Phase 1 Stormwater Management Report

1960 West Lucent Lane
Naperville, Illinois
June 12, 2025

Prepared By:
Jacob and Hefner Associates, Inc.
1333 Butterfield Road, Suite 300
Downers Grove, Illinois 60515

Prepared For:
Karis Critical
2150 Goodlette-Frank Road, Suite 700
Naples, FL 34102

JACOB & HEFNER
ASSOCIATES

JACOB & HEFNER ASSOCIATES

1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
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TAB 1

PROJECT OVERVIEW

JACOB & HEFNER ASSOCIATES

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Stormwater Management Narrative

Introduction

The subject property, Lot 2 in the Nokia Campus Subdivision, is located in Naperville, DuPage County, Illinois. The subject property is bound by Lucent Lane and residential property on the west, Warrenville Road along the south, Naperville Road and Weatherbee Lane on the east, and an office/light industrial property to the north. The total site area is approximately 41-acres.

Existing Site Characteristics

The existing site previously held an office building with two parking garages and a surface parking lot, with a stormwater detention pond located in the southeast corner. The office building was connected by a pedestrian bridge to the existing building to the north (2000 West Lucent Lane), currently owned by Nokia and still in operation. The subject property was subdivided from the 2000 Lucent Lane building property in 2020.

In the previous two years, the office building, parking garages, and parking lot have been demolished and the pedestrian bridge to the Nokia building disconnected. Existing building foundations, underground utilities, some pavement, and the stormwater detention pond remain on site. Existing storm sewer crossing through the site conveys stormwater runoff from the subject property, in addition to stormwater runoff from a portion of the Nokia building property. It appears none of the existing on site storm sewer has been demolished and the existing stormwater detention pond has not been impacted by demolition activities.

Pursuant to a review of the USGS 7.5-min map for the Wheaton Quadrangle, a DuPage County GIS map, and a Topographic Survey of the site pre-demolition prepared by V3 Companies in December of 2022, the existing on site pond outfalls to existing storm sewer on the eastern side of Naperville Road. The receiving water for the subject property is the Eastern Branch of the DuPage River, which is tributary to the DuPage River and ultimately, the Des Plaines River.

Proposed Site Characteristics

The proposed development consists of a two story building with an associated equipment yard, car parking, drive aisles around the building, and two driveway accesses from Lucent Lane. The eastern portion of the site is proposed to be mass graded to achieve proper site drainage, stabilized, and left as pervious area. A possible future land banked parking area is also shown on the Site Improvement Plans.

Stormwater detention will be provided by the existing detention basin at the southeast corner of the site. Under proposed conditions, storm sewer will collect local runoff from buildings and pavement and outfall into the existing detention basin. The storm sewer network will be designed to convey runoff from a 100 year design storm event. In emergency overflow events, excess runoff will be conveyed overland to the existing stormwater detention basin. Storm sewer will be designed such that upstream stormwater flows from the Nokia building will be maintained.

Based on a review of historic aerials, it also appears that roadway and sidewalk improvements were made to Naperville Road in 2007. Per a review of the topographic survey dated February 3,

2025, prepared by Jacob & Hefner Associates, the top of the bank of the existing detention basin and emergency overflow weir at the southeast portion of the site were lowered by these improvements, effectively reducing the detention storage volume provided in the basin. Minor pond grading work is proposed to re-establish the original top of pond bank and emergency weir elevations and ensure the detention basin volume meets the original as built volume.

Stormwater Regulations

Stormwater design will be regulated by the DuPage County Countywide Stormwater and Floodplain Ordinance. Per DuPage County, stormwater detention is required for developments with 25,000 square feet or more of net new impervious area when compared to site conditions as of February 15, 1992. The previously existing office building and parking garages were constructed post-1992, and detention was provided for the impervious area constructed at that time. Existing conditions impervious area (prior to demolition work) was measured and compared to the proposed impervious area of the development. The comparison determined that the proposed development will result in a net reduction in impervious area of 301,468 square feet, therefore additional stormwater detention will not be required. When the landbanked parking is constructed, the net reduction in impervious area is reduced to 261,717 square feet, however, additional stormwater detention is still not required.

Additionally, installation of post construction best management practices (PCBMPs) is required for developments with 2,500 square feet or more net new impervious area when compared to site conditions as of April 23, 2013. PCBMPs must provide volume and pollutant control using infiltration of 1.25 inches of rainfall for all new impervious surfaces or a native vegetated wetland bottom site runoff storage basin. The proposed development will result in a net reduction in impervious area of 343,401 square feet when compared to 2013, therefore not requiring any PCBMPs. When the landbanked parking is constructed, the net reduction in impervious area is reduced to 303,650 square feet, however, PCBMPs are still not required. Because the building tenant would like to incorporate a stormwater best management practice feature into the initial phase of the project, PCBMPs are proposed as part of Phase 1 in the form of a Rain Garden. The Rain Garden has a proposed volume of 37,300 cf that will be used to offset required PCBMP volume when it is triggered during Phase 2 of the development.

JACOB & HEFNER
ASSOCIATES

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March 18, 2025

Illinois State Historic Preservation Office
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Re: Site Improvements at 1960 Lucent Lane
City of Naperville, DuPage County, Illinois

Dear Cultural Resource Protection Review and Compliance Team,

Jacob & Hefner Associates, Inc. is currently preparing Site Improvement Plans for a proposed development at 1960 Lucent Lane in the City of Naperville in DuPage County that lies within Section 5, Township 38 North, Range 10 East. The proposed development area (site) is approximately ±40.86 acres.

The site has been previously developed and demolition of the previously existing primary structures has been completed by the previous owner. The site is outlined in the aerial and topographic maps enclosed with this document.

The project consists of mass grading and soil erosion practices for the purpose of developing office and industrial facilities with associated parking lots and infrastructure. The site is currently razed, but was previously used for office and industrial purposes. There is one remaining structure within the project limits, which was constructed around 2000. This project anticipates removal of this structure. According to the Historic & Architectural Resources GIS, there there are no apparent resources of interest.

Persuant to the Illinois State Agency Historic Resources Preservation Act, we are requesting that the SHPO review the above-referenced information for its effect on cultural resources prior to submitting the development to the IEPA for their approval. Enclosed for the SHPO review are the project location aerial maps, the USGS topographic map of the site, the DuPage County topographic map of the site, the Historic and Architectural Resources GIS map, and color photos of the structure to be removed. If you have any questions or need any further information, please do not hesitate to call at (630) 652-4669 or email at rgilbert@jhainc.com.

Sincerely,
JACOB & HEFNER ASSOCIATES, INC.

Robert Gilbert
Project Manager

Encl: Project Location Aerial Maps
USGS Topographic Map
DuPage County Topographic Map
HAR GIS Map
Photos of Structure

Illinois Department of Natural Resources
JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

DuPage County
Naperville
1960 Lucent Ln.
Section:5-Township:38N-Range:10E
IEPA
New Construction, Office and Industrial Facilities

PLEASE REFER TO: SHPO LOG #029031825

April 7, 2025

Robert Gilbert
Jacob and Hefner Associates Inc.
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515

The Illinois State Historic Preservation Office is required by the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420, as amended, 17 IAC 4180) to review all state funded, permitted, or licensed undertakings for their effect on cultural resources. Pursuant to this, we have received information regarding the referenced project for our comment.

Our staff has reviewed the specifications under the state law and assessed the impact of the project as submitted by your office. We have determined, based on the available information, that no significant historic, architectural, or archaeological resources will be affected within the proposed project area.

According to the information you have provided there is no federal involvement in your project. Be aware that the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case.

This approval remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Remains Protection Act (20 ILCS 3440).

Please retain this letter in your files as evidence of compliance with the Illinois State Agency Historic Resources Preservation Act.

If further assistance is needed, please contact Jeff Kruchten, Principal Archaeologist, at 217/785-1279 or jeff.kruchten@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer, AIA
Deputy State Historic Preservation Officer

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant:	Jacob and Hefner Associates	*IDNR Project Number:*	2510813
Contact:	Robert Gilbert	*Date:*	03/17/2025
Address:	1333 Butterfield Rd Suite #300 Downers Grove, IL 60515	*Alternate Number:*	H477
Project:	Site Improvement Plans		
Address:	1960 Lucent Lane, Naperville		

Description: The proposed project includes redevelopment of existing office and industrial use. The proposed redevelopment includes proposed pavement and utility improvements.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Herrick Lake Forest Preserve INAI Site
Black-Billed Cuckoo *(Coccyzus erythropthalmus)*
Black-Crowned Night Heron *(Nycticorax nycticorax)*

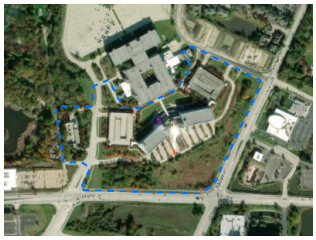
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage

Township, Range, Section:
38N, 10E, 5



IL Department of Natural Resources Contact
Isabella Newingham
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Bureau of Water
1021 North Grand Ave
Springfield, Illinois 62702 -4059

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor
Natalie Phelps Finnie, Director

March 19, 2025

Robert Gilbert
Jacob and Hefner Associates
1333 Butterfield Rd Suite #300
Downers Grove, IL 60515

RE: Site Improvement Plans
Project Number(s): 2510813 [H477]
County: DuPage

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

However, the Department recommends any vegetation clearing work occur on the project area from August 16th through April 30th to avoid the prime nesting season for the Black-billed Cuckoo.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

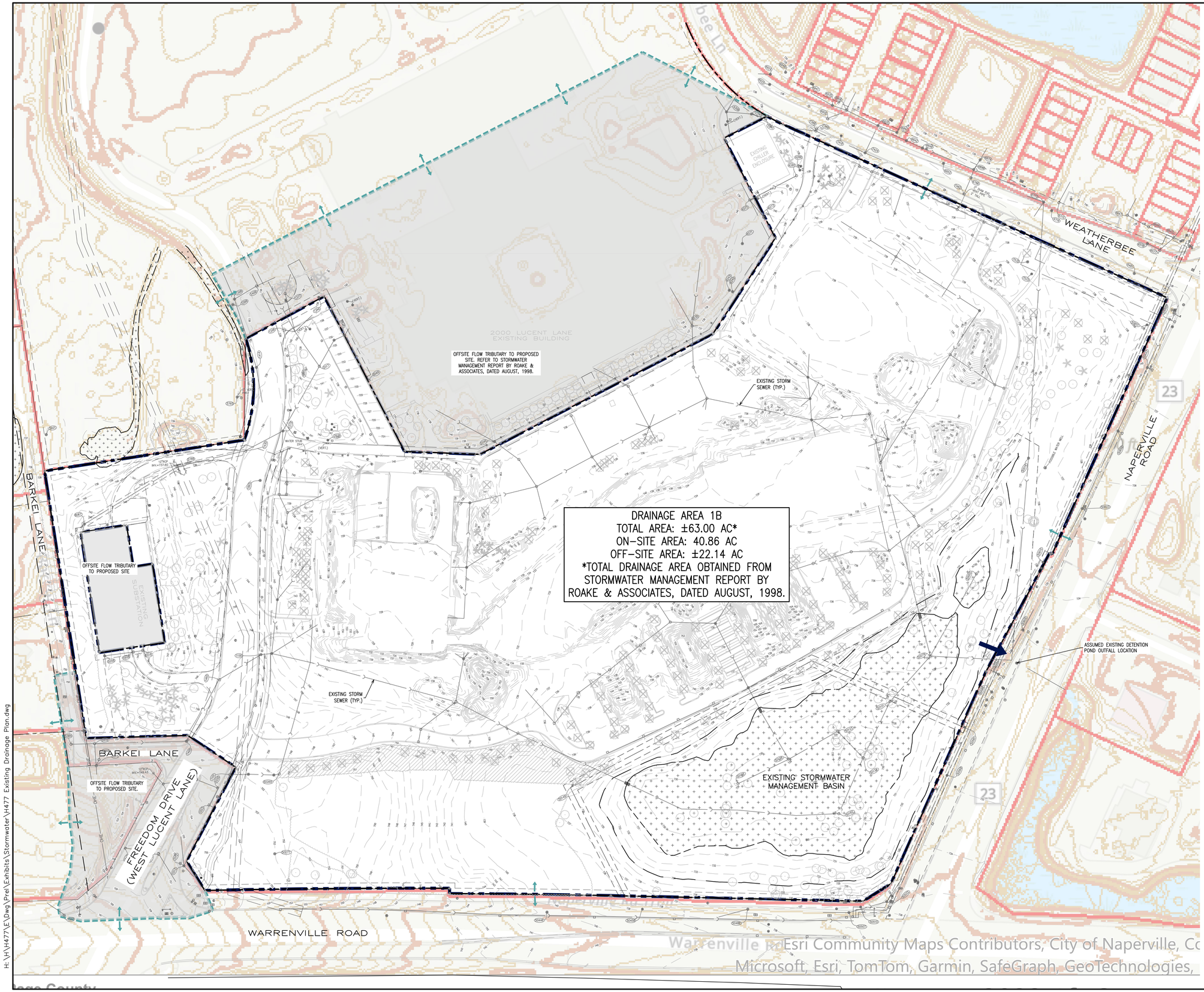
The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Bradley Hayes
Division of Ecosystems and Environment
217-785-5500

TAB 2

SITE RUNOFF STORAGE



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GRAPHIC SCALE 1"= 80'

0 40' 80' 160'

LEGEND

- FEMA "ZONE X" FLOODPLAIN
- OFFSITE AREA TRIBUTARY TO THE SITE
- SITE BOUNDARY
- DRAINAGE AREA BOUNDARY
- DRAINAGE DIVIDE ARROW
- SITE OUTFALL LOCATION

No.	Description	Date
1	ORIGINAL EXHIBIT DATE	4/4/25

EXISTING DRAINAGE PLAN

1960 WEST LUCENT LANE

KARIS CRITICAL

NAPERVILLE, ILLINOIS

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1" = 80'

H477

EDP

H:\H\H477\E\Dwg\Prel\Exhibits\Stormwater\H477 Existing Drainage Plan.dwg

N

GRAPHIC SCALE 1"= 80'

0 40' 80' 160'

LEGEND

- FEMA "ZONE X" FLOODPLAIN
- OFFSITE AREA TRIBUTARY TO THE SITE
- SITE BOUNDARY
- DRAINAGE AREA BOUNDARY
- DRAINAGE DIVIDE ARROW
- SITE OUTFALL LOCATION
- EMERGENCY OVERLAND FLOOD ARROW

2000 LUCENT LANE
EXISTING BUILDING

OFFSITE FLOW TRIBUTARY TO PROPOSED SITE. REFER TO STORMWATER MANAGEMENT REPORT BY ROAKE & ASSOCIATES, DATED AUGUST, 1998.

EXISTING DIELER ENCLOSURE

WEATHERBEE LANE

NAPERVILLE ROAD

PHASE 1 RAIN GARDEN

EQUIPMENT YARD
±43,342 SF

PHASE 1
2 STORY
BUILDING
±144,729 SF
FFE=739.00

BARKEI LANE

OFFSITE FLOW TRIBUTARY TO PROPOSED SITE

EXISTING SUBSTATION

OFFSITE FLOW TRIBUTARY TO PROPOSED SITE.

FREEDOM DRIVE
(WEST LUCENT LANE)

ASSUMED EXISTING DETENTION POND OUTFALL LOCATION

EXISTING STORMWATER MANAGEMENT BASIN

DRAINAGE AREA 1B
TOTAL AREA: ±63.00 AC*
ON-SITE AREA: 40.86 AC
OFF-SITE AREA: ±22.14 AC
*TOTAL DRAINAGE AREA OBTAINED FROM STORMWATER MANAGEMENT REPORT BY ROAKE & ASSOCIATES, DATED AUGUST, 1998.

WARRENVILLE ROAD

H:\H\H477\E\Dwg\Final\Exhibits\Stormwater\H477 Proposed Drainage Plan.dwg

No.	Description	Date
1	ORIGINAL EXHIBIT DATE	6/10/25

PROPOSED DRAINAGE PLAN

1960 WEST LUCENT LANE

KARIS CRITICAL

NAPERVILLE, ILLINOIS

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1" = 80'

H477a

PDP

PERVIOUS AND IMPERVIOUS AREA CALCULATIONS

JACOB & HEFNER ASSOCIATES

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Net New Impervious Area Summary

	Impervious Area (sf)	Gross New Impervious Area (sf)	Net New Impervious Area (sf) 1992 Comparison	Net New Impervious Area (sf) 2013 Comparison
1992 Site Conditions	632,748	-	-	-
2013 Existing Conditions (pre-demolition)	674,681	-	-	-
Existing Impervious to Remain	118,874	-	-	-
Proposed Conditions (Phase 1)	212,406	212,406	-301,468	-343,401
Future Land Banked Parking	39,751	252,157	-261,717	-303,650

Refer to 1992, 2013, and Proposed Impervious Area Exhibits under this tab for impervious area calculations referenced in the table above.

LEGEND

DENOTES SITE IMPERVIOUS AREA IN 1998
IMPERVIOUS AREA = 632,748 SF OR 14.53 ACRES

IMPERVIOUS AREA NOTES

1. AVAILABLE AERIAL IMAGERY VIA GOOGLE EARTH WAS UTILIZED TO CALCULATE EXISTING IMPERVIOUS AREA ON SITE IN 1992.
2. ADDITIONAL EXISTING CONDITIONS OBTAINED FROM A TOPOGRAPHIC SURVEY DATED 2/3/2025, PREPARED BY JACOB & HEFNER ASSOCIATES, INC.

No.	Description	Date
1	ORIGINAL EXHIBIT	4/3/25

1992 IMPERVIOUS AREA EXHIBIT

1960 WEST LUCENT LANE
KARIS CRITICAL
NAPERVILLE, ILLINOIS

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www.jacobandhefner.com

1" = 80'

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EXHIBIT 1

H:\H\H477\E\Dwg\Prel\Exhibits\Stormwater\H477 1992 Impervious Area Exhibit.dwg

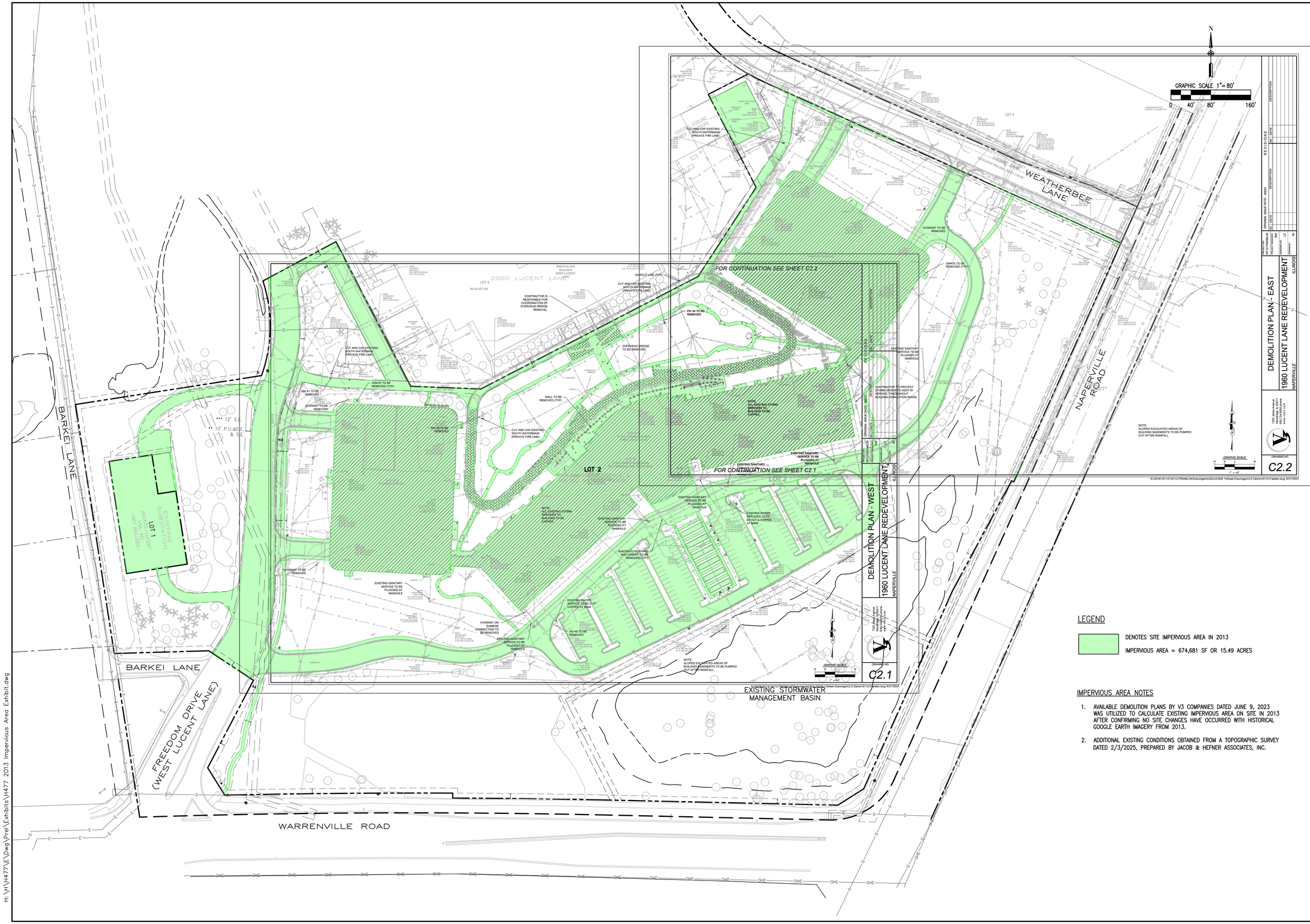
2013 IMPERVIOUS AREA EXHIBIT

1960 WEST LUCENT LANE

KARIS CRITICAL

NAPERVILLE, ILLINOIS

No.	Description	Date
1	ORIGINAL EXHIBIT DATE	3/17/25



DEMOLITION PLAN - EAST
1960 LUCENT LANE REDEVELOPMENT
NAPERVILLE ILLINOIS

DRAWING NO. C2.2

DEMOLITION PLAN - WEST
1960 LUCENT LANE REDEVELOPMENT
NAPERVILLE ILLINOIS

DRAWING NO. C2.1

ORIGINAL ISSUE DATE: 6/6/23
REVISIONS
NO. | DATE | DESCRIPTION

PROJECT MANAGER: RH
ENGINEER: LC
DRAWN BY: JR

7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
www.v3co.com

LEGEND

DENOTES SITE IMPERVIOUS AREA IN 2013

IMPERVIOUS AREA = 674,681 SF OR 15.49 ACRES

IMPERVIOUS AREA NOTES

1. AVAILABLE DEMOLITION PLANS BY V3 COMPANIES DATED JUNE 9, 2023 WAS UTILIZED TO CALCULATE EXISTING IMPERVIOUS AREA ON SITE IN 2013 AFTER CONFIRMING NO SITE CHANGES HAVE OCCURRED WITH HISTORICAL GOOGLE EARTH IMAGERY FROM 2013.
2. ADDITIONAL EXISTING CONDITIONS OBTAINED FROM A TOPOGRAPHIC SURVEY DATED 2/3/2025, PREPARED BY JACOB & HEFNER ASSOCIATES, INC.

JACOB & HEFNER ASSOCIATES
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1" = 80'

H477

EXHIBIT 1

H:\H\H477\E\Dwg\Prel\Exhibits\H477 2013 Impervious Area Exhibit.dwg

N

GRAPHIC SCALE 1"= 80'

0 40' 80' 160'

EXISTING CHILLER ENCLOSURE

2000 LUCENT LANE
EXISTING BUILDING

WEATHERBEE LANE

NAPERVILLE ROAD

BARKEI LANE

EXISTING SUBSTATION

PHASE 1 RAIN GARDEN

EQUIPMENT YARD
±43,342 SF

PHASE 1
2 STORY
BUILDING
±144,729 SF
FFE=739.00

EXISTING STORMWATER MANAGEMENT BASIN

BARKEI LANE

FREEDOM DRIVE
(WEST LUCENT LANE)

WARRENVILLE ROAD

LEGEND

DENOTES EXISTING SITE IMPERVIOUS AREA TO REMAIN
IMPERVIOUS AREA = 118,874 SF OR 2.73 ACRES

DENOTES PROPOSED PHASE 1 SITE IMPERVIOUS AREA
IMPERVIOUS AREA = 212,406 SF OR 4.88 ACRES

DENOTES FUTURE LAND BANKED PARKING IMPERVIOUS AREA
IMPERVIOUS AREA = 39,751 SF OR 0.91 ACRE

TOTAL IMPERVIOUS AREA = 371,031 SF OR 8.52 ACRES

IMPERVIOUS AREA NOTES

1. EXISTING CONDITIONS OBTAINED FROM A TOPOGRAPHIC SURVEY DATED 2/3/2025, PREPARED BY JACOB & HEFNER ASSOCIATES, INC.

PROPOSED IMPERVIOUS AREA EXHIBIT

1960 WEST LUCENT LANE

KARIS CRITICAL

NAPERVILLE, ILLINOIS

No.	Description	Date
1	ORIGINAL EXHIBIT DATE	6/10/25

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1" = 80'

H477a

EXHIBIT 3

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STORM SEWER DESIGN

Storm Sewer Design Criteria

Rainfall Return Period:	100-Year Event
Rainfall Duration:	Time of Concentration (Tc)
Rainfall Intensity:	ISWS Bulletin 75, Northeast Zone
Runoff Coefficients (Rc):	Impervious Area: Rc=0.95 Pervious Area: Rc=0.45
Inlet Time:	10 minutes
Pipe Capacity:	Manning's Equation for full pipe flow capacity N=0.013 (RCP)

JACOB & HEFNER ASSOCIATES
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Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

Runoff Coefficient (RC) Calculations

Project: *1960 Lucent* By: *RJC/JRL* Date: *6/10/2025*
Location: *Naperville, Illinois* Revised Date:
Project #: *H477*

PROPOSED STORM SEWER

Sub Basin	A_i	A_i	A_p	A_p	A_T	A_T	RC
	(SQ FT)	(AC)	(SQ FT)	(AC)	(SQ FT)	(AC)	
SERIES 100 (100-YR DESIGN)							
CB-103	1,292	0.03	50,964	1.17	52,256	1.20	0.46
CB-110	8,682	0.20	0	0.00	8,682	0.20	0.95
CB-111	7,031	0.16	0	0.00	7,031	0.16	0.95
CB-112	22,869	0.53	12,719	0.29	35,588	0.82	0.77
CB-113	823	0.02	5,624	0.13	6,447	0.15	0.51
CB-115	270	0.01	4,816	0.11	5,086	0.12	0.48
CB-116	818	0.02	28,998	0.67	29,816	0.68	0.46
CB-117	564	0.01	21,455	0.49	22,019	0.51	0.46
CB-131	3,539	0.08	0	0.00	3,539	0.08	0.95
CB-132	6,795	0.16	0	0.00	6,795	0.16	0.95
INL-132A	7,899	0.18	3,272	0.08	11,171	0.26	0.80
INL-132B	2,890	0.07	0	0.00	2,890	0.07	0.95
RD-110A	15,206	0.35	0	0.00	15,206	0.35	0.95
RD-111A	12,745	0.29	0	0.00	12,745	0.29	0.95
RD-112A	12,915	0.30	0	0.00	12,915	0.30	0.95
RD-112B	9,793	0.22	0	0.00	9,793	0.22	0.95
RD-114	8,532	0.20	0	0.00	8,532	0.20	0.95
RD-115	9,578	0.22	0	0.00	9,578	0.22	0.95
RD-131A	12,747	0.29	0	0.00	12,747	0.29	0.95
SERIES 200 (100-YR DESIGN)							
CB-202	0	0.00	39,638	0.91	39,638	0.91	0.45
CB-203	0	0.00	127,517	2.93	127,517	2.93	0.45
CB-204	0	0.00	16,942	0.39	16,942	0.39	0.45
CB-205A	0	0.00	154,777	3.55	154,777	3.55	0.45
CB-206	4,657	0.11	339	0.01	4,996	0.11	0.92
CB-207	5,330	0.12	0	0.00	5,330	0.12	0.95
CB-208	5,379	0.12	0	0.00	5,379	0.12	0.95
CB-209	2,983	0.07	1,476	0.03	4,459	0.10	0.78
CB-210	2,910	0.07	1,549	0.04	4,459	0.10	0.78
CB-211	19,935	0.46	18,004	0.41	37,939	0.87	0.71
INL-212	5,259	0.12	3,506	0.08	8,765	0.20	0.75
CB-213	5,098	0.12	3,399	0.08	8,497	0.20	0.75
INL-214	6,786	0.16	4,524	0.10	11,310	0.26	0.75
CB-215	3,616	0.08	2,410	0.06	6,026	0.14	0.75

JACOB & HEFNER ASSOCIATES
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
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Project: *1960 Lucent* By: *RJC/JRL* Date: *6/10/2025*
Location: *Naperville, Illinois* Revised Date:
Project #: *H477*

PROPOSED STORM SEWER

Sub Basin	A_i	A_i	A_p	A_p	A_T	A_T	RC
	(SQ FT)	(AC)	(SQ FT)	(AC)	(SQ FT)	(AC)	
INL-216	5,247	0.12	3,498	0.08	8,745	0.20	0.75
CB-220	0	0.00	27,918	0.64	27,918	0.64	0.45
CB-220 COMB	48,350	1.11	60,376	1.39	108,726	2.50	0.67
CB-221	0	0.00	14,313	0.33	14,313	0.33	0.45
CB-222	816	0.02	35,238	0.81	36,054	0.83	0.46
CB-225	4,348	0.10	6,881	0.16	11,229	0.26	0.64
CB-227	2,684	0.06	8,260	0.19	10,944	0.25	0.57

Notes

1) Impervious Runoff Coefficient = 0.95
2) Pervious Runoff Coefficient = 0.45
3) Areas are assumed to be fully developed (both proposed and future condition)
4) Assumes all areas to be fully impervious unless otherwise noted.

MH = Manhole
INL = Inlet
RD = Roof Drain

A_T = Total Area
Ai = Impervious Area
Ap = Pervious Area
CB = Catch Basin

JACOB & HEFNER
ASSOCIATES

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INLET CAPACITY CALCULATIONS

Project: *1960 Lucent* By: *RJC/JRL* Date: *6/10/2025*
Location: *Naperville, Illinois* Checked: Date:
Project #: *H477*

STRUCTURE #	DRAINAGE AREA (AC)	RUNOFF COEFFICIENT	FLOW (CFS)	HEIGHT (FT)	PERIMETER OF GRATE (FT)	OPEN AREA OF GRATE (S.F.)	WEIR FLOW CAPACITY (CFS)	ORIFICE FLOW CAPACITY (CFS)	GRATE TYPE
SERIES 100 (100-YR DESIGN)									
CB-103	1.20	0.46	6.86	0.35	10.2	5.40	6.97	15.38	9P
CB-110	0.20	0.95	2.34	0.30	6.0	0.90	3.25	2.37	1P
CB-111	0.16	0.95	1.90	0.25	6.0	0.90	2.48	2.17	1P
CB-112	0.82	0.77	7.79	0.40	9.9	3.00	8.26	9.14	2P
CB-113	0.15	0.51	0.94	0.15	6.0	1.10	1.15	2.05	8P
CB-115	0.12	0.48	0.69	0.15	6.0	1.10	1.15	2.05	8P
CB-116	0.68	0.46	3.92	0.55	6.0	1.10	8.08	3.93	8P
CB-117	0.51	0.46	2.89	0.30	6.0	1.10	3.25	2.90	8P
CB-131	0.08	0.95	0.95	0.15	6.0	0.90	1.15	1.68	1P
CB-132	0.16	0.95	1.83	0.25	6.0	0.90	2.48	2.17	1P
INL-132A	0.26	0.80	2.55	0.35	6.0	0.90	4.10	2.56	1P
INL-132B	0.07	0.95	0.78	0.15	6.0	0.90	1.15	1.68	1P
SERIES 200 (100-YR DESIGN)									
CB-202	0.91	0.45	5.06	0.95	6.0	1.10	18.33	5.16	8P
CB-203	2.93	0.45	16.28	0.65	10.2	5.40	17.64	20.96	9P
CB-204	0.39	0.45	2.16	0.25	6.0	1.10	2.48	2.65	8P
CB-205A	3.55	0.45	19.76	0.75	10.2	5.40	21.86	22.52	9P
CB-206	0.11	0.92	1.30	0.20	6.0	0.90	1.77	1.94	1P
CB-207	0.12	0.95	1.44	0.20	6.0	0.90	1.77	1.94	1P
CB-208	0.12	0.95	1.45	0.20	6.0	0.90	1.77	1.94	1P
CB-209	0.10	0.78	0.99	0.15	6.0	0.90	1.15	1.68	1P
CB-210	0.10	0.78	0.98	0.15	6.0	0.90	1.15	1.68	1P
CB-211	0.87	0.71	7.67	0.40	9.9	3.00	8.26	9.14	2P
INL-212	0.20	0.75	1.87	0.25	6.0	0.90	2.48	2.17	1P
CB-213	0.20	0.75	1.81	0.25	6.0	0.90	2.48	2.17	1P
INL-214	0.26	0.75	2.41	0.35	6.0	0.90	4.10	2.56	1P
CB-215	0.14	0.75	1.28	0.20	6.0	0.90	1.77	1.94	1P
INL-216	0.20	0.75	1.86	0.25	6.0	0.90	2.48	2.17	1P
CB-220	0.64	0.45	3.56	0.50	6.0	1.10	7.00	3.75	8P
CB-220 COMB	2.50	0.67	20.74	0.75	10.2	5.40	21.86	22.52	9P
CB-221	0.33	0.45	1.83	0.25	6.0	1.10	2.48	2.65	8P
CB-222	0.83	0.46	4.72	0.80	6.0	1.10	14.17	4.74	8P
CB-225	0.26	0.64	2.05	0.25	6.0	1.10	2.48	2.65	8P
CB-227	0.25	0.57	1.78	0.25	6.0	1.10	2.48	2.65	8P

EQUATIONS:

flow	weir flow	orifice flow
Q=cia	Q=3.3 P (h)^1.5	Q=CA(2gh)½

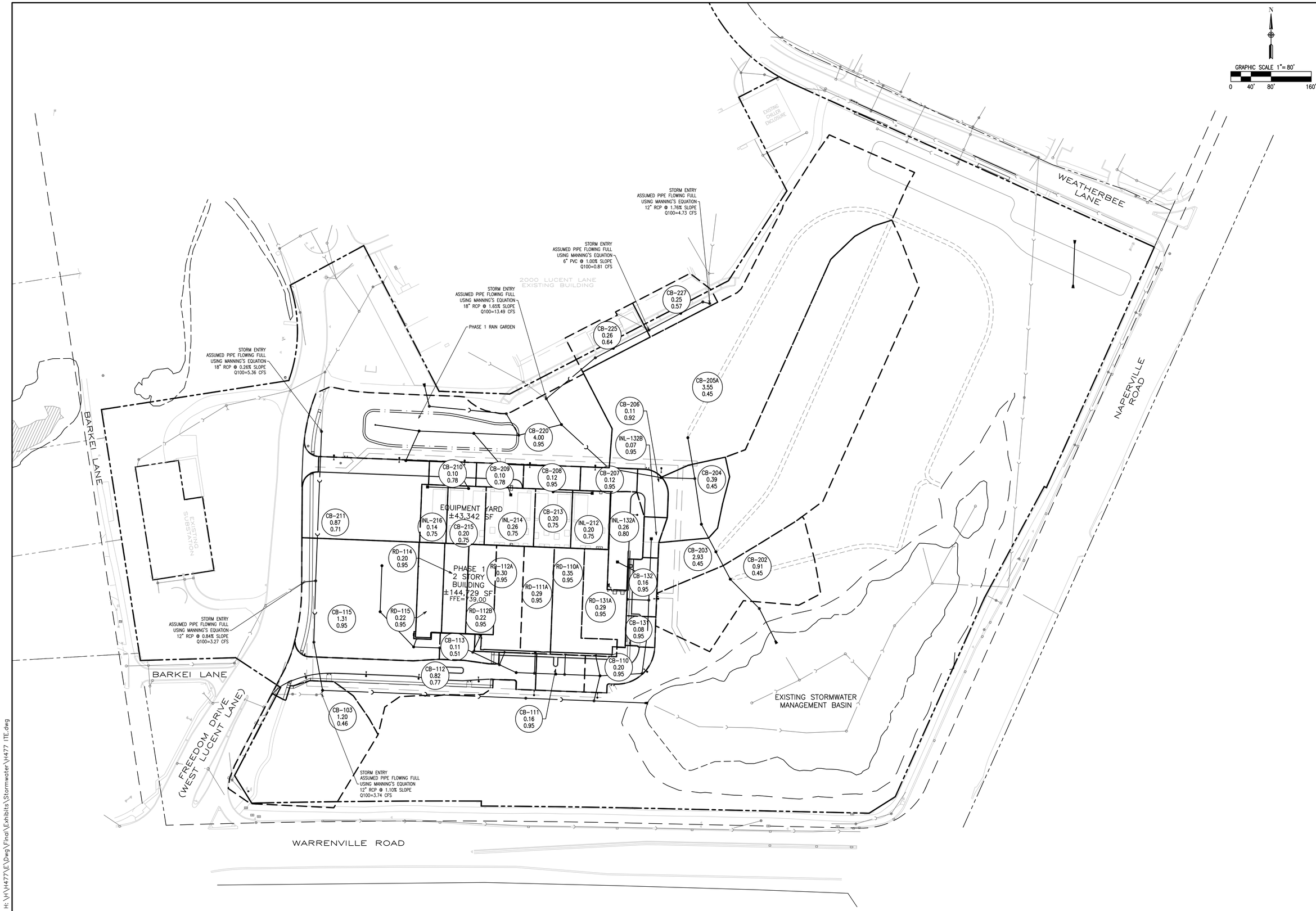
c = Runoff Coefficient
i = Intensity - 7.44 in/hr
Bulletin 75 NE - 10-Yr 5-min Storm
i = Intensity - 12.36 in/hr
Bulletin 75 NE - 100-Yr 5-min Storm
a = Drainage Area A = Open Area of Grate
C = 0.6 g = 32.2 ft/s
h = Ponding Above Rim (6" Max., 9" Max. adjacent to B9.12 C&G)
P = Perimeter of grate in feet

Grate Geometry:

Grate	Perimeter (ft)	Area (sq ft)	Plan Symbol
Neenah R-2502-D	6.0	0.9	1P
Neenah R-2502-E	6.0	1.5	1PP
Neenah R-3278-A (IDOT TYPE 3)	4.6	1.2	3P
Neenah R-4340-B (IDOT TYPE 8)	6.0	1.1	8P
Neenah R-1772 (CLOSED)	N/A	N/A	1C
Neenah R2580-C Grate G	9.9	3.0	2P
Neenah R-4349-D	10.2	5.4	9P

Assumptions

All storm sewers with a runoff coefficient of 0.95 are assumed to have fully impervious tributary drainage areas.



