXHIBIT 2



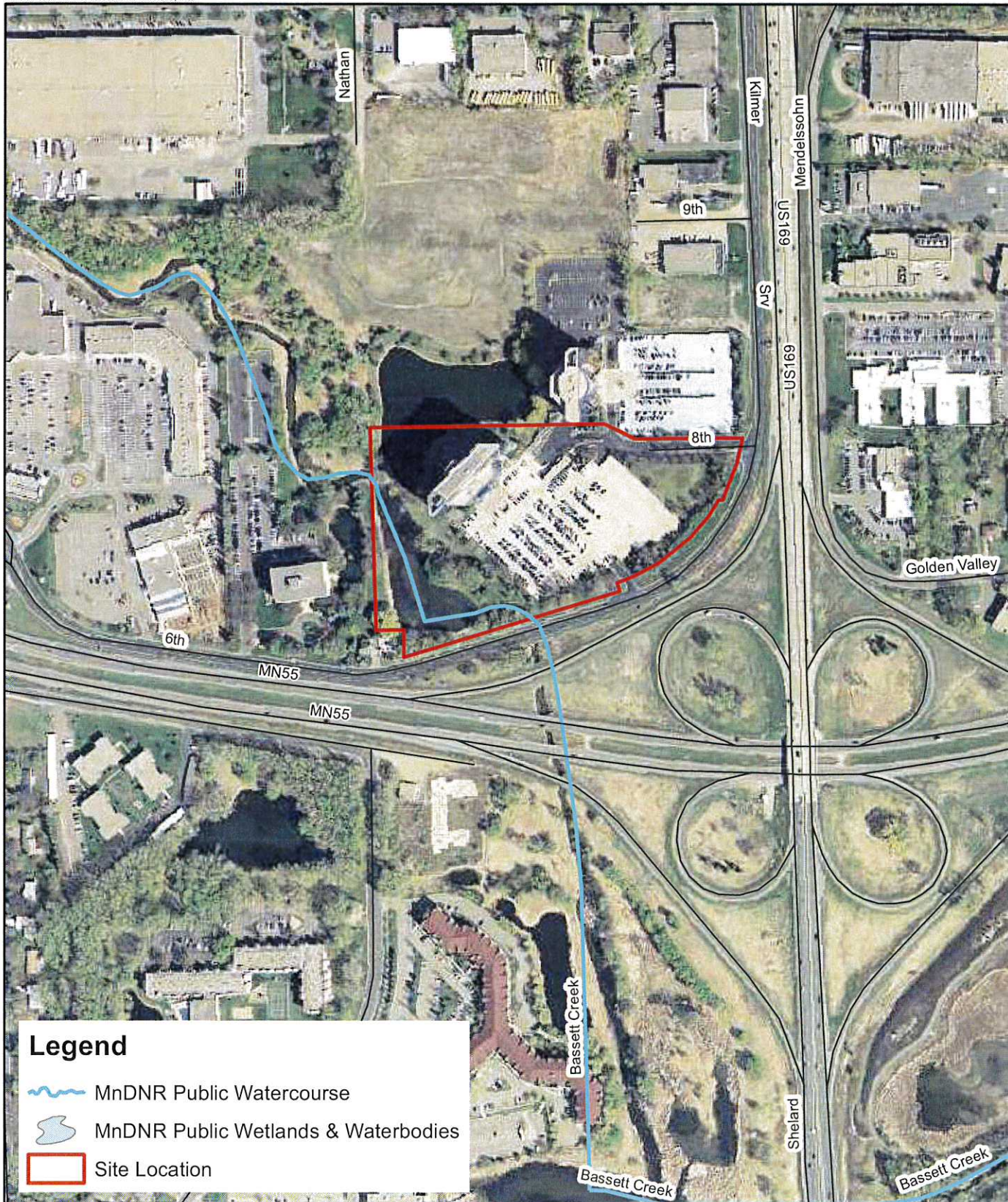
Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344

PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150

www.westwoodps.com



A horizontal number line is shown with a vertical tick mark at 0 on the left and another at 400 on the right. The word "Feet" is written to the right of the 400 mark. A segment of the line between 0 and 150 is shaded dark gray, representing the distance to the first station.



