Plan Commission
AGENDA & NOTICE OF MEETING

Monday, July 10, 2017 ~ 6:30 pm
112 Algonquin Road

AGENDA

1. Call to Order & Roll Call
2. Public Comments
3. [Vote] Vice Chairman - Julie Joyce
4. [Vote] Secretary
5. [Vote] Minutes August 9, 2016
6. School District 220 Presentation
7. Trustee's Report
8. Pre Application - Otis Road Subdivision
9. Pre Application - Bateman Road Subdivision (Bateman Meadows/Brenner Estates)
10. Route 25 Church Development Discussion
11. Penny Road Development Discussion
12. Adjournment

Chairman: Pamela Cools

NOTICE AS POSTED

VILLAGE OF BARRINGTON HILLS
Plan Commission Special Meeting Minutes
Tuesday, August 9, 2016 - 6:30 PM

The Special Meeting of the Village of Barrington Hills Plan Commission was called to order by Vice Chairman Pamela Cools at 6:34 PM.

Members Present:
Pam Cools
Arnold Cernik
John Gigerich
Lou Ann Majewski
Kelly Mazeski
Curt Crouse
Kim Van Fossan
Julie Joyce

Member Absent:
Kenneth Bosworth

PUBLIC COMMENTS:

Carol McLuskie, 74 Old Hart Road, BH, asked wheter Lake County would have to adhere to Heritage Tree Ordinance. She advised the Plan Commission that at the end of Hart Road Lake County plans to remove 25 Heritage Trees for a sidewalk and bike path. She asked how she could protect her trees and received several suggestions to help mitigate her loss of trees and canopy.

PREVIOUS MINUTES:

The minutes of were amended as follows: Under TREE PRESERVATION AND ORDINANCE REVIEW paragraph beginning with Page 4, ...Mr. Kosin believed tree replacement cost should be escrow amount without overhead costs...was amended to say Mr. Kosin believed escrow amount should be tree replacement cost...

Under Barrington Hills Farm LLC, the second sentence was amended to, "He explained that Barrington Hills Farms LLC, LOCATED IN UNINCORPORATED MCHENRY COUNTY...

Commissioner Majewski motioned approval of minutes, Commissioner Cernik seconded. All accepted by voice.

TREE PRESERVATION ORDINANCE:

Vice Chairman Cools called for a motion on the Tree Preservation Ordinance. Commissioner Cernik motioned and was seconded by Commissioner Majewski. All present said Aye. Chairman Bosworth was absent. Ordinance will be forward to Board of Trustees with comments regarding Carol McLuskie.

Commissioner Joyce was thanked for her expert advice and consult.

VILLAGE OWNED PROPERTY DISCUSSION - ROUTE 25 EAST SIDE:

The taxes on the property is approximately $3,700 per year. Commissioner Cernik suggested we sell it. Another comment was made that if it wasn't a buffer we should sell.

It was agreed that our recommendation is to sell property.

TRUSTEES REPORT:

Nothing to report.

Vice Chairman Cools requested an update of Horizon Farms/Forest Preserve Property. Consultants are looking for feedback. Suggestions included lookout tower, wildlife preserve, sledding hills, bird sanctuary. Presently north end open, south end closed. Anna Paul was asked to get contact information for Forest Preserve.

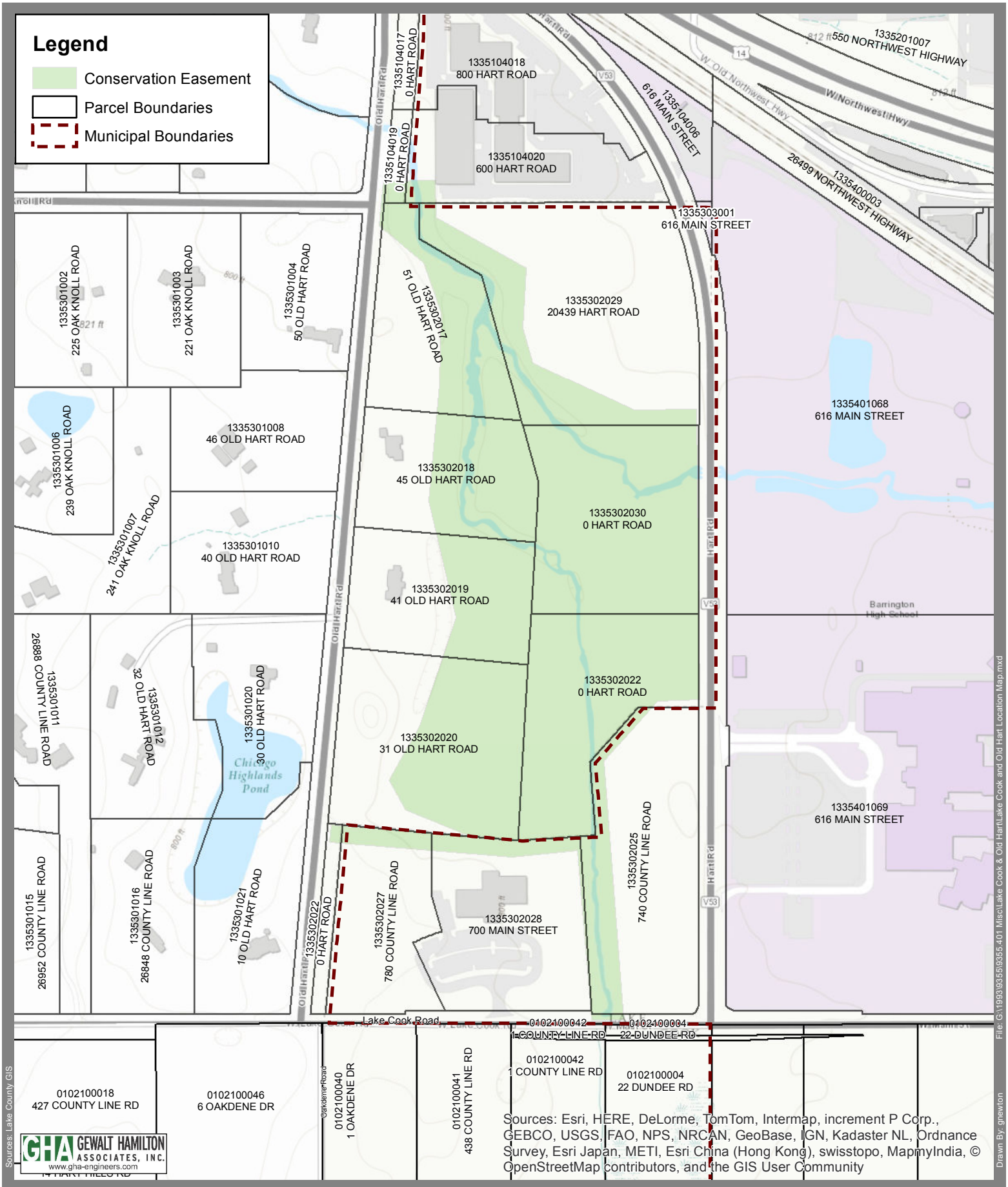
Anna Paul mentioned Kane County Department of Transportation was asking for input regarding Longmeadow Parkway.

ADJOURNMENT:

Vice Chairman Cools requested a motion to adjourn. Commissioner Majewski motioned and Commissioner Mazeski seconded. All present said aye. Meeting was adjourned at 7:46 PM.

Respectfully submitted,

Kim Van Fossan, Recording Secretary



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Sources: Lake County GIS

GHA GEWALT HAMILTON ASSOCIATES, INC.
www.gha-engineers.com

File: G:\1993\9355\9355.401 Misc\Lake Cook & Old Hart\Lake Cook and Old Hart Location Map.mxd

Drawn By: gnewton

N

1 inch = 400 Feet

Lake Cook Rd & Old Hart Rd

Barrington/Barrington Hills, IL

Map Center: -88.15319 42.15801

Date: 1/25/2016 Project: 9355.401

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701
www.gha-engineers.com

April 26, 2017

Mr. Ken Garrett
Building & Zoning Officer
112 Algonquin Road
Barrington Hills, Illinois 60010

Re: 219 Otis Road
Septic System Relocation- Preliminary Review

Dear Mr. Garrett:

Our office has reviewed the proposed septic system relocation for 219 Otis Road. Our review is based on the preliminary engineering plan (1 sheet) prepared by Heritage Land Consultants, LLC., dated March 9, 2017. We understand that a permit application has not yet been submitted to the Village, but the preliminary plan is being submitted to verify the feasibility of constructing a septic system on a separate parcel from the house that it serves. We offer the following comments:

1. There is a note indicating, "Proposed New Lot Line" to the west of the proposed septic system. It is our understanding that the currently vacant parcel between 219 Otis Road and 227 Otis Road is intended to be split between the two property owners. Prior to approval of a septic system in the location shown, a subdivision application should be submitted for resubdivision of Lots 219, 223, and 227 of Goose Lake Subdivision in accordance with the Subdivision Ordinance (Title 6 of the Village Code). The Plat of Resubdivision should be approved by the Plan Commission and Village Board and recorded in Cook County prior to approval of a permit for the relocated septic system.

2. Soil test results, septic calculations, and lift station calculations will be required as part of the permit application for the proposed septic system relocation.

The above review comments are provided based on the preliminary engineering information provided. Additional comments may be generated as the final documents are submitted. Please include with the final engineering submittal a cover letter with a written response to each of the above comments.

Sincerely,
Gewalt Hamilton Associates, Inc.

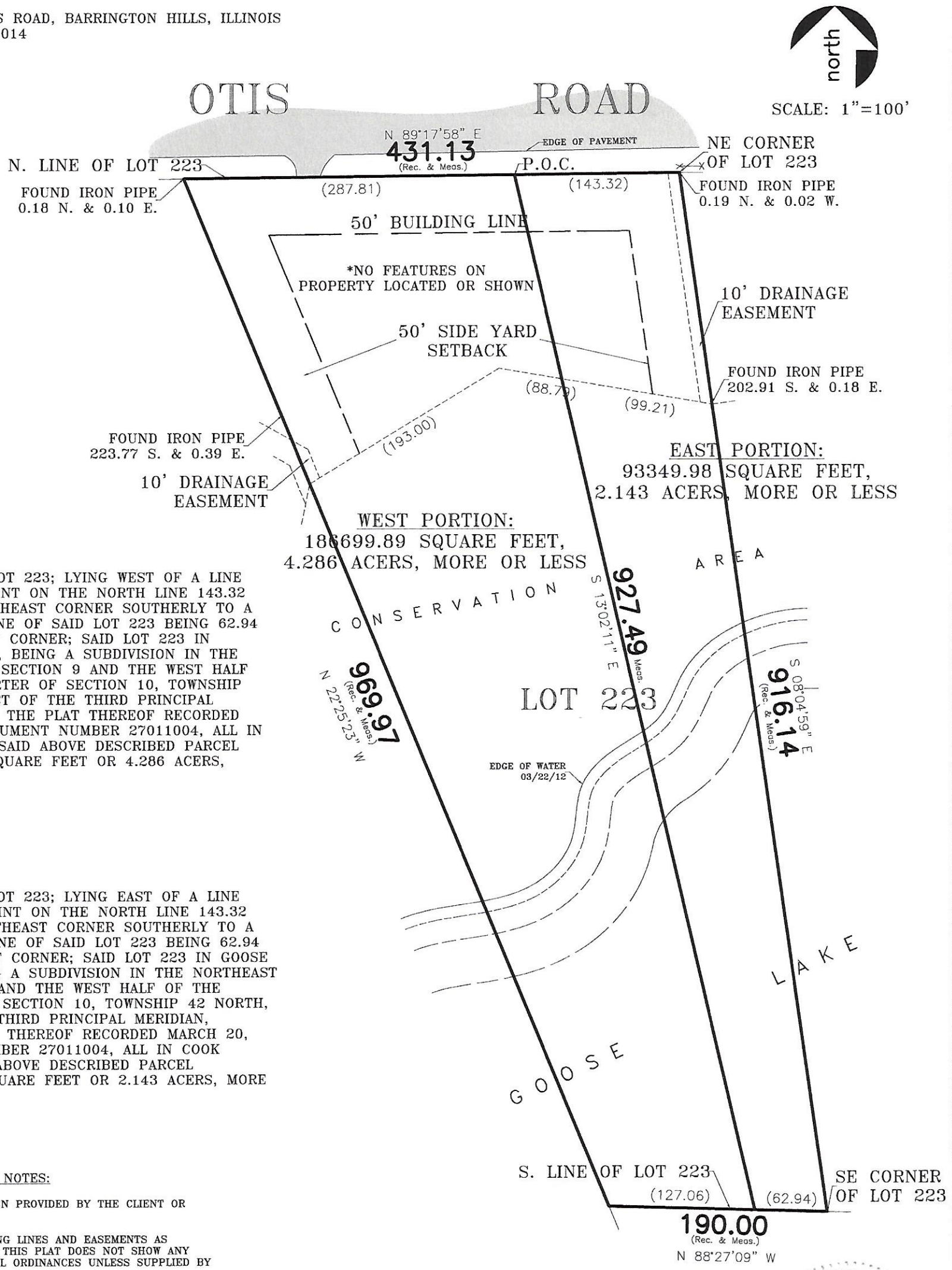
Daniel J. Strahan, P.E., CFM
Village Engineer

cc: Robert Kosin, VBH Director of Administration

P.I.N. DIVISION
PLAT OF SURVEY
of

LOT 223 IN GOOSE LAKE SUBDIVISION, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SECTION 9 AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MARCH 20, 1984, AS DOCUMENT NUMBER 27011004, IN COOK COUNTY, ILLINOIS.

ADDRESS: 223 OTIS ROAD, BARRINGTON HILLS, ILLINOIS
P.I.N.#01-09-204-014



WEST PORTION

THE WEST PORTION OF LOT 223; LYING WEST OF A LINE COMMENCING FROM A POINT ON THE NORTH LINE 143.32 FEET WEST OF THE NORTHEAST CORNER SOUTHERLY TO A POINT ON THE SOUTH LINE OF SAID LOT 223 BEING 62.94 WEST OF THE SOUTHEAST CORNER; SAID LOT 223 IN GOOSE LAKE SUBDIVISION, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SECTION 9 AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MARCH 20, 1984, AS DOCUMENT NUMBER 27011004, ALL IN COOK COUNTY, ILLINOIS, SAID ABOVE DESCRIBED PARCEL CONTAINING 186699.89 SQUARE FEET OR 4.286 ACERS, MORE OR LESS.

EAST PORTION

THE EAST PORTION OF LOT 223; LYING EAST OF A LINE COMMENCING FROM A POINT ON THE NORTH LINE 143.32 FEET WEST OF THE NORTHEAST CORNER SOUTHERLY TO A POINT ON THE SOUTH LINE OF SAID LOT 223 BEING 62.94 WEST OF THE SOUTHEAST CORNER; SAID LOT 223 IN GOOSE LAKE SUBDIVISION, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SECTION 9 AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MARCH 20, 1984, AS DOCUMENT NUMBER 27011004, ALL IN COOK COUNTY, ILLINOIS, SAID ABOVE DESCRIBED PARCEL CONTAINING 93349.98 SQUARE FEET OR 2.143 ACERS, MORE OR LESS.

GENERAL NOTES:

1) THE LEGAL DESCRIPTION HAS BEEN PROVIDED BY THE CLIENT OR THEIR AGENT.

2) THIS SURVEY SHOWS THE BUILDING LINES AND EASEMENTS AS INDICATED BY THE RECORDED PLAT. THIS PLAT DOES NOT SHOW ANY RESTRICTIONS ESTABLISHED BY LOCAL ORDINANCES UNLESS SUPPLIED BY THE CLIENT.

3) BASIS OF BEARING FOR THIS SURVEY IS AS ASSUMED NORTH.

4) MONUMENTS; WILL BE SET AT THE CLIENTS REQUEST. IF STAKING IS A MATTER OF URGENCY OR FOR CONSTRUCTION, PLEASE NOTIFY THE OFFICE. OTHERWISE THIS PROPERTY WILL BE STAKED WHEN WE HAVE A CREW SCHEDULED TO WORK IN THE VICINITY.

5) LOCATION OF SOME FEATURES MAY BE EXAGGERATED FOR CLARITY. NO INTERPOLATIONS MAY BE MADE FROM THE INFORMATION SHOWN HEREON.

6) ONLY COPIES WITH AN ORIGINAL SIGNATURE AND SEAL ARE OFFICIAL LEGAL DOCUMENTS. ALL SURVEYS ARE COPYRIGHTED MATERIALS WITH ALL RIGHTS RESERVED.

7) PROPERTY BENEFITED BY EASEMENT FOR INGRESS AND EGRESS PER DOCUMENT NUMBERS 27011004, 27011005, AND 27011006, FOR PARTICULARS SEE DOCUMENTS.

Professional Design Registration #184-002795

PREFERRED SURVEY, INC.