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No.	Description	Date
1	ORIGINAL EXHIBIT DATE	06/11/25

INLET TRIBUTARY EXHIBIT

1960 W LUCENT
KARISX CRITICAL
NAPERVILLE, ILLINOIS

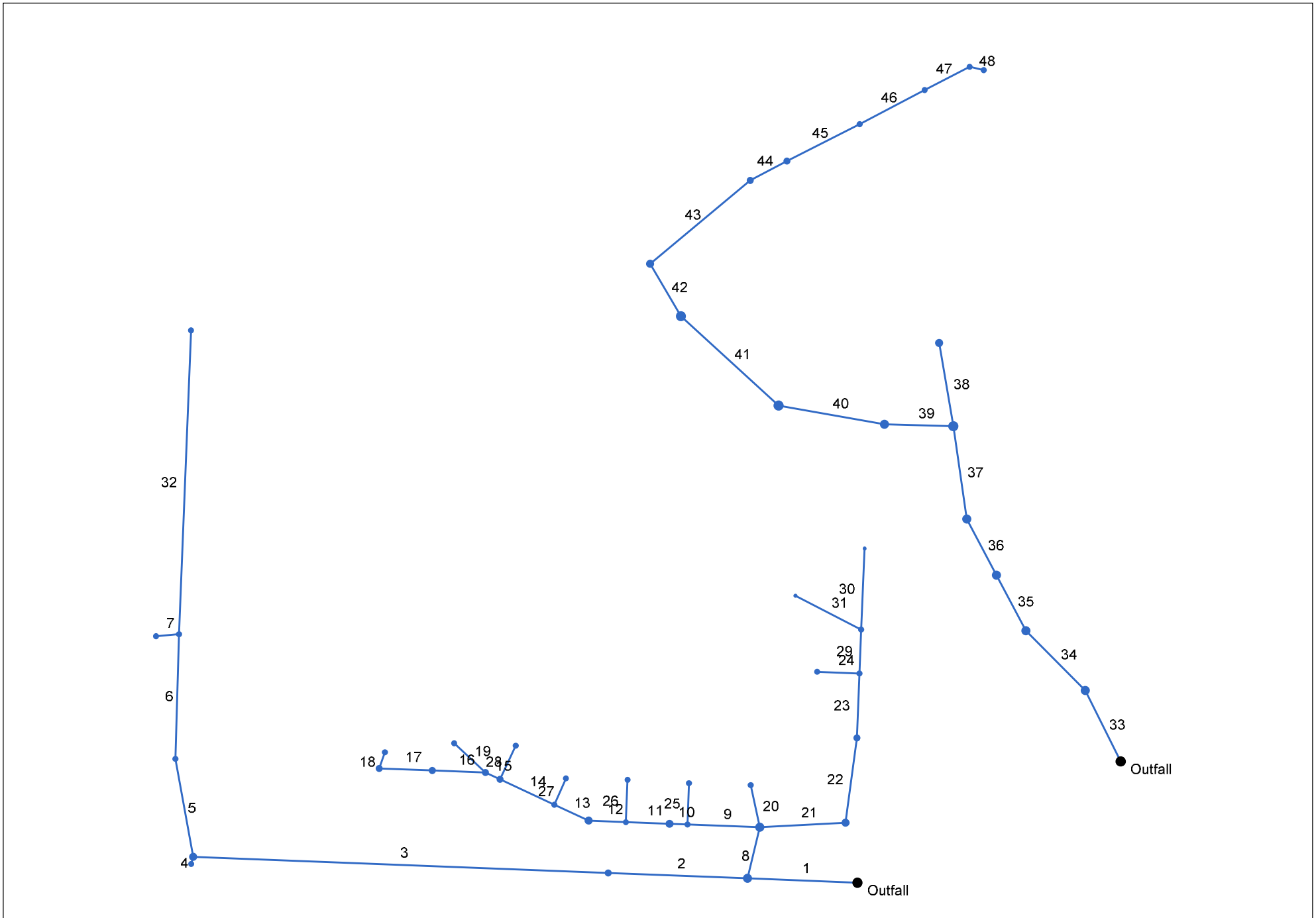
JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

1" = 80'

H477a

ITE

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Project File: H477a-Storm Sewer-Final.stm	Number of lines: 48	Date: 6/11/2025

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	107.063	0.00	6.24	0.00	0.00	5.11	0.0	55.4	4.3	34.14	94.16	6.53	48	0.43	727.00	727.46	728.74	729.20	731.68	737.93	MH-101
2	1	135.762	0.00	1.20	0.00	0.00	0.55	0.0	11.8	10.2	17.98	21.98	4.90	30	0.29	727.43	727.82	729.20	729.55	737.93	736.97	MH-102
3	2	404.219	1.20	1.20	0.46	0.55	0.55	10.0	10.0	10.8	18.35	20.80	4.79	30	0.26	727.82	728.86	729.64	730.68	736.97	748.00	CB-103
4	3	7.256	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	3.74	6.61	7.04	12	3.45	745.00	745.25	745.54	746.07	748.00	750.30	MH-103A
5	3	97.273	0.00	0.00	0.00	0.00	0.00	0.0	2.4	0.0	8.63	11.23	2.75	24	0.25	728.86	729.10	731.03	731.17	748.00	747.40	MH-104
6	5	121.970	0.00	0.00	0.00	0.00	0.00	0.0	1.6	0.0	8.63	11.59	2.76	24	0.26	729.10	729.42	731.20	731.37	747.40	745.34	MH-105
7	6	22.493	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	3.27	3.10	4.45	12	0.76	739.00	739.17	739.88	740.05	745.34	747.67	MH-105A
8	1	51.235	0.20	5.04	0.95	0.19	4.55	10.0	55.2	4.3	19.46	24.36	2.81	42	0.06	727.43	727.46	729.80	729.82	737.93	737.11	CB-110
9	8	70.429	0.00	3.98	0.00	0.00	3.59	0.0	11.4	10.3	36.88	64.07	6.68	36	0.92	727.46	728.11	729.95	730.08	737.11	737.28	MH-110A
10	9	17.542	0.16	3.63	0.95	0.15	3.25	10.0	11.4	10.3	33.54	63.70	7.00	36	0.91	728.11	728.27	730.08	730.15	737.28	737.10	CB-111
11	10	42.458	0.00	3.47	0.00	0.00	3.10	0.0	11.2	10.4	32.15	63.92	6.99	36	0.92	728.27	728.66	730.15	730.50	737.10	737.47	MH-111A
12	11	36.282	0.82	3.18	0.77	0.63	2.83	10.0	11.1	10.4	29.44	63.61	6.67	36	0.91	728.66	728.99	730.50	730.75	737.47	737.10	CB-112
13	12	36.810	0.00	2.36	0.00	0.00	2.19	0.0	10.9	10.5	22.97	39.42	6.51	30	0.92	728.99	729.33	730.75	730.96	737.10	737.57	MH-112A
14	13	58.507	0.00	2.06	0.00	0.00	1.91	0.0	10.7	10.6	20.16	39.40	6.19	30	0.92	729.33	729.87	730.96	731.39	737.57	737.39	MH-112B
15	14	15.550	0.11	1.84	0.51	0.06	1.70	10.0	10.6	10.6	18.00	40.28	5.96	30	0.96	729.87	730.02	731.39	731.46	737.39	737.20	CB-113
16	15	51.778	0.00	1.53	0.00	0.00	1.45	0.0	10.4	10.7	15.54	39.07	5.60	30	0.91	730.02	730.49	731.46	731.82	737.20	737.75	MH-114
17	16	51.778	1.31	1.53	0.95	1.24	1.45	10.0	10.1	10.8	15.70	39.49	5.90	30	0.93	730.49	730.97	731.82	732.31	737.75	737.20	CB-115
18	17	16.825	0.22	0.22	0.95	0.21	0.21	10.0	10.0	10.8	2.27	3.88	4.69	12	1.19	732.80	733.00	733.35	733.64	737.20	738.30	RD-115
19	15	41.796	0.20	0.20	0.95	0.19	0.19	10.0	10.0	10.8	2.06	3.70	4.46	12	1.08	732.55	733.00	733.08	733.61	737.20	738.43	RD-114
20	8	42.163	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.01	4.25	1.03	12	1.42	732.40	733.00	732.44	733.04	737.11	738.24	RD-110
21	8	83.617	0.00	0.86	0.00	0.00	0.78	0.0	12.8	9.8	7.64	15.54	1.57	30	0.14	727.46	727.58	729.95	729.97	737.11	738.12	MH-130
22	21	83.505	0.08	0.86	0.95	0.08	0.78	10.0	12.0	10.1	7.86	15.55	1.63	30	0.14	727.58	727.70	730.01	730.04	738.12	738.00	CB-131

Project File: H477a-Storm Sewer-Final.stm

Number of lines: 48

Run Date: 6/11/2025

NOTES:Intensity = 157.45 / (Inlet time + 12.90) ^ 0.85; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
23	22	63.123	0.00	0.78	0.00	0.00	0.70	0.0	11.7	10.2	7.15	7.59	4.89	18	0.52	729.80	730.13	730.96	731.29	738.00	737.44	MH-131A
24	23	41.208	0.29	0.29	0.95	0.28	0.28	10.0	10.0	10.8	2.99	4.30	5.35	12	1.46	732.40	733.00	733.01	733.74	737.44	738.37	RD-131A
25	9	40.376	0.35	0.35	0.95	0.33	0.33	10.0	10.0	10.8	3.60	4.34	5.74	12	1.49	732.40	733.00	733.10	733.81	737.28	738.24	RD-110A
26	11	41.334	0.29	0.29	0.95	0.28	0.28	10.0	10.0	10.8	2.99	4.29	5.35	12	1.45	732.40	733.00	733.01	733.74	737.47	738.42	RD-111A
27	13	28.012	0.30	0.30	0.95	0.29	0.29	10.0	10.0	10.8	3.09	5.21	5.89	12	2.14	732.40	733.00	732.95	733.75	737.57	738.32	RD-112A
28	14	36.333	0.22	0.22	0.95	0.21	0.21	10.0	10.0	10.8	2.27	4.58	5.03	12	1.65	732.40	733.00	732.90	733.64	737.39	738.97	RD-112B
29	23	42.836	0.16	0.49	0.95	0.15	0.43	10.0	11.4	10.3	4.39	7.53	2.54	18	0.51	730.13	730.35	731.66	731.72	737.44	736.85	CB-132
30	29	79.392	0.07	0.07	0.95	0.07	0.07	10.0	10.0	10.8	0.72	5.93	1.91	12	2.77	730.35	732.55	731.82	732.90	736.85	736.55	INL-132B
31	29	72.019	0.26	0.26	0.80	0.21	0.21	10.0	10.0	10.8	2.25	2.65	2.87	12	0.56	730.35	730.75	731.82	732.11	736.85	734.40	INL-132A
32	6	297.155	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	5.36	5.38	3.03	18	0.26	729.42	730.20	731.49	732.26	745.34	740.64	MH-106
33	End	77.504	0.00	12.52	0.00	0.00	7.83	0.0	28.6	6.5	70.02	134.0	7.96	54	0.46	721.50	721.86	723.94	724.30	726.54	735.63	MH-201
34	33	82.085	0.91	12.52	0.45	0.41	7.83	16.8	28.3	6.6	70.35	135.6	7.99	54	0.48	721.86	722.25	724.30	724.69	735.63	735.10	CB-202
35	34	61.500	2.93	11.61	0.45	1.32	7.42	27.0	28.1	6.6	67.91	114.9	7.52	54	0.34	726.00	726.21	728.49	728.70	735.10	735.10	CB-203
36	35	62.000	0.39	8.68	0.45	0.18	6.10	10.0	27.8	6.6	59.45	111.7	6.37	54	0.32	726.21	726.41	728.83	728.91	735.10	735.10	CB-204
37	36	91.669	0.00	8.29	0.00	0.00	5.92	0.0	27.4	6.7	58.63	114.4	6.06	54	0.34	726.41	726.72	729.17	729.24	735.10	736.71	MH-205
38	37	82.511	3.55	3.55	0.45	1.60	1.60	27.0	27.0	6.7	10.78	21.56	6.24	24	0.91	729.00	729.75	730.00	730.93	736.71	735.10	CB-205A
39	37	67.190	0.11	4.74	0.92	0.10	4.32	10.0	13.0	9.8	61.19	57.57	6.71	42	0.33	726.72	726.94	729.87	730.09	736.71	736.35	CB-206
40	39	104.556	0.12	4.63	0.95	0.11	4.22	10.0	12.7	9.8	60.58	58.21	6.49	42	0.33	726.94	727.29	730.21	730.53	736.35	736.25	CB-207
41	40	129.110	4.00	4.51	0.95	3.80	4.11	10.0	12.4	10.0	59.93	58.06	6.23	42	0.33	727.29	727.72	730.92	731.38	736.25	735.40	CB-220
42	41	59.349	0.00	0.51	0.00	0.00	0.31	0.0	12.2	10.0	22.13	23.81	4.51	30	0.34	727.72	727.92	731.59	731.76	735.40	737.59	MH-223
43	42	127.085	0.00	0.51	0.00	0.00	0.31	0.0	11.4	10.3	8.72	26.54	2.78	24	1.38	725.50	727.25	732.07	732.26	737.59	735.57	MH-224
44	43	40.335	0.26	0.51	0.64	0.17	0.31	10.0	11.2	10.4	8.75	13.32	2.78	24	0.35	728.34	728.48	732.29	732.35	735.57	735.15	CB-225

Project File: H477a-Storm Sewer-Final.stm

Number of lines: 48

Run Date: 6/11/2025

NOTES:Intensity = 157.45 / (Inlet time + 12.90) ^ 0.85; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
45	44	79.559	0.00	0.25	0.00	0.00	0.14	0.0	10.6	10.6	7.05	12.93	2.24	24	0.33	728.48	728.74	732.37	732.45	735.15	735.89	MH-226
46	45	71.444	0.25	0.25	0.57	0.14	0.14	10.0	10.0	10.8	6.27	13.11	2.00	24	0.34	728.74	728.98	732.46	732.51	735.89	735.15	CB-227
47	46	49.419	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	4.73	6.16	2.68	18	0.34	728.98	729.15	732.52	732.62	735.15	735.64	MH-228
48	47	14.070	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	4.73	3.68	6.02	12	1.07	727.00	727.15	732.70	732.95	735.64	737.03	MH-229

Project File: H477a-Storm Sewer-Final.stm

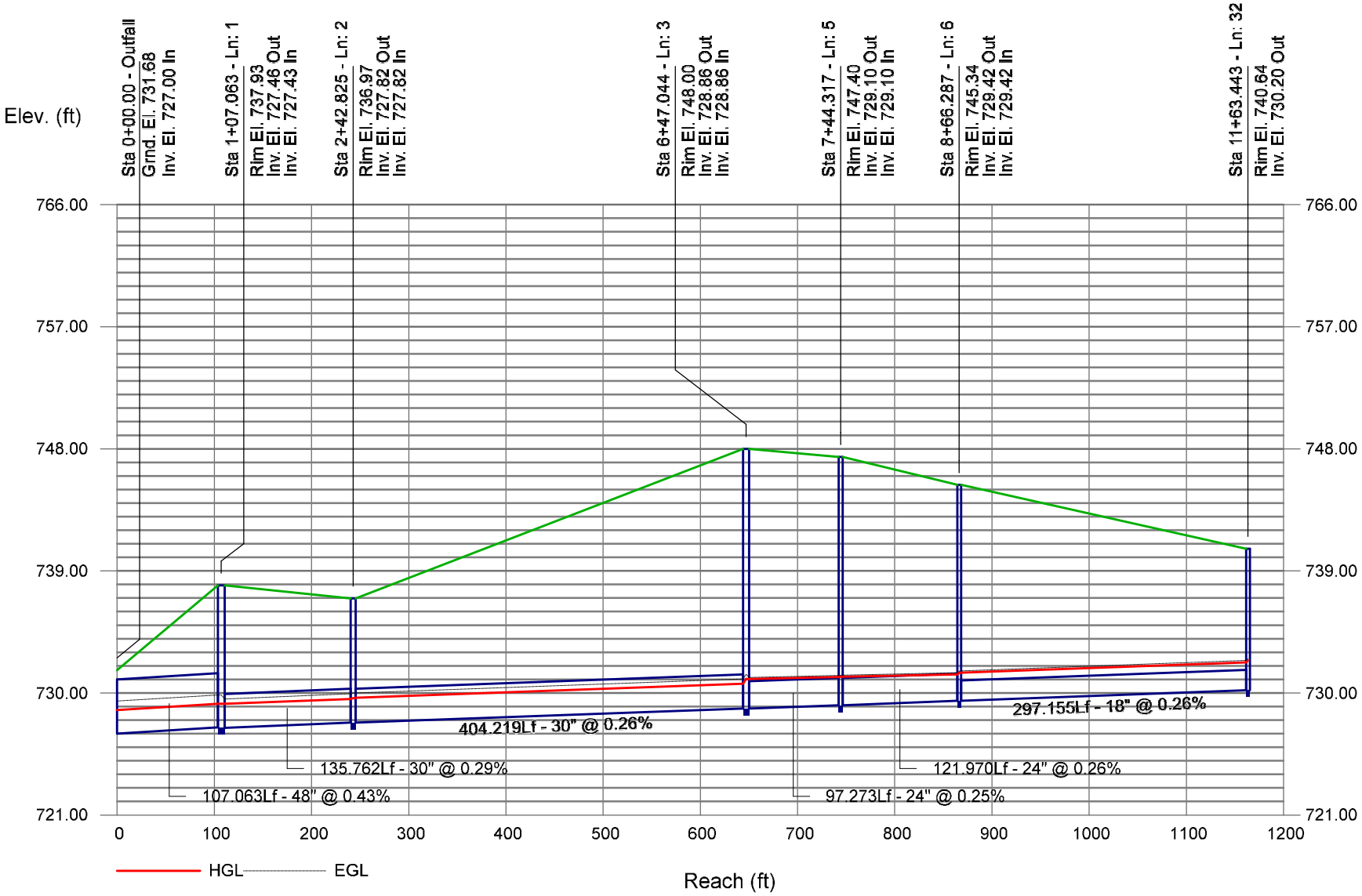
Number of lines: 48

Run Date: 6/11/2025

NOTES:Intensity = 157.45 / (Inlet time + 12.90) ^ 0.85; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Profile

Proj. file: H477a-Storm Sewer-Final.stm



Storm Sewer Profile

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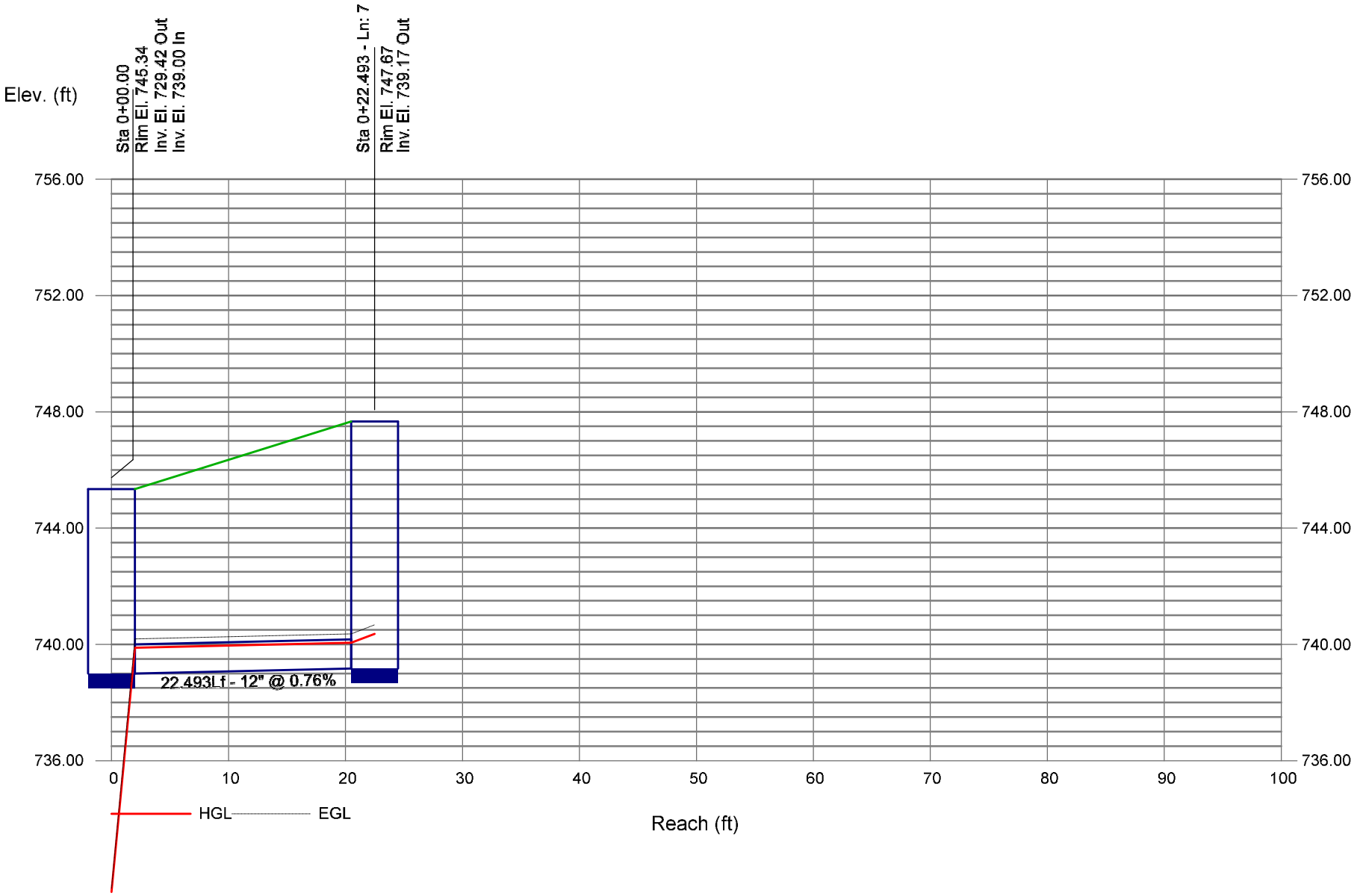

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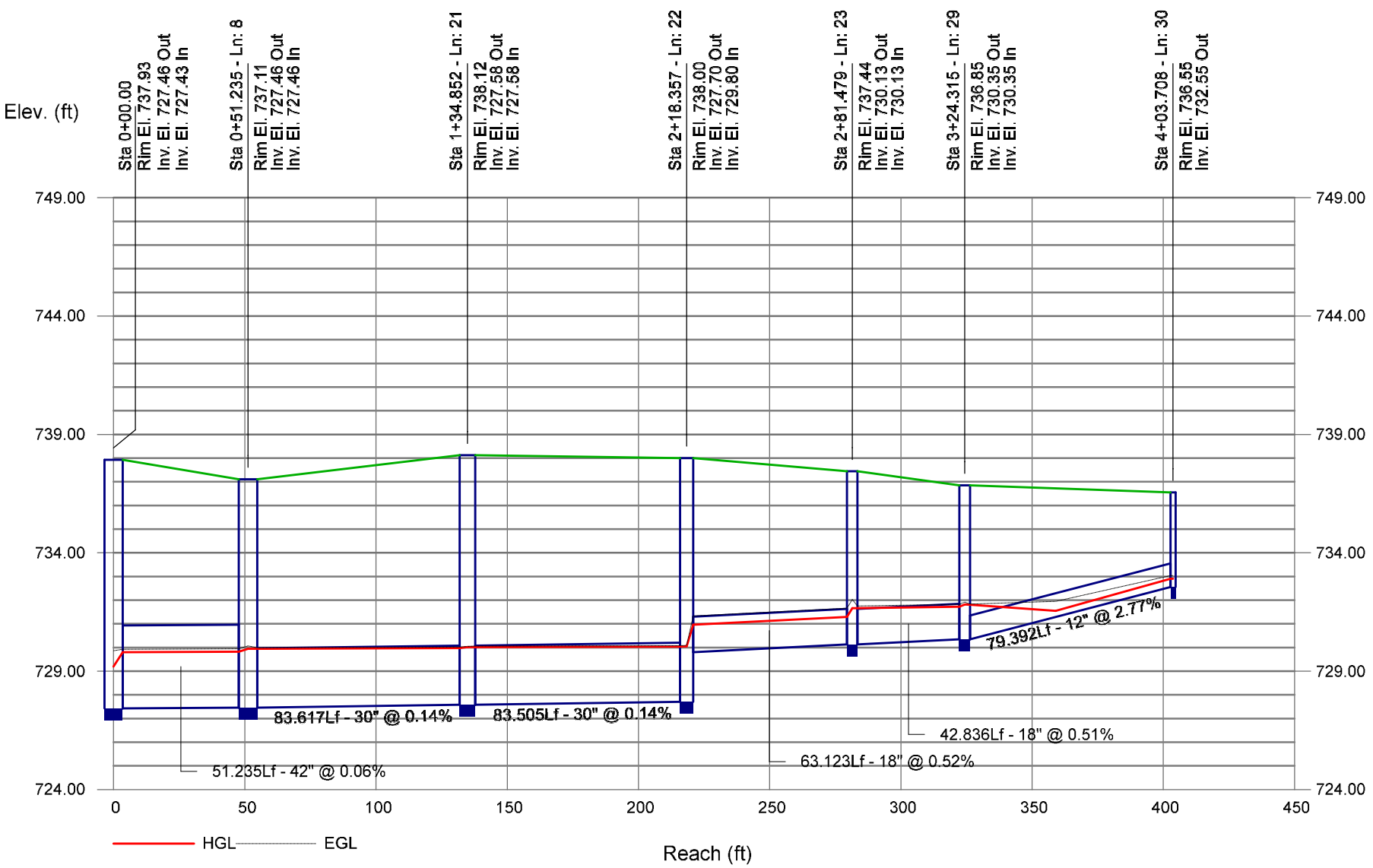

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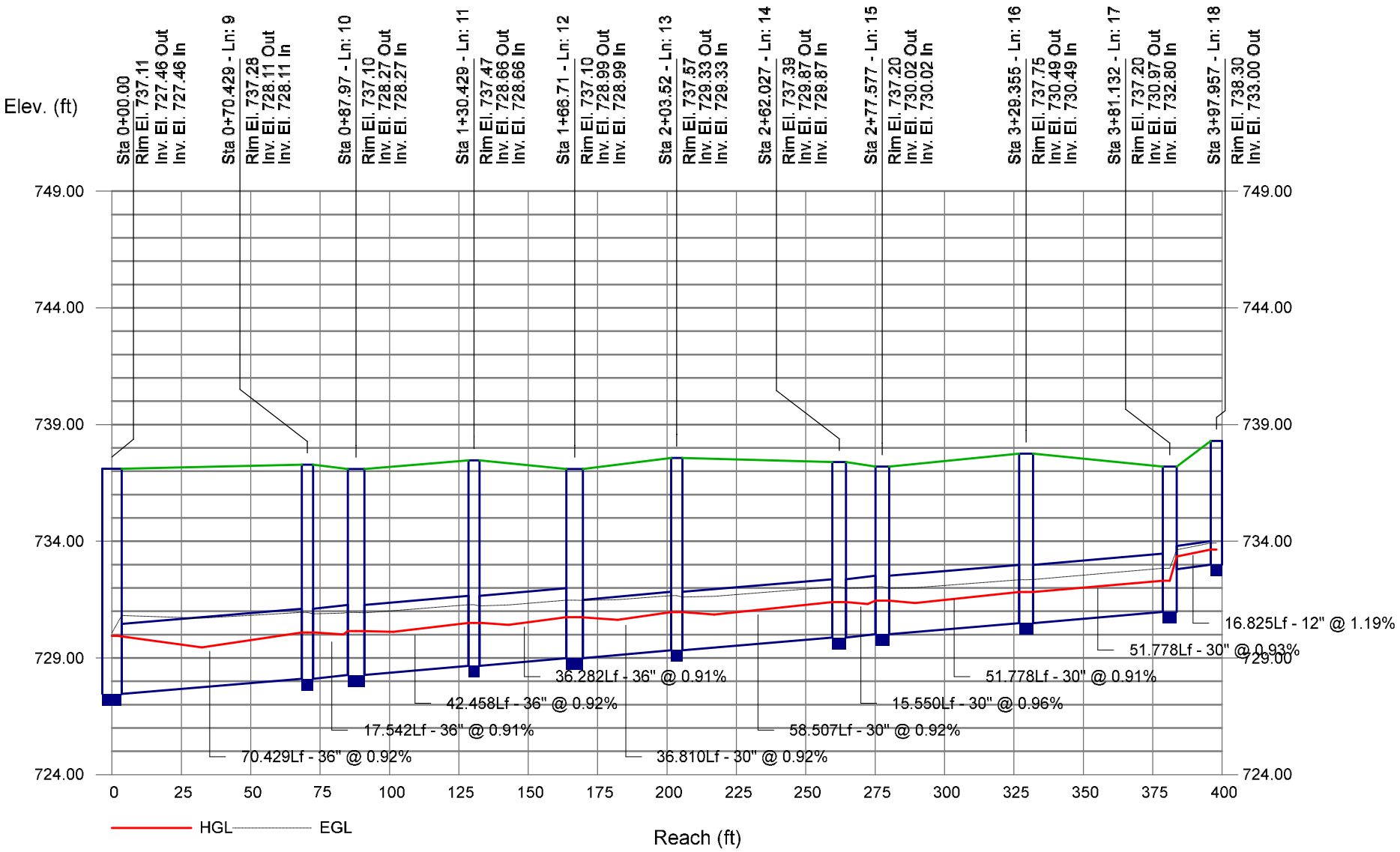

Storm Sewer Profile

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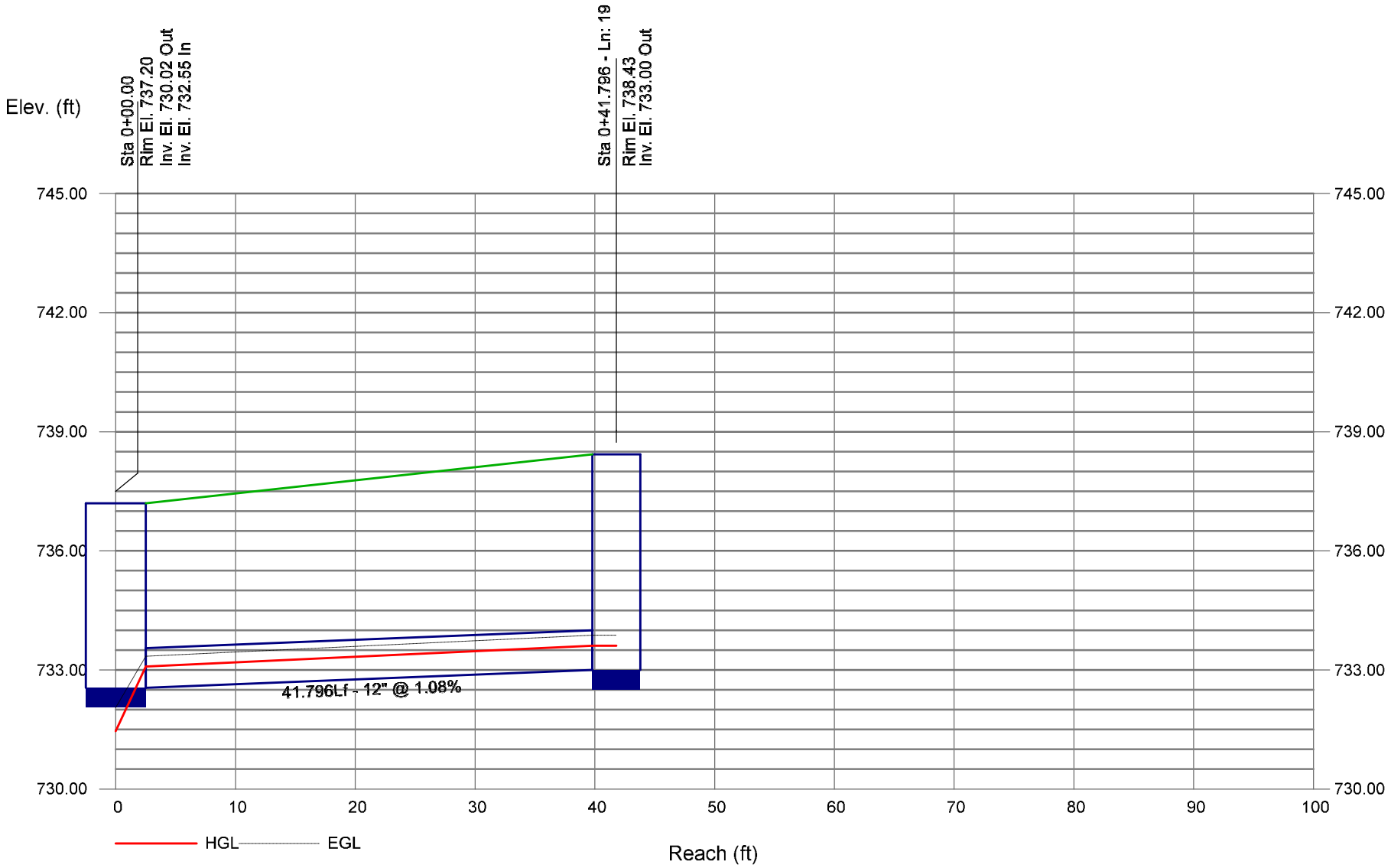

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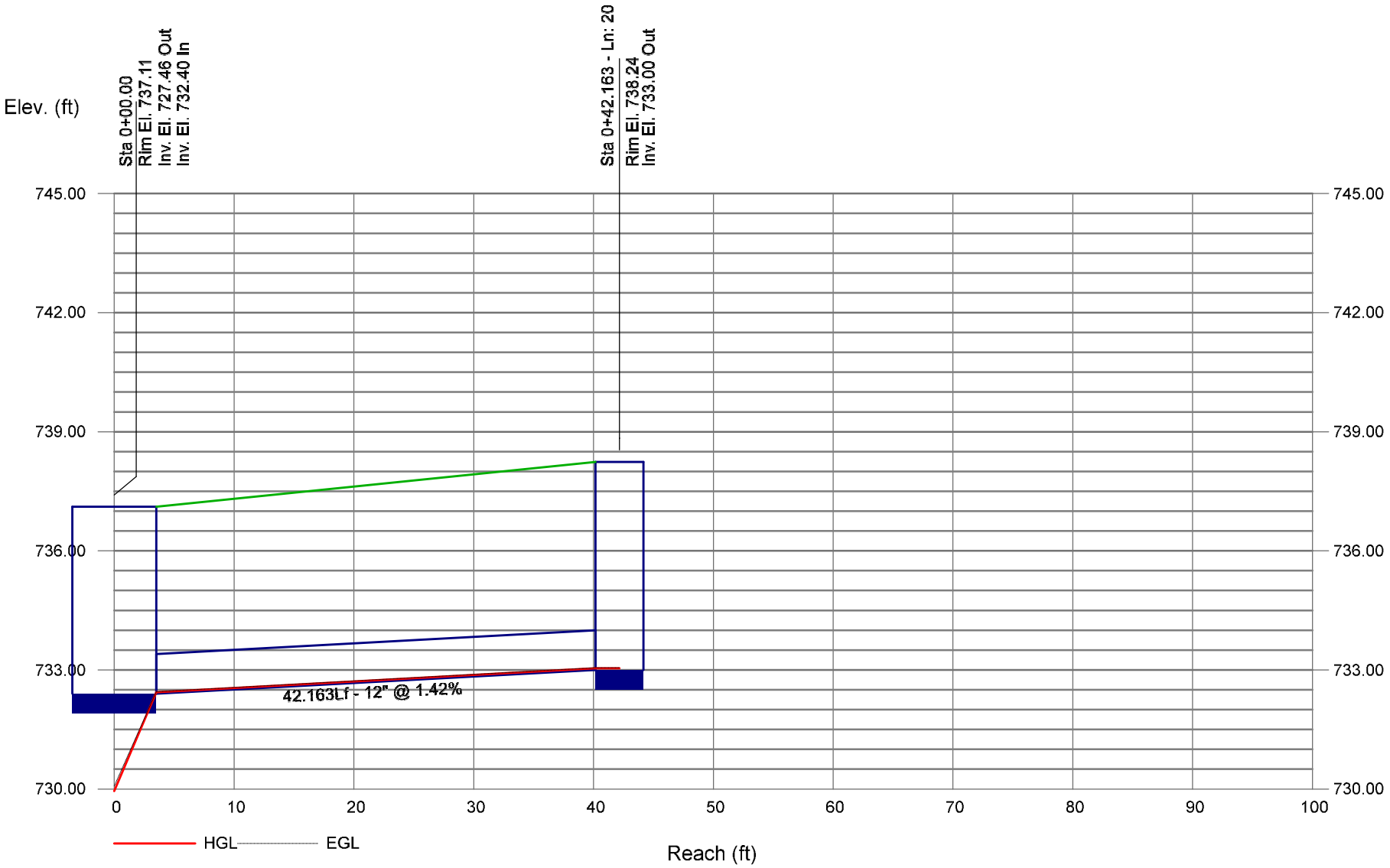

Storm Sewer Profile

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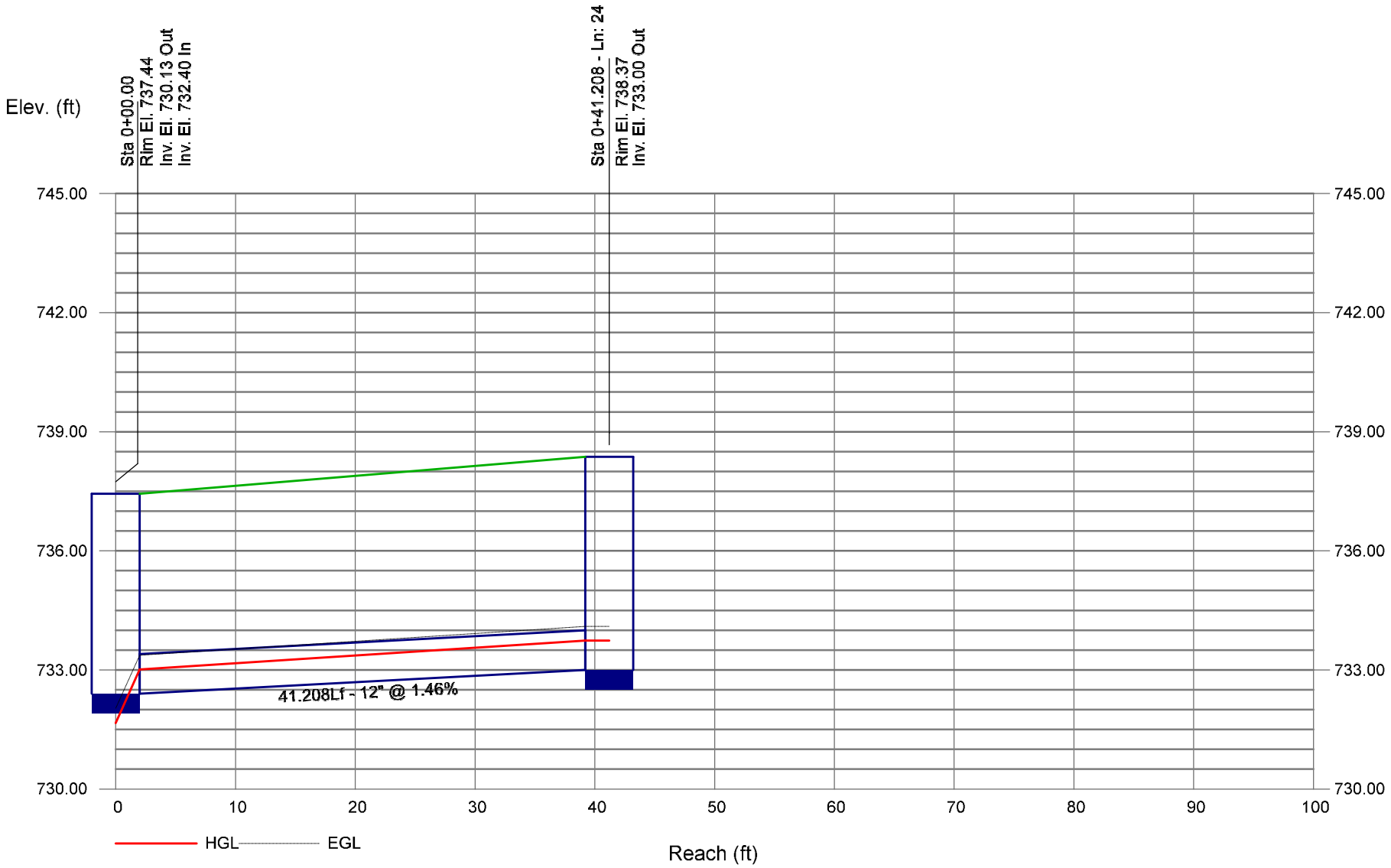