Legend

-  MnDNR Public Watercourse
-  MnDNR Public Wetlands & Waterbodies
-  Site Location

Data Source(s): MnDNR Division of Waters, MnGEO WMS (2012), Westwood (2013).

CA Ventures Property

Plymouth, Minnesota

MnDNR Public Waters & Wetlands

EXHIBIT 4



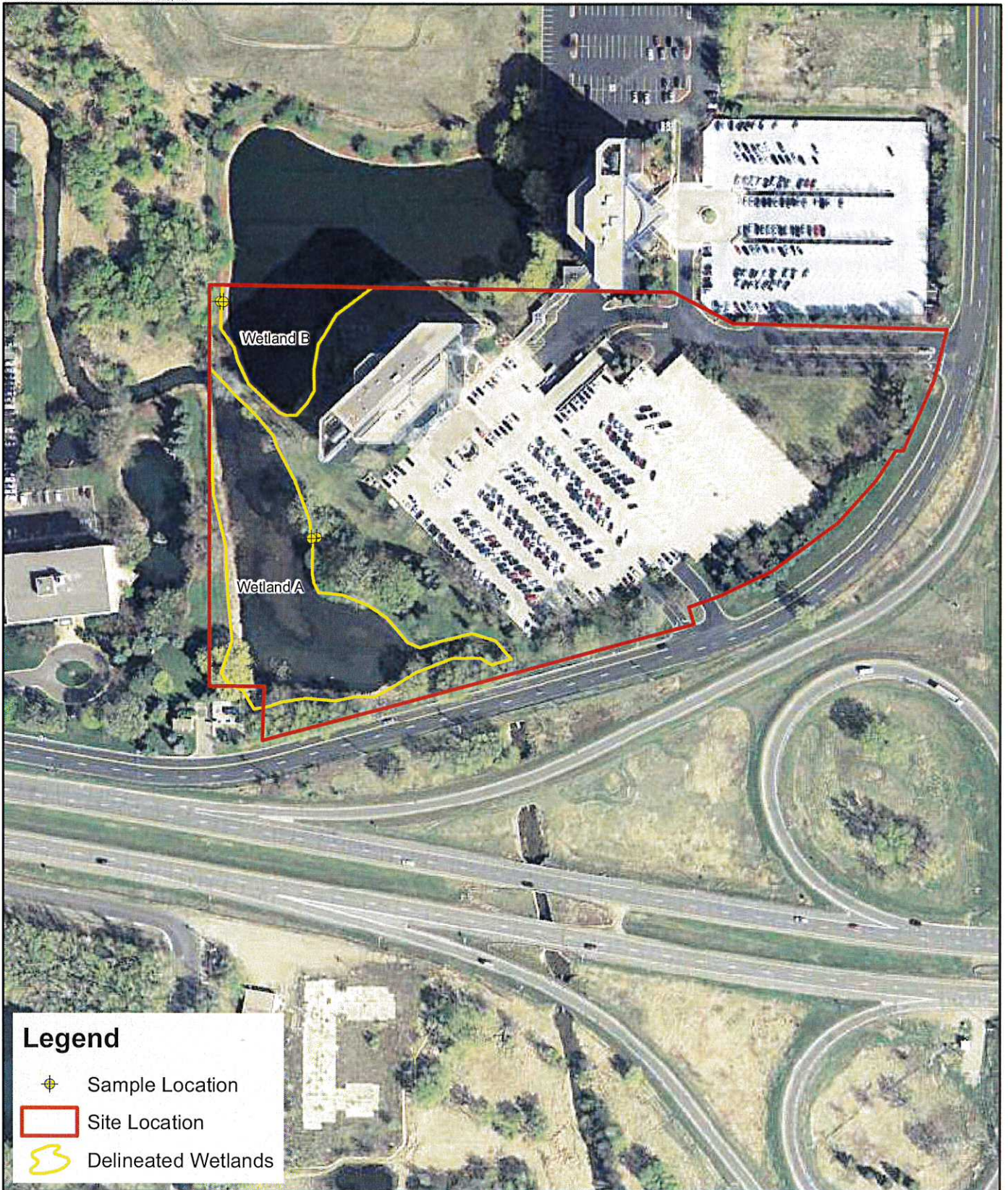
Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344

PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150

www.westwoodps.com



0 400 Feet



Data Source(s): MnGEO WMS (2012), Westwood (2013).