7845 W. 79TH STREET, BRIDGEVIEW, IL, 60455
Phone 708-458-7845 / Fax 708-458-7855
www.psisurvey.com

Field Work Completed	07/21/2016	FLD CREW:	CD/KS
Land Area Surveyed	280,049.87 Sq. Ft.	CAD:	SR
Drawing Revised		PNTN:	8028162

PREFERRED SURVEY, INC. BRIDGEVIEW, IL. PROFESSIONAL LAND SURVEYOR CORPORATION NO. 116 STATE OF ILLINOIS

PREPARED FOR:
JAMES G. FITZGERALD
1629 COLONIAL PARKWAY
INVERNESS, IL 60067

RICHARD E. LULIK STATE OF ILLINOIS 3575 PROFESSIONAL LAND SURVEYOR CHICAGO, ILLINOIS

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

I, RICHARD E. LULIK, AS AN EMPLOYEE OF PREFERRED SURVEY INC., DO HEREBY STATE THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARD FOR A BOUNDARY SURVEY. DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF AND ARE CORRECTED TO A TEMPERATURE OF 68 DEGREES FAHRENHEIT.

GIVEN UNDER MY HAND AND SEAL THIS 2nd DAY OF JUNE A.D. 2017

RICHARD E. LULIK - LIC.#035-003575 - EXPIRES 11/30/18

P.S.I. NO. 171363 P.I.N.

C:\Users\rlulik\Desktop\JOBS - Survey Stars\17-1363\171363PIN-Plat.dwg, 6/2/2017 7:22:03 AM

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive, Vernon Hills, IL 60061
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July 7, 2017

Ms. Pamela Cools
Plan Commission Chairman
Village of Barrington Hills
112 Algonquin Road
Barrington Hills, Illinois 60010

Re: Bateman Meadows Subdivision
Pre-application Conference

Dear Ms. Cools:

We have completed a brief review of the documents submitted for purposes of the pre-application conference for the proposed Bateman Meadows Subdivision, a proposed four-lot subdivision of approximately 33 acres located on the west side of Bateman Road south of County Line Road. A previous 4-lot subdivision of this property received conditional approval from the Plan Commission and Village Board under the name Brenner Estates in 2012. However, the plat of subdivision was not recorded as the financial guarantee for the construction improvements could not be provided and the wetland permit was not received by the developer. Below is a summary of key points discussed during the previous subdivision process:

- **Floodplain** – There is a regulatory floodplain within the property (Tributary to Spring Creek, Elevation of 778.10), which created challenges with respect to providing sufficient gross lot area and suitable septic area for Lot 4.
- **Wetlands** – There are existing wetlands on the property that fall under the jurisidiction of the US Army Corps of Engineers. The proposed subdivision roadway will result in impacts to the existing wetlands and therefore an Army Corps permit will be required.
- **Septic Systems** – Based on the soil mapping completed previously, soils for a majority of the site are Drummer and Ashkum, with a depth of 0" to the seasonal high water table. Extensive curtain drains will be required to provide adequate separation from the limiting layer. Based on recent revisions to the Village's septic code that were made in response to changes to the state code, it is likely that the septic systems for the currently proposed subdivision would be mound systems instead of subsurface seepage systems.
  In addition, the previous submittal indicated that the existing septic system for the adjacent "Not Included" parcel (93 Bateman Road) was located within a portion of Lot 1. After discussion of this condition, it was determined that prior to issuance of building permits that a permit would be required for this septic system to be relocated/modified so that it is entirely located on the adjacent lot.

Please call if you should require any additional information prior to the hearing on Monday, July 10, 2017.

Sincerely,
Gewalt Hamilton Associates, Inc.

Daniel J. Strahan, P.E., CFM
Village Engineer

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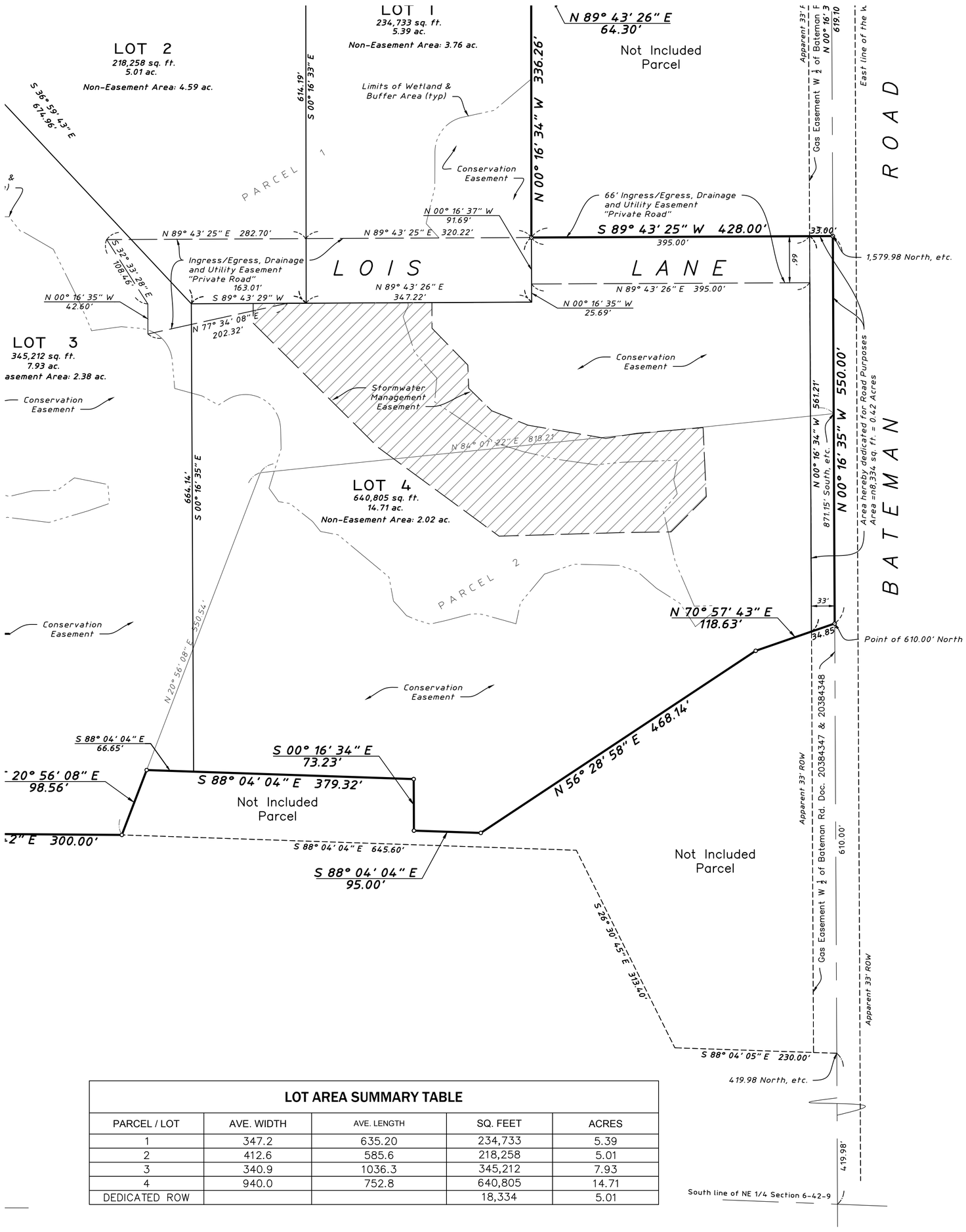


LOT AREA SUMMARY TABLE

PARCEL / LOT	AVE. WIDTH	AVE. LENGTH	SQ. FEET	ACRES
1	347.2	635.20	234,733	5.39
2	412.6	585.6	218,258	5.01
3	340.9	1036.3	345,212	7.93
4	940.0	752.8	640,805	14.71
DEDICATED ROW			18,334	5.01

LEGAL DESCRIPTION:

PARCEL 1: THAT PART OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF SAID WEST HALF OF THE NORTHEAST QUARTER, 637.46 FEET SOUTH OF THE NORTHEAST CORNER THEREOF; THENCE SOUTH 82 DEGREES 43 MINUTES WEST 1325.33 FEET TO A POINT ON THE WEST LINE OF SAID WEST HALF OF THE NORTHEAST QUARTER, 811.66 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE SOUTH ALONG THE WEST LINE 1283.38 FEET TO THE NORTH LINE OF THE SOUTH 696.56 FEET OF SAID NORTHEAST QUARTER (AS MEASURED ALONG THE WEST LINE OF SAID NORTHEAST QUARTER); THENCE EAST ALONG THE NORTH LINE OF SAID 696.56 FEET A DISTANCE OF 300 FEET; THENCE NORTHEASTERLY 550.54 FEET ALONG A LINE MAKING AN ANGLE OF 109 DEGREES 02 MINUTES 50 SECONDS (AS MEASURED FROM WEST TO NORTHEAST) WITH THE NORTH LINE OF SAID SOUTH 696.56 FEET; THENCE EASTERLY 818.20 FEET TO A POINT ON THE EAST LINE OF THE WEST HALF OF SAID NORTHEAST QUARTER 871.15 FEET SOUTH OF THE POINT OF BEGINNING; THENCE NORTH ALONG THE EAST LINE OF THE WEST HALF OF SAID NORTHEAST QUARTER, 871.15 FEET TO THE POINT OF BEGINNING (EXCEPTING THEREFROM THAT PART THEREOF DESCRIBED AS FOLLOWS: THAT PART OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 6 AFORESAID DESCRIBED AS COMMENCING AT A POINT ON THE EAST LINE OF SAID WEST HALF, SAID POINT BEING 1579.98 FEET NORTH OF THE SOUTH LINE OF SAID NORTHEAST QUARTER (AS MEASURED ALONG THE EAST LINE OF SAID WEST HALF) TO THE POINT OF BEGINNING; THENCE WEST (AT A RIGHT ANGLE TO THE LAST DESCRIBED LINE), 428.00 FEET; THENCE NORTH 0 DEGREES 03 MINUTES EAST ALONG A LINE PARALLEL WITH THE EAST LINE OF SAID WEST HALF 336.26 FEET; THENCE SOUTH 89 DEGREES 57 MINUTES EAST 64.30 FEET; THENCE NORTH 0 DEGREES 03 MINUTES EAST 235.88 FEET; THENCE NORTH 82 DEGREES 41 MINUTES 34 SECONDS EAST 366.72 FEET TO A POINT 637.46 FEET SOUTH OF THE NORTHEAST CORNER OF THE SAID WEST HALF OF THE NORTHEAST QUARTER OF SECTION 6; THENCE SOUTH 0 DEGREES 03 MINUTES WEST ALONG SAID EAST LINE, 619.10 FEET, MORE OR LESS, TO THE POINT OF BEGINNING), IN COOK COUNTY, ILLINOIS.

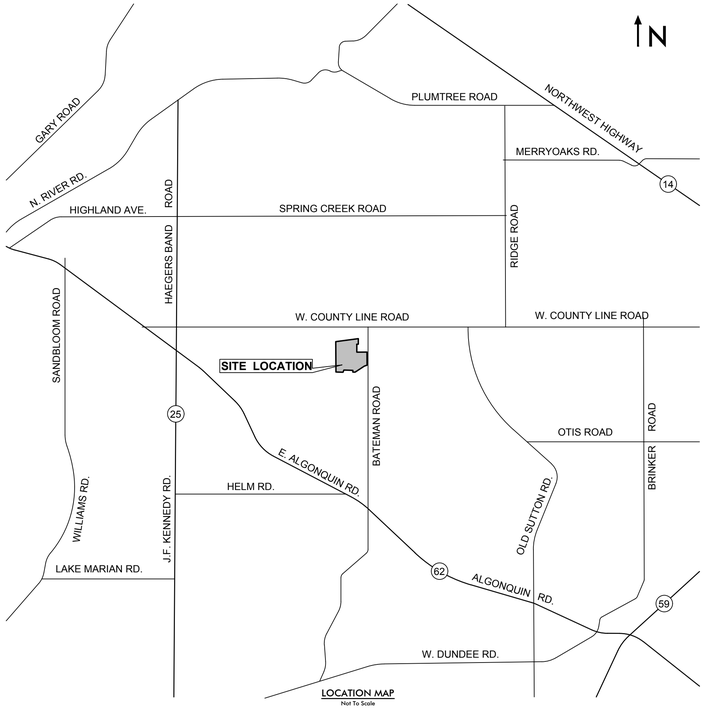
PARCEL 2: THAT PART OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 6 AT A POINT 696.56 FEET (AS MEASURED ALONG SAID WEST LINE) NORTH OF THE SOUTH LINE OF SAID NORTHEAST QUARTER; THENCE EASTERLY PARALLEL WITH THE SOUTH LINE OF SAID NORTHEAST QUARTER A DISTANCE OF 300.00 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED; THENCE NORTHEASTERLY 550.54 FEET ALONG A LINE MAKING AN ANGLE OF 109 DEGREES 02 MINUTES 50 SECONDS (AS MEASURED FROM WEST TO NORTHEAST) WITH THE LAST DESCRIBED LINE; THENCE EASTERLY 818.20 FEET, MORE OR LESS, TO A POINT ON THE EAST LINE OF THE WEST HALF OF SAID NORTHEAST QUARTER, 1508.61 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 6; THENCE SOUTH 0 DEGREES 03 MINUTES WEST ALONG THE EAST LINE OF THE WEST HALF OF SAID NORTHEAST QUARTER, A DISTANCE OF 908.65 FEET TO A POINT 419.98 FEET NORTH OF THE SOUTH LINE OF SAID NORTHEAST QUARTER; THENCE NORTH 87 DEGREES 44 MINUTES 30 SECONDS WEST 230.00 FEET; THENCE NORTH 26 DEGREES 09 MINUTES 10 SECONDS WEST 314.15 FEET; THENCE NORTH 87 DEGREES 44 MINUTES 30 SECONDS WEST 645.60 FEET TO THE POINT OF BEGINNING (EXCEPTING THEREFROM THAT PART THEREOF DESCRIBED AS FOLLOWS: THAT PART OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 6 AFORESAID DESCRIBED AS COMMENCING ON THE WEST LINE OF SAID WEST HALF AT A POINT 696.56 FEET (AS MEASURED ALONG SAID WEST LINE) NORTH OF THE SOUTH LINE OF SAID NORTHEAST QUARTER; THENCE EASTERLY PARALLEL WITH THE SOUTH LINE OF SAID NORTHEAST QUARTER A DISTANCE OF 300.00 FEET TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED; THENCE NORTHEASTERLY 98.56 FEET ALONG A LINE MAKING AN ANGLE OF 109 DEGREES 02 MINUTES 50 SECONDS (AS MEASURED FROM WEST TO NORTHEAST) WITH THE LAST DESCRIBED LINE; THENCE EASTERLY PARALLEL WITH THE SOUTH LINE OF SAID NORTHEAST QUARTER 379.32 FEET; THENCE SOUTH 0 DEGREES 03 MINUTES WEST PARALLEL TO THE EAST LINE OF THE WEST HALF OF SAID NORTHEAST QUARTER 73.23 FEET; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID NORTHEAST QUARTER 95.00 FEET; THENCE NORTH 56 DEGREES 48 MINUTES 32 SECONDS EAST 468.14 FEET; THENCE NORTH 71 DEGREES 38 MINUTES 12 SECONDS EAST 118.48 FEET; THENCE SOUTH 00 DEGREES 03 MINUTES 00 SECONDS WEST, PARALLEL TO THE EAST LINE OF THE WEST HALF AFORESAID 610.00 FEET TO A POINT 419.98 FEET NORTH OF THE SOUTH LINE OF SAID NORTHEAST QUARTER; THENCE NORTH 87 DEGREES 44 MINUTES 30 SECONDS WEST 230.00 FEET; THENCE NORTH 26 DEGREES 09 MINUTES 10 SECONDS WEST 314.15 FEET; THENCE NORTH 87 DEGREES 44 MINUTES 30 SECONDS WEST 645.60 FEET TO THE POINT OF BEGINNING), IN COOK COUNTY, ILLINOIS.

Prepared: April 24, 2017

HAEGER ENGINEERING
consulting engineers • land surveyors
100 East State Parkway, Schaumburg, IL 60173
Tel: 847.394.6600 Fax: 847.394.6608
Illinois Professional Design Firm License No. 184-003152
www.haegerengineering.com

PRELIMINARY ENGINEERING PLANS
BATEMAN MEADOWS
SITE IMPROVEMENT PLANS

SECTION 6 TOWNSHIP 42 NORTH RANGE 9 EAST
BATEMAN ROAD, BARRINGTON HILLS, ILLINOIS
COOK COUNTY



LOCATION MAP
Not To Scale

PREPARED BY:
Haeger Engineering LLC
Illinois Prof. Design Firm #184-003152
100 East State Parkway
Schaumburg, IL 60173
Tel: 847-394-6600
Fax: 847-394-6608
www.haegerengineering.com

VILLAGE OF BARRINTON HILLS
112 Algonquin Road
Barrington Hills, IL 60010
Phone: (847) 551-3000

BENCHMARKS:

Village Benchmark:

REFERENCE MONUMENT No. BH 21 78' EAST OF NEC OF BH FIRE STATION, 104' WEST OF THE WEST ENTRANCE TO VILLAGE HALL, 8.3' SOUTHWEST OF FLAGPOLE.