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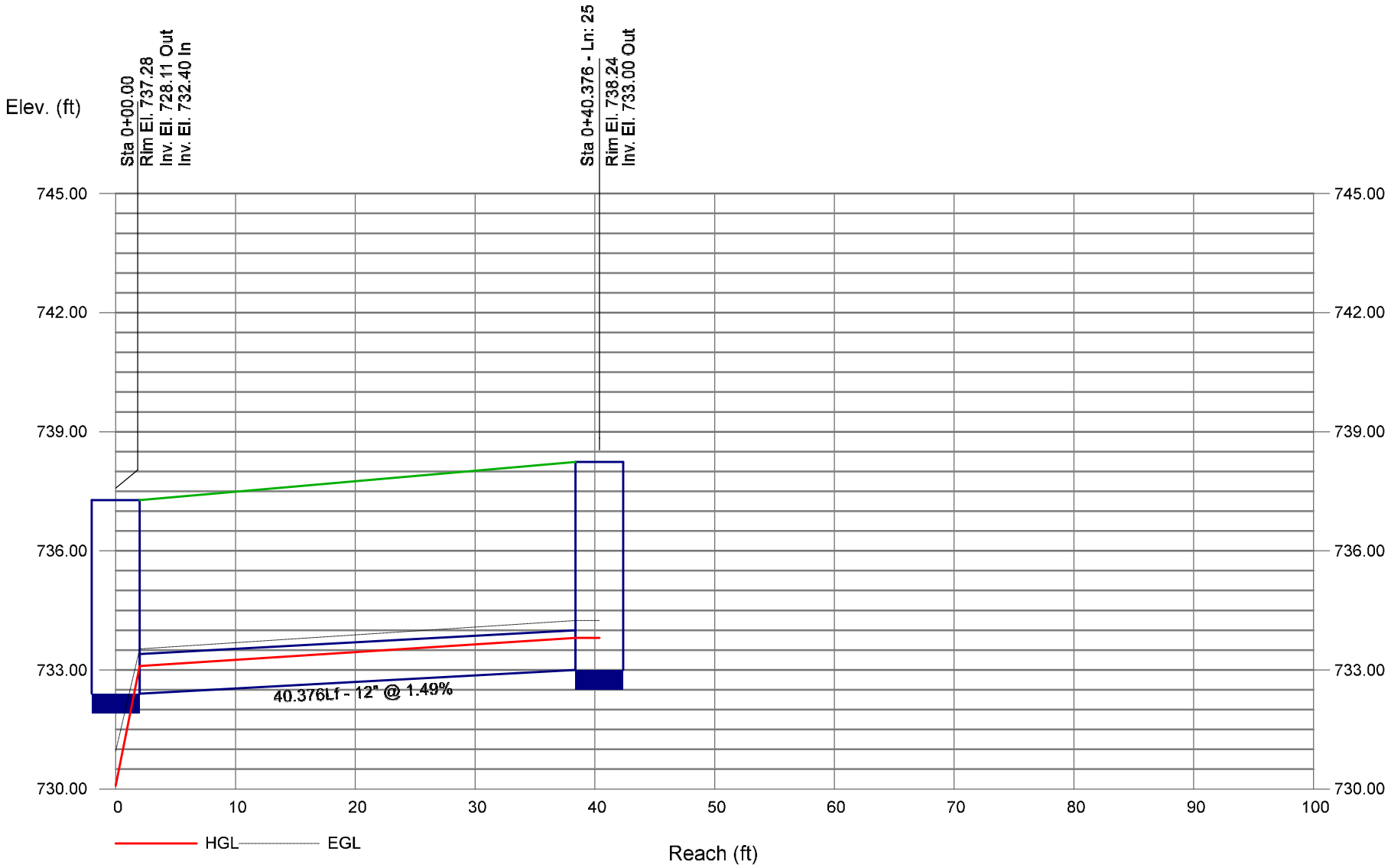

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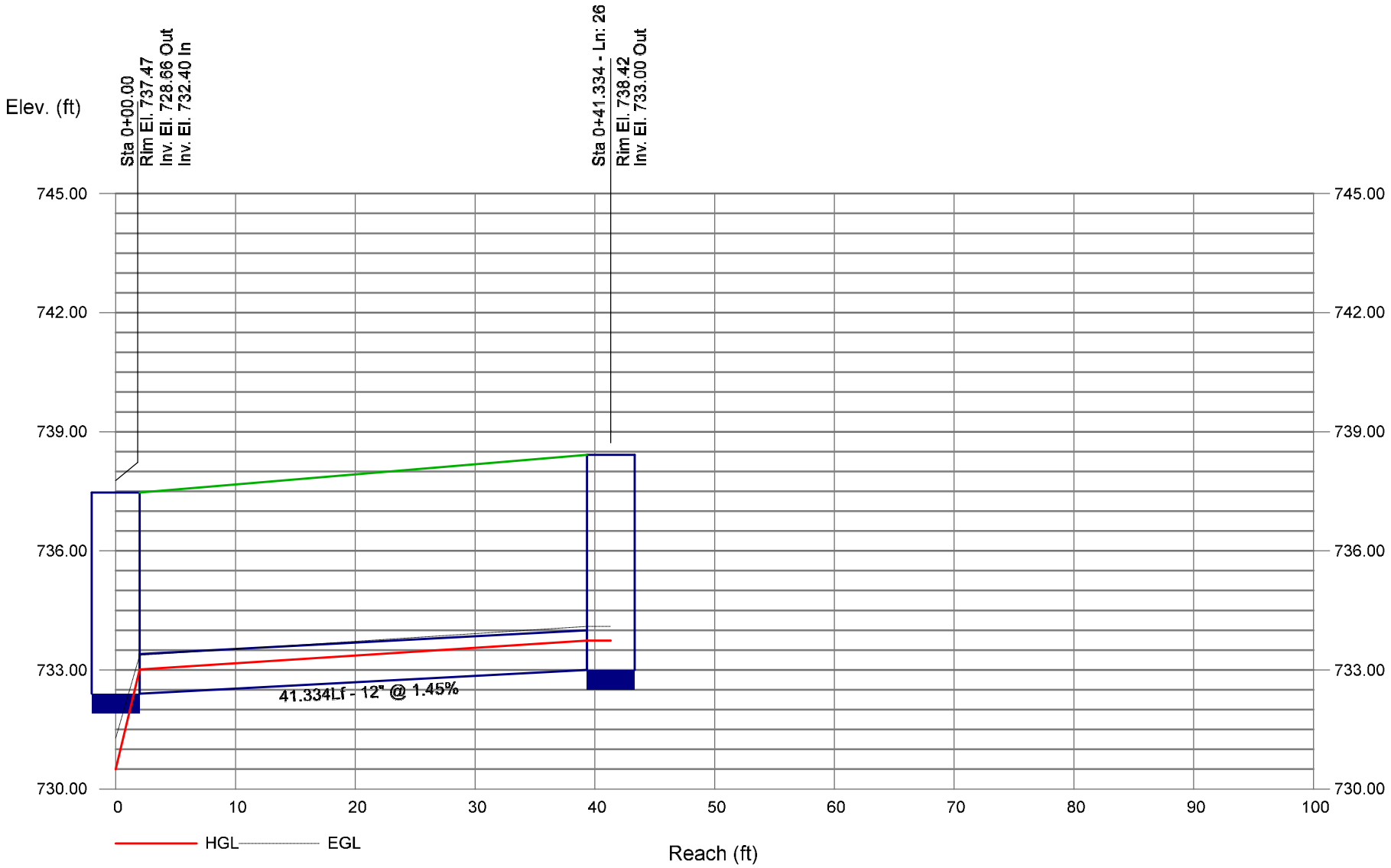

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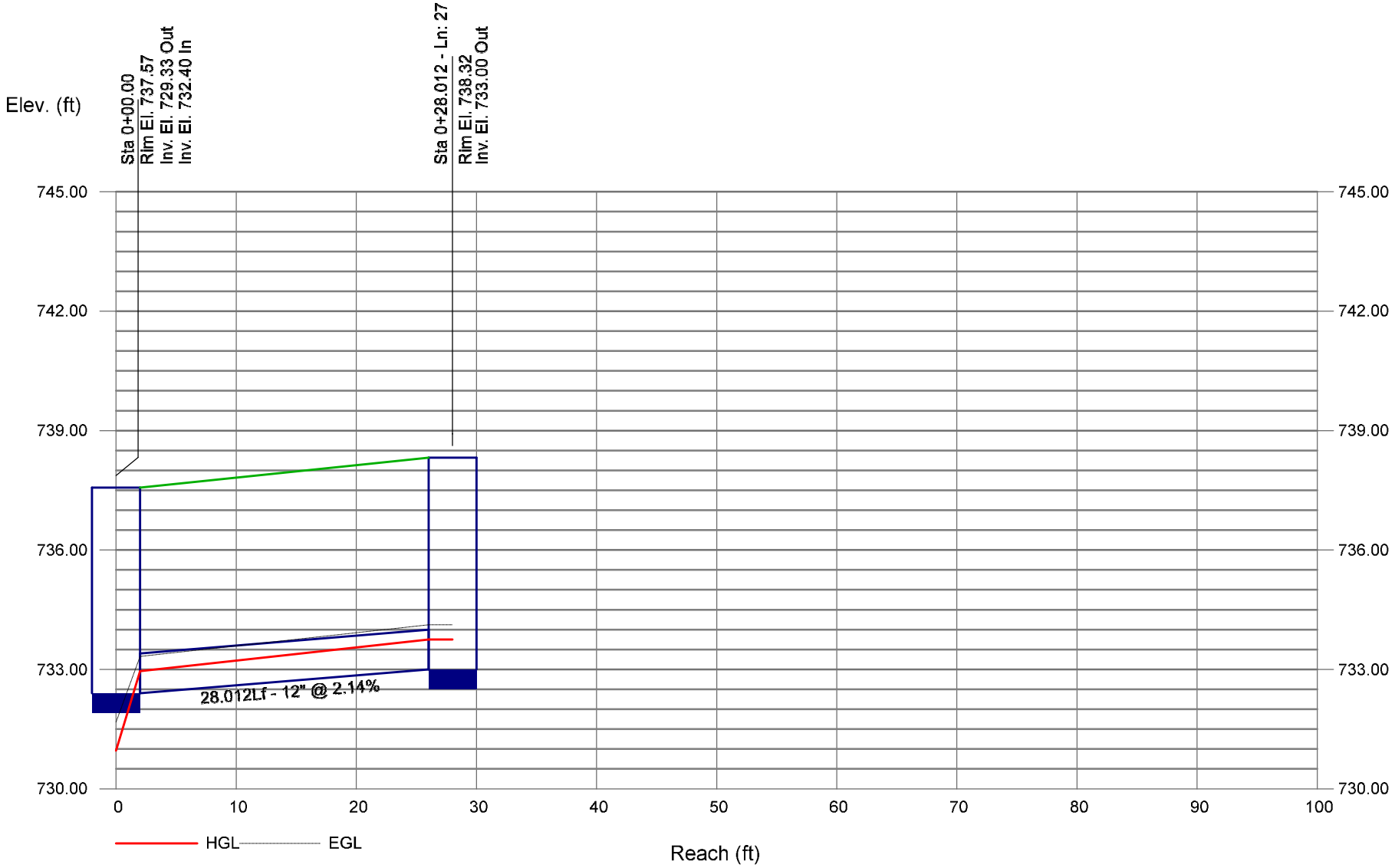

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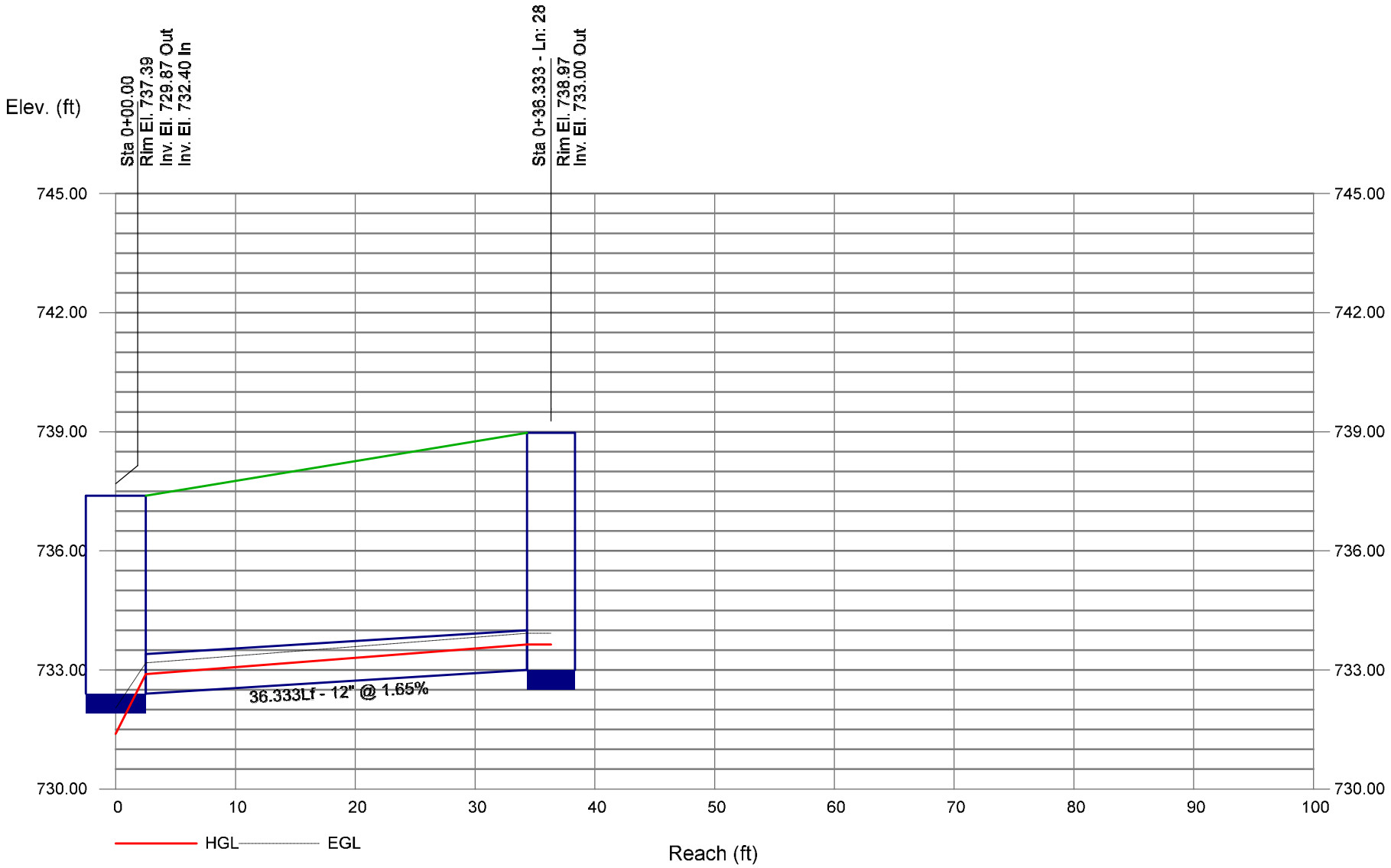

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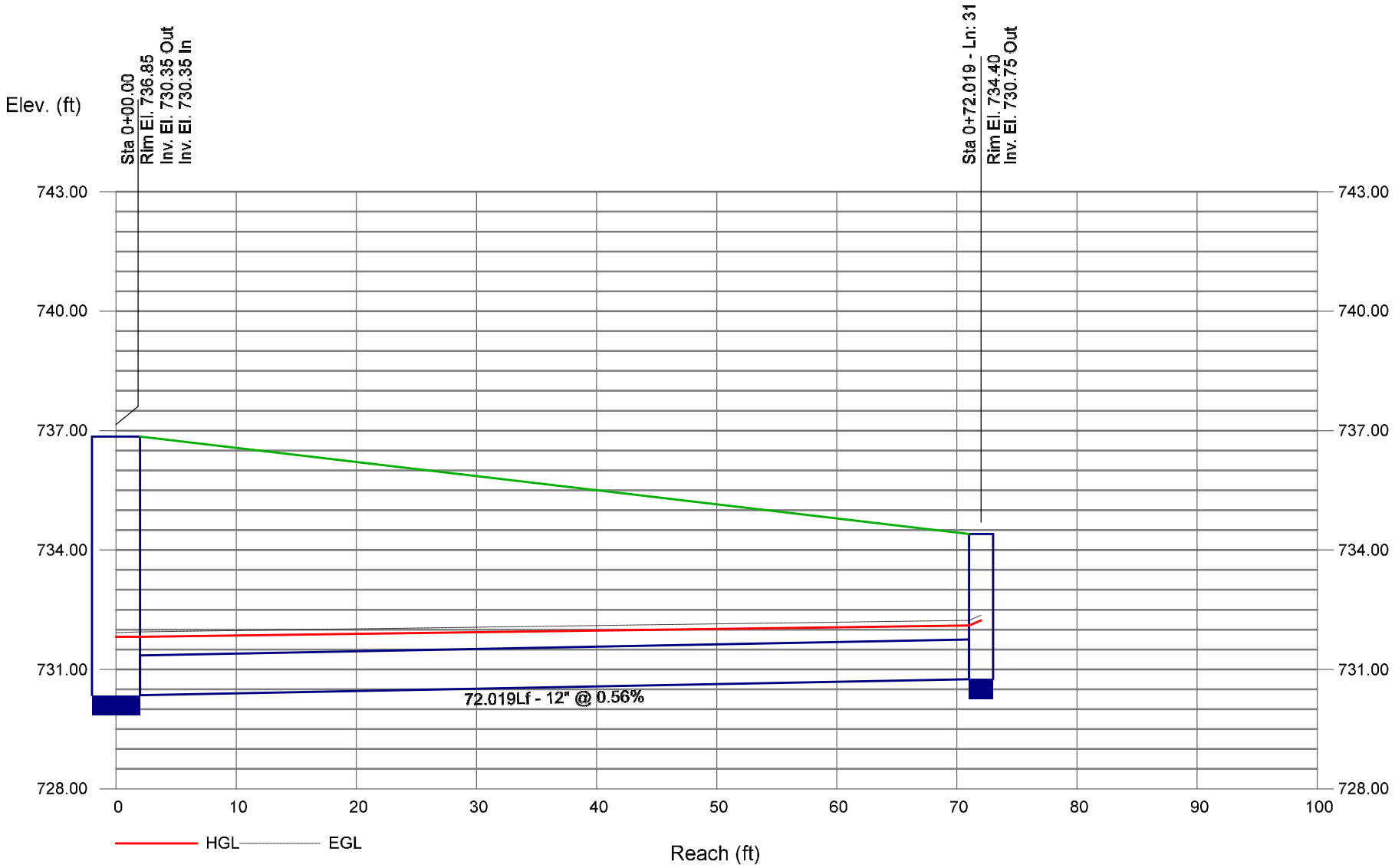

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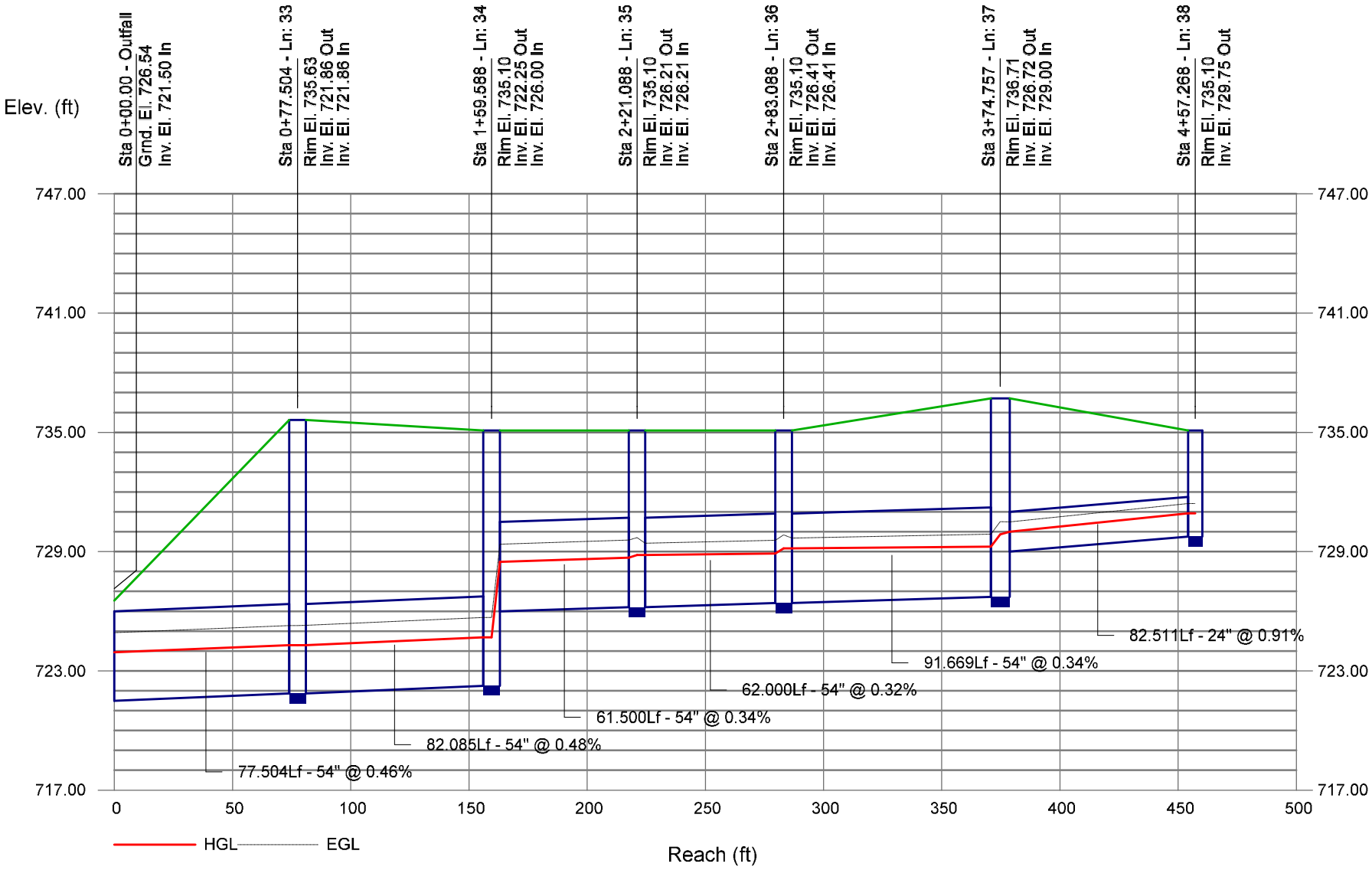

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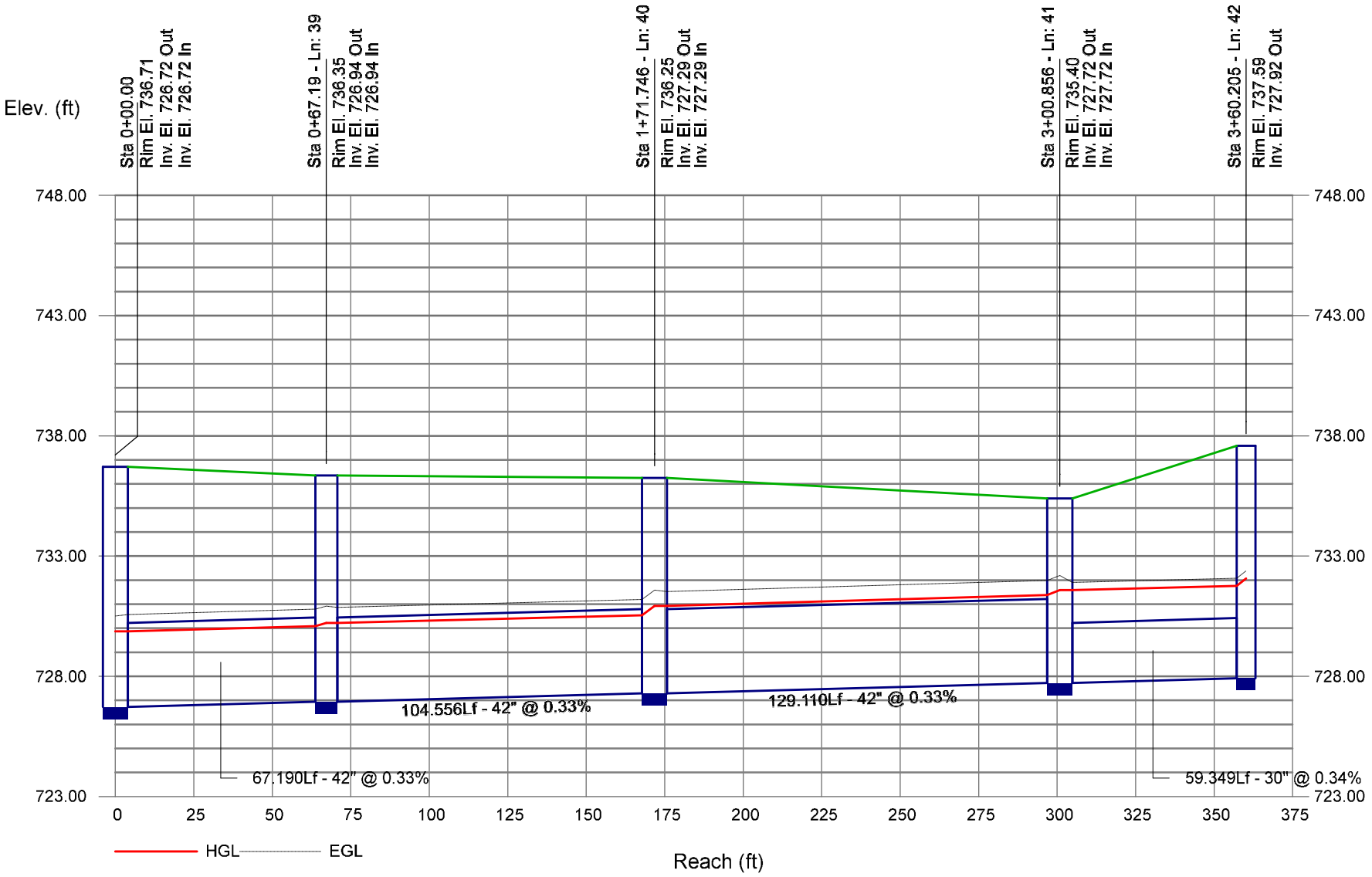

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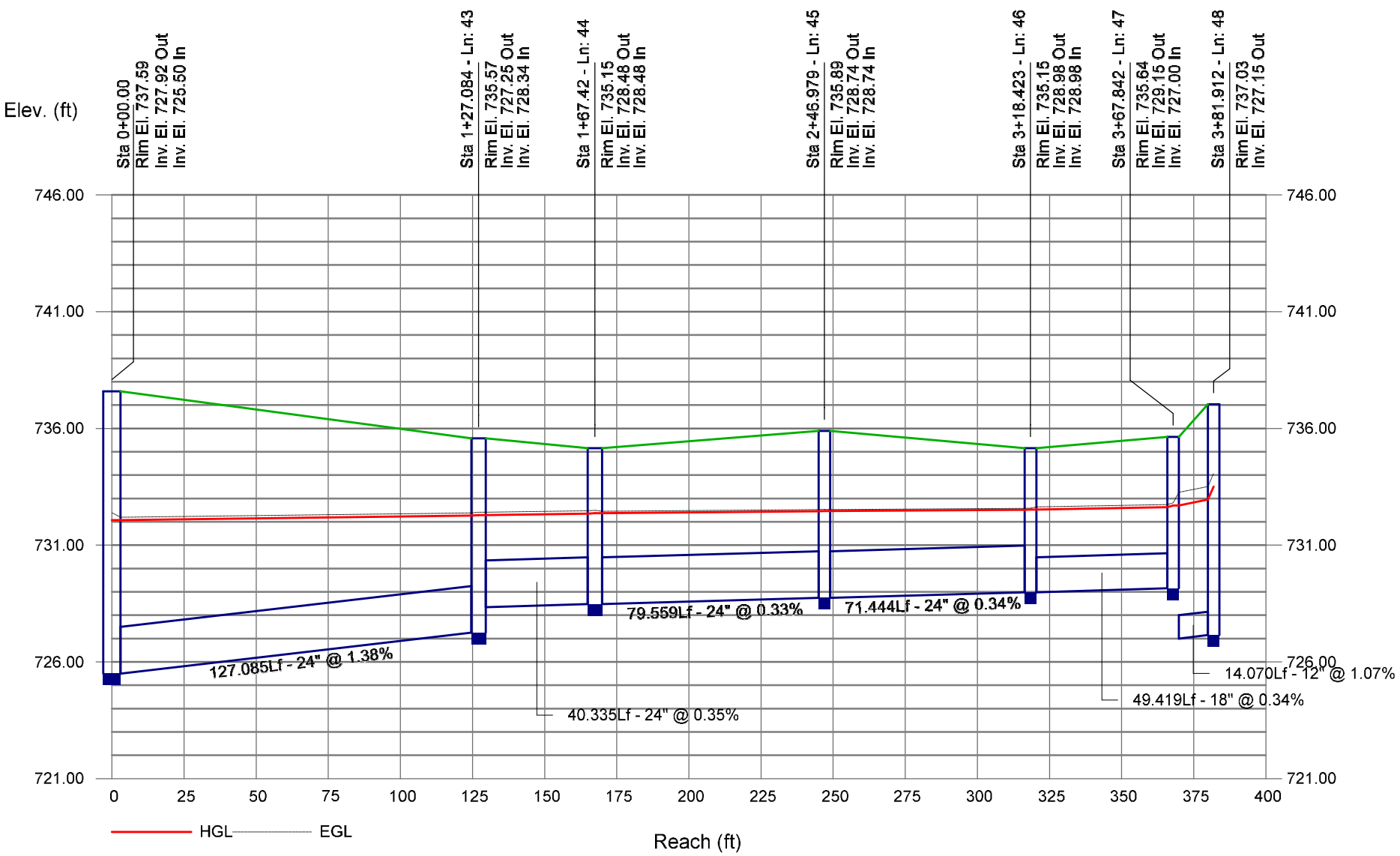
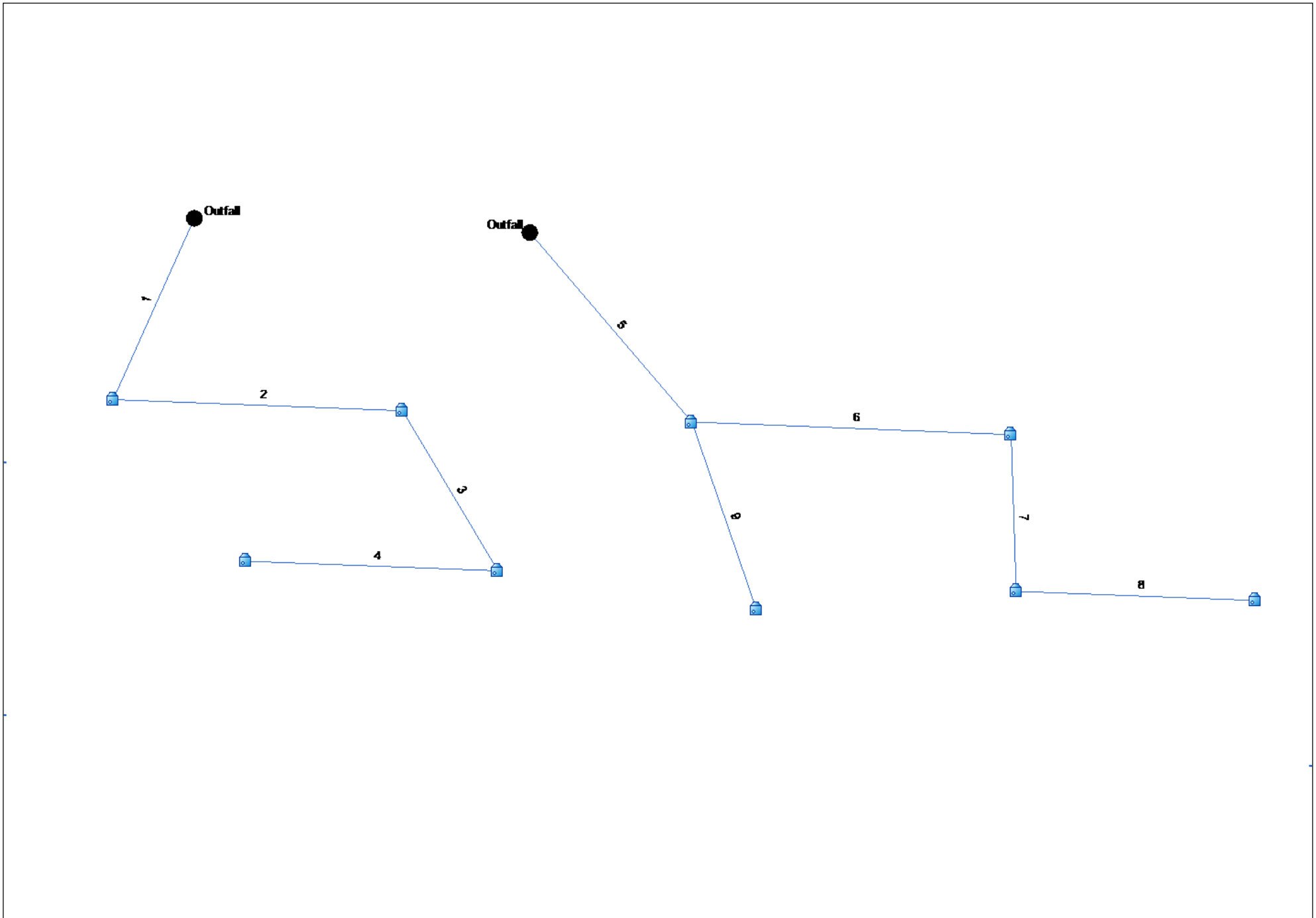


Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Project File: H477a-Storm Sewer-RG-Final.stm	Number of lines: 9	Date: 6/12/2025

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	64.371	0.87	1.31	0.71	0.62	0.95	10.0	12.0	10.1	9.59	22.73	3.05	24	1.01	728.81	729.46	735.25	735.37	735.75	736.30	CB-211
2	1	93.884	0.10	0.44	0.78	0.08	0.33	10.0	11.2	10.4	3.45	10.51	1.95	18	1.00	729.46	730.40	735.51	735.61	736.30	736.30	CB-212
3	2	60.416	0.20	0.34	0.75	0.15	0.26	10.0	10.9	10.5	2.67	3.55	3.40	12	0.99	730.40	731.00	735.66	736.00	736.30	736.75	CB-215
4	3	81.646	0.14	0.14	0.75	0.11	0.11	10.0	10.0	10.8	1.14	3.57	1.45	12	1.00	731.00	731.82	736.18	736.27	736.75	0.00	INL-216
5	End	80.820	0.10	0.88	0.78	0.08	0.69	10.0	11.6	10.2	7.02	22.64	2.23	24	1.00	728.65	729.46	735.25	735.33	735.75	736.30	CB-210
6	5	103.567	0.12	0.52	0.95	0.11	0.41	10.0	11.0	10.5	4.33	10.47	2.45	18	0.99	729.46	730.49	735.39	735.56	736.30	736.25	Pipe 127
7	6	50.793	0.20	0.40	0.75	0.15	0.30	10.0	10.6	10.6	3.18	6.47	2.59	15	1.00	730.49	731.00	735.66	735.78	736.25	736.75	CB-213
8	7	77.750	0.20	0.20	0.75	0.15	0.15	10.0	10.0	10.8	1.63	3.50	2.07	12	0.96	731.00	731.75	735.89	736.05	736.75	736.75	INL-212
9	5	64.286	0.26	0.26	0.75	0.20	0.20	10.0	10.0	10.8	2.11	6.01	2.69	12	2.85	730.92	732.75	735.39	735.61	736.30	736.75	INL-214

Project File: H477a-Storm Sewer-RG-Final.stm

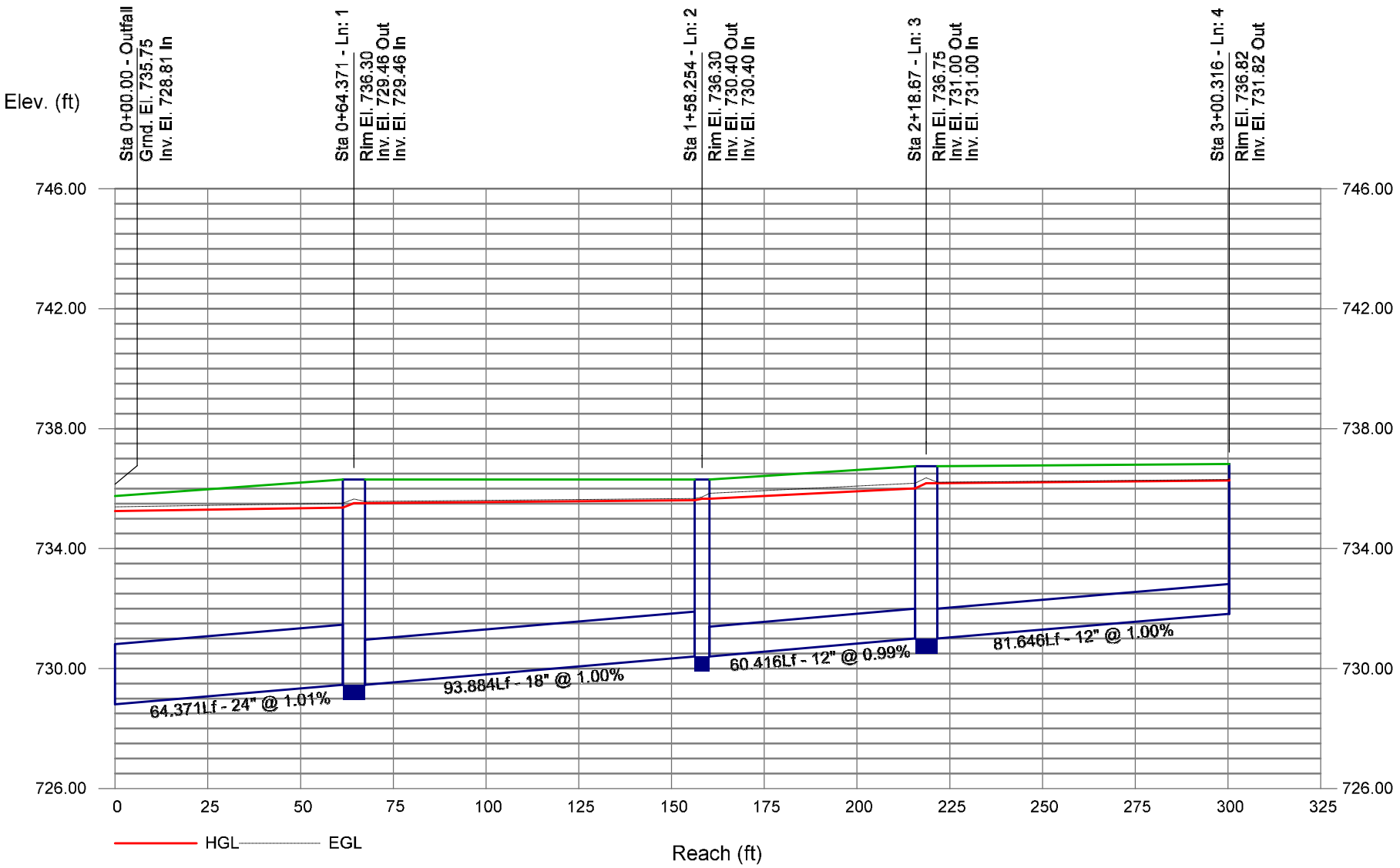
Number of lines: 9

Run Date: 6/12/2025

NOTES:Intensity = 157.45 / (Inlet time + 12.90) ^ 0.85; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Profile