CA Ventures Property

Plymouth, Minnesota

Delineated Wetlands

EXHIBIT 5



Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344

PHONE 952-937-5150
FAX 952-937-5922
TOLL FREE 1-888-937-5150

www.westwoodps.com



0 200 Feet

Appendix A

WCA/USACE Applications

CA Ventures Property

City of Plymouth, Hennepin County, Minnesota

Minnesota Wetland Conservation Act
Application for Approval of Wetland Type and Boundary

1. Project/Site Information

Project/Site Name: CA Ventures Property Local Government Unit: City of Plymouth
Location (address and/or T, R, Sec.): 505 State Hwy 169, Plymouth, MN 55441
SE 1/4 of S36, T118N, R22W

2. Applicant Information

Applicant Name: CA Ventures Address: 161 North Clark Street
City, State, Zip: Chicago, IL 60601 Suite 4900
E-mail: Phone:

3. Agent/Consultant Information

Company Name (if applicable): Westwood Prof. Serv. Contact Person: Kelly Kunst
Address: 7699 Anagram Drive City, State, Zip: Eden Prairie, MN 55344
E-mail: kelly.kunst@westwoodps.com Phone: (952) 906-7421

4. Description of Request

Check all that apply: ☒ Wetland Boundary (must attach wetland delineation report)
☒ Wetland Type (Eggers & Reed and/or Circular 39 type)

5. Signature

By signature below, the applicant requests a determination from the Local Government Unit under Minnesota Rules 8420.0225 on the submitted wetland boundary and type information in this application. The applicant also affirms that they are the owner of the subject property or have permission from the landowner to pursue this determination.


Applicant or Authorized Agent Signature

12/17/2013
Date

Important Notes:

- The applicant may be required to submit multiple copies of the report/information to the LGU. The LGU may require the applicant to submit copies directly to Technical Evaluation Panel Members. **Check with your LGU regarding their submittal requirements.**
- The LGU decision must be made in compliance with Minnesota Statutes, section 15.99.

For LGU use only

Date Received:



US Army Corps
of Engineers
St. Paul District

Request for Corps of Engineers Wetland Delineation Review

Please enter the following general information about the property under review:

Name of property owner		
Fsp 505 Waterford Corporation		
Property Address (No. & Street, City, State, Zip Code)		
505 State Hwy No 169, Plymouth, MN 55441		
Lat. 44.9844 °	Long. 93.404 °	(decimal degrees)
County Hennepin		
Location: SE 1/4 Section 36 Township 118N Range 22W		
Size of review area	1/2 acre(s)	

By submission of this wetland delineation report I am requesting that the U.S. Army Corps of Engineers, St. Paul District provide me with the following (check only one box):

☒ **Wetland Delineation Concurrence.** Concurrence with a wetland delineation is a written notification from the Corps concurring, not concurring, or commenting on the wetland boundaries delineated on a property. Under this request, the Corps will not address the jurisdictional status of the wetlands on the property, only the boundaries of the resources within the review area.

☒ **Preliminary Jurisdictional Determination.** Preliminary Jurisdictional Determination. A preliminary jurisdictional determination is a nonbinding written indication that there may be waters of the United States, including wetlands, on a parcel or indications of the approximate location(s) of waters of the United States or wetlands on a parcel. For purposes of computation of impacts and compensatory mitigation requirements a permit decision made on the basis of a preliminary jurisdictional determination will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. Preliminary jurisdictional determinations are advisory in nature and may not be appealed.

☐ **Approved Jurisdictional Determination.** An approved jurisdictional determination is an official Corps determination that jurisdictional waters of the United States or navigable waters of the United States, or both, are either present or absent on the property. An approved jurisdictional determination precisely identifies the limits of those waters on the project site determined to be jurisdictional under the Clean Water Act or Rivers and Harbors Act. Approved jurisdictional determinations can be relied upon by the affected party for a period of five years. An approved jurisdictional determination may be appealed through the Corps' administrative appeal process.

In order for the Corps 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 and Wisconsin (<http://www.mvp.usace.army.mil/regulatory/>).