Elevation = 890.15

Temporary Site Benchmark:

EXISTING WELL ON PROPOSED LOT NO. 3, NAVD ELEV. 782.88 (OBSERVED 4-19-11). PREVIOUS MEASUREMENT ELEV. 782.51 ELEV. 782.51 (ELEV. EQ. ADD 0.33 FEET TO ELEVATIONS SHOWN ON PLANS)

Know what's **below.**
Call before you dig.

Note:
Call 811 at least 48 hours, excluding weekends and holidays, before you dig.

INDEX TO SHEETS

LEGEND

Existing Symbol	Description	Proposed Symbol
	Storm Sewer Manhole	
	Catch Basin	
	Inlet	
	Flared End Section	
	Headwall	
	Area Drain	
	Sanitary Sewer Manhole	
C.O.	Clean Out	C.O.
	Storm Sewer	
	Perforated Underdrain	
H	Hand Hole	H
	Fence	
	Guardrail	
	Pipe Bollard	
	Sign	
G	Gas Valve	G
G	Gas Line	G
E	Electric Line	E
OHW	Overhead Utility Line	OHW
FO	Fiber Optic Line	FO
E	Electrical Pedestal	E
E	Electric Manhole	E
	Guy Wire	
	Utility Pole	
T	Telephone Pedestal	T
T	Telephone Manhole	T
T	Telephone Line	T
CATV	Cable TV Line	CATV
C	Cable TV Pedestal	C
	Flagpole	
M	Mailbox	M
	Curb & Gutter	
XXX.XX	Pavement Elevation	P XXX.XX
XXX.X +	Ground Elevation	XXX.X
	Open Lid Frame & Grate	Gr XXX.XX
	Closed Lid Frame & Lid	Rim XXX.XX
	Swale	
	Hardscape Flow	
	Softscape Flow	
XXX	Contour Line	XXX
	Deciduous Tree	
	Coniferous Tree	
	Bush	
	Brushline	

No.	Revision	Date

HAEGER ENGINEERING
consulting engineers • land surveyors
100 East State Parkway, Schaumburg, IL 60173 Tel: 847.394.6600 Fax: 847.394.6608
Illinois Professional Design Firm License No.: 184-003152
www.haegerengineering.com

TITLE SHEET

BATEMAN MEADOWS
PRELIMINARY ENGINEERING PLANS
BATEMAN ROAD, BARRINGTON HILLS, ILLINOIS

Project Manager:	M L A
Engineer:	P A C
Date:	04/27/2017
Project No.	16-188
Sheet	C1.0 / C7

Plot Date: May 01, 2017 - 11:18am Plotted By: jason-h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg

S 82° 22' 00" W 958.98'

DEED S82°43'W
DEED = 1325.33'

Fnd Iron Rod
0.86'N & O.L.

Fnd Iron Rod
0.13'N & O.L.

N 00° 16' 35" W 295.88'

Fnd Iron Rod
0.10'S & O.L.

64.30'
N 89° 43' 26" E

Fnd Iron Rod
at Corner

NOT NCLUDED
PARCEL

CONTRACTOR TO DETERMINE IF SEPTIC FIELD SERVING THE ADJACENT HOUSE TO THE EAST IS LOCATED ON LOT 1.

N 00° 16' 34" W 336.25'

SAWCUT & R
EXISTING PAV

S 89° 43' 25" W 428.00'

Fnd Iron Rod
at Corner

Top Of Well Cap
782.51

Electric Transformer

Concrete

Concrete Pad

Concrete Bench

Concrete
781.2

Concrete

Concrete

156.7'

EXIST. TREES TO REMAIN (APPROX. LOCATION)

NOTE:
REMOVE GRAVEL OR INCORPORATE INTO OVERALL SITE GRADING

Gravel

Fnd Iron Rod

NOTE:
REMOVE GRAVEL OR INCORPORATE INTO OVERALL SITE GRADING

Swale

S 00° 20' 36" E 1243.16'

1283.16'
DEED = 1283.38'
S00°20'36"E

WETLANDS

Fnd Iron Rod

Fnd Iron Rod
0.37'E

Conservation Easement Boundary

WETLANDS

TOP OF WATER
773.3 +/-

POND

WETLANDS

WETLAND LIMITS BY MIDWEST ECOLOGICAL SERVICES

FLOODPLAIN 100-YR B.F.E.
EL. 778.10 (NAVD88)

POND

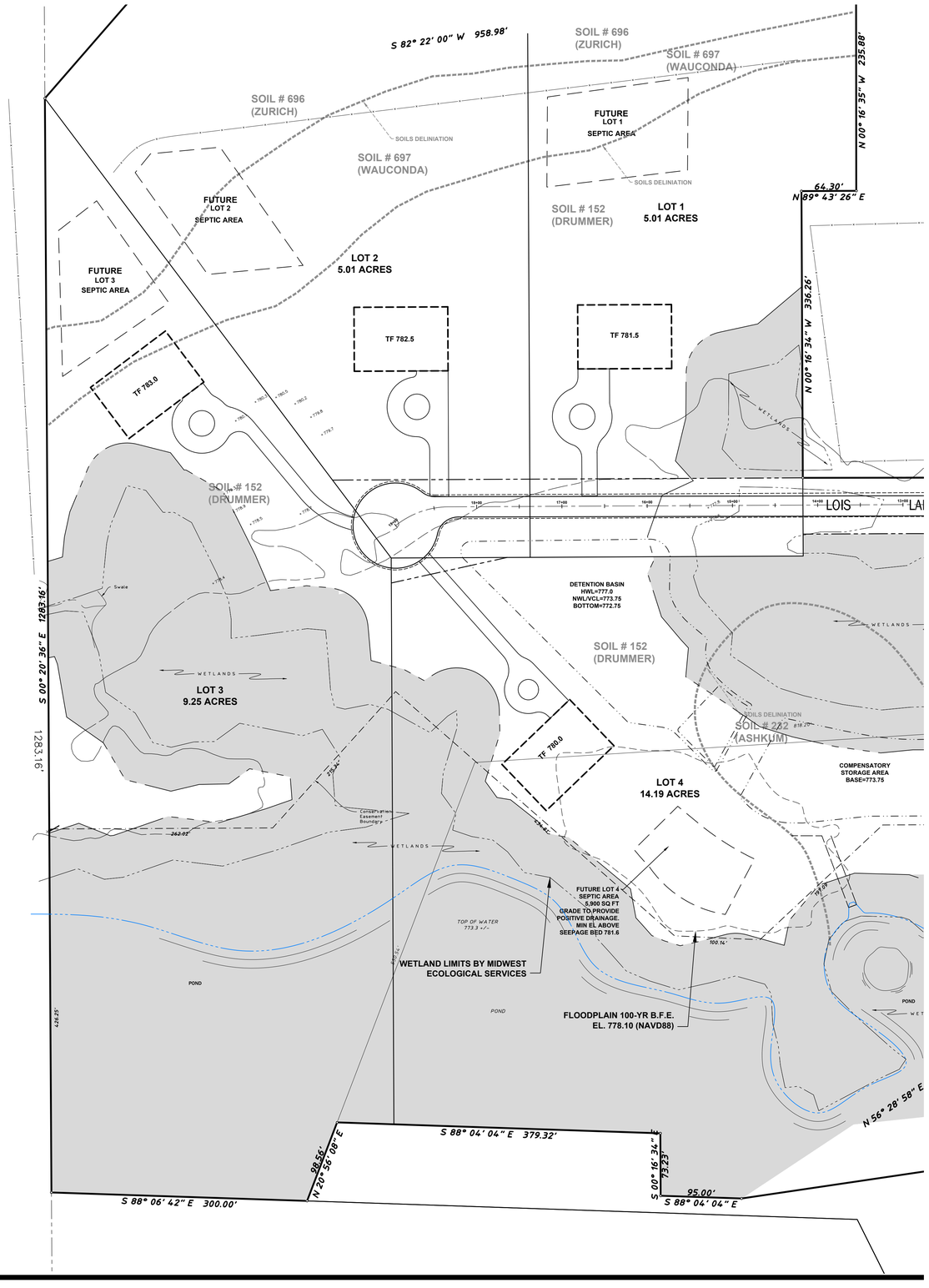
POND

WETLANDS

Conservation Easement Boundary

S 56° 28' 58" E 468.14'

Plot Date: May 01, 2017 - 11:18am Plotted By: jason-h
File Name:P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg



Plot Date: May 01, 2017 - 11:18am Plotted By: jason.h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg

FUTURE
LOT 1
SEPTIC AREA

FUTURE
LOT 2
SEPTIC AREA

FUTURE
LOT 3
SEPTIC AREA

LOT 1
5.01 ACRES

LOT 2
5.01 ACRES

LOT 3
9.25 ACRES

LOT 4
14.19 ACRES

TF 782.5

TF 781.5

TF 783.0

TF 780.0

CONTRACTOR TO DETERMINE IF SEPTIC FIELD SERVING THE ADJACENT HOUSE TO THE EAST IS LOCATED ON LOT 1.

6" PERFORATED PVC PIPE

I-775.70

P778.15

P778.00

LOIS LANE

6" PERFORATED PVC PIPE

I-773.75

DETENTION BASIN
HWL=777.0
NWL/WQL=773.75
BOTTOM=772.75

Inv 773.75
Control Structure
Inv 773.75

COMPENSATORY STORAGE AREA
BASE=773.75

I-773.75

EXCAVATION ONLY AT WETLAND BOUNDARY
NO FILL WITHIN WETLAND

FUTURE LOT 4
SEPTIC AREA
5,900 SQ FT
GRADE TO PROVIDE POSITIVE DRAINAGE.
MIN EL ABOVE SEEPAGE BED.781.6

I-773.50

ENERGY DISSIPATION SYSTEM.
- 0% FROM OUTLET TO EDGE OF WATER EDGE
- 15'x15' AREA MIN.
- 10" DIA. WASHED STONE MIN.

TOP OF WATER
773.3 +/-

WETLANDS

Conservation Easement Boundary

Swale

Ditch
18" CMP
Inv 777.4

Asphalt

Wood Service Po
6 Wires N&S

Communications

Wood Service I
With Transfor
6 Wires N&S

30" CMP
Inv 773.2

Wood Service F
7 Wires N&S

Guy Wire

Edge of Pavement

Guard Rail

48" CMP
Inv 771.8

48" CMP
Inv 771.6
T/Water 773.3

48" CMP
Inv 771.7

BATEMAN ROAD

1283.16'

262.02'

303.40'

152.90'

100.14'

1927.03'

24.00'

Plot Date: May 01, 2017 - 11:18am Plotted By: jason-h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg

EXISTING WETLAND AREA
Delineated by Midwest Ecological Consultants, S

WETLAND BUFFER AREA
Assumed 50-ft Buffer from Delineated Wetland Li
Note: Wetland and Buffer Area to be located with

PROPOSED WETLAND IMPACT AREA

PROPOSED WETLAND BUFFER IMPACT AREA

S 82° 22' 00" W 958.98'

N 00° 16' 35" W 235.88'

64.30'
N 89° 43' 26" E

LOT 1
5.01 ACRES

LOT 2
5.01 ACRES

N 00° 16' 34" W 336.26'

WETLAND BUFFER IMPACT
21,930 S.F.
0.50 ACRE

WETLAND IMPACT
9,764 S.F.
0.22 ACRE

S 89° 43' 25" W 428.00'

LOIS LANE

B A T E M A N R O A D

N 00° 16' 35" W 550.00'

S 00° 20' 36" E 1283.16'

1283.16'

LOT 3
9.25 ACRES

LOT 4
14.19 ACRES

WETLANDS

Conservation Easement Boundary

262.02'

497.03'

100.14'

303.40'

152.90'

TOP OF WATER
773.3

Swale

Ditch
18" CMP
Inv 777.4

Asphalt

Wood Service Po
6 Wires N&S

Communications

Wood Service I
With Transfor
6 Wires N&S

30" CMP
Inv 773.2

Wood Service F
7 Wires N&S

Guy Wire

Edge of Pavement

Guard Rail

48" CMP
Inv 771.8

48" CMP
Inv 771.6
T/Water 773.3

48" CMP
Inv 771.6

48" CMP
Inv 778.7

Plot Date: May 01, 2017 - 11:18am Plotted By: jason-h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg

EXISTING SITE FLOODPLAIN AREA

PROPOSED EXCAVATION IN FLOODPLAIN AR
COMPENSATORY STORAGE AND/OR DETENT
EXCAVATION VOLUME = 10,500 C.Y.
STORMWATER DETENTION VOLUME = 3,0

PROPOSED FILL IN FLOODPLAIN AREA
FILL VOLUME = 2,324 C.Y.
150% COMPENSATORY STORAGE REQUIF
PROVIDED COMPENSATORY STORAGE V

LOT 1
5.01 ACRES

LOT 2
5.01 ACRES

LOT 3
9.25 ACRES

LOT 4
14.19 ACRES

TF 782.5

TF 781.5

TF 783.0

TF 780.0

DETENTION BASIN
HWL=777.0
NWL/VCL=773.75
BOTTOM=772.75

COMPENSATORY
STORAGE AREA
BASE=773.75

Inv 773.75
Control Structure

Inv 773.75

I-773.75

I-773.50

ENERGY DISSIPATION SYSTEM.
- 0% FROM OUTLET TO EDGE OF WATER EDGE
- 15'x15' AREA MIN.
- 10" DIA. WASHED STONE MIN.

EXCAVATION ONLY AT WETLAND BOUNDARY
NO FILL WITHIN WETLAND

WETLAND LIMITS BY MIDWEST
ECOLOGICAL SERVICES

FLOODPLAIN 100-YR B.F.E.
EL. 778.10 (NAVD88)

TOP OF WATER
773.3 +/-

POND

WETLANDS

Conservation Easement Boundary

LOIS LANE

BATEMAN

Ditch

Asphalt

Swale

Guard Rail

64.30'
N 89° 43' 26" E

336.26'
N 00° 16' 34" W

S 89° 43' 25" W 428.00'

1283.16'
S 00° 20' 36" E

550.00'
N 00° 16' 35" W

118.63'
N 70° 57' 43" E

460.14'

426.25'

262.02'

215.34'

434.81'

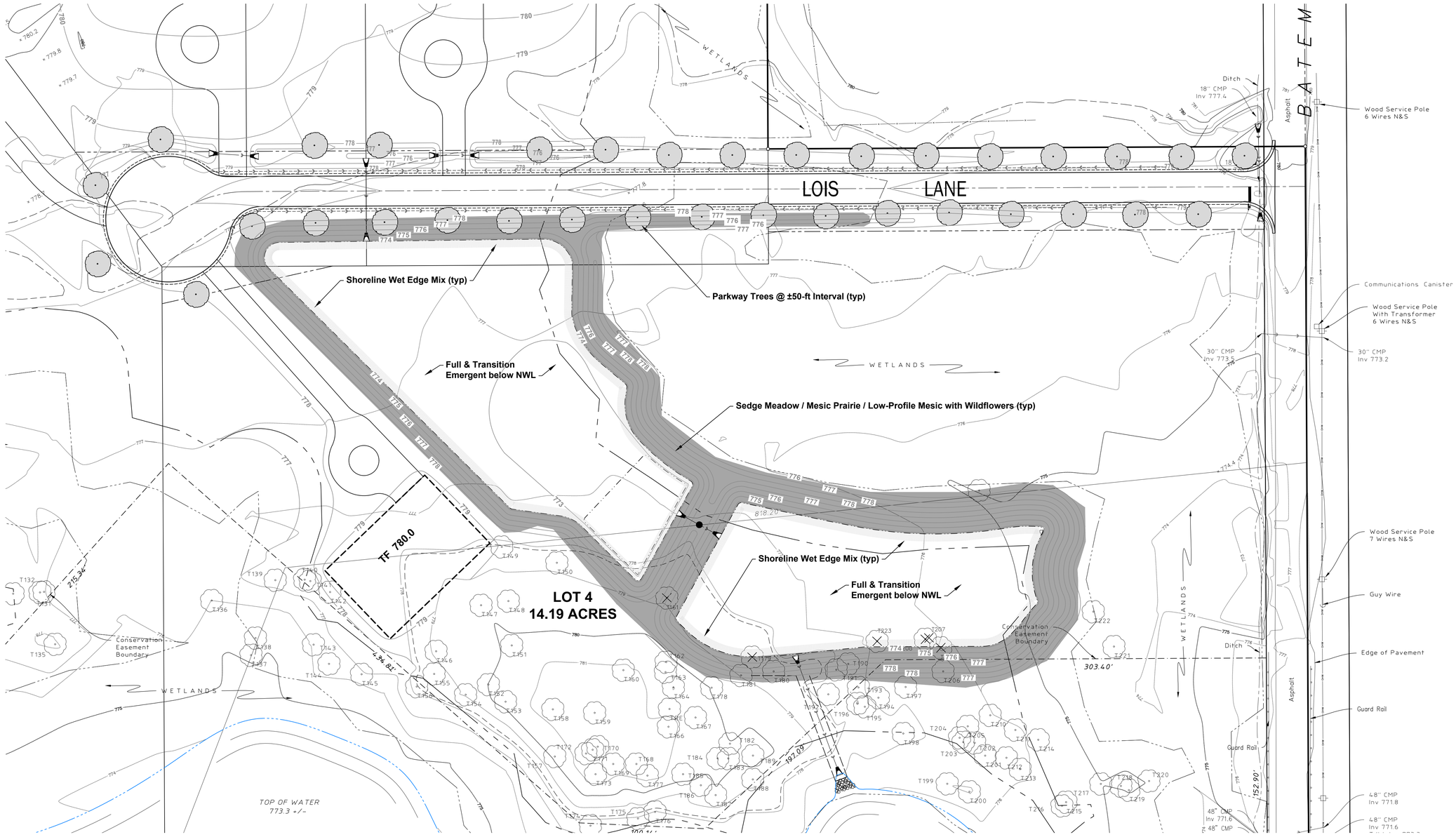
303.40'