Proj. file: H477a-Storm Sewer-RG-Final.stm



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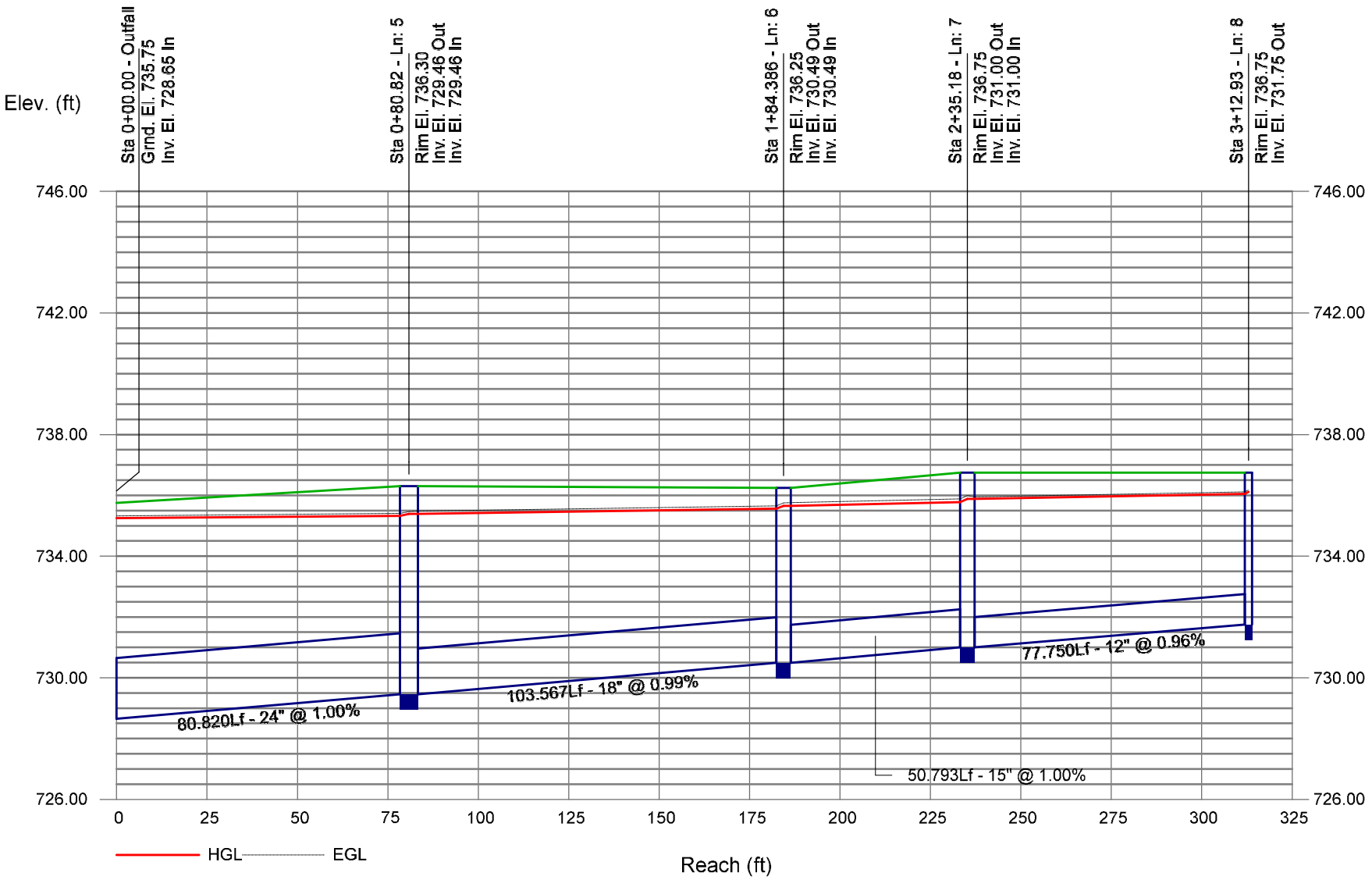

Storm Sewer Profile

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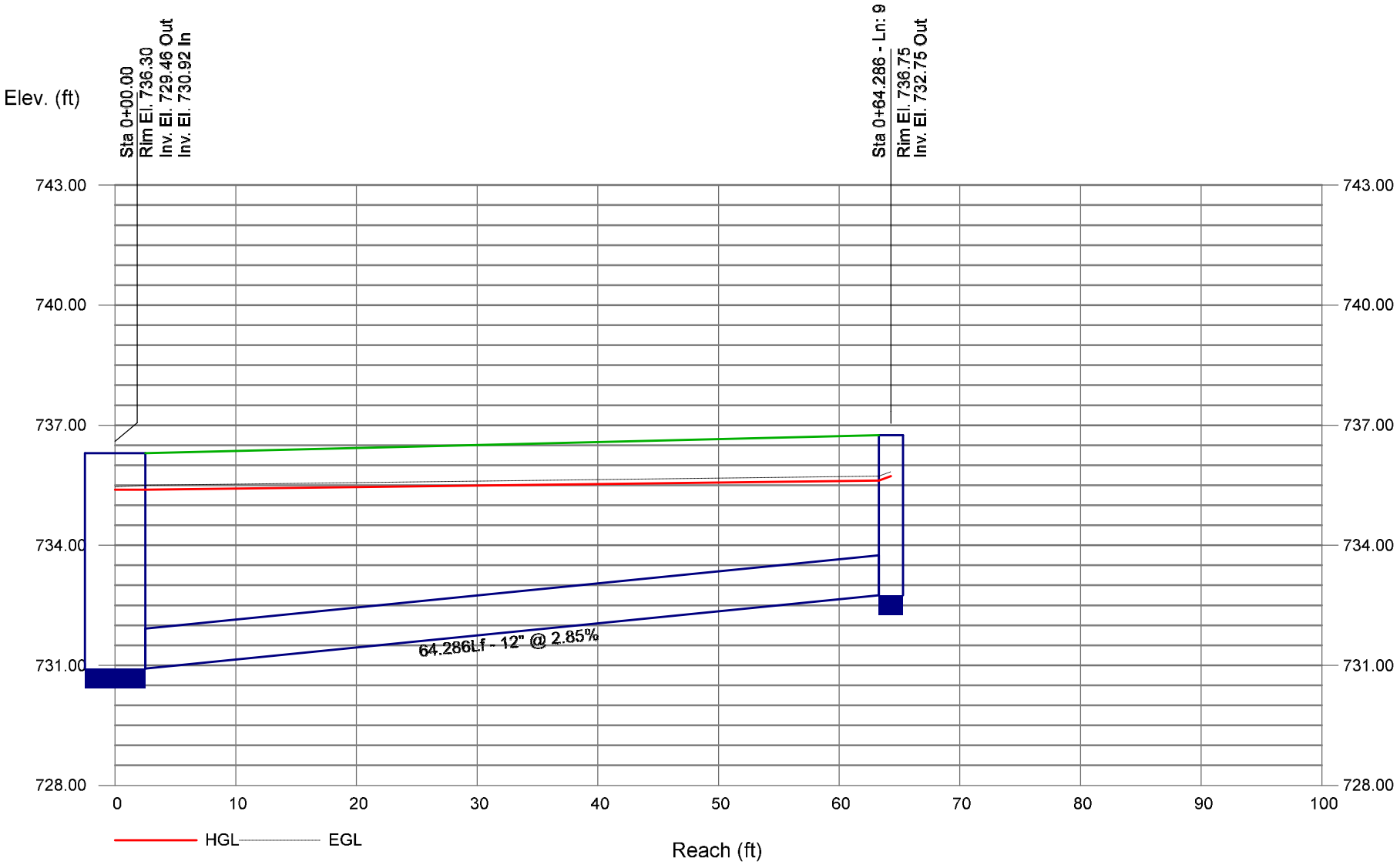

JACOB & HEFNER ASSOCIATES
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

EMERGENCY WEIR SUMMARY

Project: *1960 W Lucent*
Location: *Naperville, Illinois*
Project #: *H477a*

By: *RJC*
Revised: *JMS*

Date: *5/20/2025*
Date: *6/3/2025*

Weir ID	UPSTREAM WEIR	SUB-BASIN DRAINAGE AREA (AC)	SUB-BASIN RUNOFF COEFFICIENT	CUMMULATIVE DRAINAGE AREA (AC)	CUMMULATIVE RUNOFF COEFFICIENT	TIME OF CONCENTRATION (MIN)	INTENSITY (INCH/HOUR)	RUNOFF (CFS)
EMERGENCY WEIR A-A	-	5.38	0.95	5.38	0.95	10.00	10.80	55.20
EMERGENCY WEIR B-B	-	3.31	0.95	3.31	0.95	10.00	10.80	33.96

Notes:
1) Intensity Obtained from Bulletin 75 - Northeast Section (100-year Interval)
2) Runoff utilizes the rational method. Q = C*I*A
3) Storm sewer is designed to convey the 100-year storm event, weirs are provided for emergency overflow situations only.

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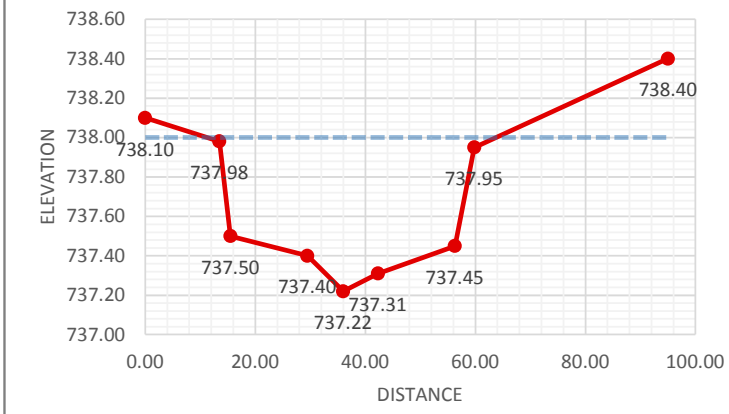
EMERGENCY WEIR CALCULATIONS
WEIR A-A

Project: *1960 W Lucent* By: *RJC* Date: *5/20/2025*
Location: *Naperville, Illinois* Revised: *JMS* Date: *6/3/2025*
Project #: *H477a*

Elevation Data:

Elevation (ft)	Distance (ft)
738.10	0.00
737.98	13.50
737.50	15.50
737.40	29.50
737.22	36.00
737.31	42.30
737.45	56.3
737.95	59.8
738.40	95.0

Cross Section View



Weir Capacity

Max Flow Depth	0.78 ft
Water Surface Elevation	738 ft
Cross Sectional Area	27.19 sq-ft
Weir Coefficient	2.60
Weir Capacity	**62.43 cfs**

Proposed Runoff

Tributary Area	5.38 Acre
Runoff Coeficient	0.95
Time of Concentration	10.0 min
Intensity	10.80 inch/hour
Runoff (Rational Method)	55.20 cfs
Minimum 1 cfs/acre	5.38 cfs
Design Runoff	**55.20 cfs**

Notes:

1) Intensity Obtained from Bulletin 75 - Northeast Section (100-year Interval)
2) Runoff utilizes the rational method. Q = C*I*A
3) Weir capacity equation: Q = C*A*H^(1/2)

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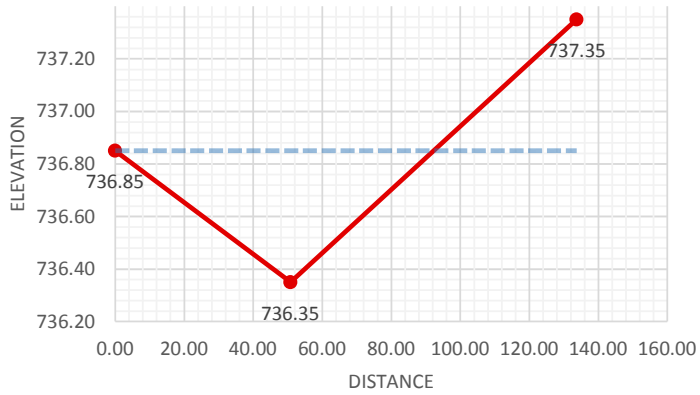
EMERGENCY WEIR CALCULATIONS
WEIR B-B

Project: *1960 W Lucent* By: *RJC* Date: *5/20/2025*
Location: *Naperville, Illinois* Revised: *JMS* Date: *6/3/2025*
Project #: *H477a*

Elevation Data:

Elevation (ft)	Distance (ft)
736.85	0.00
736.35	50.80
737.35	133.70

Cross Section View



Weir Capacity

Max Flow Depth	0.50 ft
Water Surface Elevation	736.85 ft
Cross Sectional Area	23.06 sq-ft
Weir Coefficient	2.60
Weir Capacity	**42.40 cfs**

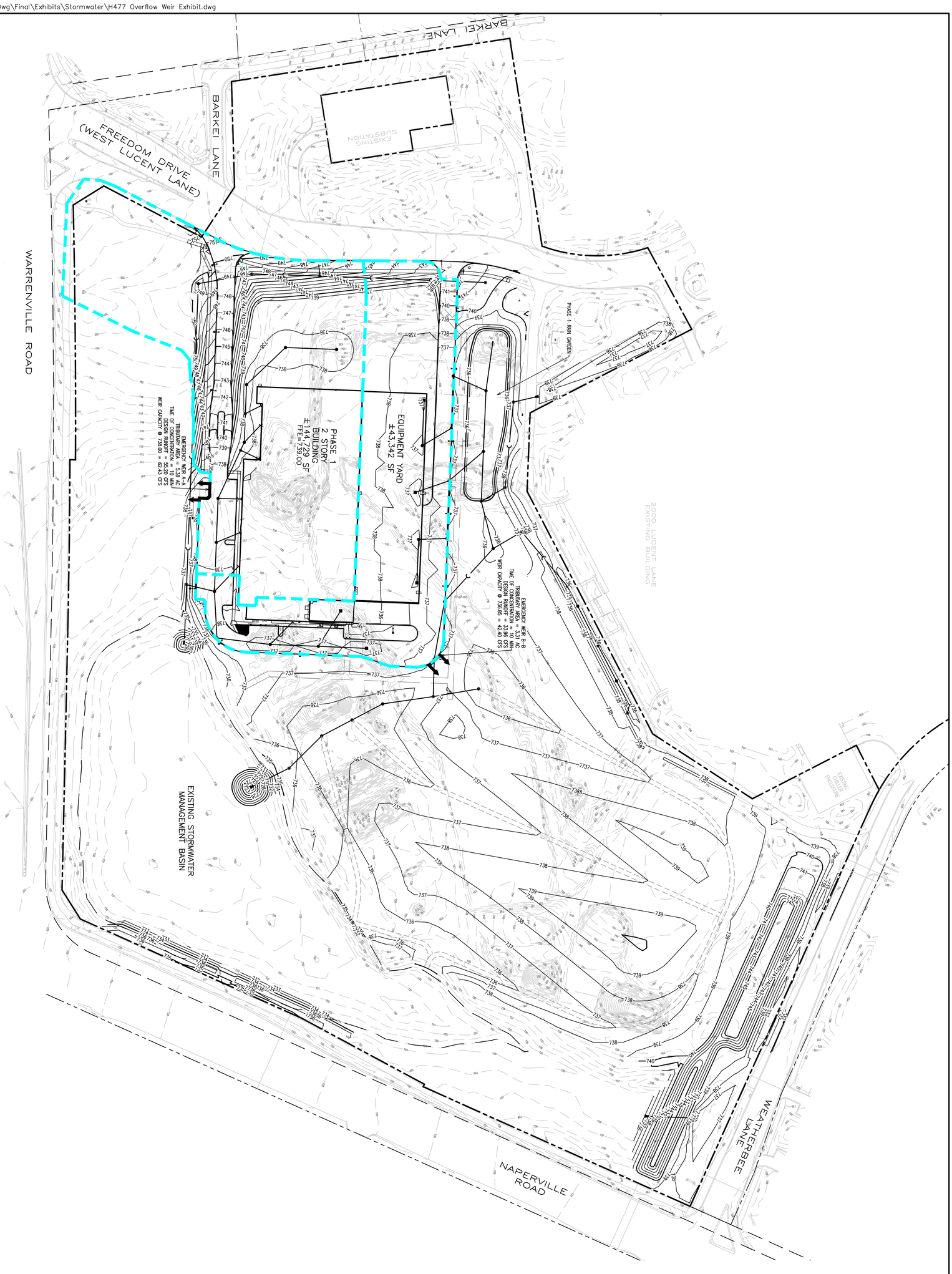
Proposed Runoff

Tributary Area	3.31 Acre
Runoff Coeficient	0.95
Time of Concentration	10.0 min
Intensity	10.80 inch/hour
Runoff (Rational Method)	33.96 cfs
Minimum 1 cfs/acre	3.31 cfs
Design Runoff	**33.96 cfs**

Notes:

1) Intensity Obtained from Bulletin 75 - Northeast Section (100-year Interval)
2) Runoff utilizes the rational method. Q = C*I*A
3) Weir capacity equation: Q = C*A*H^(1/2)

H:\H\H477\E\Dwg\Final\Exhibits\Stormwater\H477 Overflow Weir Exhibit.dwg



WEIR

H477

1" = 80'

JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

EMERGENCY WEIR EXHIBIT

1960 WEST LUCENT LANE
KARIS CRITICAL
NAPERVILLE, ILLINOIS

No.	Description	Date
1	ORIGINAL EXHIBIT DATE	6/10/25

JACOB & HEFNER ASSOCIATES
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Downers Grove, IL 60515
P 630-652-4600
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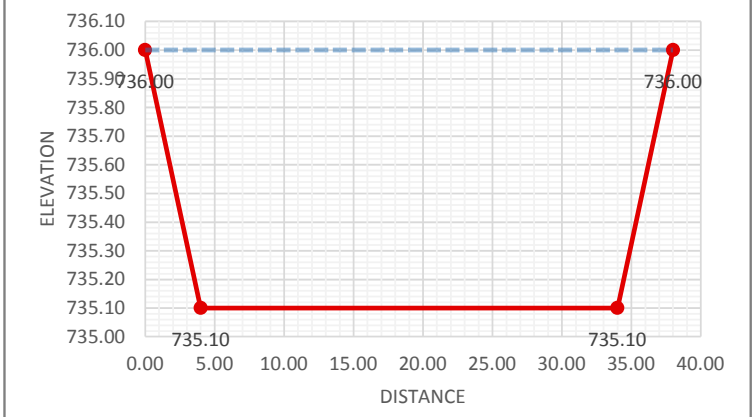
EMERGENCY WEIR CALCULATIONS

Project: *1960 W Lucent* By: *JMS* Date: *6/6/2025*
Location: *Naperville, Illinois* Revised: Date:
Project #: *H477a*

Elevation Data:

Elevation (ft)	Distance (ft)
736.00	0.00
735.10	4.00
735.10	34.00
736.00	38.00

Cross Section View



Weir Capacity

Max Flow Depth	0.90 ft
Water Surface Elevation	736 ft
Cross Sectional Area	30.60 sq-ft
Weir Coefficient	2.60
Weir Capacity	**75.48 cfs**

Proposed Runoff

Tributary Area	63.00 Acres
1 cfs/acre	63.00 cfs
Design Runoff	**63.00 cfs**

Notes:

1) Intensity Obtained from Bulletin 75 - Northeast Section (100-year Interval)
2) Runoff utilizes the rational method. Q = C* 160550
3) Weir capacity equation: Q = C*A*H^(1/2) 39206 0.95 37245.7
121344 0.45 54604.8
91850.5

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F 630-652-4601

STAGE STORAGE CALCULATIONS
EXISTING DETENTION BASIN

Project: 1960 West Lucent Lane
Location: Naperville, IL
Job #: H477

By: JMS
Checked:

Date: 6/6/2025
Date:

As-Built Detention Basin				
Elevation (ft)	Area (sf)	Volume (ac-ft)	Storage (ac-ft)	
729.00	-	0.00	0.00	*NWL*
730.00	-	0.90	0.90	
731.00	-	2.60	3.50	
732.00	-	4.10	7.60	
733.00	-	4.80	12.40	
734.00	-	5.40	17.80	
734.75	-	4.40	22.20	
735.00	-	1.50	23.70	*HWL*

- Refer to as-built stage storage table provided on historical Lucent Technoligies R & D Facility record drawings.

Existing Detention Basin				
Elevation (ft)	Area (sf)	Volume (ac-ft)	Storage (ac-ft)	
729.00	4,649	0.00	0.00	*NWL*
730.00	84,711	0.84	0.84	
731.00	161,046	2.77	3.61	
732.00	193,854	4.07	7.68	
733.00	217,358	4.72	12.40	
734.00	236,605	5.21	17.60	
735.00	259,511	5.69	23.30	
735.10	263,742	0.60	23.90	*HWL*

- Existing detention basin stage storage includes minor pond adjustments included as part of the Phase 1 Construction Plans.

TAB 3

FLOODPLAIN

JACOB & HEFNER
ASSOCIATES

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Downers Grove, IL 60515
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TAB 3: FLOODPLAIN

Pursuant to FEMA Firm Map Number 17043C0161J, effective August 1, 2019, there is Zone X floodplain (0.2% annual chance flood hazard) located within the detention pond at the southeast corner of the site, and also at the northwest corner, north of the substation. Zone X floodplain is not regulated in DuPage County.

TAB 4

WETLAND/WETLAND BUFFER

JACOB & HEFNER
ASSOCIATES

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TAB 4: WETLAND

A wetland delineation of the subject property was completed by V3 Companies in November of 2022 and determined that no jurisdictional wetlands were identified on the property. While DuPage County Wetlands and National Wetlands Inventory maps show wetland area on the southern portion of property, this area was considered exempt due to it being a man made excavated basin. Gary R. Weber Associates (GRWA) have recently reviewed existing site conditions and have confirmed no change in determination and have received concurrence from DuPage County. A cover letter from GRWA and the previous Wetland Determination Report by V3 Companies have been included in this tab for reference.

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE

April 7, 2025

Kristen Bruns, P.E.
Project Manager
Jacob & Hefner Associates, Inc.
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515

SUBJECT: **Wetland Exemption Update: 1960 Lucent Lane**
Naperville, DuPage County, IL

Dear Ms. Bruns,

On March 25, 2025, we conducted a site visit to review the findings of wetland report issued by V3 Companies November 29, 2022. This report reviewed a stormater mananagment basin as part of the overall delineation. Based on a verification with DuPage County on 6/13/2019, this basin was determined to be an exempt feature as described by the DuPage County Stormater Ordinance. This exemption was documented under WBV2019-0018.

No changes to the boundaries or character of the basin were observed during the recent site visit. It is our opinion that the exemption supported in the V3 report is still valid for site development permits. Coordination with DuPage County may be required.

Please feel free to contact me with any comments or questions. I can be reached by phone (630-668-7197) or email (eraimondi@grwainc.com).

Sincerely,

Ellen Raimondi

Ellen Raimondi, PWS
Senior Ecologist, GRWA

402 W. LIBERTY DRIVE WHEATON, ILLINOIS 60187
TELEPHONE: 630-668-7197

WETLAND DELINEATION AND ASSESSMENT REPORT

PROJECT SITE:

1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest

Naperville, DuPage County, Illinois

PREPARED FOR:

Lincoln Property Company Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

PREPARED BY:

V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, Illinois 60517
630-724-9200

July 1, 2019

We hereby certify that this Wetland Delineation and Assessment Report has been prepared by V3 Companies for use by Lincoln Property Company Commercial, Inc., their affiliates, lenders, and assignees.

Project Staff:

Alicia Metzger, CPSC, PWS
Soil Scientist

Daniel Jablonski
Wetland Scientist

Approved by:

Scott J. Brejcha, PWS
Wetland Consulting Group Leader
Natural Resources Division

Thomas E. Slowinski, PWS
Technical Director, Wetlands and Ecology
Natural Resources Division

TABLE OF CONTENTS

APPENDICES

FIGURES

EXECUTIVE SUMMARY

The 176 – acre subject property was investigated by V3 Companies (V3) on April 22, 2019 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or DuPage County jurisdiction.

Delineation Summary.

Thirteen areas were identified on the subject property, including ten emergent wetlands (Areas 1-6 and 9, 10, 11 and 13), two constructed stormwater management basins (Areas 7 and 8) and one man-made roadside ditch (Area 12), and are described in detail below. A summary of the identified areas is provided in Table 1 and a summary of the data points is provided in Table 2. Two off-site regulatory wetlands were identified north and west of the subject property, per the DuPage County Ordinance, and are located within Herrick Lake and Danada Forest Preserves.

- Area 1 (0.14 acres) is an emergent wetland located in the northwest corner of the subject property.
- Area 2 (0.08 acres) is an emergent wetland located in the northwest corner of the subject property.
- Area 3 (1.50 acres on-site; 31.15 acres off-site) is an emergent wetland along the northern corner of the subject property that is associated with Danada Forest Preserve. Area 3 is listed as a critical wetland in DuPage County and continues off-site to the east.
- Area 4 (0.22 acres; 0.35 acres off-site) is an emergent wetland located in the center of the subject property along the north side a constructed berm.
- Area 5 (0.05 acres) is an emergent wetland located in the eastern portion of the subject property in a landscaped area. Area 5 appears to be hydrologically connected to a stormwater management basin located off-site to the north.
- Area 6 (0.13 acres) is drainageway and emergent wetland located in the southwestern portion of the subject property. Area 6 appears on the subject property between 1972 and 1987, as seen on historical aerial imagery (Appendix VI), after the construction of the ComEd substation.
- Area 7 (7.30 acres) is a constructed stormwater management basin located in the southeastern corner of the subject property. Area 7 was under construction in 1972, as seen on historical aerial imagery (Appendix VI) and contains an in ground portion of Rott Creek, as seen on the hydrologic atlas (Figure 4).
- Area 8 (15.73 acres) is a constructed stormwater management basin, known as Bell Pond, located in the western portion of the subject property. Area 8 was under construction in 1972, as seen on historical aerial imagery (Appendix VI) and contains an in ground portion of Rott Creek, as seen on the hydrologic atlas (Figure 4).
- Area 9 (0.05 acres) is an area in the turf grass that satisfies the three wetland criteria.
- Area 10 (0.06 acres) is an area in the turf grass that satisfies the three wetland criteria.
- Area 11 (0.01 acres) is an area in the turf grass that satisfies the three wetland criteria.
- Area 12 (0.05 acres) is an emergent wetland located mostly off-site in the northwest corner of the subject property along a berm. Area 12 continues off-site to the north into Danada Forest Preserve.

- Area 13 (0.27 acres) is a man-made roadside ditch as seen on the engineering plans in Appendix VI.

In V3's professional opinion, Areas 1, 2, 3, 4, 5, 6, 9, 10, 11 and 12 are subject to USACE and DuPage County jurisdiction due to the their hydrologic connection and proximity to a Waters of the U.S./DuPage. Areas 7, 8 and 13 are exempt from jurisdiction because they are constructed stormwater management features.

The delineated boundaries of Areas 1 – 13 were field verified by Mr. Nick Assell and Ms. Jenna Fahey of DuPage County Stormwater and Mr. Scott Brejcha, Ms. Alicia Metzger and Mr. Dan Jablonski of V3 Companies on June 13, 2019.

Regulatory Summary.

Pursuant to Section 404 of the Clean Water Act, the U. S. Army Corps of Engineers (USACE) has jurisdiction over the placement of fill or dredged material in all jurisdictional Waters of the United States (Waters). Jurisdictional areas include rivers, streams, tributaries, lakes, natural ponds and wetlands adjacent (bordering, contiguous or neighboring) to these areas.[1] A tributary is characterized by the presence of physical indicators of flow (bed and bank, ordinary high water mark) that contribute flow directly or through another Waters to a traditional navigable or interstate water. Ditches that meet certain criteria can be considered a tributary. Swales and erosional features are generally not considered to be tributaries or Waters.

Wetlands not considered adjacent waters, but located within 4,000 feet of the high tide line or ordinary water mark of traditional navigable waters, interstate waters, or a jurisdictional tributary, can be jurisdictional if they have a significant nexus to a traditional navigable or interstate waters (floodplain Waters/wetlands). A significant nexus determination will be based on hydrologic and ecological factors.

Wetlands not considered adjacent to jurisdictional Waters are considered isolated wetlands and are not regulated under the Clean Water Act.

If less than 0.10 acre of impact to USACE jurisdictional wetlands are proposed, the project would likely qualify for a Regional Permit from the USACE without wetland mitigation. If wetland impacts will consist of between 0.10 acre and 1.0 acre of wetland, a Regional Permit would still be possible, but compensatory mitigation will be required at a minimum ratio of 1.5:1. Mitigation at a higher ratio (typically 3:1 or greater) would be required for impacts to High Quality Aquatic Resources (HQAR). Wetland impacts greater than 1.0 acre will require an Individual Permit, with a public comment period and additional regulatory scrutiny. Required buffer widths under the Regional Permit Program are shown in Table 1. If a permit from the USACE is not required, then the USACE buffer requirements are not applicable.

Pursuant to the *2013 DuPage County Countywide Stormwater and Flood Plain Ordinance* (Ordinance), any development that affects a special management area (i.e., floodplain, wetland, wetland buffer, or waterway buffer) requires a Stormwater Management Permit. All delineated wetlands are to be classified as critical or regulatory wetlands according to the criteria defined in Section 15-85 of the Ordinance. A vegetated buffer 50 feet wide is required around all regulatory wetlands and a vegetated buffer 100 feet wide is

[1] Obama 2015 Clean Water Rule, as of August 16, 2018

required around all critical wetlands, unless mitigation for buffer functions is provided. Information concerning applicable regulatory requirements is provided in **Appendix III**.

Table 1. Wetland Summary Table

Area	On-Site Size (Acres)	Off-Site Size (Acres)	Native Mean Conservatism (NMC)*	Floristic Quality Index (FQI)*	Quality**	USACE Jurisdiction	Buffer Required
1	0.14	N/A	2.67	10.33	Non-HQAR	Yes	50’
2	0.08	N/A	2.40	5.37	Non-HQAR	Yes	50’
3	1.50	31.15	2.83	9.81	HQAR	Yes	100’
4	0.22	0.35	2.18	7.24	Non-HQAR	Yes	50’
5	0.05	N/A	2.71	7.18	Non-HQAR	Yes	50’
6	0.13	N/A	2.60	10.07	Non-HQAR	Yes	50’
9	0.05	N/A	1.83	4.49	Non-HQAR	Yes	50’
10	0.06	N/A	1.83	4.49	Non-HQAR	Yes	50’
11	0.01	N/A	1.86	4.91	Non-HQAR	Yes	50’
12	0.05	N/A	2.71	7.18	Non-HQAR	Yes	50’
Total	**2.56**	**31.50**					

* Based on the Floristic Quality Assessment (FQA) methodology in *Plants of the Chicago Region* (Swink and Wilhelm, 1994).

** **Regulatory**= Non-HQAR Isolated Wetland (NMC ≤ 3.5 and FQI ≤ 20, DuPage County jurisdiction); **Critical**= High Quality Isolated Wetland (NMC ≥ 3.5 or FQI ≥ 20, DuPage County jurisdiction); **Non-HQAR**= Non- High Quality Aquatic Resource (NMC ≤ 3.5 and FQI ≤ 20, USACE jurisdiction); **HQAR**= High Quality Aquatic Resource (NMC ≥ 3.5 or FQI ≥ 20, USACE jurisdiction); **WOUS**= Waters of the United States (USACE jurisdiction)

Table 2. Data Point Summary Table

Area	Data Point	Hydrophytic Vegetation?	Hydric Soils?	Wetland Hydrology?	Wetland (Y/N)
1	X03	Y	Y	Y	Y
2	X05	Y	Y	Y	Y
3	X07	Y	Y	Y	Y
4	X11	Y	Y	Y	Y
5	X13	Y	Y	Y	Y
6	X15	Y	Y	Y	Y
7	X14	N	N	Y	N
8	X17	Y	Y	Y	Y
9	X08	Y	Y	Y	Y
10	X09	Y	Y	Y	Y
11	X18	Y	Y	Y	Y
12	X19	Y	Y	Y	Y
13	X16	Y	Y	Y	Y
14	X01	N	Y	N	N
15	X02	Y	N	N	N
16	X04	N	N	N	N
17	X06	Y	N	N	N
18	X10	Y	N	Y	N
19	X12	Y	N	N	N

INTRODUCTION AND BACKGROUND

The 176 – acre subject property was investigated by V3 Companies (V3) on April 22, 2019 to determine the presence, extent and quality of any wetlands or other areas under U.S. Army Corps of Engineers (USACE) and/or DuPage County jurisdiction. Any identified wetland boundaries are marked in the field using pink wire flags labeled "Wetland Delineation" and numbered consecutively from beginning to end. This report summarizes the results of the field investigation and provides technical documentation for all investigated areas. The delineated boundaries of Areas 1 – 13 were field verified by Mr. Nick Assell and Ms. Jenna Fahey of DuPage County Stormwater and Mr. Scott Brejcha, Ms. Alicia Metzger and Mr. Dan Jablonski of V3 Companies on June 13, 2019.

The subject property is located north of Warrenville Road, south of Butterfield Road, east of Herrick Lake Forest Preserve and west of Naperville Road in Naperville, DuPage County, Illinois (Section 5, T38N, R10E; 41.819002°N, -88.124043°W; Wheaton and Naperville quadrangle, Figure 1).

Six wetlands are identified on the subject property on the National Wetlands Inventory (NWI) Map (Figure 2). The wetlands include three palustrine, emergent, persistent, temporarily flooded (PEM1A) wetland; one palustrine, emergent, persistent, semipermanently flooded (PEM1F) wetland; one palustrine, emergent, persistent, temporariliy flooded (PEM1Ah) wetland and one palustrine, unconsolidated bottom, intermittently exposed, excavated (PUBGx) wetland.

Five regulatory wetlands and one critical wetland are identified on the subject property on the DuPage County Wetlands Map (Figure 3).

The USGS Hydrologic Atlas (Figure 4) shows the presence of a portion of Rott Creek in the southeastern portion of the subject property. The stream is labeled as "Stream in underground conduit" and on aerial imagery appears to be hydrologically connected to Area 7 and Area 8 via underground pipes.

The 12-Digit Hydrologic Unit Code (HUC) Map (Figure 5) shows that the subject property lies within the East Branch DuPage River sub watershed (Hydrologic Unit 071200040804), which is associated with the larger Des Plaines River watershed.

The FEMA Flood Insurance Rate Map (FIRM) (Figure 6) identifies flood zone A in the northeastern corner associated with the off-site ciritical wetland and flood zone X in the southeast corner near Area 7.

The DuPage County Regulatory Flood Map (RFM) (Figure 7) identifies flood zone A and X throughout the southern portion of the subject property associated with Rott Creek, Bell Pond and EBRC #5.

Eleven soil series are mapped on the subject property on the Soil Survey of DuPage County, Illinois (2015) Map (Figure 8) and include:

Soil Map Unit	Soil Name	Hydric?
69A	Milford silty clay loam	Yes
146A	Elliott silt loam	No
189A	Martinton silt loam	No
232A	Ashkum silty clay loam	Yes

Soil Map Unit	Soil Name	Hydric?
298A	Beecher silt loam	No
330A	Peotone silty clay loam	Yes
530B/530C2	Ozaukee silt loam	No
531B	Markham silt loam	No
697A	Wauconda silt loam	No
805B	Orthents, clayey	No
1903A	Muskego and Houghton mucks	Yes

Figure 9, a DuPage County Aerial Image (2017), shows the location of all data points and the locations of the delineated areas as professionally surveyed by V3 Companies.

WETLAND DELINEATION METHODS

Wetland delineations are conducted following the methods given in the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region*. Under the delineation procedures in this manual, an area must exhibit characteristic hydrophytic vegetation, hydric soils, and wetland hydrology to be considered a wetland. If field investigation determines that any of the three parameters are not satisfied, the area usually does not qualify as wetland. Moreover, drainage ditches excavated in dry land are generally not considered jurisdictional waters of the United States by the Corps of Engineers (preamble to 33 CFR Parts 320 through 330, *Federal Register* Vol. 56, No. 219, 41217).

As part of a delineation report, data forms and technical information are required by the U.S. Army Corps of Engineers, to document the three parameters for any area determined to be wetland. Data forms for wetlands identified at the subject property are provided in **Appendix I**. The vegetation data calculated on the data forms reflects the changes made to the National Wetland Plant List as of May 1, 2016. Representative photographs of delineated wetlands are provided in **Appendix II**. A brief description of the field methods used and a description of the three wetland parameters are provided in **Appendix IV**.

Plant species lists are compiled for each area identified, focusing on the plant communities within each identified wetland area. This accumulated floristic data is analyzed using the Floristic Quality Assessment (FQA) methodology, which is an assessment technique for a rapid quality evaluation of vegetation in a defined area. Technical names in the FQA and this report follow the nomenclature of *The National Wetland Plant List: 2014 Update of Wetland Ratings* (Lichvar *et. al.,* 2014). A detailed explanation of the Floristic Quality Assessment method is provided in **Appendix IV**.

As part of the wetland delineation assessment, Illinois Department of Natural Resources (IDNR) and US Fish and Wildlife Service (USFWS) threatened and endangered species evaluations were conducted (**Appendix V**).

The IDNR EcoCAT report shows the following protected resources may be within the vicinity of the subject property:

- Herrick Lake Forest Preserve INAI Site
- Black-Billed Cuckoo *(Coccyzus erythropthalmus)*

The IDNR confirmed that adverse effects to protected resources are unlikely and have terminated consultation. Refer to **Appendix V** for further information.

The USFWS Section 7 consultation did not find species or critical habitat present on the subject property. A copy of the USFWS Section 7 consultation is included in **Appendix V**.

RESULTS OF THE FIELD INVESTIGATION

JURISDICTIONAL AREAS

Area 1 –Emergent Wetland

Data Point X03

Area 1 (0.14 acres) is an emergent wetland located in the northwest corner of the subject property.

Summary:

- Emergent Wetland
- Jurisdiction: USACE and DuPage County
- Quality: Non-HQAR/Regulatory
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X03 are green ash (*Fraxinus pennsylvanica*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 1 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.67**	Species Richness (all)	28
Mean C (all species)	1.43	Species Richness (native)	15
Mean C (native trees)	3.50	% Non-native	0.46
Mean C (native shrubs)	0.00	Wet Indicator (all)	-0.29
Mean C (native herbaceous)	2.73	Wet Indicator (native)	-1.00
FQAI (native species)	**10.33**	% hydrophyte (Midwest)	0.75
FQAI (all species)	7.56	% native perennial	0.46
Adjusted FQAI	19.52	% native annual	0.07
% C value 0	0.46	% annual	0.11
% C Value 1-3	0.43	% perennial	0.79
% C value 4-6	0.07		
% C value 7-10	0.04		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
apocan	*Apocynum cannabinum*	*Apocynum sibiricum*	Indian-Hemp	2	FAC	FAC	0	Forb	Perennial
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	FACU	1	Forb	Biennial
ascinc	*Asclepias incarnata*	*Asclepias incarnata*	Swamp Milkweed	3	OBL	OBL	-2	Forb	Perennial
barvul	*Barbarea vulgaris*	*BARBAREA VULGARIS*	Garden Yellow-Rocket	0	FAC	FAC	0	Forb	Biennial
bidfro	*Bidens frondosa*	*Bidens frondosa*	Devil's-Pitchfork	1	FACW	FACW	-1	Forb	Annual
cxcris	*Carex cristatella*	*Carex cristatella*	Crested Sedge	4	FACW	FACW	-1	Sedge	Perennial
cxmole	*Carex molesta*	*Carex molesta*	Troublesome Sedge	2	FAC	FAC	0	Sedge	Perennial
cxtrib	*Carex tribuloides*	*Carex tribuloides*	Blunt Broom Sedge	7	OBL	FACW	-2	Sedge	Perennial
cxvulp	*Carex vulpinoidea*	*Carex vulpinoidea*	Common Fox Sedge	2	FACW	OBL	-1	Sedge	Perennial

cirarv	*Cirsium arvense*	*CIRSIUM ARVENSE*	Canadian Thistle	0	FACU	FACU	1	Forb	Perennial
daucar	*Daucus carota*	*DAUCUS CAROTA*	Queen Anne's Lace	0	UPL	UPL	2	Forb	Biennial
eleery	*Eleocharis palustris*	*Eleocharis erythropoda; Eleocharis palustris major*	Common Spike-Rush	1	OBL	OBL	-2	Sedge	Perennial
elyrep	*Elymus repens*	*AGROPYRON REPENS; Elytrigia repens*	Creeping Wild Rye	0	FACU	FACU	1	Grass	Perennial
frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima; Fraxinus lanceolata*	Green Ash	4	FACW	FACW	-1	Tree	Perennial
geulac	*Geum laciniatum*	*Geum laciniatum*	Rough Avens	3	FACW	FACW	-1	Forb	Perennial
lotcor	*Lotus corniculatus*	*LOTUS CORNICULATUS*	Garden Bird's-Foot-Trefoil	0	FACU	FACU	1	Forb	Perennial
perhyr	*Persicaria hydropiper*	*Polygonum hydropiper*	Mild Water-Pepper	2	OBL	OBL	-2	Forb	Annual
polper	*Persicaria maculosa*	*POLYGONUM PERSICARIA*	Lady's-Thumb	0	FACW	FAC	-1	Forb	Annual
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	FACW	-1	Grass	Perennial
poapra	*Poa pratensis*	*POA PRATENSIS*	Kentucky Blue Grass	0	FAC	FACU	0	Grass	Perennial
pyrcal	*Pyrus calleryana*	*PYRUS CALLERYANA*	Ornamental Pear	0	UPL	UPL	2	Tree	Perennial
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	FAC	0	Shrub	Perennial
rosmul	*Rosa multiflora*	*ROSA MULTIFLORA*	Rambler Rose	0	FACU	FACU	1	Shrub	Perennial
rumcri	*Rumex crispus*	*RUMEX CRISPUS*	Curly Dock	0	FAC	FAC	0	Forb	Perennial
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	FACW	0	Forb	Perennial
toxrad	*Toxicodendron radicans*	*Rhus radicans*	Eastern Poison-Ivy	2	FAC	FAC	0	Vine	Perennial
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	FACW	-1	Tree	Perennial
vitrip	*Vitis riparia*	*Vitis riparia var. syrticola*	River-Bank Grape	1	FACW	FAC	-1	Vine	Perennial

Soils: The soil profile at Data Point X03 consisted of 0-11 inches of black (10YR 2/1) silt loam with 20% brownish yellow (10YR 6/8) redoximorphic concentrations. Below that, to a depth of 15 inches below the surface, the soil profile was dark grayish brown (2.5Y 4/2) silty clay loam with 15% brownish yellow (10YR 6/6) redoximorphic concentrations and 5% gray (10YR 6/1) redoximorphic depletions. This profile exhibits hydric soil indicator A11, Depleted Below Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of presence of primary wetland hydrology indicator A2, High Water Table at 4 inches below the surface, satisfies the hydrology criterion.