Requestor Kelly Kunst

Date 12/17/2013

Name (typed) Kelly Kunst

Appendix B

Wetland Determination Data Forms

CA Ventures Property

City of Plymouth, Hennepin County, Minnesota

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site	CA Ventures	City/County:	Hennepin	Sampling Date:	12/3/2013
Applicant/Owner:	CA Ventures	State:	Minnesota	Sampling Point:	SP A-1 wet
Investigator(s):	K. Kunst	Section, Township, Range:	S36, T118N, R22W		
Landform (hillslope, terrace, etc.):	flat	Local relief (concave, convex, none):	none		
Slope (%):	0-1%	Lat:	44.985029	Long:	93.404952
		Datum:	NAD83		
Soil Map Unit Name	Water (miscellaneous)	UWI Classification:	PUBGx		

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 _____ significantly disturbed? Are "normal circumstances"

Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: _____
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1	<i>Populus deltoides</i>	10	Y	FAC
2				
3				
4				
5				
		10	= Total Cover	

Sapling/Shrub stratum (Plot size: <u>15</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	

Herb stratum (Plot size: <u>5</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Woody vine stratum (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
		0	= Total Cover	

Remarks: (Include photo numbers here or on a separate sheet)

Sample plot was 100% bare ground.

SOIL

Sampling Point: SP A-1 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-24	N5/0	100					S	gravels

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ☐ Histisol (A1) ☒ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1)
☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2)
☐ 2 cm Muck (A10) ☐ Depleted Matrix (F3)
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface (F6)
☐ Thick Dark Surface (A12) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils:

- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Dark Surface (S7) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1) ☐ Aquatic Fauna (B13)
☒ High Water Table (A2) ☐ True Aquatic Plants (B14)
☒ Saturation (A3) ☒ Hydrogen Sulfide Odor (C1)
☐ Water Marks (B1) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Sediment Deposits (B2) ☐ Presence of Reduced Iron (C4)
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7)
☐ Iron Deposits (B5) ☐ Gauge or Well Data (D9)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Water-Stained Leaves (B9)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☒ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes ☒ No ☐ Depth (inches): 3
 Water table present? Yes ☒ No ☐ Depth (inches): 0
 Saturation present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Indicators of wetland hydrology present? Y

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CA Ventures City/County: Hennepin Sampling Date: 12/3/2013
 Applicant/Owner: CA Ventures State: Minnesota Sampling Point: SP A-1 up
 Investigator(s): K. Kunst Section, Township, Range: S36, T118N, R22W
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex
 Slope (%): 2-6% Lat: 44.985029 Long: 93.404952 Datum: NAD83
 Soil Map Unit Name: Medo soils (depressional) NWI 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 significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation, soil, or hydrology naturally problematic? Yes

SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus deltoides</i>	20	Y	FAC
2				
3				
4				
5				
		20	= Total Cover	

Sapling/Shrub stratum	(Plot size: <u>15</u>)	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

Herb stratum	(Plot size: <u>5</u>)	Absolute % Cover	Dominant Species	Indicator Status
1	<i>Poa pratensis</i>	80	Y	FAC
2	<i>Lolium perenne</i>	20	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		100	= Total Cover	

Woody vine stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
		0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>100</u>	x 3 =	<u>300</u>
FACU species	<u>20</u>	x 4 =	<u>80</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>120</u>	(A)	<u>380</u> (B)

Prevalence Index = B/A = 3.17

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation

X Dominance test is >50%

 Prevalence index is ≤3.0*

Morphological adaptations* (provide 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

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP A-1 up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10YR 2/1	100					SL	
8-24	10YR 4/4	100					mixed S, C, and gravel	likely fill material

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ☐ Histisol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Dark Surface (S7) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes ☐ No ☒ Depth (inches): _____
 Water table present? Yes ☐ No ☒ Depth (inches): _____
 Saturation present? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CA Ventures City/County: Hennepin Sampling Date: 12/3/2013
Applicant/Owner: CA Ventures State: Minnesota Sampling Point: SP B-1 wet
Investigator(s): K. Kunst Section, Township, Range: S36, T118N, R22W
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave
Slope (%): 0-1% Lat: 44.985786 Long: 93.405488 Datum: NAD83
Soil Map Unit Name Water (miscellaneous) NWI Classification: PEM/FO1C

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 significantly disturbed? Are "normal circumstances" present? Yes
Are vegetation , soil , or hydrology naturally problematic?

SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> if yes, optional wetland site ID: <u> </u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
Sapling/Shrub stratum	(Plot size: <u>15</u>)			
1				
2				
3				
4				
5				
		<u>0</u> = Total Cover		
Herb stratum	(Plot size: <u>5</u>)			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		<u>0</u> = Total Cover		
Woody vine stratum	(Plot size: <u>30</u>)			
1				
2				
		<u>0</u> = Total Cover		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 0 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>0</u> (A)		<u>0</u> (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation

 Dominance test is >50%

 Prevalence index is ≤3.0*

 Morphological adaptations* (provide 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

Remarks: (Include photo numbers here or on a separate sheet)
Sample plot was unvegetated, assumed hydrophytic vegetation.

SOIL

Sampling Point: SP B-1 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-20	N5/0	100					S	gravels

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ☐ Histisol (A1) ☒ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1)
☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2)
☐ 2 cm Muck (A10) ☐ Depleted Matrix (F3)
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface (F6)
☐ Thick Dark Surface (A12) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils:

- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Dark Surface (S7) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1) ☐ Aquatic Fauna (B13)
☒ High Water Table (A2) ☐ True Aquatic Plants (B14)
☒ Saturation (A3) ☒ Hydrogen Sulfide Odor (C1)
☐ Water Marks (B1) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Sediment Deposits (B2) ☐ Presence of Reduced Iron (C4)
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7)
☐ Iron Deposits (B5) ☐ Gauge or Well Data (D9)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Water-Stained Leaves (B9)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes ☒ No _____ Depth (inches): 3
 Water table present? Yes ☒ No _____ Depth (inches): 0
 Saturation present? Yes ☒ No _____ Depth (inches): 0
 (includes capillary fringe)

Indicators of wetland hydrology present? Y

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

Remarks:

All of Wetland B sample plot was inundated.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site CA Ventures City/County: Hennepin Sampling Date: 12/3/2013
 Applicant/Owner: CA Ventures State: Minnesota Sampling Point: SP B-1 up
 Investigator(s): K. Kunst Section, Township, Range: S36, T118N, R22W
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex
 Slope (%): 2-6% Lat: 44.985786 Long: 93.405488 Datum: NAD83
 Soil Map Unit Name: Water (miscellaneous) NWI 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 significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation , soil , or hydrology naturally problematic?
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: <u> </u>
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)
1					
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
Sapling/Shrub stratum	(Plot size: <u>15</u>)				Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>50</u> x 3 = <u>150</u> FACU species <u>50</u> x 4 = <u>200</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>100</u> (A) <u>350</u> (B) Prevalence Index = B/A = <u>3.50</u>
1					
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
Herb stratum	(Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u> </u> Rapid test for hydrophytic vegetation <u> </u> Dominance test is >50% <u> </u> Prevalence index is ≤3.0* <u> </u> Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1	<u>Poa pratensis</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	
2	<u>Lolium perenne</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>	
3					
4					
5					
6					
7					
8					
9					
10					
		<u>100</u>	= Total Cover		
Woody vine stratum	(Plot size: <u>30</u>)				Hydrophytic vegetation present? <u>N</u>
1					
2					
		<u>0</u>	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)
 Upland consisted of landscaping and maintained turf grass.

SOIL

Sampling Point: SP B-1 up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 2/1	100					SL	
7-20	10YR 4/4	100					mixed S, C, and gravels	likely fill material

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ☐ Histisol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Dark Surface (S7) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Water-Stained Leaves (B9)

- ☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes ☐ No ☒ Depth (inches): _____
 Water table present? Yes ☐ No ☒ Depth (inches): _____
 Saturation present? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

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

Remarks:

Appendix C

Wetland Delineation Photographs

CA Ventures Property

City of Plymouth, Hennepin County, Minnesota

CA Ventures Project

Wetland Delineation Photos, December 3, 2013



Wetland A-facing south from northeast side of wetland.



Wetland A-facing north from northeast side of wetland.



Wetland B-facing north from south side of wetland.



Wetland B-facing northeast from south side of wetland.



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