197.09'

100.14'

152.90'

Plot Date: May 01, 2017 - 11:18am Plotted By: jason-h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg



		Total Existing Trees	223	
		Total Existing Trees to be Removed	8	
		Percentage of Existing Trees to be Removed	3.6%	
Inventory of Heritage Trees to be Removed				
ID	Size (in)	Common Name	Botanical Name	Condition
146	15	Wild Black Cherry	Prunus Serotina	2
155	18	White Mulberry	Morus Alba	2
161	16	Wild Black Cherry	Prunus Serotina	3
179	31	Wild Black Cherry	Prunus Serotina	3
207	17	Wild Black Cherry	Prunus Serotina	3
208	18	Wild Black Cherry	Prunus Serotina	3
209	13	Wild Black Cherry	Prunus Serotina	2
223	18	Wild Black Cherry	Prunus Serotina	3
	146	Total Caliper Inches to be Removed		

No.	Revision	Date

HAEGER ENGINEERING
consulting engineers • • land surveyors
100 East State Parkway, Schaumburg, IL 60173 Tel: 847.394.6600 Fax: 847.394.6608
Illinois Professional Design Firm License No.: 184.003152
www.haegerengineering.com

PRELIMINARY
LANDSCAPING PLAN

BATEMAN MEADOWS
PRELIMINARY ENGINEERING PLANS
BATEMAN ROAD, BARRINGTON HILLS, ILLINOIS

Project Manager:	M L A
Engineer:	P A C
Date:	04/27/2017
Project No.	16-188
Sheet	C5.0 / C7

Plot Date: May 01, 2017 - 11:19am Plotted By: jason-h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg

LOT 1
5.01 ACRES

LOT 2
5.01 ACRES

LOT 3
9.25 ACRES

LOT 4
14.19 ACRES

Silt Fence

Ditch Checks

Stabilized Construction Entrance

TF 782.5

TF 781.5

TF 783.0

TF 780.0

DETENTION BASIN
HWL=777.0
NWL/VCL=773.75
BOTTOM=772.75

COMPENSATORY
STORAGE AREA
BASE=773.75

LOIS LANE

WETLANDS

Swale

Conservation Easement Boundary

TOP OF WATER
773.3 +/-

POND

WETLAND LIMITS BY MIDWEST
ECOLOGICAL SERVICES

FLOODPLAIN 100-YR B.F.E.
EL. 778.10 (NAVD88)

Rip-Rap Portection

1283.16'

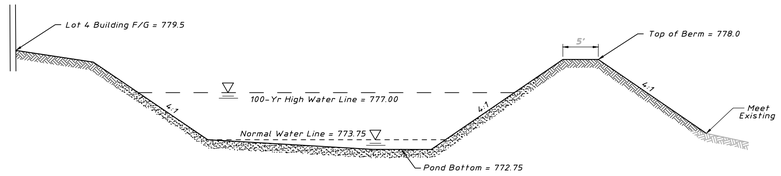
426.25'

562.03'

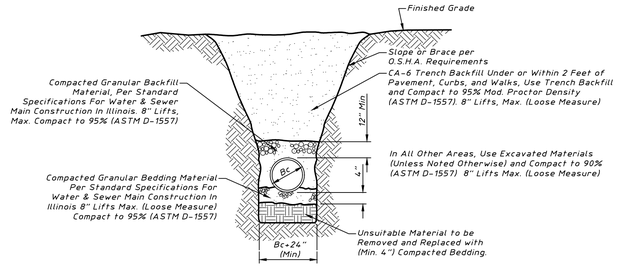
303.40'

100.14'

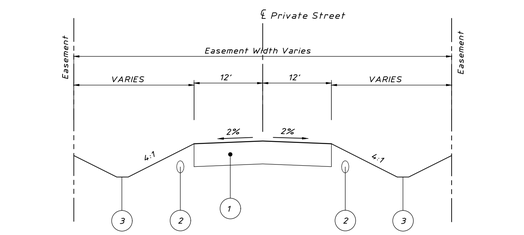
Plot Date: May 01, 2017 - 11:19am Plotted By: jason.h
File Name: P:\2016\6188\Drawings\Preliminary\6188-Prelim Engineering.dwg



POND CROSS SECTION
NOT TO SCALE

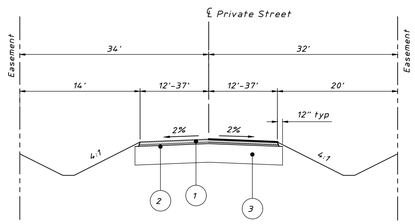


TRENCH SECTION - STORM SEWER



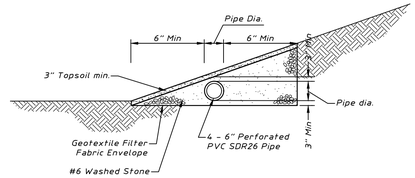
1. 10" Aggregate Base Course Type B
2. 6" PVC Perforated Underdrain
3. Drainage Ditch

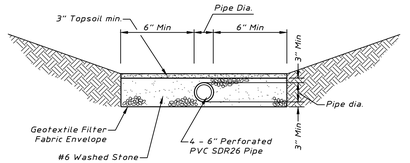
PRIVATE STREET CROSS-SECTION
NOT TO SCALE



1. 2-1/4" HMA Surface Course, Mix "D", IL-9.5, N70
2. 3/4" HMA Leveling Binder, Machine Method, IL-9.5, N50
3. 10" Aggregate Base Course, Type "b"

PAVED PRIVATE STREET AT ENTRANCE CROSS-SECTION
NOT TO SCALE





UNDER DRAIN DETAIL

No.	Revision	Date

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DETAILS

BATEMAN MEADOWS
PRELIMINARY ENGINEERING PLANS
BATEMAN ROAD, BARRINGTON HILLS, ILLINOIS

Project Manager: M L A
Engineer: P A C
Date: 04/27/2017
Project No. 16-188
Sheet **C7.0** / C7

Plot Date: May 01, 2017 - 11:19am Plotted By: jason.h
File Name: P:\2016\16188\Drawings\Preliminary\16188-Prelim Engineering.dwg

WETLAND DELINEATION REPORT

PREPARED FOR:

Bridgeview Bank Group

SUBJECT SITE:

Bateman Meadows
95 Bateman Road
Barrington Hills, Cook County Illinois
(Latitude 42.151049 Longitude -88.226097)

May 3, 2017

MIDWEST ECOLOGICAL

PO BOX 321 | GILBERTS, ILLINOIS 60136 | 847-278-4610

TABLE OF CONTENTS

WETLAND DELINEATION REPORT

EXECUTIVE SUMMARY

In response to the request of Haeger Engineering, (MEI) has performed and wetland delineation of the approximate 34 acre study area. The study area has a common address of 93 and 95 Bateman Road, Barrington Hills, Cook County Illinois. Geographically the site is located within Section 6, Township 42 North, Range 9 East of the Third Principal Meridian within Cook County, Illinois. Utilizing the methods and criteria established by the U.S. Army Corps of Engineers (COE) in their Corps of Engineers Wetlands Delineation Manual (1987) & Midwest Regional Supplement (2008) a wetland investigation of the property was preformed. Based on the on-site investigation using the information obtained from the field samples Midwest Ecological, Inc. (MEI) identified two (2) wetland areas totaling **11.91 acres** in size.

Site	Size in Acres	Mean C	FQI	Anticipated Regulatory Agency
Wetland A	0.24	1.80	4.02	Corps
Wetland B	11.67	2.76	19.55	Corps

Please Note: The floristic quality assessment was taken early in the growing season and may not represent a full vegetative inventory.

It should be noted that under the current guidelines, any disturbance of a wetland area requires a permit through the US Army Corps of Engineers, Cook County Metropolitan Water Reclamation District (MWRD) or the Village of Barrington Hills. However, mitigation may or may not be required, depending on the overall impact (> 0.10) to the wetland, Waters of the United States or Isolated Wetland of Cook County. This jurisdiction of the identified wetland is at the discretion of the ACOE.

PURPOSE OF VISIT

The purpose of the site visit is to determine if any Wetlands (various types), Open water pockets, Creeks or Rivers exist on-site and to determine their approximate size, location, quality and jurisdiction. Wetlands encountered were delineated using standard methods sanctioned by the United States Army Corps of Engineers in their Corps of Engineers Wetlands Delineation Manual (1987), Regional Supplement (2008) and Wetland Mapping Conventions – NRCS, Illinois (1998).

DEFINITION OF A WETLAND

The U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protections Agency (EPA) define wetlands as:

> "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do

> support, a prevalence of vegetation typically adapted for life in saturated soil conditions..." (33 CFR 328.3[b], 1977).

Although not defined by regulation, "normal circumstances" are interpreted by both the ACOE and the Natural Resources Conservation Service to be "the soil and hydrologic conditions that are normally present, without regard to whether the vegetation has been removed" (7 CFR 12.31[b][2][*i*]).

METHODOLOGY

Prior to visiting the site, Midwest Ecological, Inc. (MEI) performed a review of the aforementioned National Wetland Inventory map, Cook County Soil Survey map, United States Geological Survey Maps and aerial photographs in order to determine existing site conditions. Site visits were then conducted by an Environmental Wetland Specialist from MEI on February 14, April 26, May 2, 2017. The ACOE 1987 Wetlands Delineation Manual Technical Report Y-87-1 & 2008 Midwest Regional Supplement identifies the mandatory technical criteria for wetland identification. The three essential characteristics of a wetland are: 1) hydrophytic vegetation; 2) hydric soils; and 3) wetland hydrology. These characteristics are described below:

Hydrophytic Vegetation: The hydrophytic vegetation criterion is based on a separation of plants into five basic groups:

1) Obligate wetland plants (OBL) almost always occur (estimated probability >99%) in wetlands under natural conditions;
2) Facultative wetland plants (FACW) usually occur in wetlands (estimated probability 67-99%), but occasionally are found in non-wetlands;
3) Facultative plants (FAC) are equally likely to occur in wetland or non-wetlands (estimated probability 34-66%);
4) Facultative upland plants (FACU) usually occur in non-wetlands (estimated probability 67-99%), but occasionally are found in wetlands (estimated probability 1-33%); and
5) Obligate upland plants (UPL) almost always occur (estimated probability >99%) in non-wetlands under natural conditions.

Within each data point, vegetation is sampled in plots of varying size based on the type of vegetation being sampled. The following plot sizes are recommended by the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Midwest Region:

Trees	- 30-ft radius
Saplings/Shrubs	- 15-ft radius
Herbaceous Plants	- 1 m2 plot
Woody vines	- 30-ft radius

If greater than 50% of the plants present in each stratum or layer of the plant community are FAC (with the exception of FAC-), FACW, or OBL the subject area is considered a wetland in terms of vegetation (Dominance Test). If the vegetation does not meet the requirements of the Dominance Test, the Prevalence Index (PI) should be utilized.

The PI evaluates the coverage, on a weighted basis of coverage over all strata, of the vegetation within the plot. The PI ranges between 1.0 and 5.0, with a 3.0 or less indicating hydrophytic vegetation is present. If the PI is greater than 3.0, the dominance test is failed, but there are still hydric soil and wetland hydrology presence, the observation of morphological adaptations by vegetation can be used to indicate that the hydrophytic vegetation criteria is met.

Morphological adaptations are changes in the structure of vegetation in response to conditions outside the normal character of the plant. These adaptations include adventitious roots, multi-stemmed trunks, shallow root systems developed at or near the surface, and buttressing in tree species. To meet this indicator, more than 50% of the individuals of FACU species must exhibit the morphological adaptations. Care must be given that the adaptations observed are due wetter conditions that the species is used to as opposed to other factors such as shallow roots present because of erosion of the surface.

Hydric Soils: Hydric soils are defined in the manual as "soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part." Hydric soil indicators are distinctive characteristics that persist in the soil during both wet and dry periods, and are used to identify hydric soils in the field. Field indicators include color, mottling, gleying, and sulfidic odor. A specific set of indicators has been developed by the USDA Natural Resource Conservation Service (Field Indicators of Hydric Soils in the United States) which provides a detailed description of how to identify the indicators in during a site visit. A soil meets the definition of a hydric soil if it exhibits at least one of these indicators.

Wetland Hydrology: Indicators of hydric soil and hydrophytic vegetation typically reflect the middle and long-term conditions of a site, but not the short term conditions. The wetland hydrology criterion is often the most difficult to determine because of climatological variation. Typically, the presence of water for a week or more during the growing season creates anaerobic conditions indicative of wetland hydrology. Anaerobic conditions lead to the prevalence of wetland plants. The 2010 USACE Regional Supplement for the Midwest Region provides specific indicators in four different groups for wetland hydrology: Observation of Surface Water or Saturated Soils, Evidence of Recent Inundation, Evidence of Current or Recent Soil Saturation, and Evidence from Other Site Conditions or Data. If a site exhibits 1 primary indicator or 2 secondary indicators, then it meets the hydrology criteria for a wetland.

REFERENCE MATERIALS

The following materials were reviewed and utilized to assist in the field reconnaissance and completion of this report. See Appendix A for the Reference Materials (Exhibits 1 through 7).

LOCATION

The 34 acre study area is located at common address 93 and 95 Bateman Road, Barrington Hills, Cook County Illinois. Geographically the site is located within Section 6, Township 42 North, Range 9 East of the Third Principal Meridian within Cook County, Illinois (Latitude 42.151049 Longitude -88.226097).

NATIONAL WETLAND INVENTORY (NWI) MAP

The National Wetland Inventory (NWI) Map for the Barrington Quadrangle was reviewed to determine the location of wetland areas on the subject site. It should be noted that these maps are only large scale guides, actual wetland locations and types may vary. Ultimate qualification occurs during field reconnaissance.

Per our review of the NWI map, the study area does contain a wetland area:

PEMC: Palustrine, Emergent, Seasonal
POWH: Palustrine, Open Water, Permanent

Based on our onsite investigation, the site contains two wetland areas. Wetland A appears to have been separated from Wetland B due to the installation of a gravel roadway. Wetland B is jurisdictionally connected to Spring Creek. Spring Creek is hydrologically connected to the Fox River.

COOK COUNTY SOIL SURVEY MAP

The Soil Survey of Cook County, Illinois was investigated to determine the location of hydric soils on the subject site. Mapped hydric soils can indicate wetland areas. The following soil were found to be present on the subject site during our investigation.

152 A – Ashkum silty clay loam, 0-2% slopes (**poorly drained, hydric**)

361 C2 – Kidder loam, 4-6% slopes (well drained)

442 A – Mundelein silt loam, 0-2% slopes (somewhat poorly drained)

1903 A – Muskego and Houghton mucks, undrained, 0-2% slopes (very poorly drained)

W – Water

UNITED STATES GEOLOGICAL SURVEY & HYDROLOGICAL ATLAS MAPS

The Hydrological Atlas for Barrington Hills (2015 and 1965), as illustrated on the Barrington quad, U.S.G.S. Map and Hydrological Atlas. These maps were reviewed to determine the historical local drainage patterns. Upon review of this drainage pattern, it appears that the site drains to Spring Creek which is tributary to the Fox River.

FLOOD INSURANCE RATE MAP (F.I.R.M.)

The Flood Insurance Rate Maps (F.I.R.M.), for Cook County, Illinois, Community Panel No. 17031C0015 J effective date August 19, 2008 were reviewed to determine the location of regulatory floodplains and floodways within the subject site. Mapped floodplains can be indicative of wetland hydrology.

Based on the F.I.R.M. Map, the study area contains a Zone A flood plain associated with the delineated Wetland A.

WETLAND FIELD DELINEATION

An on-site wetland delineation of the property was conducted on February 14, April 26, May 2, 2017. Wetland boundaries were determined using the ACOE guidelines and the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) guidelines, as stated previously. The routine method of wetland delineation was used, incorporating information on vegetation, hydrology and soils. The full width of the property was traversed and when a suspected wetland was encountered, the plant species present were determined by making several random passes through the area. If wetland plant species were found to be comprised of 50% or more of plant cover (i.e., wetland vegetation was dominant), the suspected wetland was further examined for the necessary field indicators of hydric soil and hydrology. The wetland boundaries were then defined and all observed plant species were recorded.

The plant taxonomic nomenclature and the Natural Area Index (NAI) used in this report follow's the Swink and Wilhelm Manual (1994). A more detailed survey would be necessary for a more complete plant list and while more species might be obtained from additional surveys, this would not change the areas delineated as wetlands.

Study Area: The 34 acre parcel is currently vacant. One brick barn and gravel drive way is noted on the property. It appears that the site is a historical horse farm. Old horse paddocks are noted within the property.