Conclusion: Data Point X03 satisfies all three criteria; therefore Area 1 qualifies as wetland.

Area 2 –Emergent Wetland

Data Point X05

Area 2 (0.08 acres) is an emergent wetland located in the northwest corner of the subject property.

Summary:

- Emergent Wetland
- Jurisdiction: USACE and DuPage County
- Quality: Non-HQAR/Regulatory
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X05 is reed canary grass (*Phalaris arundinacea*). The dominant species is hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 2 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.40**	Species Richness (all)	11
Mean C (all species)	1.09	Species Richness (native)	5
Mean C (native trees)	0.00	% Non-native	0.55
Mean C (native shrubs)	4.00	Wet Indicator (all)	-0.18
Mean C (native herbaceous)	2.00	Wet Indicator (native)	-0.80
FQAI (native species)	**5.37**	% hydrophyte (Midwest)	0.82
FQAI (all species)	3.62	% native perennial	0.45
Adjusted FQAI	16.18	% native annual	0.00
% C value 0	0.55	% annual	0.09
% C Value 1-3	0.36	% perennial	0.82
% C value 4-6	0.09		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species (Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
apocan	*Apocynum cannabinum*	*Apocynum sibiricum*	Indian-Hemp	2	FAC	Forb	Perennial	Native	apocan
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive	diplac
eleery	*Eleocharis palustris*	*Eleocharis erythropoda; Eleocharis palustris major*	Common Spike-Rush	1	OBL	Sedge	Perennial	Native	eleery
jundud	*Juncus dudleyi*	*Juncus dudleyi*	Dudley's Rush	2	FACW	Forb	Perennial	Native	jundud
polper	*Persicaria maculosa*	*POLYGONUM PERSICARIA*	Lady's-Thumb	0	FACW	Forb	Annual	Adventive	polper
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive	phaaru
poapra	*Poa pratensis*	*POA PRATENSIS*	Kentucky Blue Grass	0	FAC	Grass	Perennial	Adventive	poapra
pyrcal	*Pyrus calleryana*	*PYRUS CALLERYANA*	Ornamental Pear	0	UPL	Tree	Perennial	Adventive	pyrcal
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive	rhacat
samcan	*Sambucus nigra ssp. canadensis*	*Sambucus canadensis*	Black Elder	4	FAC	Shrub	Perennial	Native	samcan
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	Forb	Perennial	Native	astsim

Soils: The soil profile at Data Point X05 consisted of 0-4 inches of black (10YR 2/1) silt loam underlain by 6 inches, to a depth of 10 inches below the surface, of dark grayish brown (2.5Y 4/2) silty clay loam with 25% yellowish brown (10YR 5/8) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X05 satisfies all three criteria; therefore Area 2 qualifies as wetland.

Area 3 – High Quality Emergent Wetland

Data Point X07

Area 3 (1.50 acres on-site; 31.15 acres off-site) is an emergent wetland along the northern corner of the subject property that is associated with Danada Forest Preserve. Area 3 is listed as a critical wetland in DuPage County and continues off-site to the east.

Summary:

- Emergent Wetland
- Jurisdiction: DuPage County
- Quality: HQAR/Critical
- Vegetated Buffer Required: 100'

Vegetation: The dominant plant species at Data Point X07 are eastern cottonwood (*Populus deltoides*), sandbar willow (*Salix interior*) and panicled aster (*Symphyotrichum lanceolatum*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 3 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.83**	Species Richness (all)	19
Mean C (all species)	1.79	Species Richness (native)	12
Mean C (native trees)	2.25	% Non-native	0.37
Mean C (native shrubs)	2.50	Wet Indicator (all)	-0.53
Mean C (native herbaceous)	3.33	Wet Indicator (native)	-0.92
FQAI (native species)	**9.81**	% hydrophyte (Midwest)	0.84
FQAI (all species)	7.80	% native perennial	0.63
Adjusted FQAI	22.52	% native annual	0.00
% C value 0	0.42	% annual	0.05
% C Value 1-3	0.37	% perennial	0.95
% C value 4-6	0.16		
% C value 7-10	0.05		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
acesai	*Acer saccharinum*	*Acer saccharinum*	Silver Maple	1	FACW	Tree	Perennial	Native	acesai
apocan	*Apocynum cannabinum*	*Apocynum sibiricum*	Indian-Hemp	2	FAC	Forb	Perennial	Native	apocan
branig	*Brassica nigra*	*BRASSICA NIGRA*	Black Mustard	0	UPL	Forb	Annual	Adventive	branig

cxtrib	*Carex tribuloides*	*Carex tribuloides*	Blunt Broom Sedge	7	OBL	Sedge	Perennial	Native	cxtrib
corrac	*Cornus racemosa*	*Cornus racemosa*	Gray Dogwood	1	FAC	Shrub	Perennial	Native	corrac
geulac	*Geum laciniatum*	*Geum laciniatum*	Rough Avens	3	FACW	Forb	Perennial	Native	geulac
glehed	*Glechoma hederacea*	*GLECHOMA HEDERACEA*	Groundivy	0	FACU	Forb	Perennial	Adventive	glehed
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive	phaaru
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	0	FAC	Tree	Perennial	Native	popdel
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive	rhacat
salfra	*Salix fragilis*	*SALIX FRAGILIS*	Crack Willow	0	UPL	Tree	Perennial	Adventive	salfra
salnig	*Salix nigra*	*Salix nigra*	Black Willow	5	OBL	Tree	Perennial	Native	salnig
salpeu	*Salix X pendulina*	*0*	Hybrid Weeping Willow	0	FACW	Tree	Perennial	Adventive	salpeu
samcan	*Sambucus nigra ssp. canadensis*	*Sambucus canadensis*	Black Elder	4	FAC	Shrub	Perennial	Native	samcan
sciflu	*Schoenoplectus fluviatilis*	*Scirpus fluviatilis; Bolboschoenus fluviatilis*	River Club-Rush	4	OBL	Sedge	Perennial	Native	sciflu
typang	*Typha angustifolia*	*TYPHA ANGUSTIFOLIA*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive	typang
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	Tree	Perennial	Native	ulmame
urtgra	*Urtica dioica ssp. gracilis*	*Urtica procera; Urtica gracilis*	Tall Nettle	1	FACW	Forb	Perennial	Native	urtgra
viosor	*Viola sororia*	*Viola priceana*	Hooded Blue Violet	3	FAC	Forb	Perennial	Native	viosor

Soils: The soil profile at Data Point X07 consisted of 0-4 inches of black (10YR 2/1) silty clay loam underlain by 6 inches, to a depth of 10 inches below the surface, of gray (10YR 5/1) silty clay loam with 20% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The presence of two secondary wetland hydrology indicators D2, Geomorphic Position, and D5, FAC-neutral Test, satisfies the hydrology criterion.

Conclusion: Data Point X07 satisfies all three criteria; therefore Area 3 qualifies as wetland.

Area 4 – Emergent Wetland

Data Point X11

Area 4 (0.22 acres; 0.35 acres off-site) is an emergent wetland located in the center of the subject property along the north side a constructed berm.

Summary:

- Emergent Wetland
- Jurisdiction: USACE and DuPage County
- Quality: Non-HQAR/Regulatory
- Vegetated Buffer Required: 50’

Vegetation: The dominant plant species at Data Point X11 are American elm (*Ulmus americana*) and common buckthorn (*Rhamnus cathartica*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 4 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.18**	Species Richness (all)	20
Mean C (all species)	1.20	Species Richness (native)	11
Mean C (native trees)	2.00	% Non-native	0.45
Mean C (native shrubs)	1.50	Wet Indicator (all)	0.30
Mean C (native herbaceous)	2.67	Wet Indicator (native)	-0.27
FQAI (native species)	**7.24**	% hydrophyte (Midwest)	0.55
FQAI (all species)	5.37	% native perennial	0.45
Adjusted FQAI	16.18	% native annual	0.10
% C value 0	0.55	% annual	0.10
% C Value 1-3	0.40	% perennial	0.85
% C value 4-6	0.00		
% C value 7-10	0.05		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
allcan	*Allium canadense*	*Allium canadense*	Meadow Garlic	3	FACU	Forb	Perennial	Native	allcan
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native	ambtri
cxtrib	*Carex tribuloides*	*Carex tribuloides*	Blunt Broom Sedge	7	OBL	Sedge	Perennial	Native	cxtrib
corrac	*Cornus racemosa*	*Cornus racemosa*	Gray Dogwood	1	FAC	Shrub	Perennial	Native	corrac
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive	diplac
galapa	*Galium aparine*	*Galium spurium*	Sticky-Willy	0	FACU	Forb	Annual	Native	galapa
geulac	*Geum laciniatum*	*Geum laciniatum*	Rough Avens	3	FACW	Forb	Perennial	Native	geulac
gletri	*Gleditsia triacanthos*	*Gleditsia triacanthos*	Honey-Locust	1	FACU	Tree	Perennial	Native	gletri
lontat	*Lonicera tatarica*	*LONICERA TATARICA*	Twinsisters	0	FACU	Shrub	Perennial	Adventive	lontat
malpum	*Malus pumila*	*MALUS PUMILA*	Apple	0	UPL	Tree	Perennial	Adventive	malpum
moralb	*Morus alba*	*MORUS ALBA VAR. TATARICA*	White Mulberry	0	FAC	Tree	Perennial	Adventive	moralb
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive	phaaru
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive	rhacat
rosmul	*Rosa multiflora*	*ROSA MULTIFLORA*	Rambler Rose	0	FACU	Shrub	Perennial	Adventive	rosmul
salfra	*Salix fragilis*	*SALIX FRAGILIS*	Crack Willow	0	UPL	Tree	Perennial	Adventive	salfra
salint	*Salix interior*	*Salix interior*	Sandbar Willow	2	FACW	Shrub	Perennial	Native	salint
scisib	*Scilla sibirica*	*SCILLA SIBIRICA*	Squill	0	UPL	Forb	Perennial	Adventive	scisib

astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	Forb	Perennial	Native	astsim
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	Tree	Perennial	Native	ulmame
vitrip	*Vitis riparia*	*Vitis riparia var. syrticola*	River-Bank Grape	1	FACW	Vine	Perennial	Native	vitrip

Soils: The soil profile at Data Point X11 consisted of 0-20 inches of black (10YR 2/1) silty clay loam with 10% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The soil was saturated at the surface which satisfies the hydrology criterion.

Conclusion: Data Point X11 satisfies all three criteria; therefore Area 4 qualifies as wetland.

Area 5 – Emergent Wetland

Data Point X13

Area 5 (0.05 acres) is an emergent wetland located in the eastern portion of the subject property in a landscaped area. Area 5 appears to be hydrologically connected to a stormwater management basin located off-site to the north.

Summary:

- Emergent Wetland
- Jurisdiction: USACE and DuPage County
- Quality: Non-HQAR/Regulatory
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X13 are green ash (*Fraxinus pennsylvanica*) and common spikerush (*Eleocharis palustris*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 5 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.71**	Species Richness (all)	11
Mean C (all species)	1.73	Species Richness (native)	7
Mean C (native trees)	2.00	% Non-native	0.36
Mean C (native shrubs)	1.00	Wet Indicator (all)	-0.45
Mean C (native herbaceous)	3.50	Wet Indicator (native)	-0.86
FQAI (native species)	**7.18**	% hydrophyte (Midwest)	0.91
FQAI (all species)	5.73	% native perennial	0.64
Adjusted FQAI	21.65	% native annual	0.00
% C value 0	0.45	% annual	0.00
% C Value 1-3	0.36	% perennial	0.91
% C value 4-6	0.09		
% C value 7-10	0.09		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species (Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity

cxtrib	*Carex tribuloides*	*Carex tribuloides*	Blunt Broom Sedge	7	OBL	Sedge	Perennial	Native	cxtrib
corrac	*Cornus racemosa*	*Cornus racemosa*	Gray Dogwood	1	FAC	Shrub	Perennial	Native	corrac
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive	diplac
eleery	*Eleocharis palustris*	*Eleocharis erythropoda; Eleocharis palustris major*	Common Spike-Rush	1	OBL	Sedge	Perennial	Native	eleery
frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima; Fraxinus lanceolata*	Green Ash	4	FACW	Tree	Perennial	Native	frapen
geulac	*Geum laciniatum*	*Geum laciniatum*	Rough Avens	3	FACW	Forb	Perennial	Native	geulac
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	0	FAC	Tree	Perennial	Native	popdel
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive	rhacat
rumcri	*Rumex crispus*	*RUMEX CRISPUS*	Curly Dock	0	FAC	Forb	Perennial	Adventive	rumcri
salpeu	*Salix X pendulina*	*0*	Hybrid Weeping Willow	0	FACW	Tree	Perennial	Adventive	salpeu
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	Forb	Perennial	Native	astsim

Soils: The soil profile at Data Point X13 consisted of 0-10 inches of black (10YR 2/1) silty clay loam with 5% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X13 satisfies all three criteria; therefore Area 5 qualifies as wetland.

Area 6 – Emergent Wetland

Data Point X15

Area 6 (0.13 acres) is drainageway and emergent wetland located in the southwestern portion of the subject property. Area 6 appears on the subject property between 1972 and 1987, as seen on historical aerial imagery (Appendix VI), after the construction of the ComEd substation.

Summary:

- Emergent Wetland
- Jurisdiction: USACE and DuPage County
- Quality: Non-HQAR/Regulatory
- Vegetated Buffer Required: 50'

Vegetation: The dominant plant species at Data Point X15 are bur oak (*Quercus macrocarpa*), common buckthorn (*Rhamnus cathartica*) and panicled aster (*Symphyotrichum lanceolatum*). 100% of the dominant

species are hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 6 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.60**	Species Richness (all)	21
Mean C (all species)	1.86	Species Richness (native)	15
Mean C (native trees)	2.67	% Non-native	0.29
Mean C (native shrubs)	0.50	Wet Indicator (all)	0.24
Mean C (native herbaceous)	3.22	Wet Indicator (native)	0.13
FQAI (native species)	**10.07**	% hydrophyte (Midwest)	0.62
FQAI (all species)	8.51	% native perennial	0.71
Adjusted FQAI	21.97	% native annual	0.00
% C value 0	0.43	% annual	0.00
% C Value 1-3	0.38	% perennial	0.95
% C value 4-6	0.19		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species (Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
cxcris	*Carex cristatella*	*Carex cristatella*	Crested Sedge	4	FACW	Sedge	Perennial	Native	cxcris
corrac	*Cornus racemosa*	*Cornus racemosa*	Gray Dogwood	1	FAC	Shrub	Perennial	Native	corrac
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive	diplac
elyvir	*Elymus virginicus*	*Elymus virginicus*	Virginia Wild Rye	3	FACW	Grass	Perennial	Native	elyvir
eryalb	*Erythronium albidum*	*Erythronium albidum*	Small White Fawn-Lily	5	FACU	Forb	Perennial	Native	eryalb
fravir	*Fragaria virginiana*	*Fragaria virginiana*	Virginia Strawberry	0	FACU	Forb	Perennial	Native	fravir
geulac	*Geum laciniatum*	*Geum laciniatum*	Rough Avens	3	FACW	Forb	Perennial	Native	geulac
jugnig	*Juglans nigra*	*Juglans nigra*	Black Walnut	3	FACU	Tree	Perennial	Native	jugnig
lontat	*Lonicera tatarica*	*LONICERA TATARICA*	Twinsisters	0	FACU	Shrub	Perennial	Adventive	lontat
panvir	*Panicum virgatum*	*Panicum virgatum*	Wand Panic Grass	3	FAC	Grass	Perennial	Native	panvir
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive	phaaru
poapra	*Poa pratensis*	*POA PRATENSIS*	Kentucky Blue Grass	0	FAC	Grass	Perennial	Adventive	poapra
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	0	FAC	Tree	Perennial	Native	popdel
quemac	*Quercus macrocarpa*	*Quercus macrocarpa*	Burr Oak	5	FAC	Tree	Perennial	Native	quemac
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive	rhacat
rosmul	*Rosa multiflora*	*ROSA MULTIFLORA*	Rambler Rose	0	FACU	Shrub	Perennial	Adventive	rosmul
rubocc	*Rubus occidentalis*	*Rubus occidentalis*	Black Raspberry	0	UPL	Shrub	Perennial	Native	rubocc
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled	3	FAC	Forb	Perennial	Native	astsim

			American-Aster						
trirec	*Trillium recurvatum*	*Trillium recurvatum*	Bloody-Butcher	5	FACU	Forb	Perennial	Native	trirec
viosor	*Viola sororia*	*Viola priceana*	Hooded Blue Violet	3	FAC	Forb	Perennial	Native	viosor
vitrip	*Vitis riparia*	*Vitis riparia var. syrticola*	River-Bank Grape	1	FACW	Vine	Perennial	Native	vitrip

Soils: The soil profile at Data Point X15 consisted of 0-10 inches of black (10YR 2/1) silty clay loam with 5% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X15 satisfies all three criteria; therefore Area 6 qualifies as wetland.

Area 7 – Constructed Stormwater Management Basin

Data Point X14

Area 7 (~7.30 acres) is a constructed stormwater management basin located in the southeastern corner of the subject property. Area 7 was under construction in 1972, as seen on historical aerial imagery (Appendix VI) and contains a portion of Rott Creek, as seen on the hydrologic atlas (Figure 4).

Vegetation: The dominant plant species at Data Point X14 are sandbar willow (*Salix interior*) and cut-leaved teasel (*Dipsacus laciniatus*). Only 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X14 consisted of 0-8 inches of black (10YR 2/1) silty clay loam underlain by 7 inches, to a depth of 15 inches below the surface, of yellowish brown (10YR 5/4) silty clay loam mixed fill with 5% yellowish brown (10YR 5/8) redoximorphic concentrations and 5% grayish brown (10YR 5/2) redoximorphic depletions. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology: The presence of two secondary wetland hydrology indicators D2, Geomorphic Position and D5, FAC-neutral Test, satisfies the hydrology criterion.

Conclusion: Data Point X14 fails to satisfy the vegetation and soils criteria; therefore Area 7 does not qualify as wetland.

Area 8 – Constructed Stormwater Management Basin

Data Point X17

Area 8 (~15.73 acres) is a constructed stormwater management basin, known as Bell Pond, located in the western portion of the subject property. Area 8 was under construction in 1972, as seen on historical aerial imagery (Appendix VI) and contains a portion of Rott Creek, as seen on the hydrologic atlas (Figure 4).

Vegetation: The dominant plant species at Data Point X17 are common buckthorn (*Rhamnus cathartica*), smooth brome (*Bromus inermis*) and reed canary grass (*Phalaris arundinacea*). 66.7% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil in this location was too saturated to retrieve and could not be classified. However, inundation of the area strongly suggests the presence of hydric soil indicators, so the soils criterion is satisfied.

Hydrology: The area was inundated to a depth of 2 inches, so the hydrology criterion is satisfied.

Conclusion: Data Point X17 satisfies all three criteria to qualify as wetland. In V3's professional opinion, Area 8 is a constructed stormwater management basin.

Area 9 – Turf Grass Wetland

Data Point X08

Area 9 (0.05 acres) is an area in the turf grass in the northwestern portion of the subject property that satisfies the three wetland criteria.

Vegetation: The dominant plant species at Data Point X08 is Kentucky blue grass (*Poa pratensis*). The dominant species is hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 9 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**1.83**	Species Richness (all)	10
Mean C (all species)	1.10	Species Richness (native)	6
Mean C (native trees)	n/a	% Non-native	0.40
Mean C (native shrubs)	n/a	Wet Indicator (all)	-0.80
Mean C (native herbaceous)	1.83	Wet Indicator (native)	-1.00
FQAI (native species)	**4.49**	% hydrophyte (Midwest)	0.90
FQAI (all species)	3.48	% native perennial	0.30
Adjusted FQAI	14.20	% native annual	0.30
% C value 0	0.50	% annual	0.40
% C Value 1-3	0.50	% perennial	0.50
% C value 4-6	0.00		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
agrsto	*Agrostis stolonifera*	*Agrostis alba palustris*	Spreading Bent	2	FACW	FACW	-1	Grass	Perennial
barvul	*Barbarea vulgaris*	*BARBAREA VULGARIS*	Garden Yellow-Rocket	0	FAC	FAC	0	Forb	Biennial
cernut	*Cerastium nutans*	*Cerastium nutans*	Nodding Mouse-Ear Chickweed	0	FACU	FACU	1	Forb	Annual
eleobt	*Eleocharis obtusa*	*Eleocharis ovata*	Blunt Spike-Rush	3	OBL	OBL	-2	Sedge	Annual
eleery	*Eleocharis palustris*	*Eleocharis erythropoda; Eleocharis palustris major*	Common Spike-Rush	1	OBL	OBL	-2	Sedge	Perennial
perhyr	*Persicaria hydropiper*	*Polygonum hydropiper*	Mild Water-Pepper	2	OBL	OBL	-2	Forb	Annual
permac	*Persicaria maculosa*	*POLYGONUM PERSICARIA*	Lady's-Thumb	0	FACW	FAC	-1	Forb	Annual

phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	FACW	-1	Grass	Perennial
poapra	*Poa pratensis*	*POA PRATENSIS*	Kentucky Blue Grass	0	FAC	FACU	0	Grass	Perennial
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	FACW	0	Forb	Perennial

Soils: The soil profile at Data Point X08 consisted of 0-4 inches of black (10YR 2/1) silt loam mixed fill underlain by 6 inches, to a depth of 10 inches below the surface, of gray (10YR 6/1) silty clay loam mixed fill with 10% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F3, Depleted Matrix, and satisfies the soils criterion.

Hydrology: The area at Data Point X08 was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X08 satisfies all three criteria; therefore Area 9 qualifies as wetland.

Area 10 – Turf Grass Wetland

Data Point X09

Area 10 (0.06 acres) is an area in the turf grass in the northwestern portion of the subject property that satisfies the three wetland criteria.

Vegetation: The dominant plant species at Data Point X09 is Kentucky blue grass (*Poa pratensis*). The dominant species is hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 10 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**1.83**	Species Richness (all)	9
Mean C (all species)	1.22	Species Richness (native)	6
Mean C (native trees)	n/a	% Non-native	0.33
Mean C (native shrubs)	n/a	Wet Indicator (all)	-0.78
Mean C (native herbaceous)	1.83	Wet Indicator (native)	-1.00
FQAI (native species)	**4.49**	% hydrophyte (Midwest)	0.89
FQAI (all species)	3.67	% native perennial	0.33
Adjusted FQAI	14.97	% native annual	0.33
% C value 0	0.44	% annual	0.44
% C Value 1-3	0.56	% perennial	0.44
% C value 4-6	0.00		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
agrsto	*Agrostis stolonifera*	*Agrostis alba palustris*	Spreading Bent	2	FACW	FACW	-1	Grass	Perennial
barvul	*Barbarea vulgaris*	*BARBAREA VULGARIS*	Garden Yellow-Rocket	0	FAC	FAC	0	Forb	Biennial

cernut	*Cerastium nutans*	*Cerastium nutans*	Nodding Mouse-Ear Chickweed	0	FACU	FACU	1	Forb	Annual
eleobt	*Eleocharis obtusa*	*Eleocharis ovata*	Blunt Spike-Rush	3	OBL	OBL	-2	Sedge	Annual
eleery	*Eleocharis palustris*	*Eleocharis erythropoda; Eleocharis palustris major*	Common Spike-Rush	1	OBL	OBL	-2	Sedge	Perennial
perhyr	*Persicaria hydropiper*	*Polygonum hydropiper*	Mild Water-Pepper	2	OBL	OBL	-2	Forb	Annual
permac	*Persicaria maculosa*	*POLYGONUM PERSICARIA*	Lady's-Thumb	0	FACW	FAC	-1	Forb	Annual
poapra	*Poa pratensis*	*POA PRATENSIS*	Kentucky Blue Grass	0	FAC	FACU	0	Grass	Perennial
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	FACW	0	Forb	Perennial
agrsto	*Agrostis stolonifera*	*Agrostis alba palustris*	Spreading Bent	2	FACW	FACW	-1	Grass	Perennial

Soils: The soil profile at Data Point X09 consisted of 0-6 inches of black (10YR 2/1) silty clay loam mixed fill underlain by 4 inches, to a depth of 10 inches below the surface, of gray (10YR 5/1) silty clay loam mixed fill with 15% yellowish brown (10YR 5/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F3, Depleted Matrix, and satisfies the soils criterion.

Hydrology: The soil was saturated at the surface, so the hydrology criterion is satisfied.

Conclusion: Data Point X09 satisfies all three criteria; therefore Area 10 qualifies as wetland.

Area 11 – Turf Grass Wetland

Data Point X18

Area 11 (0.01 acres) is an area in the turf grass in the northwestern portion of the subject property that satisfies the three wetland criteria.

Vegetation: The dominant plant species at Data Point X18 is Kentucky blue grass (*Poa pratensis*). The dominant species is hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species inventory for Area 11 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**1.86**	Species Richness (all)	11
Mean C (all species)	1.18	Species Richness (native)	7
Mean C (native trees)	n/a	% Non-native	0.36
Mean C (native shrubs)	n/a	Wet Indicator (all)	-0.82
Mean C (native herbaceous)	1.86	Wet Indicator (native)	-1.00
FQAI (native species)	**4.91**	% hydrophyte (Midwest)	0.91
FQAI (all species)	3.92	% native perennial	0.36
Adjusted FQAI	14.81	% native annual	0.27
% C value 0	0.45	% annual	0.36
% C Value 1-3	0.55	% perennial	0.55
% C value 4-6	0.00		
% C value 7-10	0.00		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
agrsto	*Agrostis stolonifera*	*Agrostis alba palustris*	Spreading Bent	2	FACW	FACW	-1	Grass	Perennial
barvul	*Barbarea vulgaris*	*BARBAREA VULGARIS*	Garden Yellow-Rocket	0	FAC	FAC	0	Forb	Biennial
cxvulp	*Carex vulpinoidea*	*Carex vulpinoidea*	Common Fox Sedge	2	FACW	OBL	-1	Sedge	Perennial
cernut	*Cerastium nutans*	*Cerastium nutans*	Nodding Mouse-Ear Chickweed	0	FACU	FACU	1	Forb	Annual
eleobt	*Eleocharis obtusa*	*Eleocharis ovata*	Blunt Spike-Rush	3	OBL	OBL	-2	Sedge	Annual
eleery	*Eleocharis palustris*	*Eleocharis erythropoda; Eleocharis palustris major*	Common Spike-Rush	1	OBL	OBL	-2	Sedge	Perennial
perhyr	*Persicaria hydropiper*	*Polygonum hydropiper*	Mild Water-Pepper	2	OBL	OBL	-2	Forb	Annual
permac	*Persicaria maculosa*	*POLYGONUM PERSICARIA*	Lady's-Thumb	0	FACW	FAC	-1	Forb	Annual
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	FACW	-1	Grass	Perennial
poapra	*Poa pratensis*	*POA PRATENSIS*	Kentucky Blue Grass	0	FAC	FACU	0	Grass	Perennial
astsim	*Symphyotrichum lanceolatum*	*Aster simplex*	White Panicled American-Aster	3	FAC	FACW	0	Forb	Perennial

Soils: The soil profile at Data Point X18 consisted of 0-12 inches of very dark grayish brown (10YR 3/2) silty clay loam mixed fill with 10% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X18 satisfies all three criteria; therefore Area 11 qualifies as wetland.

Area 12 – Emergent Wetland

Data Point X19

Area 12 (0.05 acres) is an emergent wetland located in the northwest corner of the subject property along a berm. Area 12 continues off-site to the north into Danada Forest Preserve.

Summary:

- Emergent Wetland
- Jurisdiction: USACE and DuPage County
- Quality: Non-HQAR/Regulatory
- Vegetated Buffer Required: 50’

Vegetation: The dominant plant species at Data Point X19 are green ash (*Fraxinus pennsylvanica*) and reed canary grass (*Phalaris arundinacea*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied. The floristic quality data and plant species list for Area 12 are provided below.

Conservatism-Based Metrics		Additional Metrics	
Mean C (native species)	**2.71**	Species Richness (all)	14
Mean C (all species)	1.36	Species Richness (native)	7
Mean C (native trees)	4.00	% Non-native	50%
Mean C (native shrubs)	4.00	Wet Indicator (all)	-0.43
Mean C (native herbaceous)	2.20	Wet Indicator (native)	-0.86
FQAI (native species)	**7.18**	% hydrophyte (Midwest)	86%
FQAI (all species)	5.08	% native perennial	50%
Adjusted FQAI	19.19	% native annual	0%
% C value 0	50%	% annual	7%
% C Value 1-3	36%	% perennial	86%
% C value 4-6	14%		
% C value 7-10	0%		

Species Acronym	Species Name (NWPL/Mohlenbrock)	Species(Synonym)	Common Name	C Value	Midwest WET indicator	WET indicator (numeric)	Habit	Duration	Nativity
apocan	*Apocynum cannabinum*	Apocynum sibiricum	Indian-Hemp	2	FAC	0	Forb	Perennial	Native
diplac	*Dipsacus laciniatus*	DIPSACUS LACINIATUS	Cut-Leaf Teasel	0	UPL	2	Forb	Biennial	Adventive
eleery	*Eleocharis palustris*	Eleocharis erythropoda; Eleocharis palustris major; Eleocharis smallii; Eleocharis xyridiformis; Eleocharis macrostachya	Common Spike-Rush	1	OBL	-2	Sedge	Perennial	Native
frapen	*Fraxinus pennsylvanica*	Fraxinus pennsylvanica subintegerrima; Fraxinus lanceolata	Green Ash	4	FACW	-1	Tree	Perennial	Native
jundud	*Juncus dudleyi*	Juncus dudleyi	Dudley's Rush	2	FACW	-1	Forb	Perennial	Native
polper	*Persicaria maculosa*	POLYGONUM PERSICARIA	Lady's-Thumb	0	FACW	-1	Forb	Annual	Adventive
phaaru	*Phalaris arundinacea*	PHALARIS ARUNDINACEA	Reed Canary Grass	0	FACW	-1	Grass	Perennial	Adventive
phrausm	*Phragmites australis ssp. americanus*	Phragmites americanus	Common Reed	3	FACW	-1	Grass	Perennial	Native
poapra	*Poa pratensis*	POA PRATENSIS	Kentucky Blue Grass	0	FAC	0	Grass	Perennial	Adventive
pyrcal	*Pyrus calleryana*	PYRUS CALLERYANA	Ornamental Pear	0	UPL	2	Tree	Perennial	Adventive
rhacat	*Rhamnus cathartica*	RHAMNUS CATHARTICA	European Buckthorn	0	FAC	0	Shrub	Perennial	Adventive
samcan	*Sambucus nigra ssp. canadensis*	Sambucus canadensis	Black Elder	4	FAC	-1	Shrub	Perennial	Native
astsim	*Symphyotrichum lanceolatum*	Aster simplex	White Panicled	3	FAC	0	Forb	Perennial	Native

			American-Aster						
typang	*Typha angustifolia*	TYPHA ANGUSTIFOLIA	Narrow-Leaf Cat-Tail	0	OBL	-2	Forb	Perennial	Adventive

Soils: The soil profile at Data Point X19 consisted of 0-11 inches of black (10YR 2/1) silt loam with 20& brownish yellow (10YR 6/8) redoximorphic concentrations. Below that, to a depth of 15 inches below the surface, the soil profile was dark grayish brown (2.5Y 4/2) silty clay loam with 15% brownish yellow (10YR 6/6) redoximorphic concentrations and 5% gray (10YR 6/1) redoximorphic depletions. This profile exhibits hydric soil field indicator A11, Depleted Below Dark Surface, and satisfies the soils criterion.

Hydrology: The soil was saturated at the surface which satisfies the hydrology criterion.

Conclusion: Data Point X19 satisfies all three criteria; therefore Area 12 qualifies as wetland.

ADDITIONAL AREAS INVESTIGATED

Area 13 – Man-Made Roadside Ditch

Data Point X16

Area 13 (0.27 acres) is a man-made roadside ditch. In V3's professional opinion, Area 13 is exempt from jurisdiction because it was constructed as a roadside ditch to convey stormwater, as seen on the engineering plans in **Appendix VI**.

Vegetation: The dominant plant species at Data Point X16 is narrow-leaved cattail (*Typha angustifolia*). The dominant species is hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil profile at Data Point X16 consisted of 0-10 inches of black (10YR 2/1) silty clay loam with 5% dark yellowish brown (10YR 4/6) redoximorphic concentrations. This profile exhibits hydric soil indicator F6, Redox Dark Surface, and satisfies the soils criterion.

Hydrology: The soil was saturated at the surface, so the hydrology criterion is satisfied.

Conclusion: Data Point X16 satisfies all three criteria to qualify as wetland; however, Area 13 is a man-made roadside ditch, as seen on engineering plans in **Appendix VI** and is exempt from jurisdiction.

Area 14 – Upland

Data Point X01

Area 14 is mapped as wetland on the NWI (Figure 2) and DuPage County Wetland Map (Figure 3); however, this area does not qualify as wetland and is upland.

Vegetation: The dominant plant species at Data Point X01 are honey locust (*Gleditsia triacanthos*), black walnut (*Juglans nigra*) and wild bergamot (*Monarda fistulosa*). None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X01 consisted of 0-14 inches of black (10YR 2/1) silty clay loam mixed fill. Garbage and debris were observed in this layer. From 14 to 16 inches below the surface, the soil profile was gray (2.5Y 5/2) silty clay loam mixed fill with 10% yellowish brown (10YR 6/6) redoximorphic

concentrations. This profile exhibits hydric soil indicator A12, Thick Dark Surface, and satisfies the soils criterion.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

Conclusion: Data Point X01 fails to satisfy the vegetation and hydrology criteria; therefore Area 14 does not qualify as wetland.

Area 15 – Upland

Data Point X02

Area 15 is representative of the turf grass upland areas in the northwestern portion of the subject property.

Vegetation: The dominant plant species at Data Point X02 is Kentucky blue grass (*Poa pratensis*). The dominant species is hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil profile at Data Point X02 consisted of 0-10 inches of black (10YR 2/10 silt loam mixed fill underlain by 8 inches, to a depth of 18 inches below the surface, of brown (10YR 5/4) silty clay loam mixed fill. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

Conclusion: Data Point X02 fails to satisfy the soil and hydrology criteria; therefore Area 15 does not qualify as wetland.

Area 16 – Upland

Data Point X04

Area 16 consists of an upland area north of Area 8.

Vegetation: The dominant plant species at Data Point X04 are common buckthorn (*Rhamnus cathartica*), black raspberry (*Rubus occidentalis*), meadow fescue (*Festuca pratensis*), cut-leaved teasel (*Dipsacus laciniatus*) and creeping Jenny (*Lysimachia nummularia*). Only 40% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

Soils: The soil profile at Data Point X04 consisted of 0-10 inches of black (10YR 2/1) silt loam underlain by 5 inches, to 15 inches below the surface, of brown (2.5Y 5/4) silty clay loam mixed fill with 5% gravel. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

Conclusion: Data Point X04 fails to satisfy all three criteria; therefore Area 16 does not qualify as wetland.

Area 17 – Upland

Data Point X06

Area 17 consists of the upland area around Area 3 in the northeast corner of the subject property.

Vegetation: The dominant plant species at Data Point X06 are black walnut (*Juglans nigra*), common buckthorn (*Rhamnus cathartica*), sandbar willow (*Salix interior*) and panicled aster (*Symphyotrichum lanceolatum*). 75% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil profile at Data Point X06 consisted of 0-10 inches of black (10YR 2/1) silty clay loam mixed fill with 5% yellowish brown (10YR 5/6) redoximorphic concentrations and 5% gray (10YR 5/2) redoximorphic depletions. Below that, to a depth of 15 inches below the surface, the soil profile was brown (2.5Y 4/4) silty clay loam mixed fill with 5% yellowish brown (10YR 5/6) redoximorphic concentrations and 5% gray (10YR 5/2) redoximorphic depletions. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

Conclusion: Data Point X06 fails to satisfy the soils and hydrology criteria; therefore Area 17 does not qualify as wetland.

Area 18 – Spoil Pile

Data Point X10

Area 18 is located in the northwest corner of the north parking lot and consists of spoil piles in a parking lot with hydrophytic vegetation.

Vegetation: The dominant plant species at Data Point X10 are eastern cottonwood (*Populus deltoides*) and common reed (*Phragmites australis*). 100% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil profile at Data Point X10 consisted of 0-4 inches of silty gravel material underlain by impervious pavement. Hydric soil indicators were not observed, so the soils criterion is not satisfied.

Hydrology: The area was inundated to 1 inch, so the hydrology criterion is satisfied.

Conclusion: Data Point X10 fails to satisfy the soils criterion; therefore Area 18 does not qualify as wetland.

Area 19 – Upland

Data Point X12

Area 19 consists of the upland area around Area 5.

Vegetation: The dominant plant species at Data Point X12 are common buckthorn (*Rhamnus cathartica*), cut-leaved teasel (*Dipsacus laciniatus*) and panicled aster (*Symphyotrichum lanceolatum*). 66.7% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

Soils: The soil profile at Data Point X12 consisted of 0-6 inches of balck (10YR 2/1) silty clay loam underlain by 4 inches, to a depth of 10 inches below the surface, of brown (10YR 4/4) silty clay loam. The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

Hydrology: Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

Conclusion: Data Point X12 fails to satisfy the soil and hydrology criteria; therefore Area 19 does not qualify as wetland.

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APPENDIX I

WETLAND DELINEATION DATA FORMS

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X01**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.819002 | Long.: -88.124043 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: PEM1A

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This location fails the vegetation and hydrology criteria and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Gleditsia triacanthos	20	☑ 28.6%	FACU
2. Juglans nigra	40	☑ 57.1%	FACU
3. Rhamnus cathartica	10	☐ 14.3%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	70	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Monarda fistulosa	80	☑ 72.7%	FACU
2. Galium aparine	20	☐ 18.2%	FACU
3. Rubus occidentalis	10	☐ 9.1%	UPL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	110	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	160	x 4 =	640
UPL species	10	x 5 =	50
Column Totals:	180 (A)		720 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ◉

Remarks: (Include photo numbers here or on a separate sheet.)
None of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X01**

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
0-14	10YR	2/1	60						Silty Clay Loam	Mixed fill; garbage and debris
			40							
14-16	2.5Y	5/2		10YR	6/6	10%	C	M	Silty Clay Loam	Mixed fill

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator A12, Thick Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X02**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.819789 | Long.: -88.123858 | Datum: NAD 1983

Soil Map Unit Name: Milford silty clay loam (69A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
This location fails the soils and hydrology criteria and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Poa pratensis	100	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
The dominant species is hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X02**

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	10YR	2/1							Silt Loam	Mixed fill
10-18	10YR	5/4							Silty Clay Loam	Mixed fill

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ◉

Remarks:

Hydric soil indicators were not observed, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X03**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.821149 | Long.: -88.124431 | Datum: NAD 1983

Soil Map Unit Name: Martinton silt loam (189A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fraxinus pennsylvanica	10	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Phalaris arundinacea	80	☑ 88.9%	FACW
2. Apocynum cannabinum	10	☐ 11.1%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	90	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.100

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X03**

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
0-11	10YR	2/1		10YR	6/8	20	C	M	Silt Loam	
11-15	2.5Y	4/2		10YR	6/6	15%	C	M	Silty Clay Loam	
				10YR	6/1	5%	D	M		

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator A11, Depleted Below Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 4

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The presence of primary wetland hydrology indicator A2, High Water Table at 4 inches below the surface, satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X04**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.821453 | Long.: -88.124363 | Datum: NAD 1983

Soil Map Unit Name: Martinton silt loam (189A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This location fails all three criteria and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)				
1. Rhamnus cathartica	10	☑	50.0%	FAC
2. Rubus occidentalis	10	☑	50.0%	UPL
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	20	= Total Cover		
Herb Stratum (Plot size: 5 feet)				
1. Festuca pratensis	60	☑	60.0%	FACU
2. Dipsacus laciniatus	20	☑	20.0%	UPL
3. Lysimachia nummularia	20	☑	20.0%	FACW
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size: 5 feet)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	60	x 4 =	240
UPL species	30	x 5 =	150
Column Totals:	120 (A)		460 (B)

Prevalence Index = B/A = 3.833

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ◉

Remarks: (Include photo numbers here or on a separate sheet.)
Less than 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X04**

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	10YR	2/1							Silt Loam	
10-15	2.5Y	5/4							Silty Clay Loam	Mixed fill; 5% gravel

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ◉

Remarks:

Hydric soil indicators were not observed, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X05**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.821406 | Long.: -88.124061 | Datum: NAD 1983

Soil Map Unit Name: Elliott silt loam (146A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Phalaris arundinacea	60	☑ 70.6%	FACW
2. Dipsacus laciniatus	15	☐ 17.6%	UPL
3. Apocynum cannabinum	10	☐ 11.8%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	85	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	15	x 5 =	75
Column Totals:	85 (A)		225 (B)

Prevalence Index = B/A = 2.647

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
The dominant species is hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X05**

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
0-4	10YR	2/1							Silt Loam	
4-10	2.5Y	4/2		10YR	5/8	25			Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 1

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X06**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.821776 | Long.: -88.122226 | Datum: NAD 1983

Soil Map Unit Name: Milford silty clay loam (69A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This location fails the soils and hydrology criteria and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Juglans nigra	10	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Rhamnus cathartica	70	☑ 77.8%	FAC
2. Salix interior	20	☑ 22.2%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	90	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Symphyotrichum lanceolatum ssp. lanceolatum var. interior	30	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	30	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	100	x 3 =	300
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	130 (A)		380 (B)

Prevalence Index = B/A = 2.923

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X06**

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	10YR	2/1		10YR	5/6	5			Silty Clay Loam	Mixed Fill
				10YR	5/2	5				
10-15	2.5Y	4/4		10YR	5/6	5			Silty Clay Loam	Mixed Fill
				10YR	5/1	5				

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ◉

Remarks:

The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X07**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.821632 | Long.: -88.122057 | Datum: NAD 1983

Soil Map Unit Name: Milford silty clay loam (69A) | NWI classification: PEM1F

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Populus deltoides	70	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Salix interior	40	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	40	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Symphyotrichum lanceolatum ssp. lanceolatum var. interior	10	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	10	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	80	x 3 =	240
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		320 (B)

Prevalence Index = B/A = 2.667

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X07**

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
0-4	10YR	2/1		10YR	4/6	5			Silty Clay Loam	
4-10	10YR	5/1		10YR	5/6	20			Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The presence of two secondary wetland hydrology indicators satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X08**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.818339 | Long.: -88.12175 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: None

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

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland; however, Data Point X08 is a maintianed turf grass field.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Poa pratensis	70	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	70	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	70	x 3 =	210
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		210 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

The dominant species is hydrophytic, so the vegetation criterion is satisfied; however, Data Point X08 is a maintained turf grass field.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X08**

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
0-4	10YR	2/1							Silt Loam	Mixed Fill
4-10	10YR	6/1		10YR	5/6	10			Silty Clay Loam	Mixed Fill

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F3, Depleted Matrix, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 1

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X09**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.818008 | Long.: -88.122427 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: None

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

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland; however, Data Point X09 is a maintianed turf grass field.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Poa pratensis	20	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	20	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

The dominant species is hydrophytic, so the vegetation criterion is satisfied; however, Data Point X09 is a maintained turf grass field.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X09**

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	10YR	2/1							Silty Clay Loam	Mixed Fill
6-10	10YR	5/1		10YR	5/6	15			Silty Clay Loam	Mixed Fill

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F3, Depleted Matrix, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soil was saturated at the surface which satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X10**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Swale | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.81837 | Long.: -88.12071 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location fails the soils criterion and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Populus deltoides	10	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Phragmites australis	90	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	90	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.100

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X10**

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
0-4								Silty Gravel
4+								impervious pavement

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ◉

Remarks:

The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 1

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X11**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.818247 | Long.: -88.118543 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Ulmus americana	20	☑ 66.7%	FACW
2. Morus alba	5	☐ 16.7%	FAC
3. Salix fragilis	5	☐ 16.7%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	30	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Rhamnus cathartica	80	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	80	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	0	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	90	x 3 =	270
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	110 (A)		310 (B)

Prevalence Index = B/A = 2.818

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X11

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
0-20	10YR	2/1		10YR	5/6	10			Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soil was saturated at the surface which satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X12**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.813136 | Long.: -88.116662 | Datum: NAD 1983

Soil Map Unit Name: Peotone silty clay loam (330A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This location fails the soils and hydrology criteria and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)				
1. Rhamnus cathartica	40	☑	100.0%	FAC
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	40	= Total Cover		
Herb Stratum (Plot size: 5 feet)				
1. Dipsacus laciniatus	40	☑	80.0%	UPL
2. Symphyotrichum lanceolatum ssp. lanceolatum var. interior	10	☑	20.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	50	= Total Cover		
Woody Vine Stratum (Plot size: 5 feet)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	0	x 4 =	0
UPL species	40	x 5 =	200
Column Totals:	90 (A)		350 (B)

Prevalence Index = B/A = 3.889

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X12**

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	10YR	2/1							Silty Clay Loam	
6-10	10YR	4/4							Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ◉

Remarks:

The soil in this location does not meet a hydric soil indicator, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

Neither primary nor secondary wetland hydrology indicators were observed, so the hydrology criterion is not satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X13**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.813082 | Long.: -88.116508 | Datum: NAD 1983

Soil Map Unit Name: Peotone silty clay loam (330A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fraxinus pennsylvanica	60	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Eleocharis palustris	30	☑ 100.0%	OBL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	30	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		150 (B)

Prevalence Index = B/A = 1.667

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X13

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	10YR	2/1		10YR	4/6	5			Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 1

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X14**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.810634 | Long.: -88.117199 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: PEM1Ah

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location fails the vegetation and soils criteria and does not qualify as wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Salix interior	40	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	40	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Dipsacus laciniatus	60	☑ 100.0%	UPL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	60	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	60	x 5 =	300
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.800

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ◉

Remarks: (Include photo numbers here or on a separate sheet.)
Only 50% of the dominant species are hydrophytic, so the vegetation criterion is not satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X14**

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
0-8	10YR	2/1							Silty Clay Loam	
8-15	10YR	5/4		10YR	5/8	5			Silty Clay Loam	Mixed Fill
				10YR	5/3	5				

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ◉

Remarks:

Hydric soil indicators were not observed, so the soils criterion is not satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The presence of two secondary wetland hydrology indicators satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X15**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.81154 | Long.: -88.122683 | Datum: NAD 1983

Soil Map Unit Name: Beecher silt loam (298A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Quercus macrocarpa	20	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Rhamnus cathartica	20	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Symphyotrichum lanceolatum ssp. lanceolatum var. interior	30	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	30	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	70	x 3 =	210
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		210 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

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

All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X15**

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	10YR	2/1		10YR	5/6	5			Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 1

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X16**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Channel (active) | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.812724 | Long.: -88.122754 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland; however, Data Point X16 is a man-made roadside ditch

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Typha angustifolia	80	☑ 100.0%	OBL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	80	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
The dominant species is hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X16**

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	10YR	2/1		10YR	4/6	5			Silty Clay Loam	

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soil was saturated at the surface which satisfies the hydrology criterion.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 22-Apr-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X17**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Shoreline | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.818253 | Long.: -88.123719 | Datum: NAD 1983

Soil Map Unit Name: Open Water | NWI classification: PUBGx

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland; however, Data Point X17 is a man-made excavated stormwater retention facility

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1. Rhamnus cathartica	20	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Bromus inermis	30	☑ 50.0%	FACU
2. Phalaris arundinacea	30	☑ 50.0%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	60	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	20	x 3 =	60
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	80 (A)		240 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
Greater than 50% of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X17

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

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☑ 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 ○

Remarks:

The soil in this location was too saturated to retrieve and could not be classified. However, inundation of the area strongly suggests the presence of hydric soil indicators, so the soils criterion is satisfied.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 2

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 2 inches, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 13-Jun-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X18**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.818112 | Long.: -88.121915 | Datum: NAD 1983

Soil Map Unit Name: Orthents, clayey (805B) | NWI classification: None

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

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Poa pratensis	80	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	80	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= 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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		240 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
The dominant species is hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: X18

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	10YR	3/2		10YR	4/6	10	C	M	Silty Clay Loam	Mixed fill

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator F6, Redox Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 1

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

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The area was inundated to a depth of 1 inch, so the hydrology criterion is satisfied.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 1960 & 2000 Lucent Ln and Vacant Prop to NW | City/County: Naperville/DuPage | Sampling Date: 13-Jun-19

Applicant/Owner: Lincoln Property Company Commercial Inc. | State: IL | Sampling Point: **X19**

Investigator(s): A. Metzger, D. Jablonski | Section, Township, Range: S 5 T 38N R 10E

Landform (hillslope, terrace, etc.): Lowland | Local relief (concave, convex, none): flat

Slope: 0.0% / 0.0 ° | Lat.: 41.820580 | Long.: -88.123781 | Datum: NAD 1983

Soil Map Unit Name: Martinton silt loam (189A) | NWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ 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 ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This location satisfies all three criteria and qualifies as wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fraxinus pennsylvanica	10	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5 feet)			
1. Phalaris arundinacea	80	☑ 88.9%	FACW
2. Apocynum cannabinum	10	☐ 11.1%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	90	= Total Cover	
Woody Vine Stratum (Plot size: 5 feet)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.100

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - 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 ○

Remarks: (Include photo numbers here or on a separate sheet.)
All of the dominant species are hydrophytic, so the vegetation criterion is satisfied.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **X19**

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
0-11	10YR	2/1		10YR	6/8	20	C	M	Silt Loam	
11-15	2.5Y	4/2		10YR	6/6	15%	C	M	Silty Clay Loam	
				10YR	6/1	5%	D	M		

[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 Muck 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)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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 ○

Remarks:

This profile exhibits hydric soil field indicator A11, Depleted Below Dark Surface, and satisfies the soils criterion.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

The soil was saturated at the surface which satisfies the hydrology criterion.

APPENDIX II

REPRESENTATIVE PHOTOGRAPHS

PHOTO 1

04/22/2019

View of Area 1 facing northeast.

PHOTO 2

04/22/2019

View of Area 1 facing north.

PHOTO 3

04/22/2019

View of Area 1 facing southwest.

PHOTO 4

04/22/2019

View of Area 2 facing north.

PHOTO 5

04/22/2019

View of Area 2 facing northeast.

PHOTO 6

04/22/2019

View of Area 2 facing south.

PHOTO 7

04/22/2019

View of Area 3 facing southeast.

PHOTO 8

04/22/2019

View of Area 3 facing northeast.

PHOTO 9

06/13/2019

View of Area 3 facing northwest.

PHOTO 10

04/22/2019

View of Area 4 facing northeast.

PHOTO 11

04/22/2019

View of Area 4 facing northwest.

PHOTO 12

04/22/2019

View of Area 4 facing northeast.

PHOTO 13

04/22/2019

View of Area 5 facing northeast.

PHOTO 14

04/22/2019

View of Area 5 facing southwest.

PHOTO 15

04/22/2019

View of Area 5 facing north.

PHOTO 16

04/22/2019

View of the drainageway in Area 6 facing north.

PHOTO 17

04/22/2019

View of the emergent wetland in Area 6 facing southwest.

PHOTO 18

04/22/2019

View of the drainageway in Area 6 facing south.

PHOTO 19

04/22/2019

View of Area 7 facing southeast.

PHOTO 20

04/22/2019

View of Area 8 facing south.

PHOTO 21

06/13/2019

View of Area 9 facing northeast.

PHOTO 22

06/13/2019

View of Area 10 facing southeast.

PHOTO 23

06/13/2019

View of Area 11, facing east.

PHOTO 24

06/13/2019

View of Area 12 facing northeast.

PHOTO 25

04/22/2019

View of Area 13, a man made roadside ditch, facing south.

PHOTO 26

04/22/2019

View of upland Area 14 near Data Point X01 facing north.

PHOTO 27

04/22/2019

View of upland Area 15 near Data Point X02 facing southwest.

PHOTO 28

04/22/2019

View of upland Area 16 near Data Point X04 facing northeast.

PHOTO 29

04/22/2019

View of Area 17 near Data Point X06 facing southwest.

PHOTO 30

04/22/2019

View of Area 18, the spoil pile, facing south.

APPENDIX III

REGULATORY INFORMATION

REGULATORY REQUIREMENTS

U.S. ARMY CORPS OF ENGINEERS

Pursuant to Section 404 of the Clean Water Act, the U. S. Army Corps of Engineers (USACE) has jurisdiction over the placement of fill or dredged material in all jurisdictional Waters of the United States (Waters). Jurisdictional areas include rivers, streams, tributaries, lakes, natural ponds and wetlands adjacent (bordering, contiguous or neighboring) to these areas.[1] A tributary is characterized by the presence of physical indicators of flow (bed and bank, ordinary high water mark) that contribute flow directly or through another Waters to a traditional navigable or interstate water. Ditches that meet certain criteria can be considered a tributary. Swales and erosional features are generally not considered to be tributaries or Waters.

Wetlands not considered adjacent waters, but located within 4,000 feet of the high tide line or ordinary water mark of traditional navigable waters, interstate waters, or a jurisdictional tributary, can be jurisdictional if they have a significant nexus to a traditional navigable or interstate waters (floodplain Waters/wetlands). A significant nexus determination will be based on hydrologic and ecological factors.

Wetlands not considered adjacent to jurisdictional Waters are considered isolated wetlands and are not regulated under the Clean Water Act.

General permits, including nationwide and regional permits, are designed to expedite the processing of permits for minor non-controversial projects that are similar in nature and of minimal environmental impact. Currently, 52 nationwide permits have been issued. They became effective on March 19, 2017, and will expire on March 18, 2022.

Within the boundaries of the Chicago District, USACE, most NWPs were replaced with the Regional Permit Program (RPP), which were reissued on April 1, 2012 and will expire on April 1, 2017. Category I RPPs will generally authorize impacts of 0.50 acres or less. Category II RPPs will authorize impacts of between 0.50 acres and 1.0 acre. Any projects proposing impacts to High Quality Aquatic Resources will be processed under Category II. Compensatory wetland mitigation, at a ratio of 1.5:1, is required for all projects that impact more than 0.10 acre. Mitigation for impacts to High Quality Aquatic Resources typically is required at a higher ratio (generally 3:1 or greater).

High Quality Aquatic Resources (HQARs) are aquatic areas considered to be regionally critical due to their uniqueness, scarcity, and/or value, and other wetlands considered to perform functions important to the public interest, as defined in 33 CFR 320.4(b)(2). These resources include Advanced Identification (ADID) sites, bogs, ephemeral pools, fens, forested wetlands, sedge meadows, seeps, streams rated Class A or B in the Illinois Biological Stream Characterization study, streamside marshes, wet prairies, wetlands supporting Federal or Illinois endangered or threatened species, and wetlands with a floristic quality index of 20 or greater, or mean C-value of 3.5 or greater. These areas generally are regarded as unsuitable for dredge or fill activities. See Appendix IV for definitions of the wetland types, and criteria used to evaluate the presence of HQARs during wetland delineations.

[1] Obama 2015 Clean Water Rule, as of August 16, 2018

Wetland impacts greater than 1.0 acre will require authorization under an individual permit (IP), which requires greater scrutiny of the proposed project by the USACE and other concerned government agencies, and a comment period from the general public.

DuPage County Ordinance

Pursuant to the 2013 *DuPage County Countywide Stormwater and Flood Plain Ordinance* (Ordinance), any development that affects a special management area (i.e., floodplain, wetland, wetland buffer, or waterway buffer) requires a Stormwater Management Permit. Jurisdictional wetland determinations for review under the ordinance are made following the methods given in the 1987 *Corps of Engineers Wetlands Delineation Manual*. Wetland delineations conducted in DuPage County do not rely on federal jurisdiction, so both adjacent and isolated wetlands are regulated. Field verification of wetland delineations is conducted by the DuPage County, or by village staff in full waiver communities.

All delineated wetlands are to be classified as critical or regulatory wetlands according to the criteria defined in Section 15-85 of the Ordinance. If any one of the criteria is satisfied, that wetland is considered Critical and mitigation will be required at a ratio of 3:1. If none of the criteria is satisfied, that wetland is considered Regulatory and mitigation will be required at a ratio of 1.5:1. The assessment criteria are listed and addressed in Appendix V.

Under the DuPage County Ordinance, a narrative description of measures taken to avoid and minimize wetland impacts is required for all wetlands greater than 0.1 acre in size. Development in or affecting a wetland can be initiated only after an applicant demonstrates that there are no practicable alternatives to impacting a wetland. According to Section 15-92 of the Ordinance, a vegetated buffer 50 feet wide is required around all preserved regulatory wetlands and a vegetated buffer 100 feet wide is required around all critical wetlands unless mitigation for buffer functions is provided.

For projects which occur in partial waiver communities, where the wetland review is conducted by the DuPage County Department of Economic Development & Planning (EDP), the Corps of Engineers has issued General Permit (GP) Number 25, *Programmatic General Permit for Activities Requiring Review under Section 404 of the Clean Water Act Within the Established Boundaries of DuPage County, Illinois*. GP 25 authorizes the EDP to conduct technical reviews on behalf of the Corps of Engineers for projects with minimal impacts to the aquatic environment, including wetlands. Upon the completion of the technical review by EDP, the Corps of Engineers will authorize a project in accordance with the General Permit. In full waiver communities, such as Downers Grove, the community engineer has authority under the ordinance "to review and approve all applications for development in all areas under its jurisdiction." (§15-31.3 of the County Ordinance).

APPENDIX IV

DELINEATION METHODS AND FLORISTIC ANALYSIS

WETLAND DELINEATION METHODS

The site was field-inspected and plant species lists were recorded to document the vegetation types present. A wetland indicator status is assigned to each plant species based on a regional list published by the U.S. Army Corps of Engineers in 2016. The categories are based on the estimated probability that a species would be naturally encountered in a wetland. Under the *Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region*, the area is considered to be dominated by hydrophytic vegetation and representative of a wetland plant community by one of two methods, the dominance test or the prevalence index. The dominance test is satisfied if greater than 50% of the dominant plant species in a given area have a wetland indicator status of FAC, FACW, or OBL. The prevalence index assigns a numeric value to the wetland indicator status, and uses a weighted-average of the wetland indicator status of all plant species present in the sampling area. A wetland plant community is present if the prevalence index is less than 3.0.

Plant Wetland Indicator Status Categories

Indicator Category	Symbol	Indicator Definition
Obligate Wetland Plants	OBL	Plants that occur almost always (estimated probability greater than 99%) in wetlands under natural conditions, but which may also occur rarely in non-wetlands.
Facultative Wetland Plants	FACW	Plants that usually occur in wetlands (estimated probability 67% to 99%), but occasionally are found in non-wetlands.
Facultative Plants	FAC	Plants with a similar likelihood (estimated probability 33% to 67%) of occurring in both wetlands and non-wetlands.
Facultative Upland Plants	FACU	Plants that usually occur in non-wetlands (estimated probability 67% to 99%) but occasionally are found in wetlands.
Obligate Upland Plants	UPL	Plants that occur almost always (estimated probability greater than 99%) in non-wetlands under natural conditions, but which may also occur rarely in wetlands.

In addition to being dominated by hydrophytic vegetation, each suspect wetland must also exhibit hydric soils and wetland hydrology. As defined in the Federal Register (*Federal Register, Volume 59*: July 13, 1994), "A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." According to the National Technical Committee for Hydric Soils, documentation of the presence or absence of a hydric soil can only be determined through on-site investigation, not strictly by its classification of an area on soil survey maps. Soils are identified as hydric in the field if they possess certain indicators, as defined in the *Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region.* These field indicators are a regionally specific subset of the field indicators described in the *Field Indicators of Hydric Soils in the United States* (Version 8.0; NRCS, 2016). The absence of a field indicator in a soil does not exclude that soil from being classified as hydric. Soil series, soil color, the presence of mottling or gleying, and depth to water table are

determined and recorded in the field. These features, when present, may indicate a hydric soil when hydric soil field indicators are absent.

Determinations of hydrology are based on observations wetland hydrology indicators. There are two types of indicators, primary indicators and secondary indicators. A determination of wetland hydrology requires the presence of one primary indicator or two secondary indicators. Hydrology indicators are placed into four groups, these being observations of surface water or saturated soils, evidence of recent inundation, evidence of recent soil saturation, or evidence of other site conditions or data. A listing of the wetland hydrology indicators is provided in the table below.

Indicator	Category	
	Primary	Secondary
Group A – Observation of Surface Water or Saturated Soils		
A1 – Surface water	X	
A2 – High water table	X	
A3 – Saturation	X	
Group B – Evidence of Recent Inundation		
B1 – Water marks	X	
B2 – Sediment deposits	X	
B3 – Drift deposits	X	
B4 – Algal mat or crust	X	
B5 – Iron deposits	X	
B7 – Inundation visible on aerial imagery	X	
B8 – Sparsely vegetated concave surface	X	
B9 – Water-stained leaves	X	
B13 – Aquatic fauna	X	
B14 – True aquatic plants	X	
B6 – Surface soil cracks		X
B10 – Drainage patterns		X
Group C – Evidence of Current or Recent Soil Saturation		
C1 – Hydrogen sulfide odor	X	
C3 – Oxidized rhizospheres along living roots	X	
C4 – Presence of reduced iron	X	
C6 – Recent iron reduction in tilled soils	X	
C7 – Thin muck surface	X	
C2 – Dry-season water table		X
C8 – Crayfish burrows		X
C9 – Saturation visible on aerial imagery		X
Group D – Evidence from Other Site Conditions or Data		
D9 – Gauge or well data	X	
D1 – Stunted or stressed plants		X
D2 – Geomorphic position		X
D5 – FAC-neutral test		X

FLORISTIC QUALITY ASSESSMENT

Plant communities of the site were evaluated with the Floristic Quality Assessment (FQA) methodology, a widely-used technique used for rapid assessment of the floristic quality in a defined area or plant community. In using FQA, the presence of each plant species is recorded, generating a species inventory. This inventory is entered into computer software that was used to generate the species lists used in this report. Floristic quality calculations are also generated that provides a compilation of various floristic quality data, resulting in a determination of the floristic quality of the subject area.

The floristic quality data for an area partially indicates its quality as a natural area (i.e., relative to known or perceived pre-settlement or disturbance conditions). One indicator of the degree of disturbance or floristic quality in an area is the calculated Native Floristic Quality Index (Native FQI). A high Native FQI value indicates a high-quality natural area, but how high the Native FQI must be for an area to be of high quality is a subjective determination. In general, a wetland (or other defined area) with a Native FQI greater than 20.00 from a single observation may be considered a moderately high quality plant community. These areas have a high potential for containing more conservative or high-quality plant species. Therefore, adverse impacts to such areas, especially wetlands and subsequent proposals for compensatory mitigation, may be scrutinized carefully by the regulatory agencies.

A high number of native species with high coefficients of conservatism "C" (a subjective measure of quality based on habitat specificity and relative tolerance to disturbance; weedy species are highly disturbance tolerant, and are ranked lower) will result in a high Native FQI. The C value is based on the relative rarity of a species and/or the resiliency of a species following disturbance. Coefficients of conservatism for native plant species range from 0 for common, weedy species to 10 for rare, highly conservative species. Adventive species are not assigned a C value. Adventive species are non-native species that have entered the Chicago region since European settlement. These species generally do not lend themselves to increased floristic quality, but instead appear after a disturbance. Thus, a high proportion of these species in a given area or community may be an indication of a lower quality plant community.

The wetness coefficient (W, ranging from -5 to +5) refers to the corresponding wetland indicator status (e.g., OBL = obligate wetland species, -5; FAC = facultative species, 0; UPL = upland species, +5) for U.S. Fish and Wildlife Service Region 3 (Illinois, Michigan, Indiana, Missouri, Iowa, Wisconsin, and Minnesota). A wetland indicator status noted in brackets (e.g., [FACW]) is a modification of the Region 3 indicator status to apply locally in the 22-county Chicago region covered by *Plants of the Chicago Region*. The Wetness coefficient is useful in evaluating the general "wetness" affinity of a sampled plant community. If the average indicator status among all species present is in the FAC, FACW, or OBL classes, then the plant community may be considered hydrophytic.

HIGH QUALITY AQUATIC RESOURCES

U.S. Army Corps of Engineers, Chicago District Regional Permit Program

High Quality Aquatic Resources (HQARs) include Advanced Identification (ADID) sites (mapped in Kane, Lake and McHenry Counties), bogs, dune and swale complexes, ephemeral pools, fens, forested wetlands, sedge meadows, seeps, streams rated Class A or B in the Illinois Biological Stream Characterization study, wet prairies, wetlands supporting Federal or Illinois endangered or threatened species, and wetlands with a floristic quality index of 20 or greater, or mean C-value of 3.5 or greater. These definitions are listed below. If a given wetland meets one or more of these definitions, that wetland is considered a HQAR and a Category II Regional Permit or Individual Permit is required.

Advanced Identification (ADID) sites: Aquatic sites that have been identified by the Chicago District and U.S. Environmental Protection Agency, in advance of specific permit requests, as areas generally unsuitable for the disposal of dredged or fill material, because of a variety of factors, including high floristic values, water quality or storage functions, or similar wetland functions performed at elevated levels. ADID sites include various Waters of the U.S., including wetlands. An ADID map for the subject property is included with this report as Figure 3.

Bog: A low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus *Sphagnum*.

Dune and Swale Complex: Areas usually parallel to the Lake Michigan shoreline and typified by sandy, linear, upland ridges alternating with low-relief wetland created over time during changes in the Lake Michigan's water levels.

Ephemeral pool: A seasonally inundated depression within a forested wetland or upland community, usually located on a moraine, glacial outwash plain, or in an area shallow to bedrock; also known locally as a "vernal pool." These areas may not be permanently vegetated.

Fen: A peatland, herbaceous (including calcareous floating mats) or wooded, with calcareous groundwater flow.

Forested wetland: A wetland dominated by native woody vegetation with at least one of the following species or genera present: *Carya* spp., *Cephalanthus occidentalis*, *Cornus alternifolia*, *Fraxinus nigra*, *Juglans cinerea*, *Nyssa sylvatica*, *Quercus* spp., *Thuja occidentalis, Betula nigra, Betula alleghaniensis, Betula papyrifera, Fagus grandifolia.*.

Sedge meadow: A wetland dominated by at least one of the following genera: *Carex*, *Calamagrostis*, *Cladium*, *Deschampsia*, *Eleocharis*, *Rynchospora*, *Scleria*, or *Eriophorum*.

Seep: A wetland, herbaceous or wooded, with saturated soil or inundation resulting from the diffuse flow of groundwater to the surface stratum. [Seeps typically occur on slopes because of blocked vertical infiltration.]

Streams rated A or B in the Illinois Biological Stream Characterization study: The historical Class A and B rating system was replaced with the new Illinois Department of Natural Resources stream classification system that can be found at:
https://www.dnr.illinois.gov/conservation/BiologicalStreamratings/Pages/default.aspx

Wet prairie: A wetland dominated by native graminoid species with a diverse indigenous forb component that is seasonally saturated and/or temporarily inundated and may resemble a fen in its best development. Species found in a high quality wet prairie include at least one of the following: *Calamagrostis canadensis*, *Spartina pectinata*, *Aster puniceus firmus*, *Beckmannia syzigachne*, *Chelone glabra*, *Eleocharis wolfii*, *Lysimachia quadrifolia*, *Oenothera perennis*, *Oenothera pilosella*, *Pedicularis lanceolata*, and *Solidago ohioensis*.

Wetlands Supporting Federal or Illinois Endangered or Threatened Species: An Agency Action Report is routinely requested from the Illinois Department of Natural Resources (IDNR) and from the U.S. Fish and Wildlife Service (USFWS) for wetland delineations. These reports indicate the likelihood of listed species (that is, those species considered legally protected as threatened or endangered) being found near or on a subject property, or possible encroachment into protected natural area reserves. If a listed species record is indicated for the site, an endangered and threatened species investigation may be required to evaluate the actual presence or absence of the species in question. This inquiry is preliminary and does not preclude the presence of otherwise unrecorded listed species.

Wetlands with a Floristic Quality Index of 20 or greater or a mean C-value of 3.5 or greater: Plant species inventories collected during wetland delineations are used to generate floristic quality values using the Floristic Quality Assessment method published in *Plants of the Chicago Region* (Swink and Wilhelm, 1994). These tables are included in this report for each of the areas identified as wetland.

STREAM CLASSIFICATION
WITHIN THE CHICAGO DISTRICT

The historical Class A and B rating system was replaced with the new Illinois Department of Natural Resources stream classification system that can be found at:

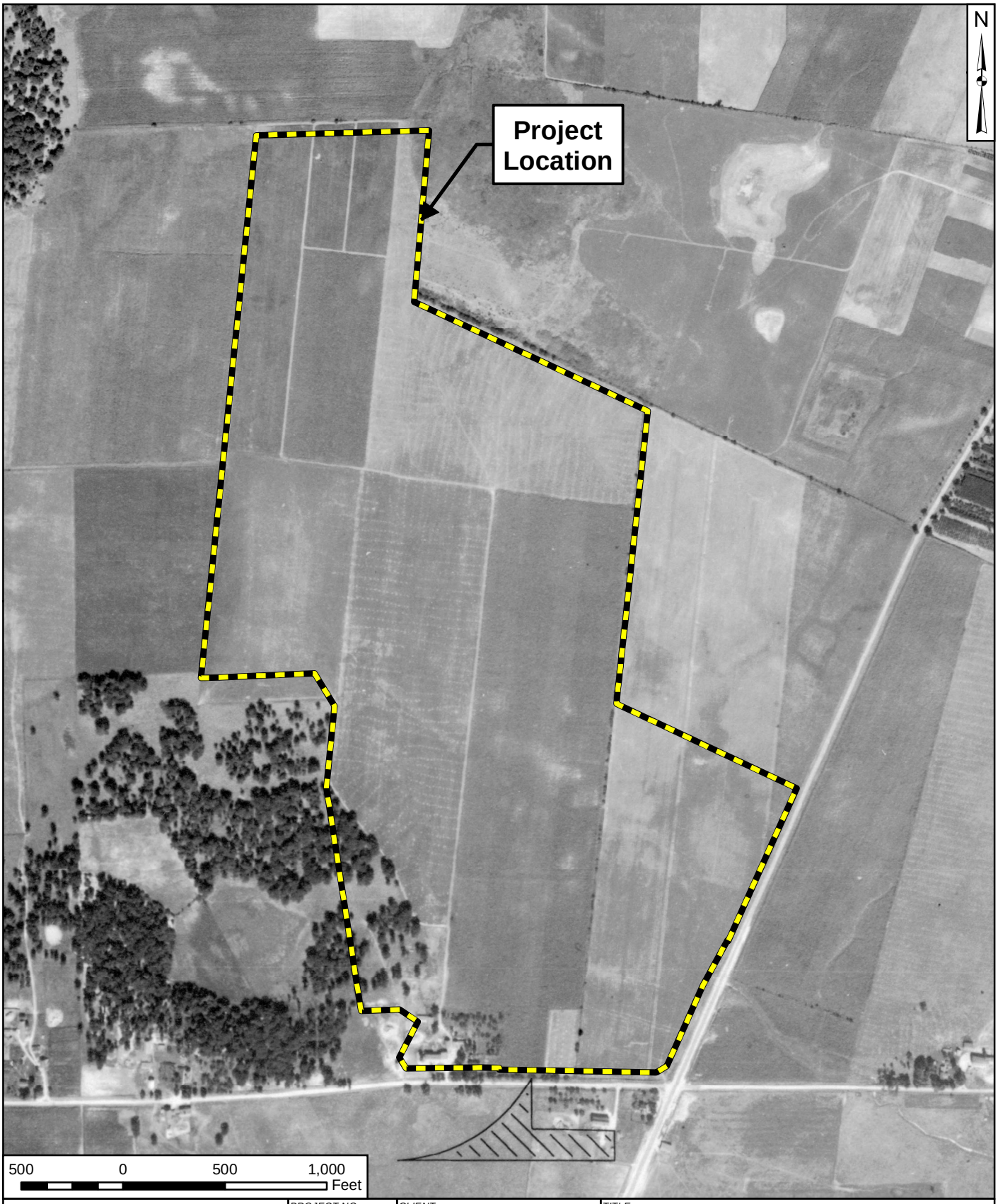
https://www.dnr.illinois.gov/conservation/BiologicalStreamratings/Pages/default.aspx

APPENDIX V

DUPAGE COUNTY WETLAND ASSESSMENT

APPENDIX VI

HISTORICAL SITE INFORMATION



7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
www.v3co.com

Visio, Vertere, Virtute...
"The Vision To Transform with Excellence"

PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT:
Lincoln Property Company
Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

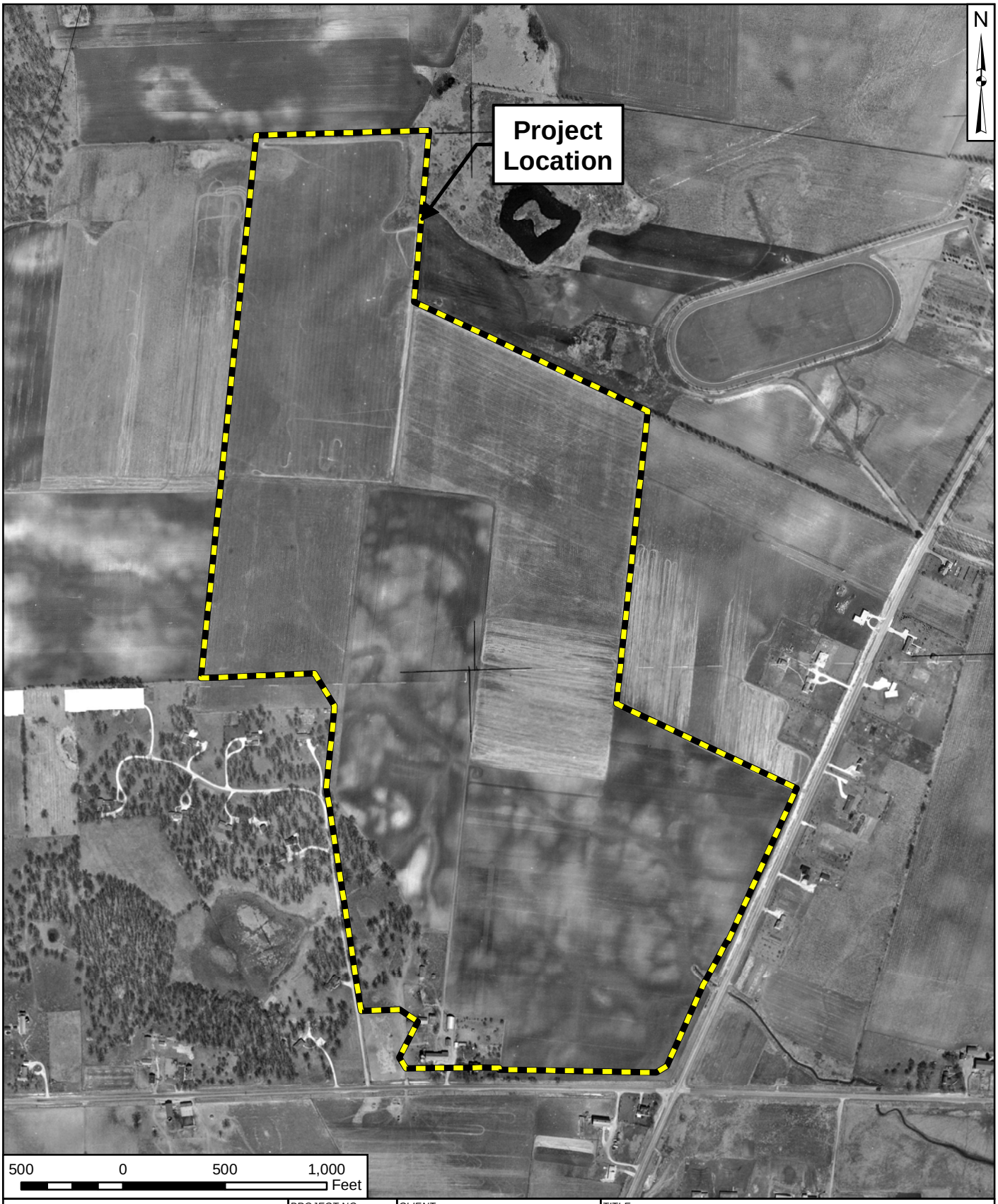
BASE LAYER:
ISGS Historical Aerial Imagery
(1939)

TITLE:
HISTORICAL AERIAL IMAGERY (1939) MAP

SITE:
1960 Lucent Lane, 2000 Lucent Lane
and Vacant Property to the Northwest
Naperville, Illinois

FIGURE: A

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGAhist_39_19112.mxd



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PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT:
Lincoln Property Company
Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

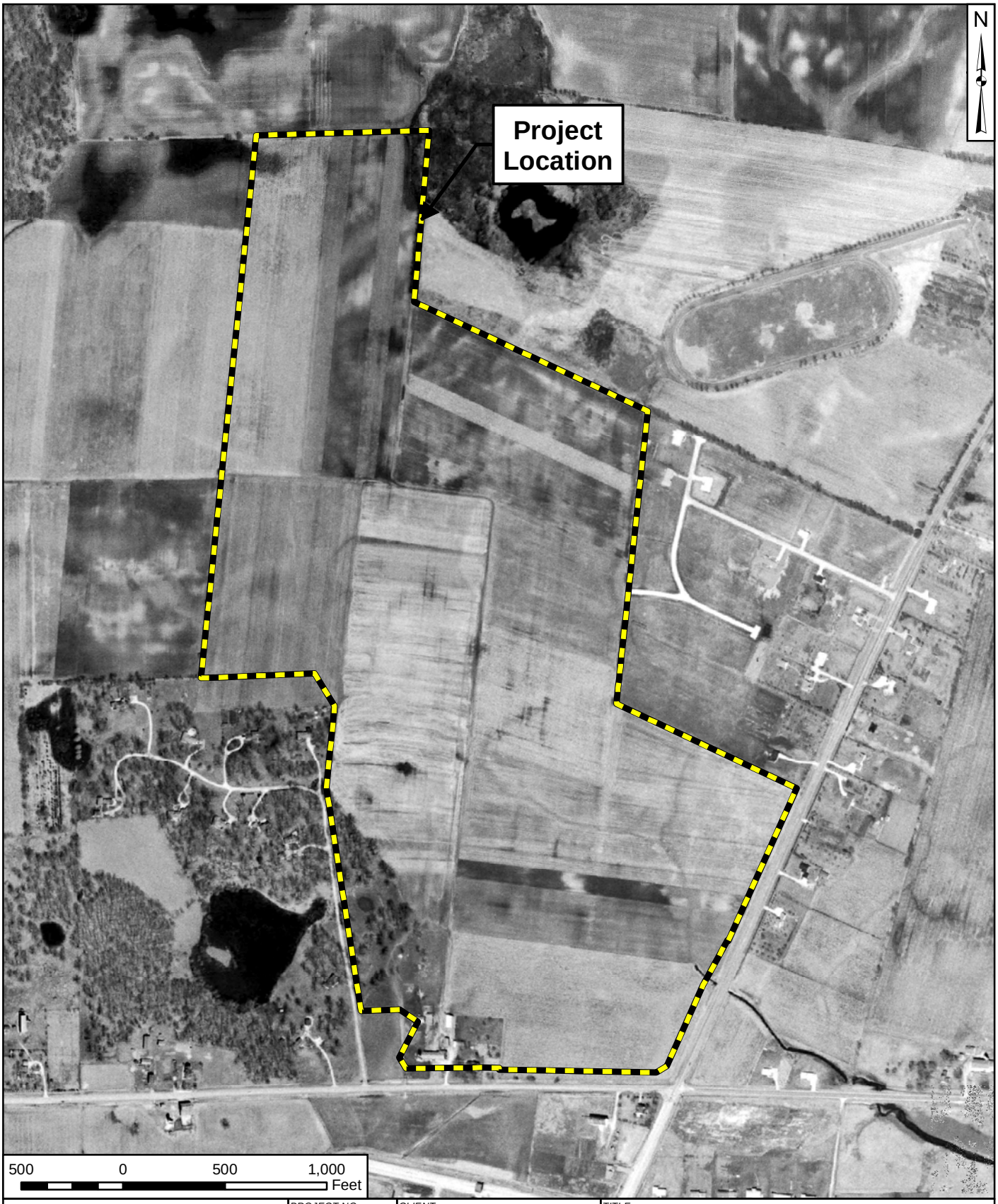
BASE LAYER:
DuPage County Aerial Imagery
(1956)