Wetland A: Wetland A is a depressional reed canary grass wetland that receives surface flow from adjacent areas. The wetland was historically part of the larger wetland to the south (wetland B) but was separated due to the construction of the gravel driveway. Wetland A is characterized by data point 1A and was determined to be **0.24 acres.** Wetland A is a depressional wetland that does not have a regulated outfall. A culvert or surface conveyance was not noted drainaing the wetland area. The dominant vegetation found was determined to be Reed Canary Grass (*Phalaris arundinacea*) and Sandbar Willow (*Salix interior*).

During our investigation positive wetland hydrology is met with the primary indicators of Saturation (A3). Mapped soil is identified as Ashkum silty clay loam (232 A) which is a poorly drained soil. Primary soil indicators of thick dark surface (A12) was noted within the flagged boundary.

Said vegetation soils and hydrology information noted above can be found in the datasheets section of this report. Please note data sheets 1A-2A reference wetland A.

Study Information

Site:	Bateman Meadows
Locale:	Wetland A
By:	Robert Vanni

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	1.80	Species Richness (all)	9.00
Mean C (all species)	1.00	Species Richness (native)	5.00
Mean C (native trees)	1.00	% Non-native	0.44
Mean C (native shrubs)	1.00	Wet Indicator (all)	-0.22
Mean C (native herbaceous)	2.33	Wet Indicator (native)	-0.60
FQAI (native species)	4.02	% hydrophyte (Midwest)	0.67
FQAI (all species)	3.00	% native perennial	0.56
Adjusted FQAI	13.42	% native annual	0.00
% C value 0	0.44	% annual	0.00
% C Value 1-3	0.44	% perennial	1.00
% C value 4-6	0.11		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
cirarv	*Cirsium arvense*	Canadian Thistle	0	FACU	1	Forb	Perennial	Adventive
frapen	*Fraxinus pennsylvanica*	Green Ash	1	FACW	-1	Tree	Perennial	Native
phaaru	*Phalaris arundinacea*	Reed Canary Grass	0	FACW	-1	Grass	Perennial	Adventive
poapra	*Poa pratensis*	Kentucky Blue Grass	0	FAC	0	Grass	Perennial	Adventive
salint	*Salix interior*	Sandbar Willow	1	FACW	-1	Shrub	Perennial	Native
fesela	*Schedonorus pratensis*	Meadow Fescue	0	FACU	1	Grass	Perennial	Adventive
solalt	*Solidago altissima*	Tall Goldenrod	1	FACU	1	Forb	Perennial	Native
solgig	*Solidago gigantea*	Late Goldenrod	4	FACW	-1	Forb	Perennial	Native
urtpro	*Urtica dioica ssp. gracilis*	Tall Nettle	2	FACW	-1	Forb	Perennial	Native

Wetland A Jurisdictional Determination Opinion: Wetland A appears to be an isolated wetland of Cook County due to a lack of a surface connection to Wetland B. A jurisdictional request to the Army Corps of Engineers should be submitted to identify the governing agency.

Wetland B: Wetland B can be located on the south portion of the property, and extends off-site to the southwest and southeast. Wetland B is tributary to the Spring Creek ecosystem. The delineated boundary is characterized by data point **2B, 7B and 9B and** has been determined to be **11.67 acres** in size. The delineated wetland consists of wet meadow, degraded wet meadow, scrub/shrub, wooded, marsh and open water wetland area. The wetland is primarily hydrated by an off-site stream but areas of ground water upwelling was noted within property boundary. Wetland B exhibits moderate to high quality plant life.

Dominant vegetation identified within this area was determined to be Common Cattails (*Typha latifolia*), Reed Canary Grass (*Phalaris arundinacea*), Boxelder (*Acer negundo*), Sandbar Willow (*Salix interior*), Tall Scouring-Rush (*Equisetum hyemale*), Common Buckthorn (*Rhamnus cathartica*) and Eastern Cottonwood (*Populus deltoids*).

During our investigation positive wetland hydrology is met with the primary indicators of Surface Water (A1), Saturation (A3), Water Marks (B1) and Inundation visible on aerial imagery (B7). Mapped soil is identified as Ashkum silty clay loam (232 A) which is a poorly drained hydric soil and Muskego and Houghton Mucks (1903A) which is a very poorly drained hydric soil. Primary soil indicators of thick dark surface (A12), loamy mucky material (F1) & Depleted Dark Surface (F7) was noted within the flagged boundary.

Said vegetation, soils, and hydrology information noted above can be found in the data sheets section of this report (reference Exhibit G). Please note data sheets 1-9B represent Wetland B.

Study Information

Site: Bateman Meadows

Locale: Wetland B

By: Robert Vanni

Conservatism-Based Metrics

Mean C (native species)	2.76
Mean C (all species)	2.04
Mean C (native trees)	2.00
Mean C (native shrubs)	2.75
Mean C (native herbaceous)	2.95
FQAI (native species)	19.55
FQAI (all species)	16.97
Adjusted FQAI	23.53
% C value 0	0.32
% C Value 1-3	0.36
% C value 4-6	0.29
% C value 7-10	0.01

Additional Metrics

Species Richness (all)	69.00
Species Richness (native)	50.00
% Non-native	0.28
Wet Indicator (all)	-0.55
Wet Indicator (native)	-0.82
% hydrophyte (Midwest)	0.78
% native perennial	0.64
% native annual	0.09
% annual	0.09
% perennial	0.83

Species Acronym	Species Name (NWPL/Mohlenbrock)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
aceneg	*Acer negundo*	Ash-Leaf Maple	0	FAC	0	Tree	Perennial	Native
agralb	*Agrostis gigantea*	Black Bent	0	FACW	-1	Grass	Perennial	Adventive
alisub	*Alisma subcordatum*	American Water-Plantain	4	OBL	-2	Forb	Perennial	Native
allpet	*Alliaria petiolata*	Garlic-Mustard	0	FAC	0	Forb	Biennial	Adventive
angatr	*Angelica atropurpurea*	Purple-Stem Angelica	7	OBL	-2	Forb	Perennial	Native
apocan	*Apocynum cannabinum*	Indian-Hemp	2	FAC	0	Forb	Perennial	Native
ascsyr	*Asclepias syriaca*	Common Milkweed	0	FACU	1	Forb	Perennial	Native
barvul	*Barbarea vulgaris*	Garden Yellow-Rocket	0	FAC	0	Forb	Biennial	Adventive
bidfro	*Bidens frondosa*	Devil's-Pitchfork	1	FACW	-1	Forb	Annual	Native
broine	*Bromus inermis*	Smooth Brome	0	FACU	1	Grass	Perennial	Adventive
consep	*Calystegia sepium*	Hedge False Bindweed	1	FAC	0	Forb	Perennial	Native
cxgran	*Carex granularis*	Limestone-Meadow Sedge	4	FACW	-1	Sedge	Perennial	Native
cxstip	*Carex stipata*	Stalk-Grain Sedge	3	OBL	-2	Sedge	Perennial	Native
cxstri	*Carex stricta*	Uptight Sedge	5	OBL	-2	Sedge	Perennial	Native
cxvulp	*Carex vulpinoidea*	Common Fox Sedge	2	FACW	-1	Sedge	Perennial	Native
corsto	*Cornus alba*	Red Osier	6	FACW	-1	Shrub	Perennial	Native
corrac	*Cornus racemosa*	Gray Dogwood	1	FAC	0	Shrub	Perennial	Native
daucar	*Daucus carota*	Queen Anne's Lace	0	UPL	2	Forb	Biennial	Adventive
eleery	*Eleocharis palustris*	Common Spike-Rush	2	OBL	-2	Sedge	Perennial	Native
epicol	*Epilobium coloratum*	Purple-Leaf Willowherb	3	OBL	-2	Forb	Perennial	Native
equarv	*Equisetum arvense*	Field Horsetail	0	FAC	0	Fern	Perennial	Native
equhye	*Equisetum hyemale*	Tall Scouring-Rush	3	FACW	-1	Fern	Perennial	Native
eriann	*Erigeron annuus*	Eastern Daisy Fleabane	0	FACU	1	Forb	Biennial	Native
eupmac	*Eutrochium maculatum*	Spotted Trumpetweed	4	OBL	-2	Forb	Perennial	Native
frapen	*Fraxinus pennsylvanica*	Green Ash	1	FACW	-1	Tree	Perennial	Native
galapa	*Galium aparine*	Sticky-Willy	1	FACU	1	Forb	Annual	Native
geucan	*Geum canadense*	White Avens	1	FAC	0	Forb	Perennial	Native
glehed	*Glechoma hederacea*	Groundivy	0	FACU	1	Forb	Perennial	Adventive
glystr	*Glyceria striata*	Fowl Manna Grass	4	OBL	-2	Grass	Perennial	Native
helgro	*Helianthus grosseserratus*	Saw-Tooth Sunflower	2	FACW	-1	Forb	Perennial	Native
impcap	*Impatiens capensis*	Spotted Touch-Me-Not	3	FACW	-1	Forb	Annual	Native
jundud	*Juncus dudleyi*	Dudley's Rush	4	FACW	-1	Forb	Perennial	Native
juntor	*Juncus torreyi*	Torrey's Rush	4	FACW	-1	Forb	Perennial	Native
leeory	*Leersia oryzoides*	Rice Cut Grass	4	OBL	-2	Grass	Perennial	Native
lemmio	*Lemna minor*	Common Duckweed	5	OBL	-2	Forb	Annual	Native
lontat	*Lonicera tatarica*	Twinsisters	0	FACU	1	Shrub	Perennial	Adventive

lycame	*Lycopus americanus*	Cut-Leaf Water-Horehound	5	OBL	-2	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	Purple Loosestrife	0	OBL	-2	Forb	Perennial	Adventive
pancap	*Panicum capillare*	Common Panic Grass	1	FAC	0	Grass	Annual	Native
panvir	*Panicum virgatum*	Wand Panic Grass	5	FAC	0	Grass	Perennial	Native
passat	*Pastinaca sativa*	Parsnip	0	UPL	2	Forb	Biennial	Adventive
poacom	*Poa compressa*	Flat-Stem Blue Grass	0	FACU	1	Grass	Perennial	Adventive
poapra	*Poa pratensis*	Kentucky Blue Grass	0	FAC	0	Grass	Perennial	Adventive
popdel	*Populus deltoides*	Eastern Cottonwood	2	FAC	0	Tree	Perennial	Native
pruvir	*Prunus virginiana*	Choke Cherry	3	FACU	1	Shrub	Perennial	Native
pycvir	*Pycnanthemum virginianum*	Virginia Mountain-Mint	5	FACW	-1	Forb	Perennial	Native
ransep	*Ranunculus hispidus var. nitidus*	Bristly Buttercup	5	FAC	0	Forb	Perennial	Native
rhacat	*Rhamnus cathartica*	European Buckthorn	0	FAC	0	Shrub	Perennial	Adventive
rudhir	*Rudbeckia hirta*	Black-Eyed-Susan	1	FACU	1	Forb	Perennial	Native
rumcri	*Rumex crispus*	Curly Dock	0	FAC	0	Forb	Perennial	Adventive
salint	*Salix interior*	Sandbar Willow	1	FACW	-1	Shrub	Perennial	Native
salnig	*Salix nigra*	Black Willow	4	OBL	-2	Tree	Perennial	Native
fesela	*Schedonorus pratensis*	Meadow Fescue	0	FACU	1	Grass	Perennial	Adventive
sciflu	*Schoenoplectus fluviatilis*	River Club-Rush	4	OBL	-2	Sedge	Perennial	Native
sciatv	*Scirpus atrovirens*	Dark-Green Bulrush	4	OBL	-2	Sedge	Perennial	Native
scipen	*Scirpus pendulus*	Rufous Bulrush	4	OBL	-2	Sedge	Perennial	Native
soldul	*Solanum dulcamara*	Climbing Nightshade	0	FAC	0	Vine	Perennial	Adventive
solalt	*Solidago altissima*	Tall Goldenrod	1	FACU	1	Forb	Perennial	Native
solgig	*Solidago gigantea*	Late Goldenrod	4	FACW	-1	Forb	Perennial	Native
astsim	*Symphyotrichum lanceolatum*	White Panicled American-Aster	3	FAC	0	Forb	Perennial	Native
typang	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	-2	Forb	Perennial	Adventive
typlat	Typha latifolia	Broad-Leaf Cat-Tail	1	OBL	-2	Forb	Perennial	Native
ulmame	Ulmus americana	American Elm	3	FACW	-1	Tree	Perennial	Native
urtpro	Urtica dioica ssp. gracilis	Tall Nettle	2	FACW	-1	Forb	Perennial	Native
verbla	Verbascum blattaria	White Moth Mullein	0	FACU	1	Forb	Biennial	Adventive
verhas	Verbena hastata	Simpler's-Joy	4	FACW	-1	Forb	Perennial	Native
vitrip	Vitis riparia	River-Bank Grape	2	FACW	-1	Vine	Perennial	Native

Wetland B Jurisdictional Determination Opinion: Wetland B is hydrologically connected to Spring Creek which is Army Corps of Engineers Jurisdiction. A jurisdictional request to the Army Corps of Engineers should be submitted to identify the governing agency.

CONCLUSIONS

The site was evaluated using U.S. Army Corps of Engineers and USDA guidelines for identifying wetlands. After evaluation of all data obtained, the site does contain one Waters of the United States totaling **11.91 acres** in size. Jurisdictional delineation data forms containing information of dominant vegetation, soils and hydrology information of the wetland areas can be found within this package.

FEDERAL REGULATIONS

Jurisdictional Waters of the United States will be regulated under Section 404 of the Clean Water Act and the Section 401 Water Quality Certification requirements. Under Section 404, the United States Army Corps of Engineers regulates the discharge of dredged or fill material into jurisdictional Wetlands or Waters of the United States (WOUS).

Regional Permit 1 (RP1) authorizes the construction of residential, commercial and institutional developments and associated infrastructure, such as roads, utilities, detention areas, and recreation areas. Authorization under RP1 is subject to the following requirements which shall be addressed in writing and submitted with the notification:

a. The impact to waters of the U.S. shall not exceed 1.0 acre. For projects that impact over 0.10 acres of waters of the U.S., the permittee is required to provide compensatory

The permittee shall establish and/or enhance an upland buffer of native plants (or other appropriate vegetation approved by the District) adjacent to all created, restored, enhanced or preserved waters of the U.S., including wetlands. Created buffers should be established on 6:1 (horizontal: vertical) or gentler slopes. The following buffer widths are required:

1) For any waters of the U.S. determined to be a high-quality aquatic resource, the buffer shall be a minimum of 100 feet.
2) For any waters of the U.S. that do not qualify as wetland (e.g. lakes, rivers, ponds, etc.), the buffer shall be a minimum of 50 feet from the Ordinary High Water Mark (OHWM).
3) For any jurisdictional wetland from 0.25 acres up to 0.50 acres in size, the buffer shall be a minimum of 30 feet.
4) For any jurisdictional wetland over 0.50 acres in size, the buffer shall be a minimum of 50 feet.

The District may allow buffer widths below the above-required minimums on a case by case basis. However, it is the responsibility of the applicant to provide supporting documentation as to why the buffer requirement could not be met. Stormwater retention/detention facilities and nature trails may be located within the outer 50% of the buffer. The District may allow Best Management Practices, small boat launches and piers/docks to be located in buffers.

Activities to be covered under the RPP will fall under one of two categories:

Category I: Activities with minimal impacts (under 0.50 acre) requiring review by the District. Authorization may include special conditions to ensure compliance with the RPP. The District has the discretion to process a Category I activity under Category II when it has concerns for aquatic resources under the Section 404(b)(1) Guidelines or for any factor of the public interest.

Category II: Activities with minimal impacts (over 0.50 acre up to 1.0 acre) requiring more rigorous review by the District and coordination with resource agencies. Authorization may include special conditions to ensure compliance with the RPP.

Activities that do not fall into one of the above categories, by definition, have more than minimal impacts and are therefore subject to the Individual Permit review process.