TITLE:
HISTORICAL AERIAL IMAGERY (1956) MAP

SITE:
1960 Lucent Lane, 2000 Lucent Lane
and Vacant Property to the Northwest
Naperville, Illinois

FIGURE: B

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGBhist_56_19112.mxd



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PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT: Lincoln Property Company Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

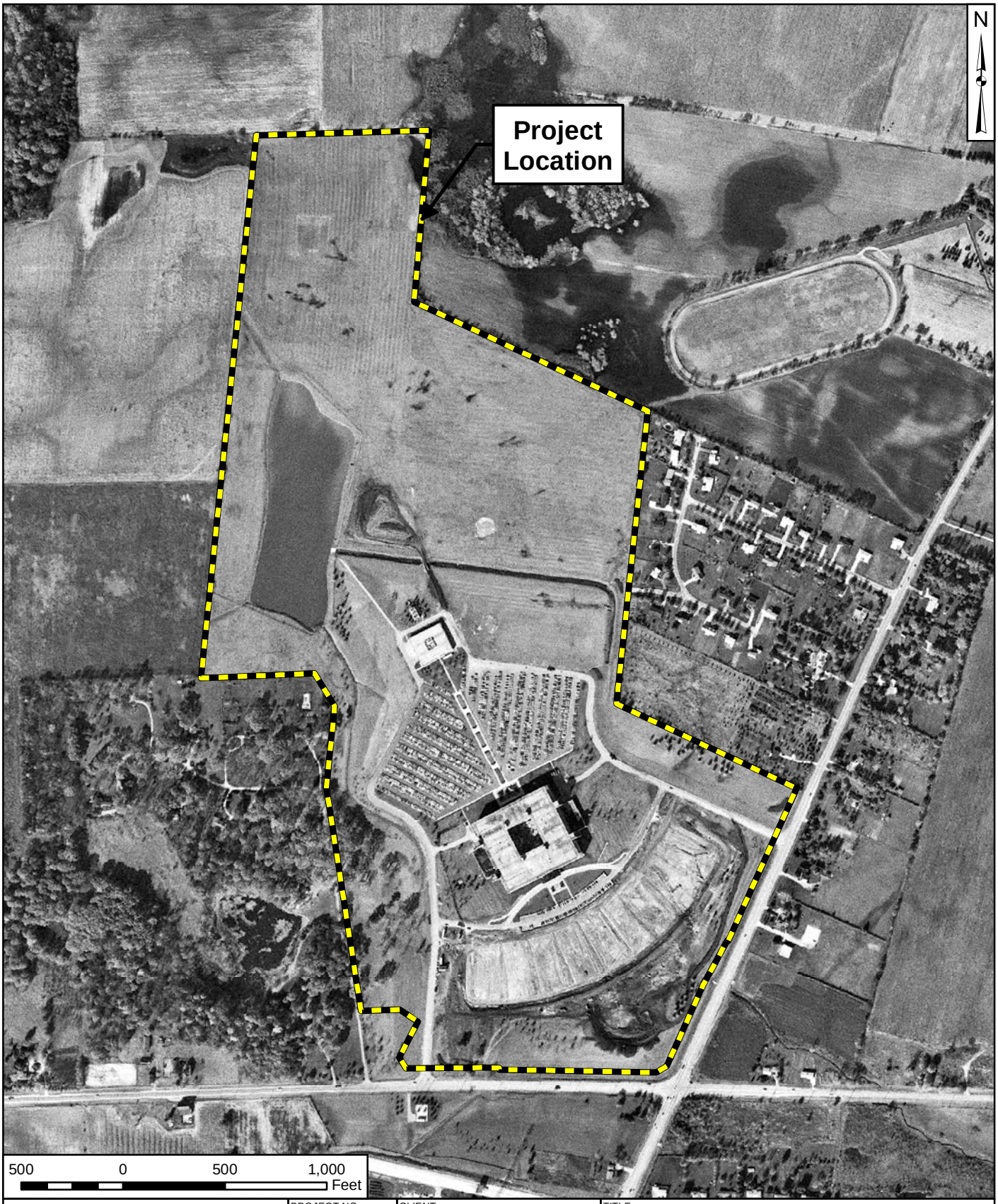
BASE LAYER: NETROnline Historical Aerial (1962)

TITLE: **HISTORICAL AERIAL IMAGERY (1962) MAP**

SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest
Naperville, Illinois

FIGURE: C

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGChist_62_19112.mxd



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PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT:
Lincoln Property Company
Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

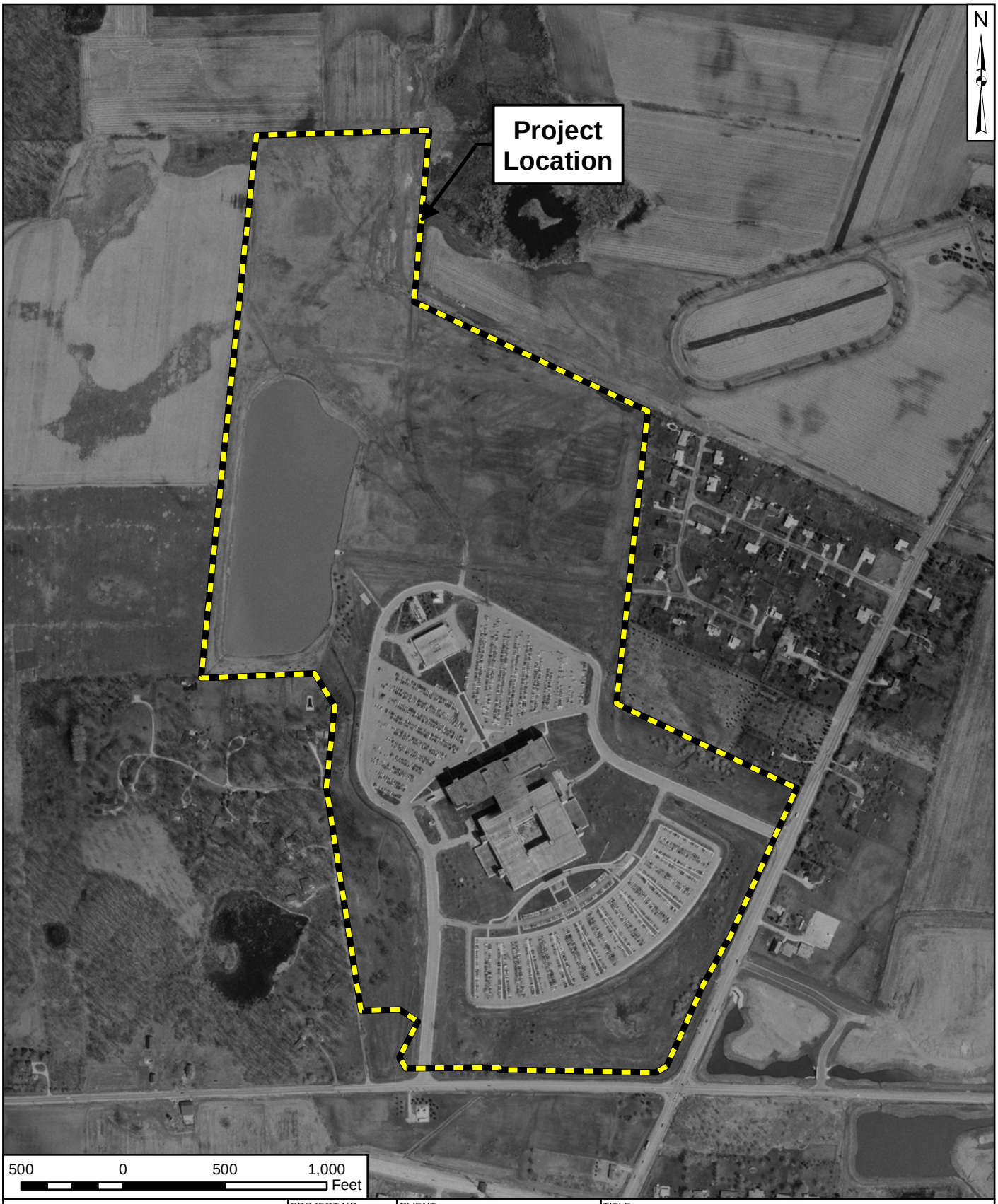
BASE LAYER:
NETROnline Aerial Imagery
(1972)

TITLE:
HISTORICAL AERIAL IMAGERY (1972) MAP

SITE:
1960 Lucent Lane, 2000 Lucent Lane
and Vacant Property to the Northwest
Naperville, Illinois

FIGURE: D

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGDhist_72_19112.mxd



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PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT: Lincoln Property Company Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

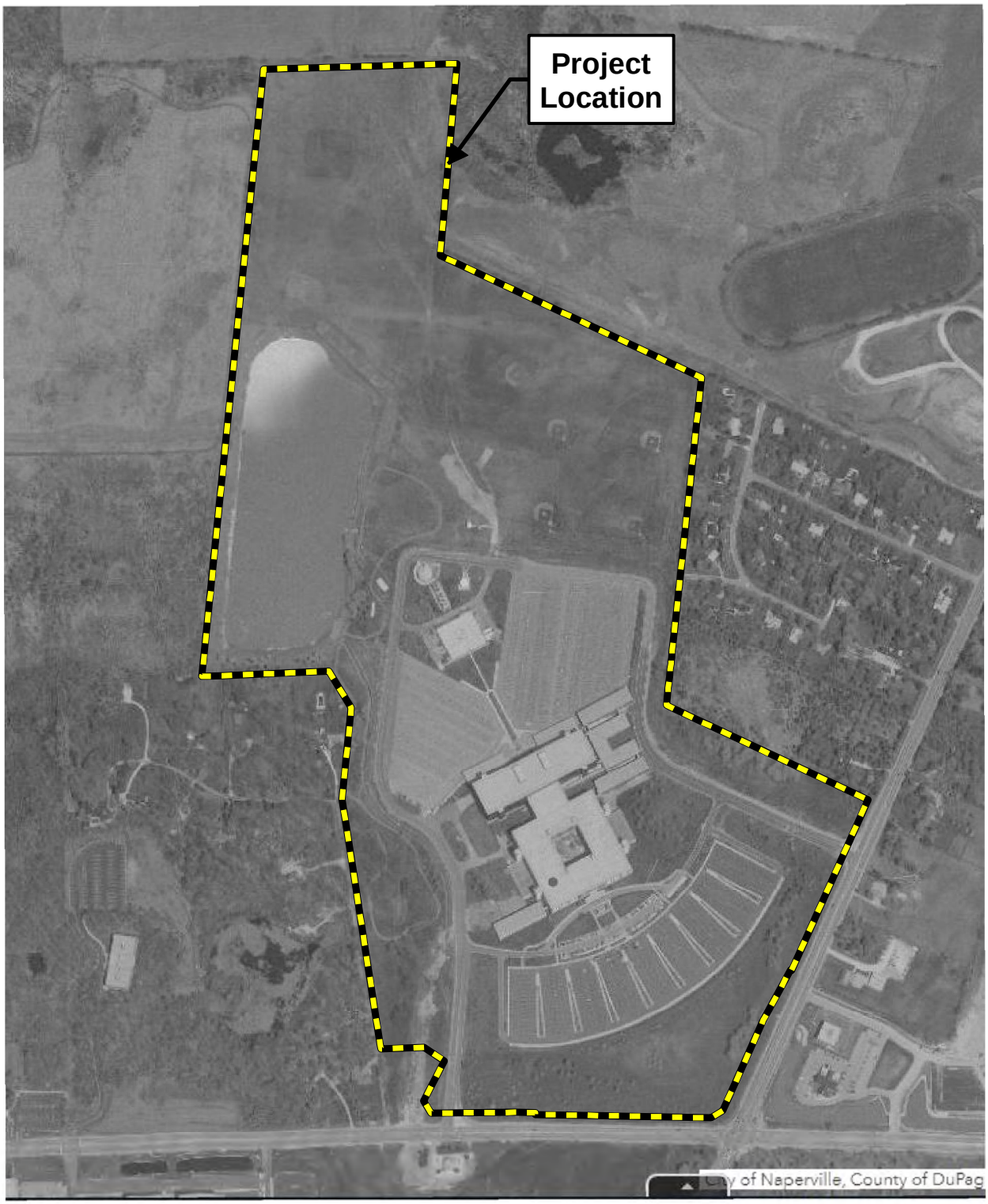
BASE LAYER: DuPage County Aerial Imagery (1978)

TITLE: **HISTORICAL AERIAL IMAGERY (1978) MAP**

SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest
Naperville, Illinois

FIGURE: E

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGEhist_78_19112.mxd



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Woodridge, IL 60517
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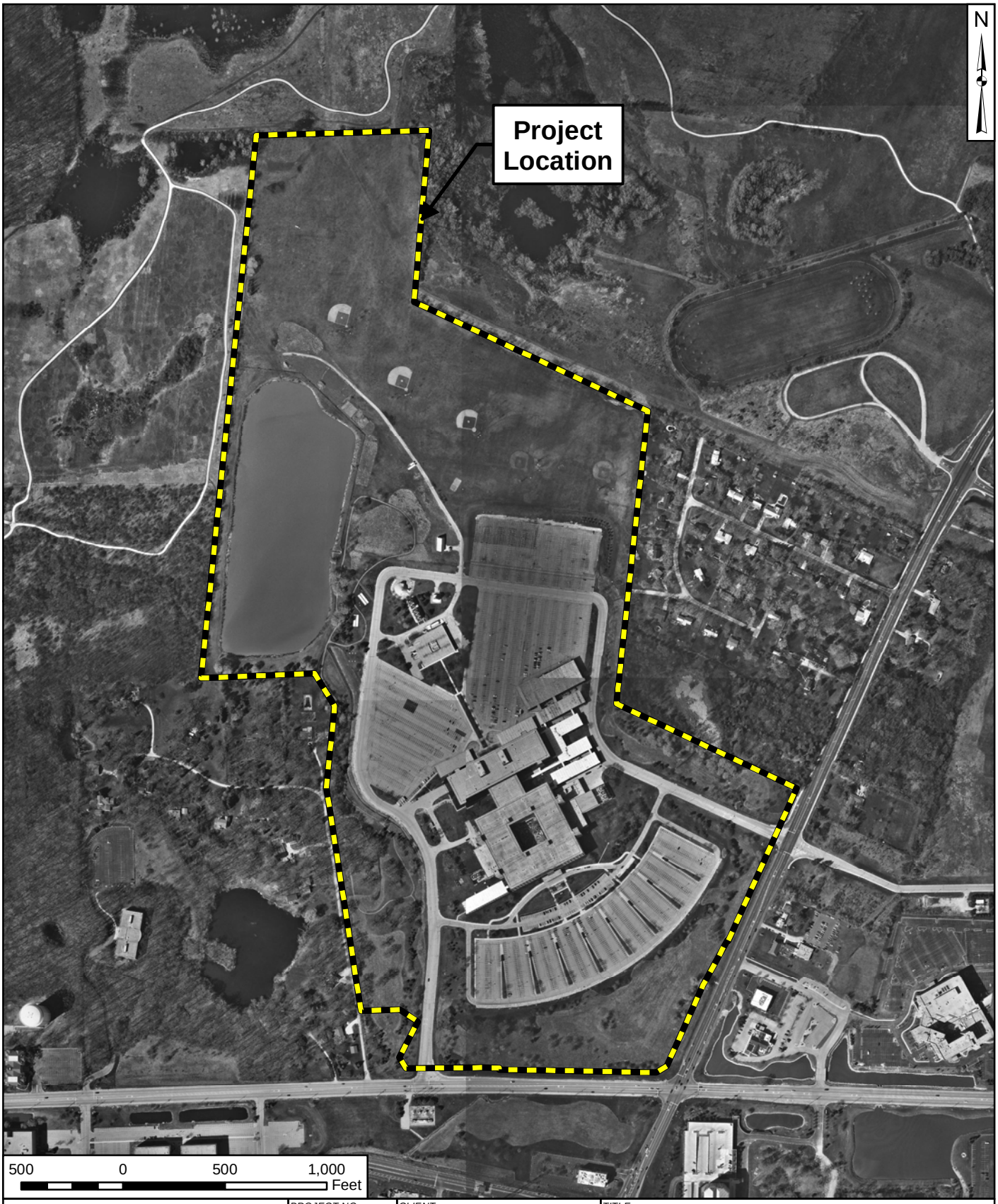
PROJECT NO.:	19112
CREATED BY:	AMM
DATE:	04/30/2019
SCALE:	See Scale Bar
CLIENT:	Lincoln Property Company Commercial, Inc. 120 North LaSalle Street Suite 2900 Chicago, Illinois 60602
BASE LAYER:	DuPage County Aerial Imagery (1987)

TITLE:
HISTORICAL AERIAL IMAGERY (1987) MAP

SITE:
1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest
Naperville, Illinois

FIGURE:
F

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGFhist_87_19112.mxd



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PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT: Lincoln Property Company Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

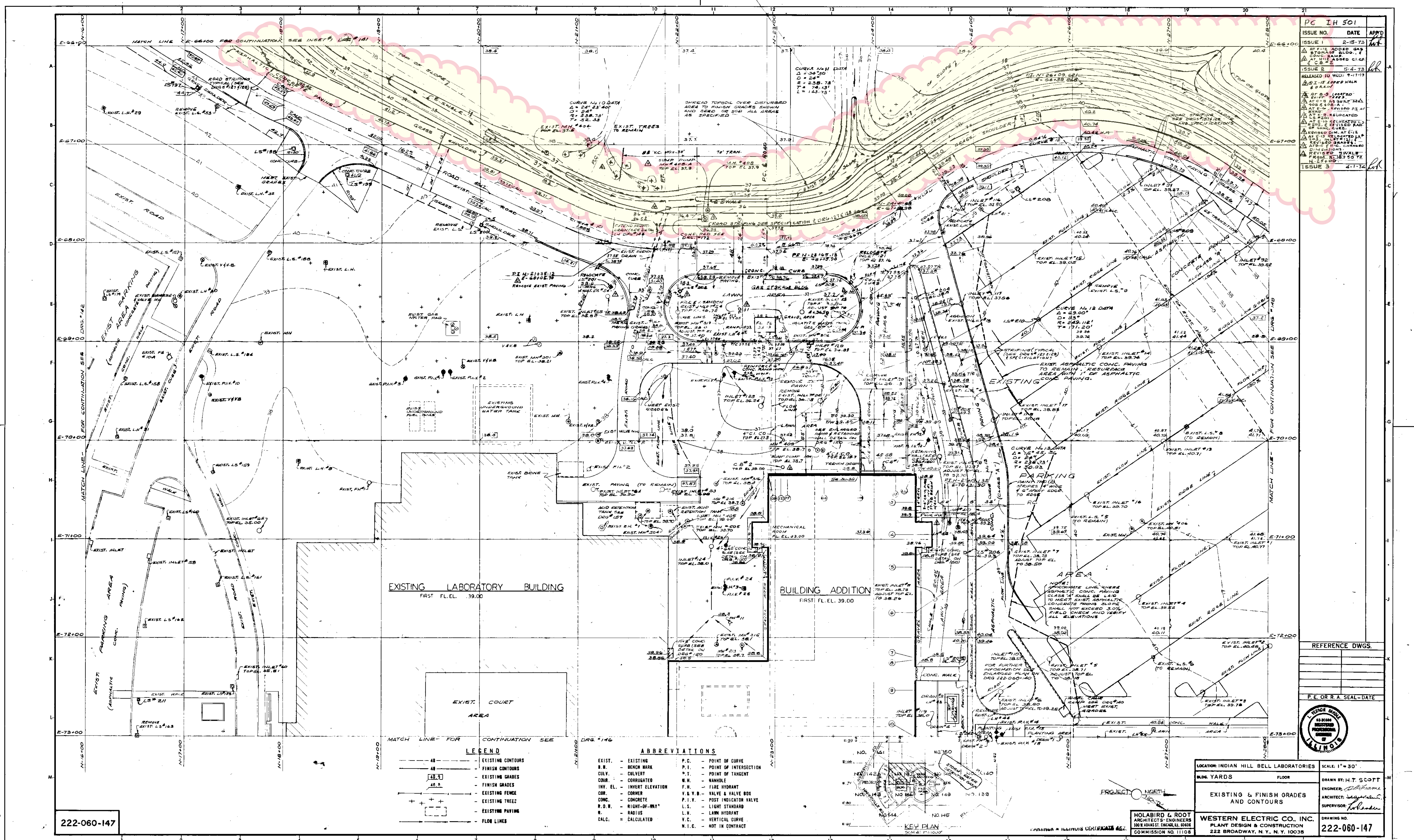
BASE LAYER: DuPage County Aerial Imagery (1998)

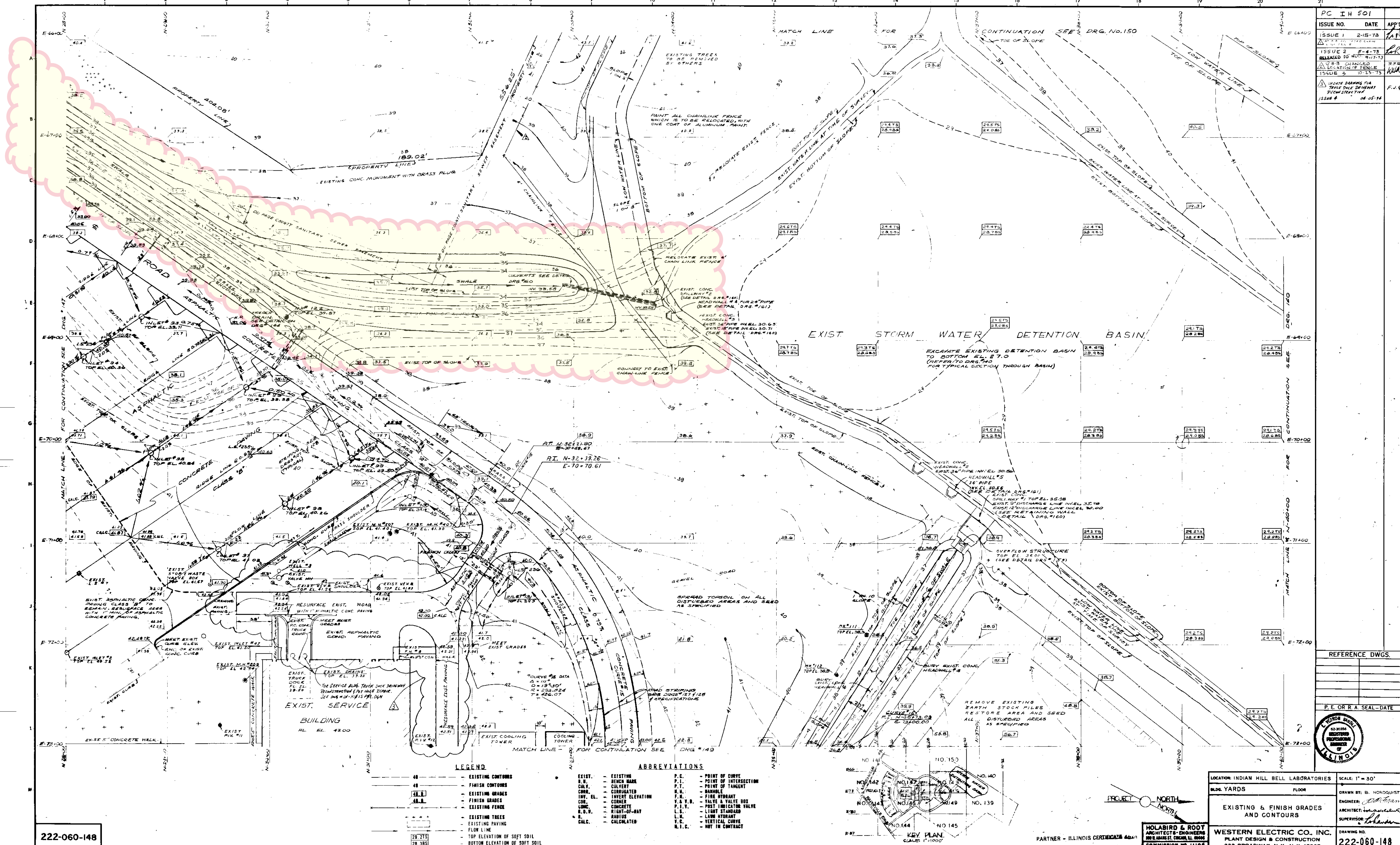
HISTORICAL AERIAL IMAGERY (1998) MAP

SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest
Naperville, Illinois

FIGURE: G

N:\2019\19112\Drawings\ArcGIS\Wetland\Historical\FIGGhist_98_19112.mxd


PC IH 501
ISSUE NO. DATE APP'D
ISSUE 1 2-15-73
1 AT F-12 ADDED GAS STORAGE BLDG., & CONC. RAMP.
2 AT H-12 ADDED C.I.C.O. & C.B. #2
ISSUE 2 5-4-73
RELEASED TO WECO 9-17-73
3 @ I-15 ADDED WALK & DRAIN
4 AT B-9 LOCATED EXIST. TREES.
5 AT C-11 AS BUILT MHS. 408 & 408-A.
6 AT E-6, REVISED P.I. OF ROAD.
7 AT E-9, RELOCATED L.S. #201
8 AT E-10 RELOCATED L.S. #202, & REVISED RAD. OF CONC. CURB.
9 REVISED DIM. AT E-12
10 AT E-13 RELOCATED L.S. #203, INLET #121 & REVISED GRADES.
11 AT 9-C & 11-C, CHANGED DIMENSIONS.
12 REVISED SWALE FROM N-18+50 TO N-25+00.
ISSUE 3 4-1-74
REFERENCE DWGS.
P.E. OR R.A. SEAL-DATE
EXISTING LABORATORY BUILDING
FIRST FL. EL. 39.00
BUILDING ADDITION
FIRST FL. EL. 39.00
EXISTING PARKING AREA
EXIST. COURT AREA
GAS STORAGE BLDG.
MECHANICAL ROOM
MATCH LINE - FOR CONTINUATION SEE DRG. #146
MATCH LINE - FOR CONTINUATION SEE DRG. #148
MATCH LINE - FOR CONTINUATION SEE DRG. #142
MATCH LINE E-66+00 FOR CONTINUATION SEE INSET #1 DRG. #141
LEGEND
40 - EXISTING CONTOURS
40 - FINISH CONTOURS
40.0 - EXISTING GRADES
40.0 - FINISH GRADES
- EXISTING FENCE
- EXISTING TREES
- EXISTING PAVING
- FLOW LINES
ABBREVIATIONS
EXIST. - EXISTING
B.M. - BENCH MARK
CULV. - CULVERT
CORR. - CORRUGATED
INV. EL. - INVERT ELEVATION
COR. - CORNER
CONC. - CONCRETE
R.O.W. - RIGHT-OF-WAY
R. - RADIUS
CALC. = CALCULATED
P.C. - POINT OF CURVE
P.I. - POINT OF INTERSECTION
P.T. - POINT OF TANGENT
M.H. - MANHOLE
F.H. - FIRE HYDRANT
V.& V.B. - VALVE & VALVE BOX
P.I.V. - POST INDICATOR VALVE
L.S. - LIGHT STANDARD
L.H. - LAWN HYDRANT
V.C. - VERTICAL CURVE
N.I.C. - NOT IN CONTRACT
KEY PLAN
PROJECT NORTH
HOLABIRD & ROOT
ARCHITECTS-ENGINEERS
300 W. ADAMS ST. CHICAGO, ILL. 60606
COMMISSION NO. 11108
LOCATION: INDIAN HILL BELL LABORATORIES
BLDG. YARDS FLOOR
EXISTING & FINISH GRADES AND CONTOURS
WESTERN ELECTRIC CO., INC.
PLANT DESIGN & CONSTRUCTION
222 BROADWAY, N.Y., N.Y. 10038
SCALE: 1" = 30'
DRAWN BY: H.T. SCOTT
ENGINEER:
ARCHITECT:
SUPERVISOR:
DRAWING NO.
222-060-147
222-060-147



PC IH 501
ISSUE NO. DATE APP'D
ISSUE 1 2-15-73
ISSUE 2 5-4-73
ISSUE 3 10-23-73
ISSUE 4
REFERENCE DWGS.
P.E. OR R.A. SEAL-DATE
LOCATION: INDIAN HILL BELL LABORATORIES
BLDG. YARDS
FLOOR
SCALE: 1" = 30'
DRAWN BY: B. NORDQUIST
ENGINEER:
ARCHITECT:
SUPERVISOR:
EXISTING & FINISH GRADES AND CONTOURS
HOLABIRD & ROOT ARCHITECTS-ENGINEERS
COMMISSION NO. 11106
WESTERN ELECTRIC CO., INC.
PLANT DESIGN & CONSTRUCTION
222 BROADWAY, N.Y., N.Y. 10038
DRAWING NO.
222-060-148
PARTNER - ILLINOIS CERTIFICATE
KEY PLAN
PROJECT NORTH
NORTH
LEGEND
EXISTING CONTOURS
FINISH CONTOURS
EXISTING GRADES
FINISH GRADES
EXISTING FENCE
EXISTING TREES
EXISTING PAVING
FLOW LINE
TOP ELEVATION OF SOFT SOIL
BOTTOM ELEVATION OF SOFT SOIL
ABBREVIATIONS
EXIST. - EXISTING
B.M. - BENCH MARK
CULV. - CULVERT
CORR. - CORRUGATED
INV. EL. - INVERT ELEVATION
COR. - CORNER
CONC. - CONCRETE
R.O.W. - RIGHT-OF-WAY
R. - RADIUS
CALC. - CALCULATED
P.C. - POINT OF CURVE
P.I. - POINT OF INTERSECTION
P.T. - POINT OF TANGENT
M.H. - MANHOLE
F.H. - FIRE HYDRANT
V. & V.B. - VALVE & VALVE BOX
P.I.V. - POST INDICATOR VALVE
L.S. - LIGHT STANDARD
L.H. - LAWN HYDRANT
V.C. - VERTICAL CURVE
N.I.C. - NOT IN CONTRACT
EXIST. STORM WATER DETENTION BASIN
EXCAVATE EXISTING DETENTION BASIN TO BOTTOM EL. 27.0 (REFER TO DRG. #140 FOR TYPICAL SECTION THROUGH BASIN)
MATCH LINE FOR CONTINUATION SEE DRG. No. 150
MATCH LINE FOR CONTINUATION SEE DWG #149
MATCH LINE FOR CONTINUATION SEE DRG. 147
MATCH LINE FOR CONTINUATION SEE DRG. 180
PROPERTY LINE
404.08'
189.02'
554.25'
EXISTING CONC. MONUMENT WITH BRASS PLUG
DU PAGE COUNTY SANITARY SEWER EASEMENT
PAINT ALL CHAINLINK FENCE WHICH IS TO BE RELOCATED, WITH ONE COAT OF ALUMINUM PAINT.
EXISTING TREES TO BE REMOVED BY OTHERS
RELOCATE EXIST. 6' CHAIN LINK FENCE
CONNECT TO EXIST. CHAIN LINK FENCE
SWALE
CULVERTS SEE DETAIL DRG. #160
EXIST. TOP OF SLOPE
ROAD
ASPHALTIC CONCRETE
ASPHALTIC CONCRETE PAVING CLASS "B"
P.I. N-32+39.26 E-70+70.61
EXIST. CHAIN-LINK FENCE
OVERFLOW STRUCTURE
SPREAD TOPSOIL ON ALL DISTURBED AREAS AND SEED AS SPECIFIED
REMOVE EXISTING EARTH STOCK PILES RESTORE AREA AND SEED ALL DISTURBED AREAS AS SPECIFIED
EXIST. SERVICE BUILDING
FL. EL. 43.00
EXIST. COOLING TOWER
COOLING TOWER
EX-ST 5' CONCRETE WALK
LOW WATER LINE
TOE OF SLOPE
BOTTOM OF SLOPE
EXIST. WATER LINE AT TIME OF SURVEY
EXIST. BOTTOM OF SLOPE

ISSUE NO.	DATE	APP'D
ISSUE NO.1.	MAR.1-65	
REVISED BUILDING OUTLINE AND ROAD CONTOURS EAST & WEST OF MAIN BUILDING. ISSUE NO.2.	MAR.9.65	
ADDED IRON PIPE FROM SURVEY. ISSUED FOR CONSTRUCTION. ISSUE NO.3.	APRIL 5.65	
ADDED ELECTRICAL SUB-STATION ISSUE NO.4. NOT ISSUED	FEB.21.66	
ADDED ROADWAY, FENCE & RAILWAY ISSUE NO.5	3-12-66	

LEGEND

- 740 — FINISH CONTOURS
- 740 — EXISTING CONTOURS
- FLOW LINES
- 24"■ TEST PIT - TOPSOIL IN INCHES

NOTES

FINISH GRADES ON ALL PAVED SURFACES WILL BE SHOWN TO THE NEAREST 0.01 OF A FOOT ON ALL 30 SCALE FINISH GRADE DRAWINGS ISSUED FOR CONSTRUCTION. THESE FINISH GRADES WILL VERY NEARLY COMPARE TO THE FINISH CONTOURS SHOWN ON THE BID DRAWINGS. REQUESTS FOR A CHANGE IN THE CONTRACT PRICE DUE TO MINOR CHANGES OF THE FINISH GRADES REFERRED TO ABOVE WILL NOT BE CONSIDERED.

THE WORK SHOWN ON THE DRAWINGS IS BASED ON THE FOLLOWING SURVEY INFORMATION.

A. PLAT OF SURVEY DRAWING NO. 64874 DATED JUNE 18, 1964, PREPARED BY WIGHT AND COMPANY, CONSULTING ENGINEERS, DOWNERS GROVE, ILLINOIS, BY GREBLEY & BIEDERMAN, SURVEYORS, 4505 NORTH ELSTON AV. CHICAGO.

B. TOPOGRAPHIC MAP OF BARKEI PROPERTY, JOB. NO. 16208, PREPARED BY WIGHT AND COMPANY, DOWNERS GROVE, ILLINOIS, COMPILED BY PHOTOGRAMMETRIC METHODS BY CLYDE E. WILLIAMS & ASSOCIATES, INC., SOUTH BEND, INDIANA.

C. ADDITIONAL SURVEY INFORMATION BY HAROLD F. STEINBRECKER, CIVIL ENGINEER-SURVEYOR, 100 NORTH WEST STREET, WHEATON, ILLINOIS

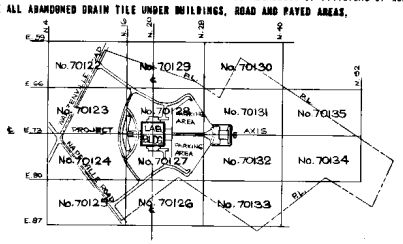
(1) NAPERVILLE AND WARRENVILLE ROAD PROFILE ELEVATIONS AND BUILDING SITE ELEVATIONS ON GRID SYSTEM, NORTH 20+00 EAST 73+00 DATED JANUARY 28, 1965. - 1" = 100'.

(2) ONE SET OF MISCELLANEOUS DRAIN TILE PLANS AND PROFILES.

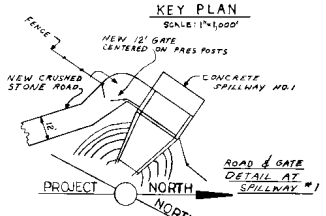
D. ALL PERMANENT BENCHES AND ALL ELEVATIONS ARE TO BE REFERENCED TO BENCH #1 IN THE WEST HEADWALL OF THE 60" CULVERT UNDER NAPERVILLE ROAD. THE ELEVATION OF THIS BENCH IS 728.38'.

THE GENERAL CONTRACTOR SHALL DELIVER A COMPLETE JOB REGARDLESS OF DIVISIONS OF WORK.

REMOVE ALL ABANDONED DRAIN TILE UNDER BUILDINGS, ROAD AND PAVED AREAS.



KEY PLAN
SCALE: 1"=1,000'



REFERENCE DWGS.