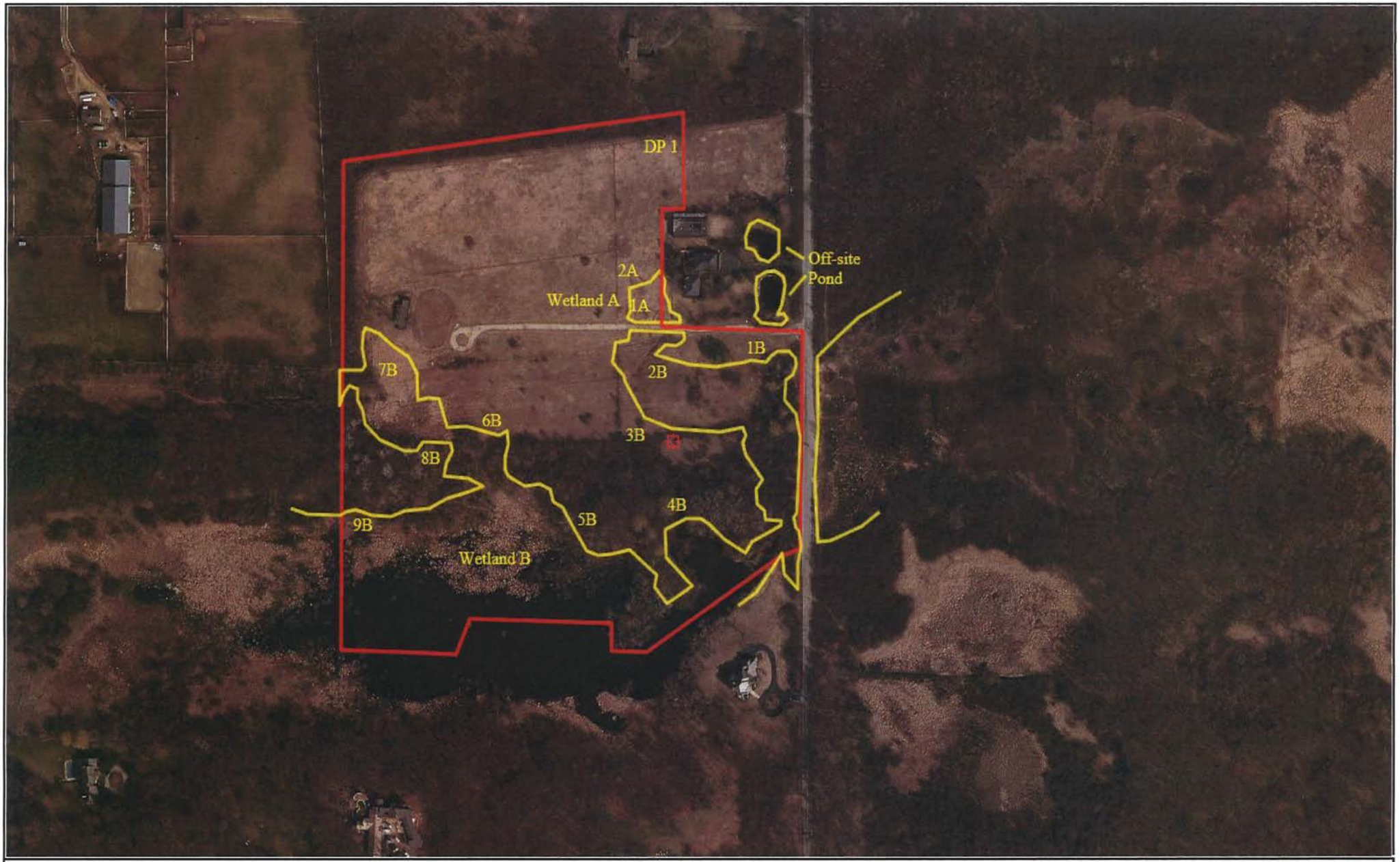
Should you have any questions, please do not hesitate to contact our office.
Sincerely,

Midwest Ecological, Inc. (MEI)

Robert L. Vanni
Wetland Specialist

APPENDIX A

Exhibits



Source: Pictometry Aerial Photograph (2017)

MIDWEST ECOLOGICAL

Wetland Aerial Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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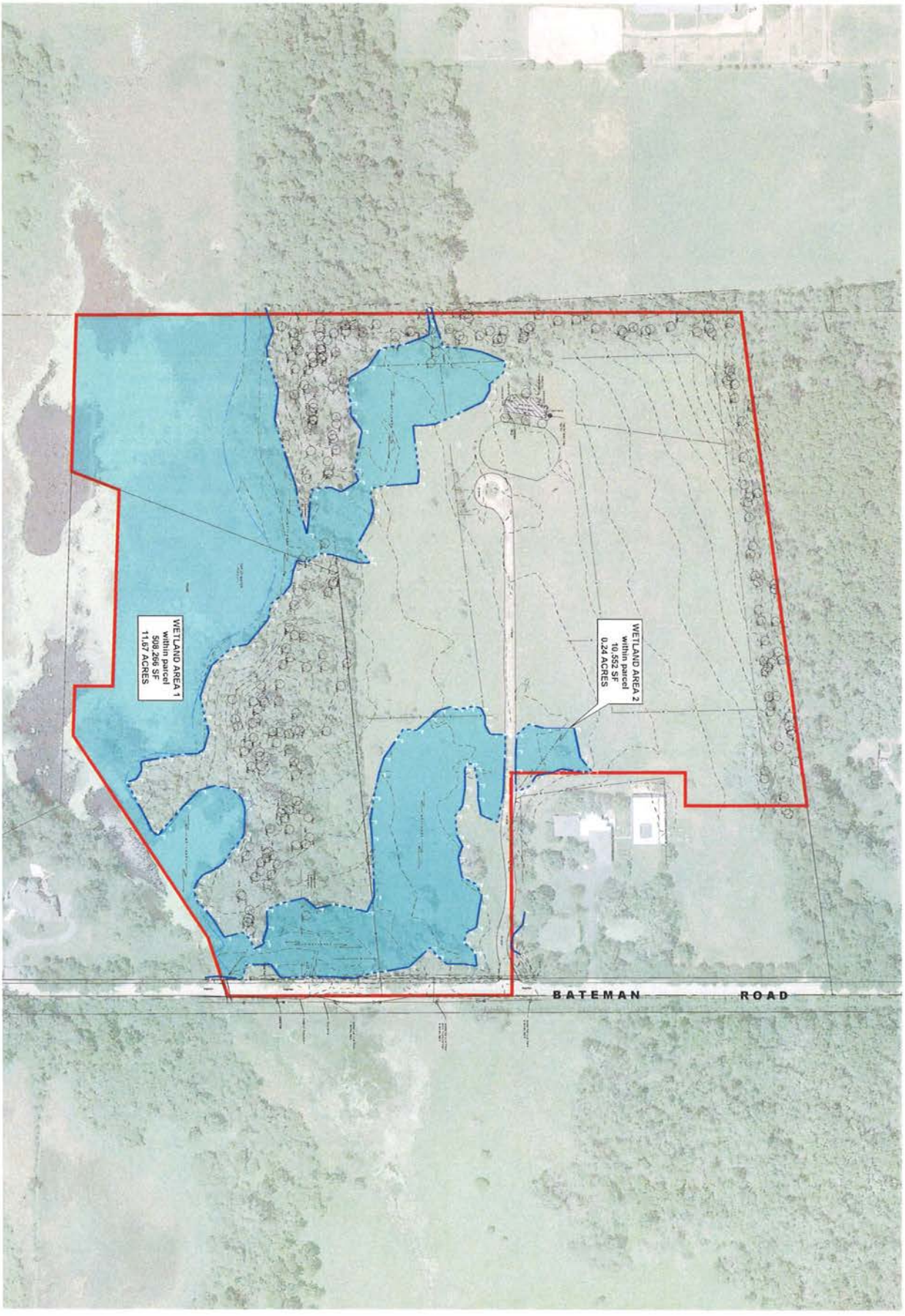


WETLAND LOCATION EXHIBIT

BATEMAN MEADOWS

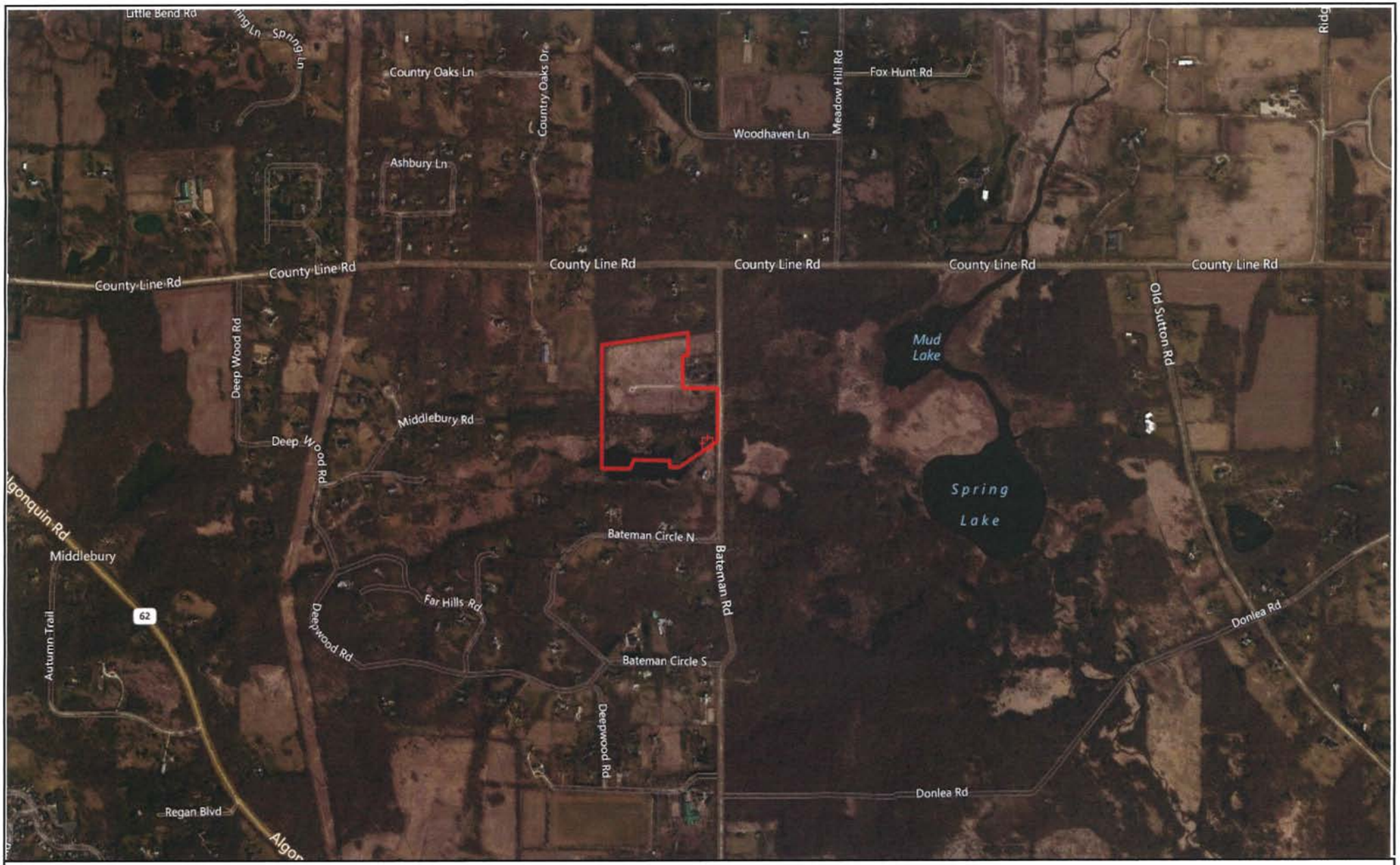
BATEMAN ROAD, BARRINGTON HILLS, ILLINOIS

HAEGER ENGINEERING

consulting engineers • land surveyors

No. Date Revision

NORTH



Source: Bing Street Finder Map

MIDWEST ECOLOGICAL

Location Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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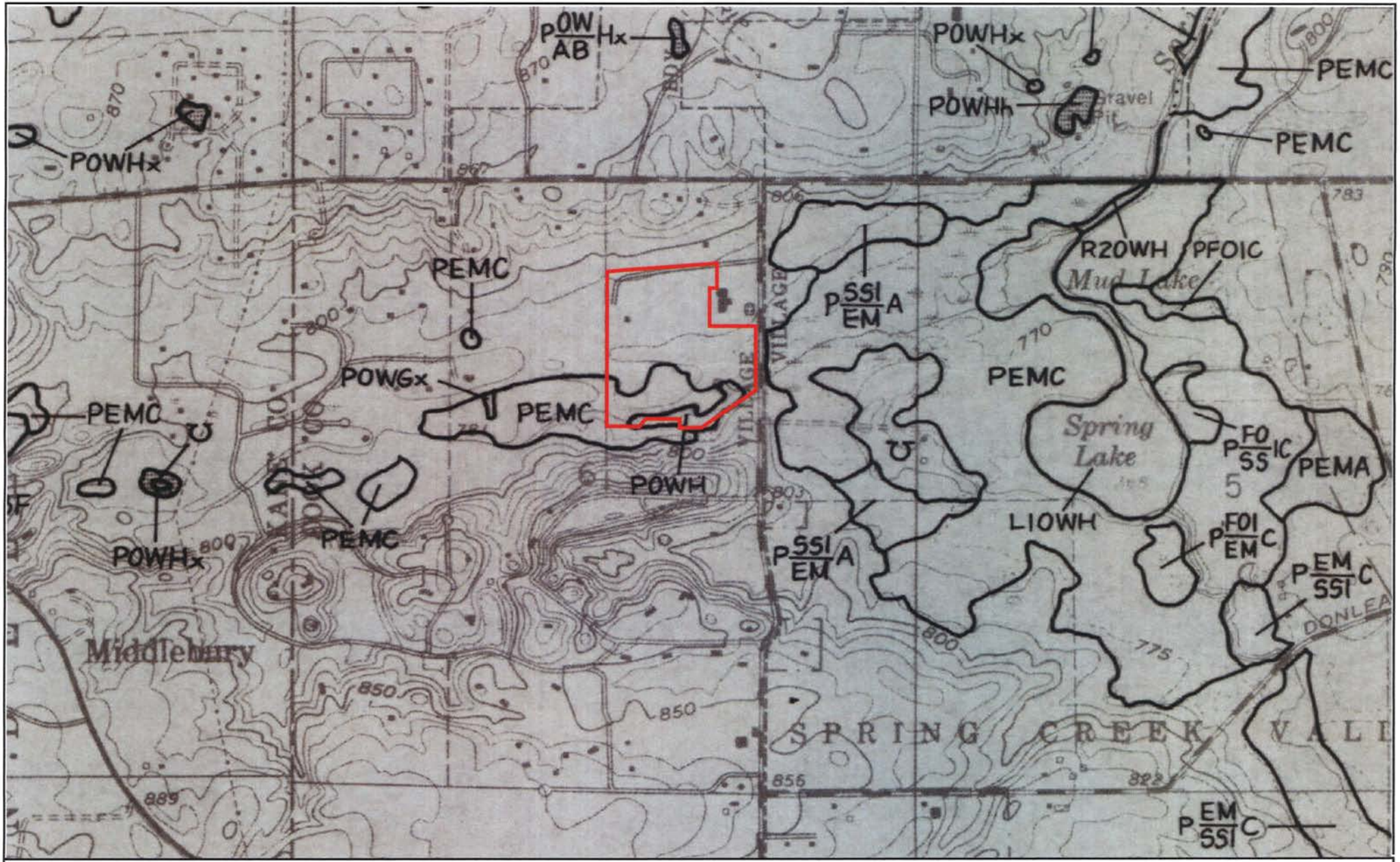

Source: National Wetland Inventory Map

MIDWEST ECOLOGICAL

N.W.I. Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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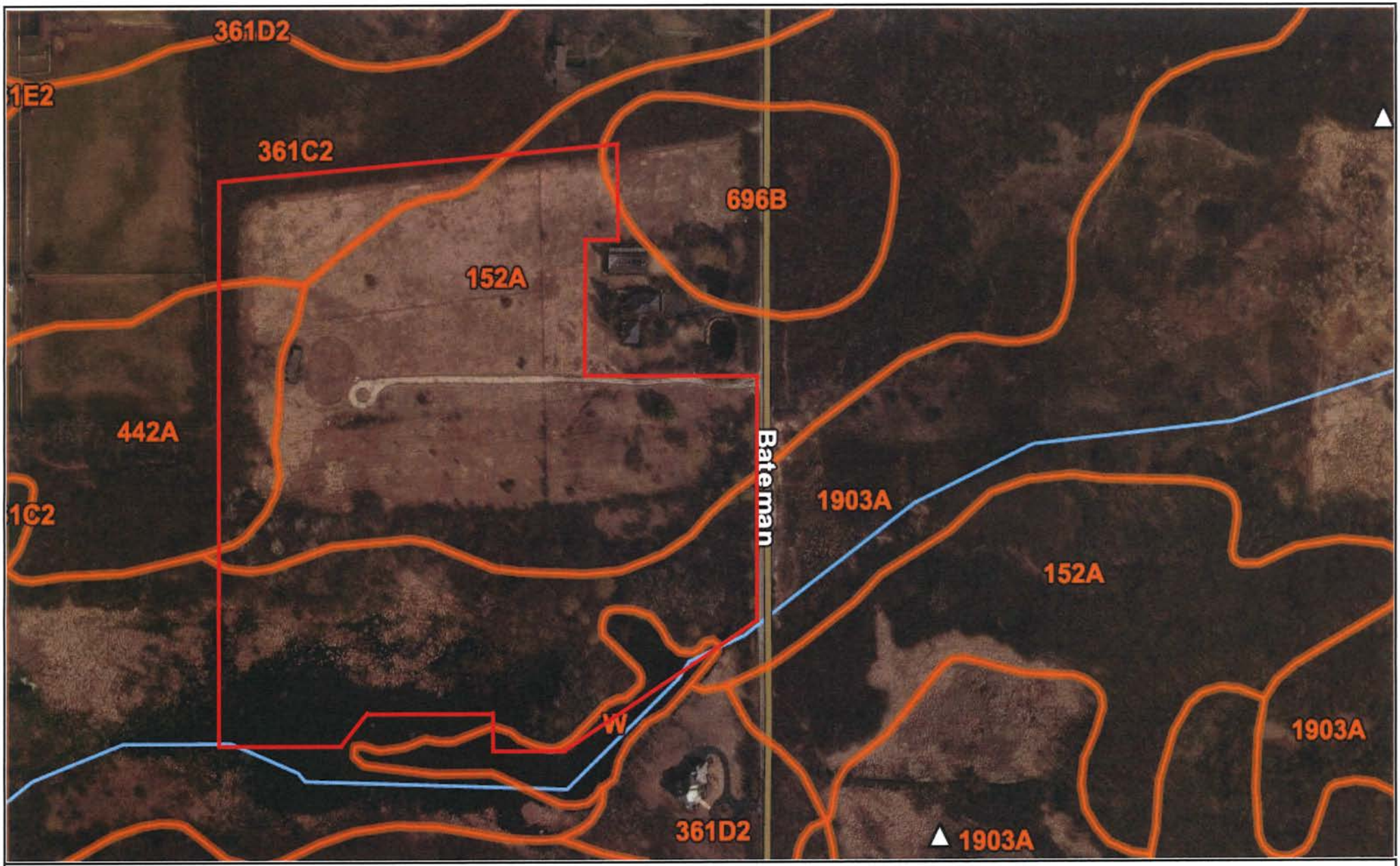

Source: Websoil Cook County Soil Survey Map

MIDWEST ECOLOGICAL

Cook County Soil Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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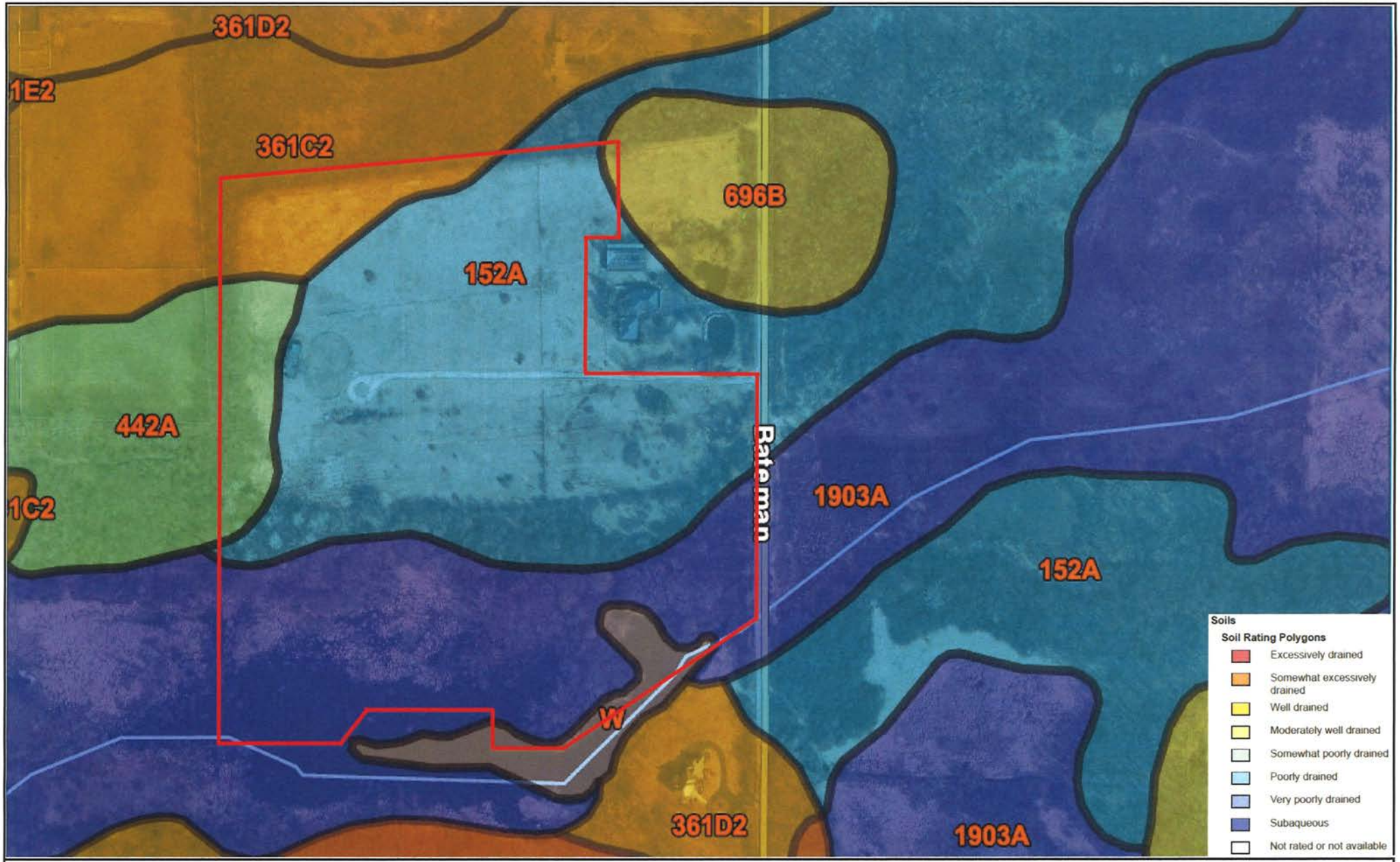

Source: Websoil Cook County Drainage Class Soil Survey Map

MIDWEST ECOLOGICAL

Cook County Drainage Class Soils Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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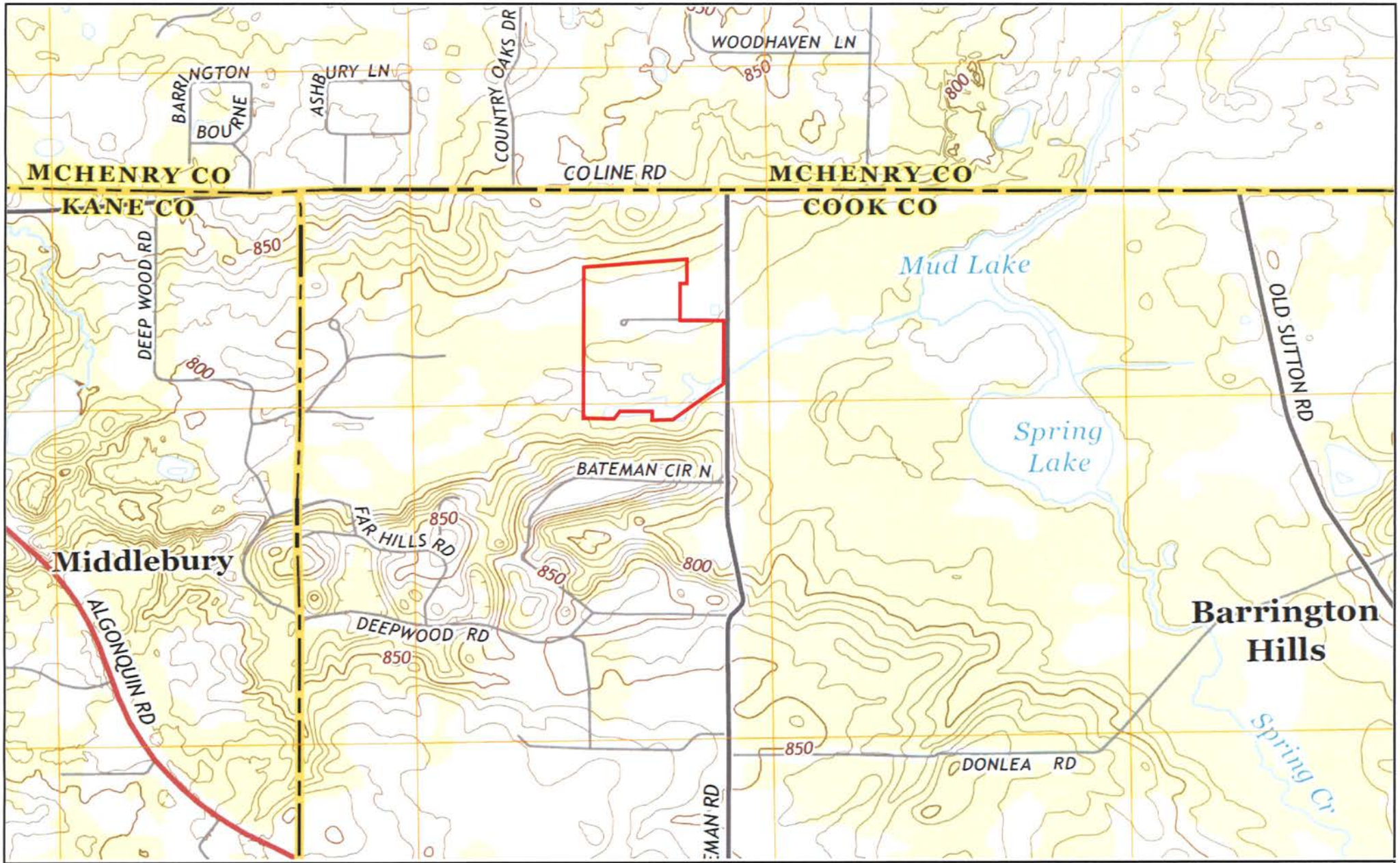

Source: United States Geological Survey Map, Barrington (2015)

MIDWEST ECOLOGICAL

U.S.G.S. Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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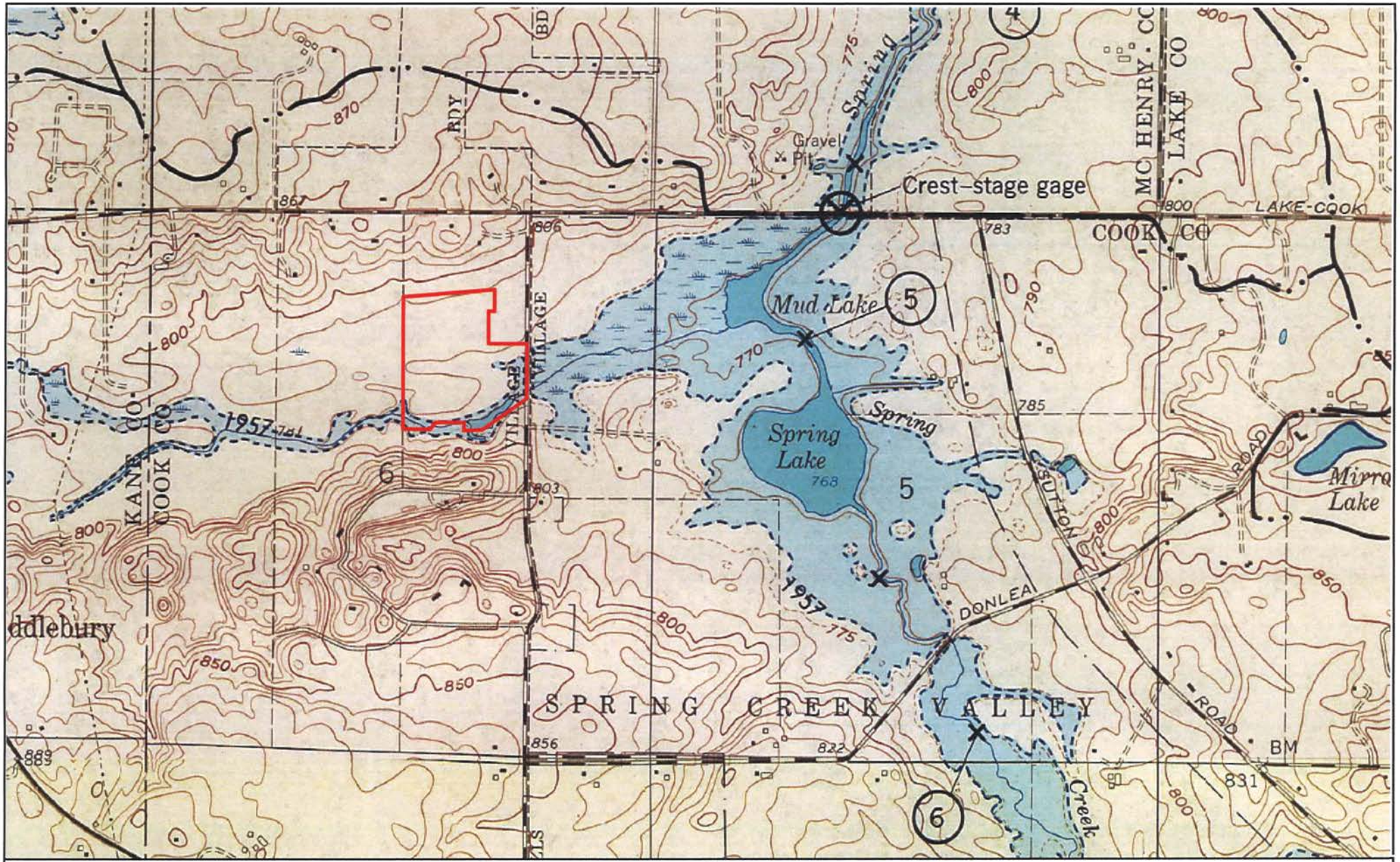

Source: United States Geological Survey, Hydrological Atlas Map HA- 150 (1965)

MIDWEST ECOLOGICAL

Hydrological Atlas Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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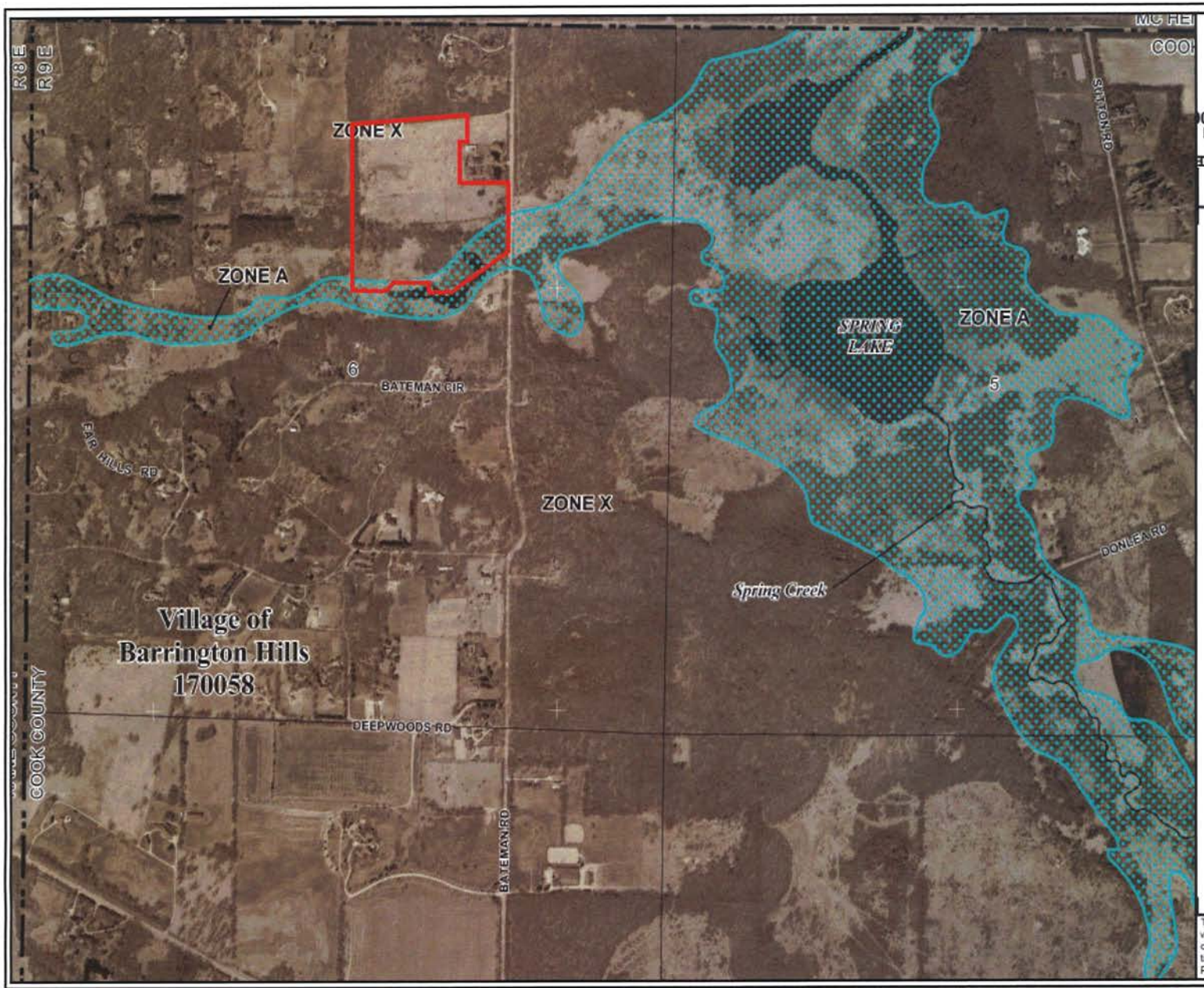

MAP SCALE 1" = 1000'

0 0 1000 2000 FEET

METE

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0015J

FIRM

FLOOD INSURANCE RATE MAP

COOK COUNTY, ILLINOIS AND INCORPORATED AREAS

PANEL 15 OF 832

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BARRINGTON HILLS, VILLAGE OF	170058	0015	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 17031C0015J

MAP REVISED AUGUST 19, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Source: Flood Insurance Rate Map (FIRM)

MIDWEST ECOLOGICAL

F.I.R.M. Map

Client: Mr. Ross Berman, Bridgeview Bank Group
4753 N. Broadway
Chicago Illinois 60640

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W E
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APPENDIX B

Data Sheets

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 1A

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.151015 Long: -88.225660 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Phalaris arundinacea*	90	Yes	FACW
2. *Solidago altissima*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)

Prevalence Index = B/A = 2.20

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

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

Hyrdophytic vegetation was present within the sample point.

SOIL

Sampling Point: 1A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-21"	10 YR 2/1	100					SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil was noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes X No ____ Depth (inches): 10"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 4"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 2A

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.151376 Long: -88.225696 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Phalaris arundinacea*	25	Yes	FACW
2. *Solidago altissima*	15	No	FACU
3. *Schedonorus pratensis*	30	Yes	FACU
4. *Asclepias syriaca*	10	No	FACU
5. *Verbascum blattaria*	5	No	FACU
6. *Poa pratensis*	15	No	FAC
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	15	x 3 =	45
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	100 (A)		335 (B)

Prevalence Index = B/A = 3.35

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 2A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6"	10 YR 2/2	100			C	M	SiCL	
6-16"	10 YR 2/1	90	10 YR 4/2	10	C	M	SiCL	
16-21"	10 YR 4/3	100			C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil was not noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >21"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 1B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.150707 Long: -88.224167 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Poa pratensis*	20	No	FAC
2. *Solidago altissima*	25	Yes	FACU
3. *Schoenoplectus fluviatilis*	10	No	FACU
4. *Daucus carota*	10	No	UPL
5. *Asclepias syriaca*	10	No	FACU
6. *Apocynum cannabinum*	10	No	FAC
7. *Alliaria petiolata*	15	No	FAC
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	45	x 3 =	135
FACU species	45	x 4 =	180
UPL species	10	x 5 =	50
Column Totals:	100 (A)		365 (B)

Prevalence Index = B/A = 3.65

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 1B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12"	10 YR 2/1	100					SiCL	
12-18"	10 YR 4/1	95	10 YR 5/3	5	C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soil was noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): >18"

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 2B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.150637 Long: -88.225318 Datum: _____

Soil Map Unit Name: Drummrs silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. *Salix interior*	35	Yes	OBL
2.			
3.			
4.			
5.			
	35	= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Equisetum hyemale*	20	Yes	FAC
2. *Solidago altissima*	10	No	FACU
3. *Phalaris arundinacea*	25	Yes	FACW
4. *Carex stipata*	5	No	OBL
5. *Schedonorus pratensis*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	65	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	25	x 2 =	50
FAC species	20	x 3 =	60
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.10

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

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

Hyrdophytic vegetation was present within the sample point.

SOIL

Sampling Point: 2B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10 YR 2/1	100			C	M	SiCL	
16-22"	10 YR 4/2	100			C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soil was noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes X No ___ Depth (inches): 12"

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4"

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 3B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.150222 Long: -88.225612 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Chrysanthemum pinnatifidum*	10	No	UPL
2. *Solidago altissima*	10	No	FACU
3. *Schedonorus pratensis*	60	Yes	FACU
4. *Daucus carota*	10	No	UPL
5. *Cirsium arvense*	10	No	FACU
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	20	x 5 =	100
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.20

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 3B

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14"	10 YR 3/2	100			C	M	SiCL	
14-22"	10 YR 4/3	100			C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil was not noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >21"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 4B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.149479 Long: -88.225260 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	10	No	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. *Lonicera tatarica*	50	Yes	FACU
2. *Rhamnus cathartica*	15	No	FAC
3.			
4.			
5.			
	65	= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Geum canadense*	10	No	FAC
2. *Glechoma hederacea*	10	No	FACU
3. *Alliaria petiolata*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	25	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	30	x 3 =	90
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.50

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 4B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10"	10 YR 3/2	100			C	M	SiCL	
10-24"	10 YR 5/3	100			C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil was not noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >21"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 5B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.149538 Long: -88.226156 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	10	No	FACW
2. *Prunus virginiana*	15	No	FACU
3.			
4.			
5.			
	25	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. *Lonicera tatarica*	35	Yes	FACU
2. *Rhamnus cathartica*	5	No	FAC
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Geum canadense*	10	No	FAC
2. *Glechoma hederacea*	5	No	FACU
3. *Alliaria petiolata*	10	No	FAC
4. *Galium aparine*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	35	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	25	x 3 =	75
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	100 (A)		355 (B)

Prevalence Index = B/A = 3.55

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 5B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12"	10 YR 3/3	100			C	M	SiL	
12-16"	10 YR3/2	100			C	M	SiL	
16-21"	2.5Y 4/3	80	10 YR 5/6	20	C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil was not noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >21"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 6B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.150193 Long: -88.227156 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Solidago altissima*	25	Yes	FACU
2. *Schedonorus pratensis*	40	Yes	FACU
3. *Asclepias syriaca*	10	No	FACU
4. *Poa pratensis*	5	No	FAC
5. *Panicum capillare*	10	No	FAC
6. *Daucus carota*	10	No	UPL
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	75	x 4 =	300
UPL species	10	x 5 =	50
Column Totals:	100 (A)		395 (B)

Prevalence Index = B/A = 3.95

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 6B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10 YR 2/2	100			C	M	SiCL	
16-22"	10 YR 3/2	80	10 YR 5/2	5	C	M	SiL	
			10 YR 5/6	15				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil was not noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >21"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 7B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.150499 Long: -88.228050 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Phalaris arundinacea*	80	Yes	FACW
2. *Solidago altissima*	5	No	FACU
3. *Solidago gigantea*	15	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.10

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

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

Hyrdophytic vegetation was present within the sample point.

SOIL

Sampling Point: 7B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18"	10 YR 2/1	100					SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soil was noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 2"

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 8B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.149538 Long: -88.226156 Datum: _____

Soil Map Unit Name: Drummers silty clay loam (152A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	5	No	FACW
2. *Prunus virginiana*	15	No	FACU
3.			
4.			
5.			
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. *Lonicera tatarica*	35	Yes	FACU
2. *Rhamnus cathartica*	5	No	FAC
3. *Rubus occidentalis*	15	No	UPL
4. *Rosa multiflora*	10	No	FACU
5.			
	65	= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Alliaria petiolata*	10	No	FAC
2. *Glechoma hederacea*	5	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	15	x 3 =	45
FACU species	65	x 4 =	260
UPL species	15	x 5 =	75
Column Totals:	100 (A)		390 (B)

Prevalence Index = B/A = 3.90

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

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

Hyrdophytic vegetation was not present within the sample point.

SOIL

Sampling Point: 8B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-21"	10 YR 2/1	100			C	M	SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Hydric soil was noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): >21"

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: 9B

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.149632 Long: -88.228341 Datum: _____

Soil Map Unit Name: Muskego and Houghton mucks (1903A) NWI or WWI classification: Yes

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	25	Yes	FACW
2.			
3.			
4.			
5.			
	25	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. *Lonicera tatarica*	5	Yes	FACU
2. *Rhamnus cathartica*	5	No	FAC
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Typha latifolia*	40	Yes	OBL
2. *Phalaris arundinacea*	25	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	65	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	50	x 2 =	100
FAC species	5	x 3 =	15
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	100 (A)		175 (B)

Prevalence Index = B/A = 1.75

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

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

Hyrdophytic vegetation was present within the sample point.

SOIL

Sampling Point: 9B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12"	10 YR 2/1	100			C	M	Muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- [X] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [X] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10)
- [ ] Depleted Below Dark Surface (A11)
- [X] 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)
- [X] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- [ ] Coast Prairie Redox (A16)
- [ ] Iron-Manganese Masses (F12)
- [ ] Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes [X] No [ ]

Remarks:

Hydric soil was noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes [ ] No [X] Depth (inches): _____

Water Table Present? Yes [X] No [ ] Depth (inches): 6"

Saturation Present? (includes capillary fringe) Yes [X] No [ ] Depth (inches): 1"

Wetland Hydrology Present? Yes [X] No [ ]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was present during our on-site investigation.

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Bateman Meadows City/County: Barrington Hills, Cook County Sampling Date: 5/1/2017

Applicant/Owner: Haeger Engineering State: Illinois Sampling Point: DP 1

Investigator(s): Rob Vanni Section, Township, Range: Sec 33, T43 N, R 10E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 42.152064 Long: -88.225362 Datum: _____

Soil Map Unit Name: Zurich silt loam (696B) NWI or WWI classification: No

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. *Populus deltoides*	20	FAC	No
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Phalaris arundinacea*	70	Yes	FACW
2. *Cirsium arvense*	5	No	FACU
3. *Asclepias syriaca*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	70	x 2 =	140
FAC species	20	x 3 =	60
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	100 (A)		240 (B)

Prevalence Index = B/A = 2.40

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

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

Hyrdophytic vegetation was present within the sample point.

SOIL

Sampling Point: DP 1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10"	10 YR 3/2	100			C	M	SiL	
10-22"	10 YR 4/4	95			C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Hydric soil was not noted within the sample point.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >22"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was not present during our on-site investigation.

APPENDIX C

Photographs

Wetland A is a depressional Reed Canary Grass wetland area. The wetland was historically separated from Wetland B due to the installation of a gravel driveway.

Data point 1A confirms a wetland soil condition.

An off-site pond is noted on within the residential lot located to the NE. This area is not found within the property limits.

A gravel driveway is found within the property limits. The gravel driveway provides access to a abandon barn found on the west property line.


Wetland B consists of a wet meadow, wooded, marsh and open water wetland area.


Drainage is conveyed into the wetland area from the upstream watershed and is conveyed to the South.


The main wetland complex is hydrologically connected to Spring Creek.

Data point 1B confirms an upland soil condition

Data point 2B confirms a wetland soil condition

Data point 3B confirms a upland soil condition

Data point 7B confirms a wetland soil condition

Data point 8B confirms a upland soil condition

APPENDIX D

Habitat Evaluation

OBSERVER: Rob Vanni
DATE: May 2, 2016
LOCATION: Wetland A, Bateman Meadows

WILDLIFE HABITAT/USE EVALUATION SCORE SHEET

To assess the existing and/or potential wildlife habitat use of the subject wetland, the applicant must first complete this score sheet. The attached documentation provides examples of each scoring parameter.

A separate sheet must be completed for each wetland being considered.

Applicants must document their basis for scoring decisions with field surveys, current photographs, aerial photographs, and other appropriate information.

A. Utilization by Wildlife

Wildlife Use	Score
Significant	3
Evident	2
Low	1
Occasional	0.5
Non-Existent	**0**

SUB-TOTAL SCORE = 0

Response: The wetland is a degraded Reed Canary Grass Wetland Area. Wildlife was not noted within the delineated boundary.

B. Interspersion of Vegetative Cover

Interspersion	Score
High	3
Medium	2
Low	**1**

SUB-TOTAL SCORE = 1

C. Vegetative Cover to Open Water

Cover	Score
>95% Cover	0.5
76% - 95% Cover, Peripheral	1.5
76% - 95% Cover, Various	2.5
26% - 75% Cover, Peripheral	2.0
26% - 75% Cover, Patches	3.0
5% - 25% Cover, Peripheral	1.0
<5% Cover	**0.5**

SUB-TOTAL SCORE = 0.5

TOTAL SCORE (A+B+C) = 1.5

Total score ≥ 5.00 apply Ludwig Wildlife Methodology
Total score < 5.00 no further wildlife analysis is necessary

OBSERVER: Rob Vanni
DATE: May 2, 2016
LOCATION: Wetland B, Bateman Meadows

WILDLIFE HABITAT/USE EVALUATION SCORE SHEET

To assess the existing and/or potential wildlife habitat use of the subject wetland, the applicant must first complete this score sheet. The attached documentation provides examples of each scoring parameter.

A separate sheet must be completed for each wetland being considered.

Applicants must document their basis for scoring decisions with field surveys, current photographs, aerial photographs, and other appropriate information.

A. Utilization by Wildlife

Wildlife Use	Score
Significant	3
Evident	**2**
Low	1
Occasional	0.5
Non-Existent	0

SUB-TOTAL SCORE = 2

Response: The South portion of the wetland consists of an emergent/open water wetland. This wetland exhibited several different wildlife habitats. Mallard Ducks, Canadian Goose, Great Egret and Blue Heron were noted.

B. Interspersion of Vegetative Cover

Interspersion	Score
High	3
Medium	2
Low	**1**

SUB-TOTAL SCORE = 1

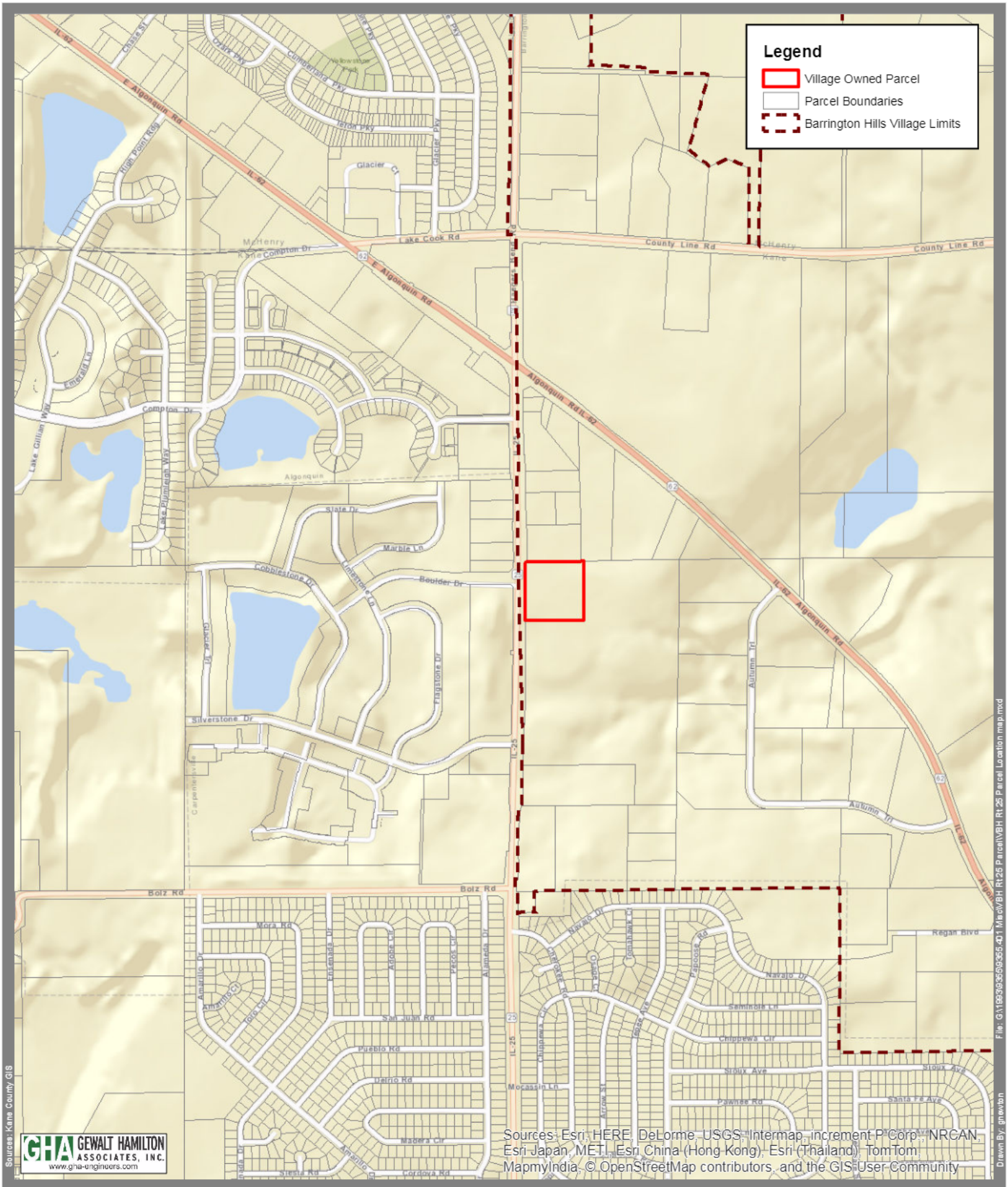
C. Vegetative Cover to Open Water

Cover	Score
>95% Cover	0.5
76% - 95% Cover, Peripheral	1.5
76% - 95% Cover, Various	2.5
26% - 75% Cover, Peripheral	2.0
26% - 75% Cover, Patches	3.0
5% - 25% Cover, Peripheral	**1.0**
<5% Cover	0.5

SUB-TOTAL SCORE = 1.0

TOTAL SCORE (A+B+C) = 4.0

Total score ≥ 5.00 apply Ludwig Wildlife Methodology
Total score < 5.00 no further wildlife analysis is necessary



N

1 inch = 1,000 Feet

Location Map

Barrington Hills, IL

Map Center: -88.25801 42.14610

Date: 10/23/2015 Project: 9355.401