P.E. OR R.A. SEAL-DATE

222-70121

HOLABIRD & ROOT
ARCHITECTS-ENGINEERS
300 W. ADAMS, CHICAGO 6, ILL.
COMMISSION NO. 10268

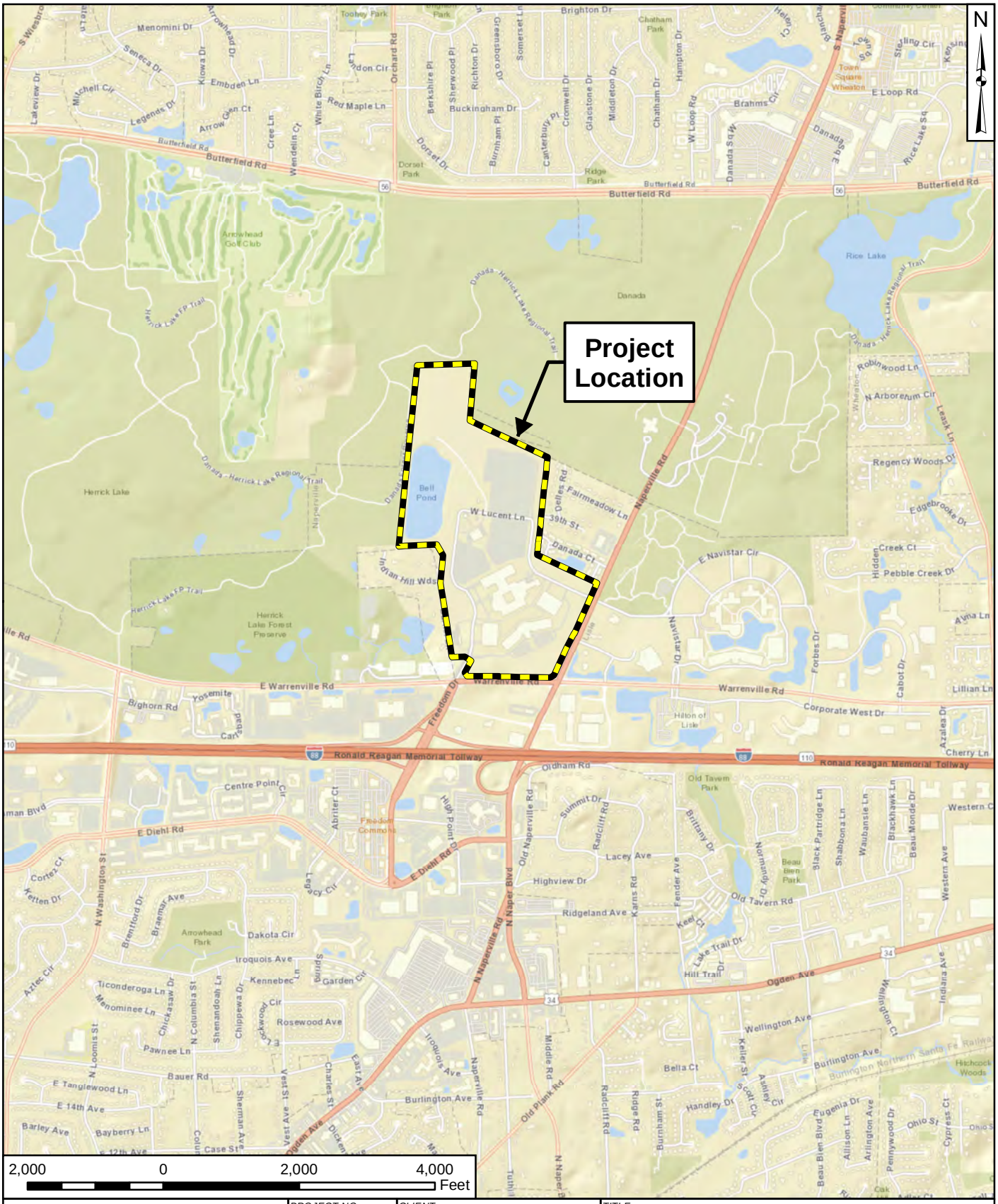
LOCATION: DU PAGE COUNTY, ILLINOIS
YARDS

EXISTING & FINISH CONTOUR PLAN
BELL TELEPHONE LABORATORIES
INDIAN HILL LABORATORY

WESTERN ELECTRIC CO., INC.
PLANT DESIGN & CONSTRUCTION
222 BROADWAY, N.Y., N.Y. 10038

SCALE: 1" = 100'
DRAWN BY: W.F. RINNER, J. PODMORSKI
ENGINEER: P.H. HANDING
ARCHITECT: J.A. HOLABIRD
SUPERVISOR: R.P. FRAME
DRAWING NO. 222-70121

FIGURES



7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
www.v3co.com

Visio, Vertere, Virtute...
"The Vision To Transform with Excellence"

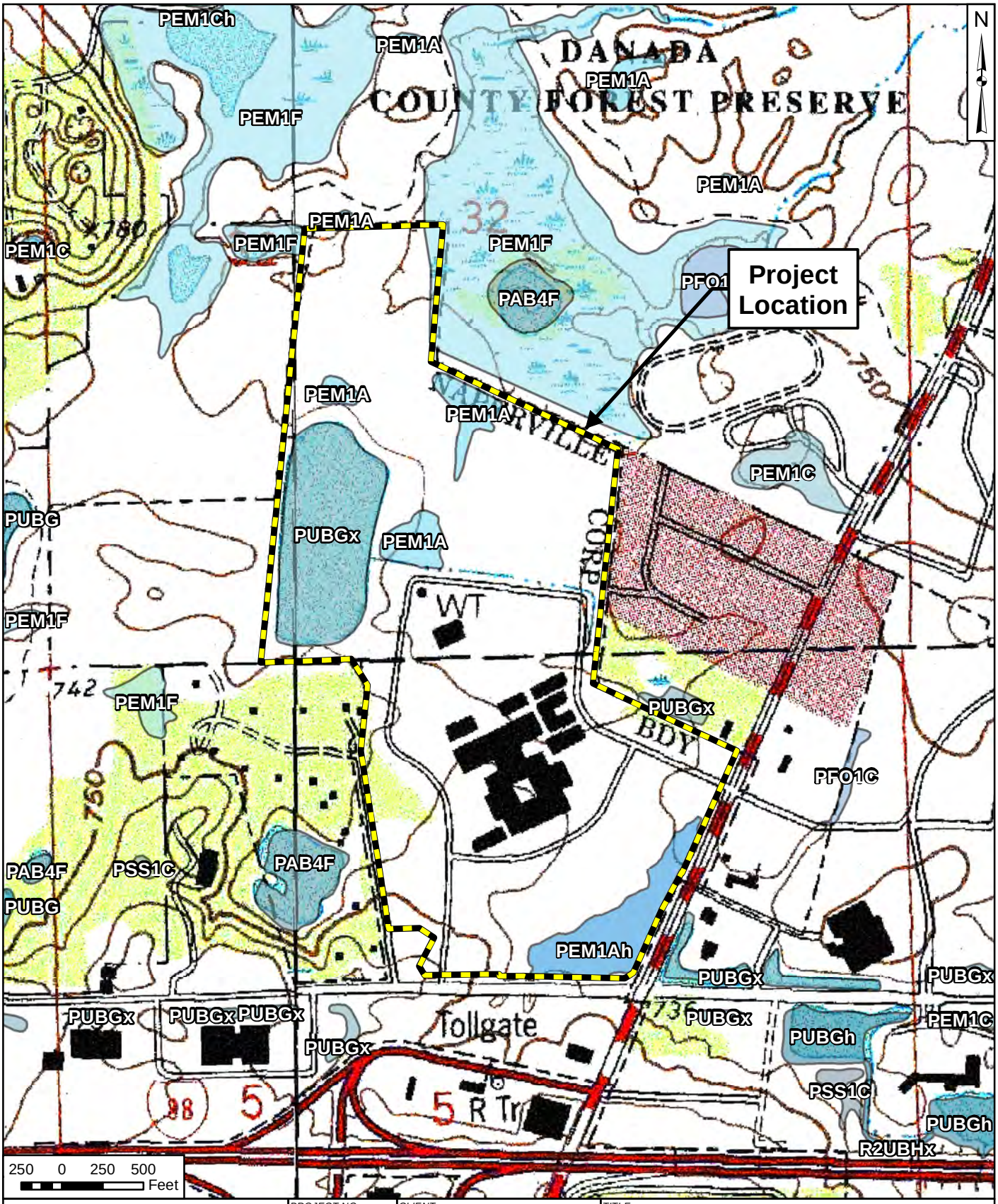
PROJECT NO.:	19112
CREATED BY:	AMM
DATE:	07/01/2019
SCALE:	See Scale Bar
CLIENT:	Lincoln Property Company Commercial, Inc. 120 North LaSalle Street Suite 2900 Chicago, Illinois 60602
BASE LAYER:	ESRI World Street Map

TITLE: **PROJECT LOCATION MAP**

SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest Naperville, Illinois

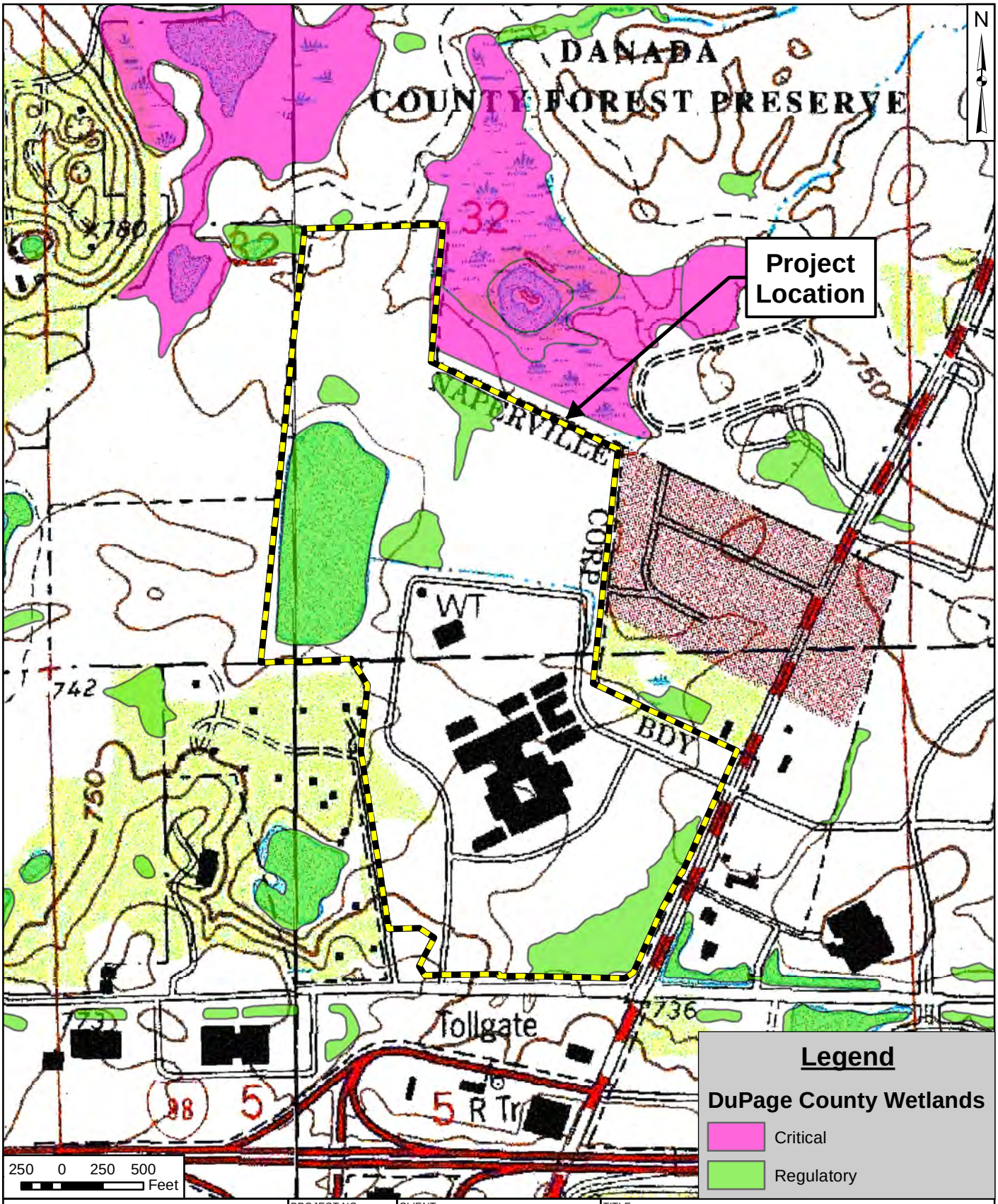
FIGURE: 1

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG1loc19112.mxd



V3 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 19112	CLIENT: Lincoln Property Company Commercial, Inc. 120 North LaSalle Street Suite 2900 Chicago, Illinois 60602	TITLE: **NATIONAL WETLANDS INVENTORY (NWI) MAP**	
	CREATED BY: AMM			
	DATE: 04/30/2019	BASE LAYER: USGS Topographic Map Wheaton and Naperville Quadrangles (1998)	SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest Naperville, Illinois	FIGURE: 2
Visio, Vertere, Virtute... *"The Vision To Transform with Excellence"*	SCALE: See Scale Bar			

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG2nwi19112.mxd



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PROJECT NO.:	19112
CREATED BY:	AMM
DATE:	04/30/2019
SCALE:	See Scale Bar

CLIENT:
Lincoln Property Company
Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

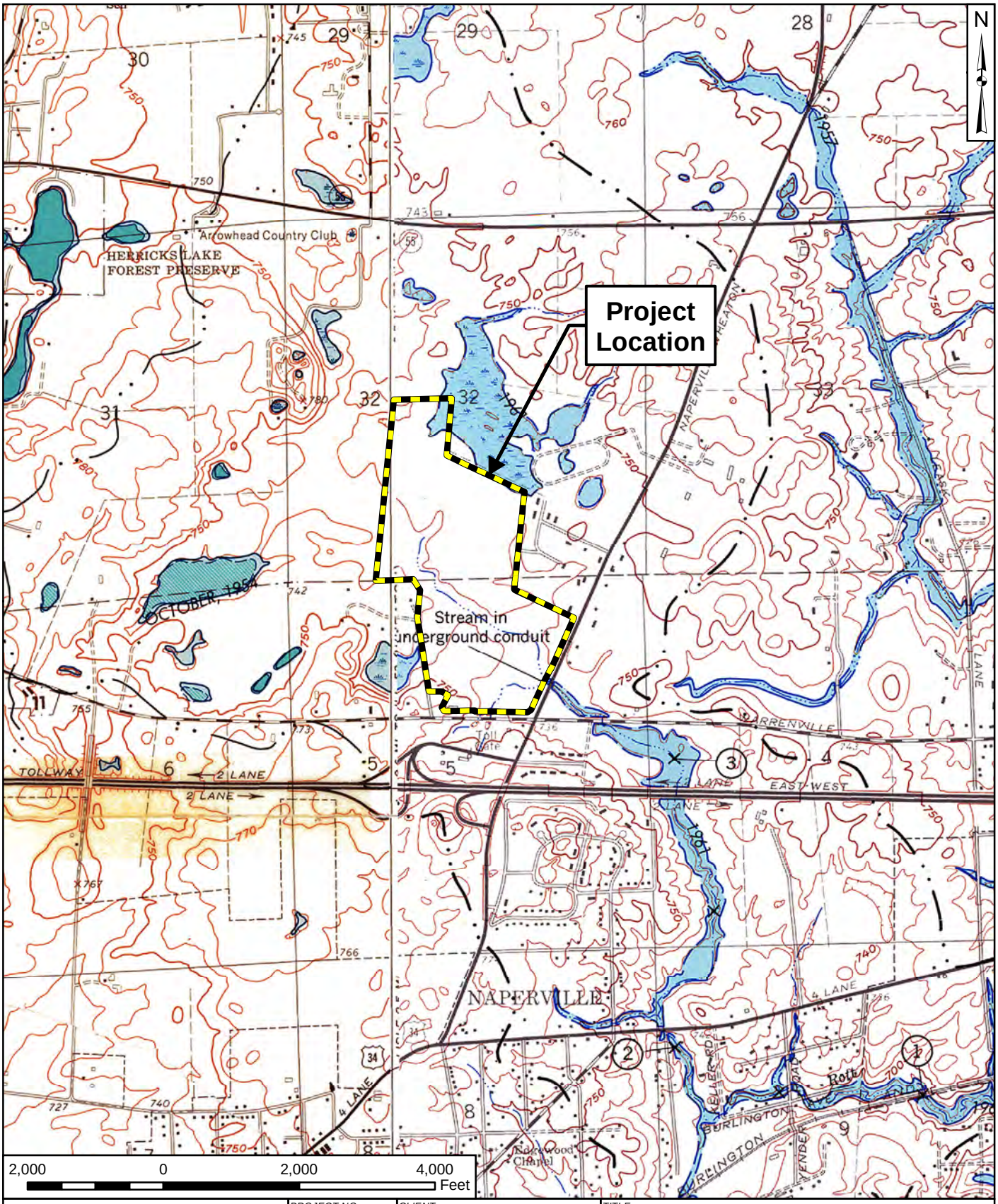
BASE LAYER:
USGS Topographic Map
Wheaton and Naperville
Quadrangles (1998)

TITLE:
DUPAGE COUNTY WETLANDS MAP

SITE:
1960 Lucent Lane, 2000 Lucent Lane
and Vacant Property to the Northwest
Naperville, Illinois

FIGURE:
3

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG3dcwi19112.mxd



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PROJECT NO.:	19112
CREATED BY:	AMM
DATE:	04/30/2019
SCALE:	See Scale Bar

CLIENT:
Lincoln Property Company
Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

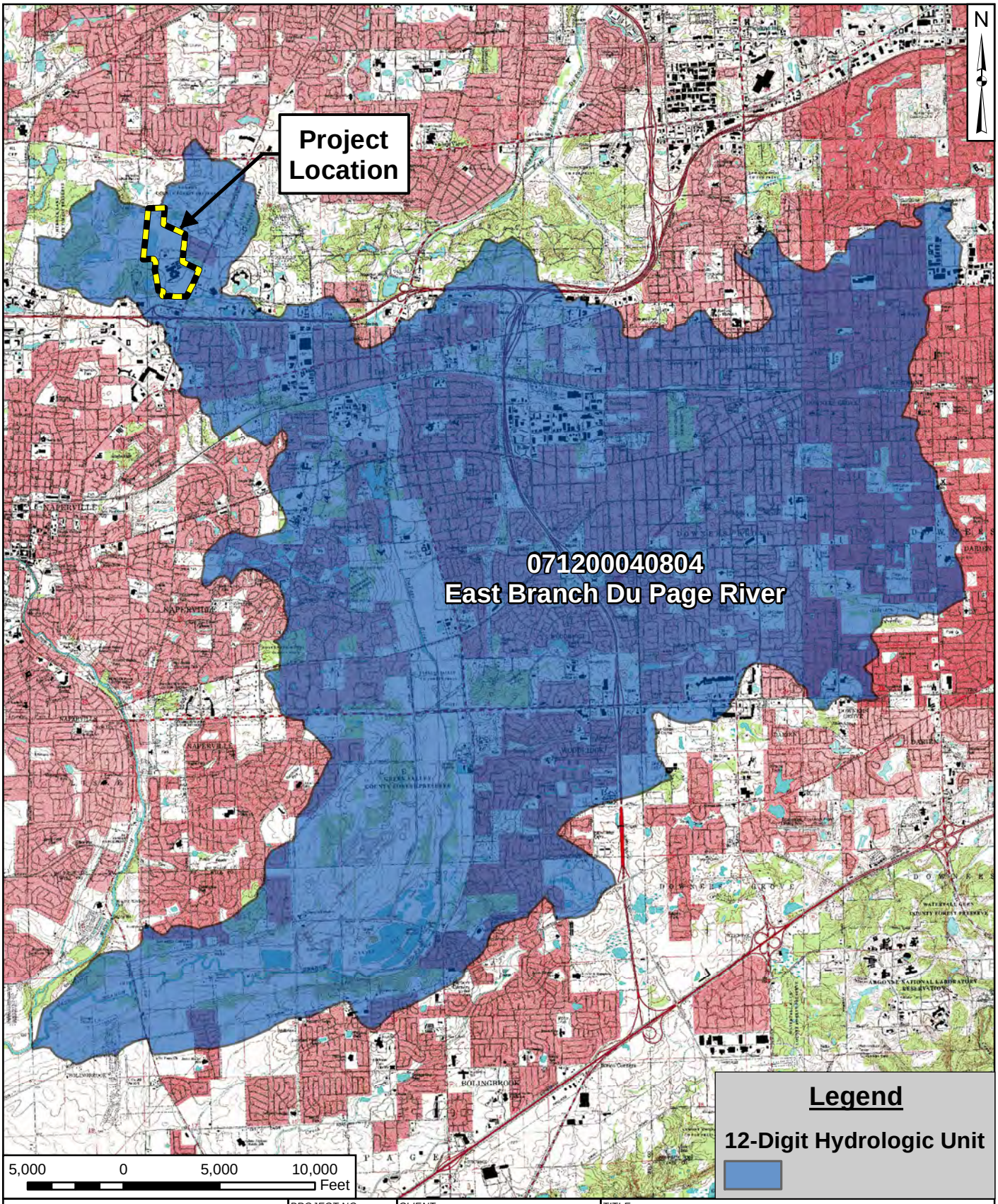
BASE LAYER:
USGS Hydrologic Atlas
Wheaton and Naperville
Quadrangles (1965)

TITLE:
USGS HYDROLOGIC ATLAS

SITE:
1960 Lucent Lane, 2000 Lucent Lane
and Vacant Property to the Northwest
Naperville, Illinois

FIGURE:
4

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG4hydro19112.mxd



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PROJECT NO.: 19112

CREATED BY: AMM

DATE: 04/30/2019

SCALE: See Scale Bar

CLIENT: Lincoln Property Company Commercial, Inc.
120 North LaSalle Street
Suite 2900
Chicago, Illinois 60602

BASE LAYER: USGS Topographic Map DuPage County, Illinois

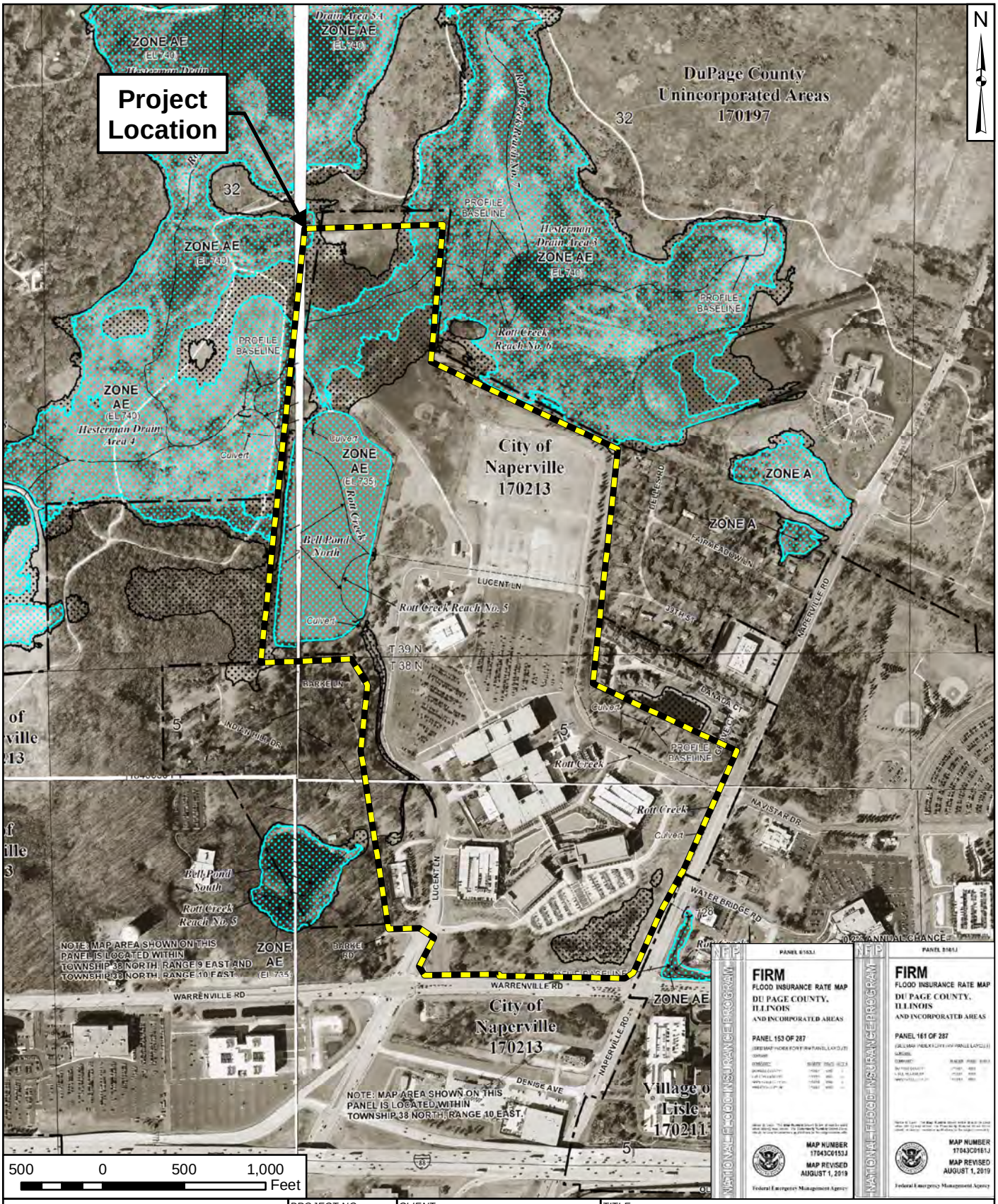
TITLE:

12-DIGIT HYDROLOGIC UNIT CODE (HUC) MAP

SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest Naperville, Illinois

FIGURE: 5

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG5huc19112.mxd



7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 19112 CREATED BY: AMM DATE: 07/01/2019 SCALE: See Scale Bar	CLIENT: Lincoln Property Company Commercial, Inc. 120 North LaSalle Street Suite 2900 Chicago, Illinois 60602 BASE LAYER: FEMA FIRM Panels 17043C0153J and 17043C0161J Effective: 08/01/2019	TITLE: **FEMA FLOOD INSURANCE RATE MAP (FIRM)** SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest Naperville, Illinois FIGURE: 6

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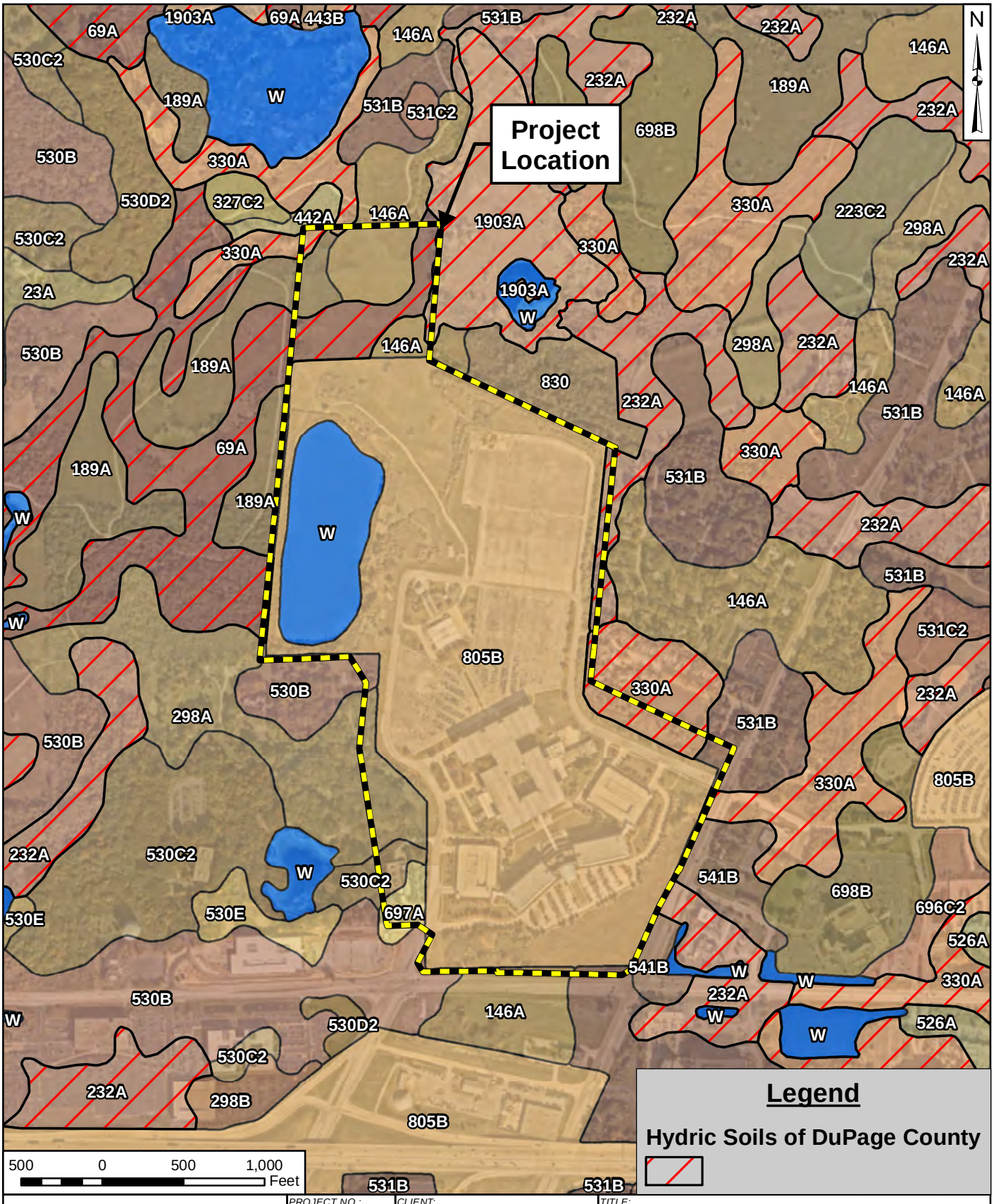
N:\2019\19112\Drawings\ArcGIS\Wetland\FIG6firm19112.mxd



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PROJECT NO.:	19112
CREATED BY:	AMM
DATE:	07/01/2019
SCALE:	See Scale Bar
CLIENT:	Lincoln Property Company Commercial, Inc. 120 North LaSalle Street Suite 2900 Chicago, Illinois 60602
BASE LAYER:	Nearmap Aerial Imagery (2015)
TITLE:	**SOIL SURVEY OF DUPAGE COUNTY, ILLINOIS (2015) MAP**
SITE:	1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest Naperville, Illinois
FIGURE:	7

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG7soil19112.mxd

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PROJECT NO.: 19112	CLIENT: Lincoln Property Company Commercial, Inc. 120 North LaSalle Street Suite 2900 Chicago, Illinois 60602	TITLE: **WETLAND DELINEATION MAP**	
CREATED BY: AMM			
DATE: 07/01/2019	BASE LAYER: DuPage County Aerial Imagery (2017)	SITE: 1960 Lucent Lane, 2000 Lucent Lane and Vacant Property to the Northwest Naperville, Illinois	FIGURE: 8
SCALE: See Scale Bar			

N:\2019\19112\Drawings\ArcGIS\Wetland\FIG8delin19112.mxd

TAB 5

WATERWAY BUFFER

JACOB & HEFNER
ASSOCIATES

1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

TAB 5: WATERWAY BUFFER

Not Applicable.

TAB 6

POST CONSTRUCTION BEST MANAGEMENT

TAB 6: POST CONSTRUCTION BMP'S

Per Article VIII of Du Page County's Countywide Stormwater and Floodplain Ordinance, post-construction best management practices (PCBMPs), a term that also includes volume control best management practices (VCBMPs), are required to treat stormwater runoff for pollutants of concern and to reduce runoff volume for developments with 2,500-SF or more of net new impervious area compared to pre-development conditions. The proposed site conditions result in a net reduction of impervious area and therefore, PCBMPs are not triggered. A Rain Garden is still proposed as part of these improvements that will be used to offset required PCBMP volume when it is triggered during Phase 2 of the development. Volume calculations for the proposed Rain Garden have been included in this section. Refer to Tab 2 of this report for impervious area calculations.

JACOB & HEFNER ASSOCIATES
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

1960 WEST LUCENT LANE

Naperville, Illinois

Engineer: JMS
Job #: H477a

Date: 6/2/2025
Plan Date: 6/6/2025

PCBMP VOLUME
STORAGE CALCULATIONS

Phase 1 Rain Garden

Surface Storage			
Elevation	Area	Volume	Storage
(ft)	(sf)	(cf)	(cf)
735.25	17,440	0.00	0.00
736.25	20,228	18834	18834

Volume Type	Porosity	Area (sf)	Depth (ft)	Storage Volume (cf)
Surface Storage	1	20,228	1	18,834
Amended Soil	0.25	20,228	0.67	3,388
Coarse Aggregate	0.36	20,228	1.5	10,923
			RG1 Total	33,145

Surface Storage was calculated using the Average End Area Method.

Volume control has been provided for 318,192 sf of impervious area

33,145 cf=1.25"*318,192 sf

JACOB & HEFNER ASSOCIATES

Drawdown Time Calculations

Project Name:	1960 West Lucent Lane	**Project Number:**	H477a
Subject:	Drawdown Calculations		
Computed By:	JMS	**Date:**	6/2/25
Checked By:			

Phase 1 Rain Garden Drawdown Time:

Equation:

$$t = \frac{A}{a * C} * \left(\sqrt{H_i} - \sqrt{H_f}\right) * \sqrt{\frac{2}{g}}$$

Given:

t = Drawdown Time (s)
A = Detention Area (ft^2)
a = Orifice cross sectional area (ft^2) – 0.60" diameter restrictor
C = Orifice discharge coefficient
H_i = Initial HWL (ft)
H_f = Elevation at center of orifice (ft)
g = Acceleration due to gravity (ft/s^2)

$$t = \left(\frac{22{,}757ft}{0.002*0.61} * \left(\sqrt{736.25} - \sqrt{733.59}\right) * \sqrt{\frac{2}{32.2}}\right) = 232{,}311\ seconds = 65\ \boldsymbol{hours}*$$

***Due to maintenance concerns, a 4" perforated pvc underdrain will be installed in lieu of a 0.60" restrictor.**

Phase 1 Rain Garden Drawdown Time (Below Perforated Pipe Invert):

Equation:

$$t = (ElevHWL - ElevBSAND) \times 12in/ft \times ISOIL$$

Given:

t = Drawdown Time (hrs)
$Elev_{HWL}$ = Initial HWL (ft)
$Elev_{BSAND}$ = Elevation at bottom of sand layer
I_{SOIL} = Soil infiltration rate per USDA Soils Report (in/hr)

$$t = (733.41 - 732.58) \times \frac{12in}{ft} \times \frac{1hr}{0.2in} = \mathbf{50\ \boldsymbol{hours}}$$

TAB 7

SOIL EROSION & SEDIMENT CONTROL

JACOB & HEFNER ASSOCIATES

1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

TAB 7: SOIL EROSION & SEDIMENT CONTROL

Disturbed Area:

The total area of the site that is estimated to be disturbed by excavation, grading, or other activities due to the proposed construction operations is ±23.94-acres.
Since the activity exceeds 1-acre in size, an NPDES Permit will be obtained from the IEPA.

Temporary:

Prior to the start of construction activities, all appropriate temporary erosion control measures (i.e. inlet baskets, silt fence, etc.) shall be in place as shown on the erosion control plan. The Erosion Control Plan and Stormwater Pollution Prevention Plan can be found within the Site Improvement Plans. All temporary erosion control measures shall be monitored by the contractor during the entire length of construction and any measures found to be not working will be repaired immediately.

Permanent:

Permanent seeding and erosion control blanket are proposed in proposed green space areas. The owner will be responsible for inspection and maintenance of permanent erosion control measures.

Security:

Letter of credit, security statement, and the right to enter the site to complete work, if required, are to be handled by contract documents/City approval process.

TAB 8

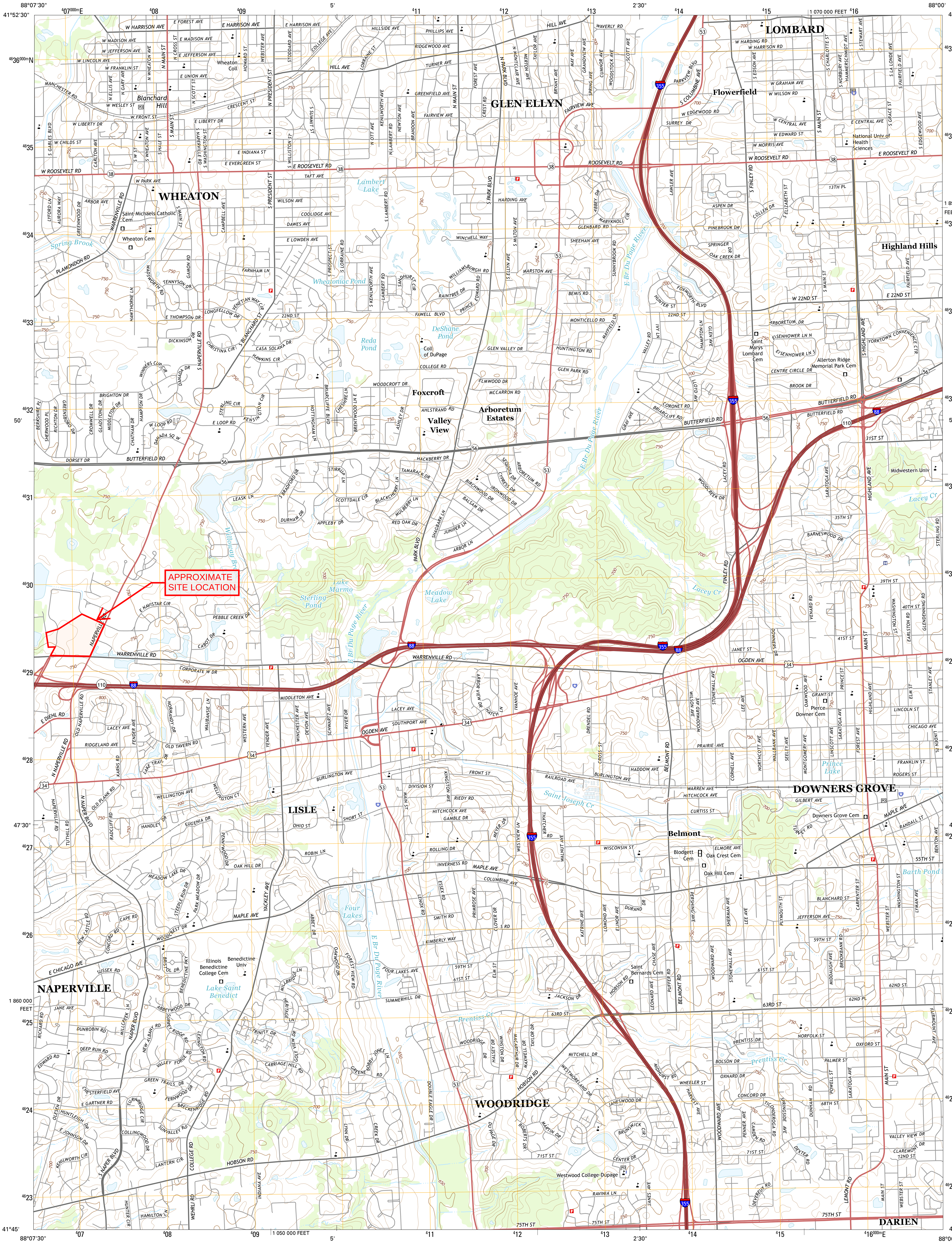
MAPS

USGS
science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
US Topo

WHEATON QUADRANGLE
ILLINOIS-DUPAGE CO.
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 16T
10 000-foot ticks: Illinois Coordinate System of 1983 (east zone)

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery....................NAIP, June 2014
Roads....................HERE, ©2013 - 2014
Names....................GNIS, 2015
Hydrography....................National Hydrography Dataset, 2014
Contours....................National Elevation Dataset, 2003
Boundaries..........Multiple sources; see metadata file 1972 - 2015

UTM GRID AND 2015 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

3° 24′ 60 MILS
0° 42′ 13 MILS

U.S. National Grid
100,000-m Square ID
DM
Grid Zone Designation
16T

SCALE 1:24 000

KILOMETERS 1 0.5 0 1 2
METERS 1000 500 0 1000 2000
MILES 1 0.5 0 1
FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

ILLINOIS
QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 West Chicago
2 Lombard
3 Elmhurst
4 Naperville
5 Hinsdale
6 Normantown
7 Romeoville
8 Sag Bridge

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

WHEATON, IL
2015

NSN 7643016365912
NGA REF NO. USGSX24K48538

National Flood Hazard Layer FIRMette

FEMA

88°7'27"W 41°48'52"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

88°6'49"W 41°48'26"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

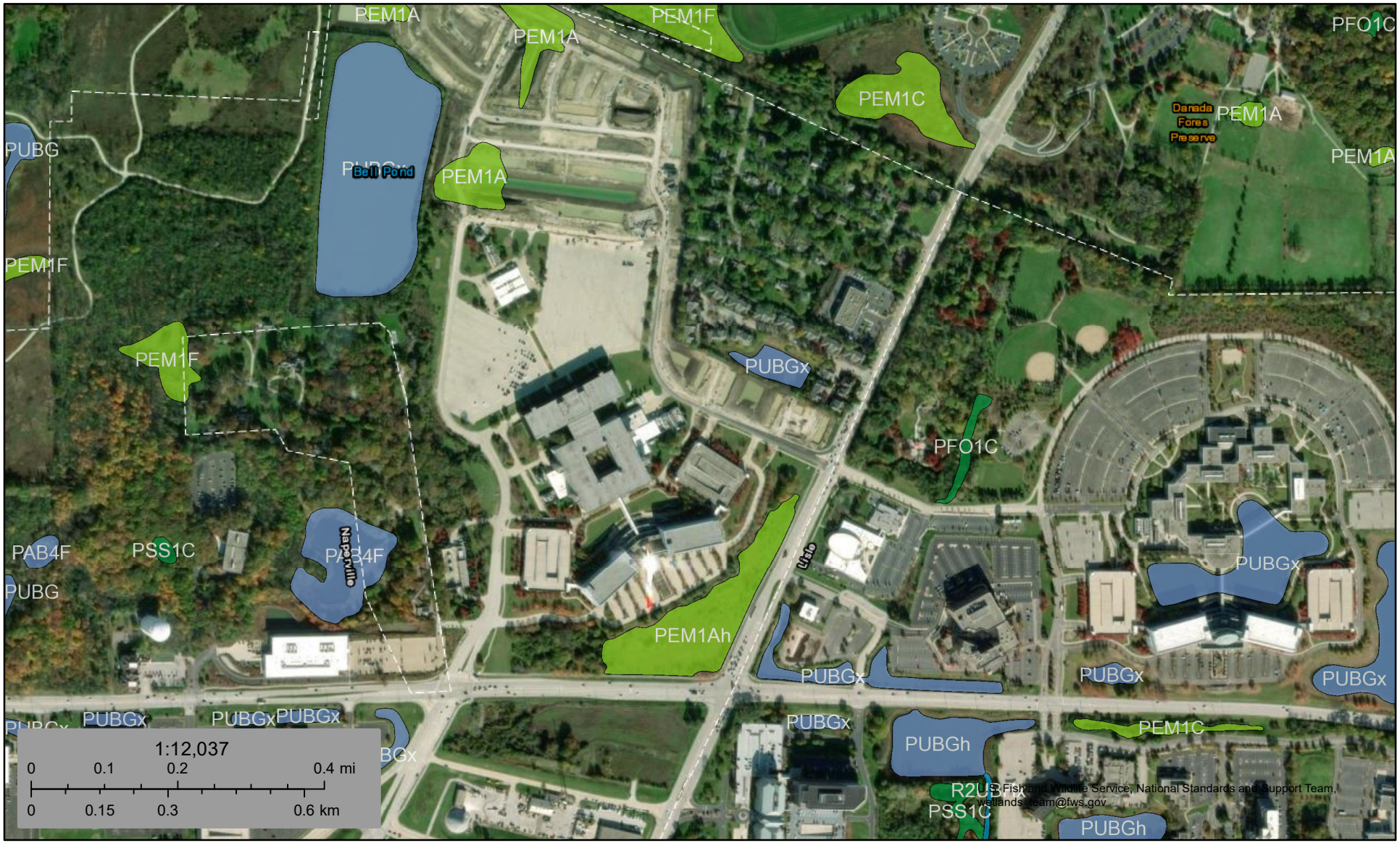
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/12/2025 at 9:14 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

U.S. Fish and Wildlife Service

National Wetlands Inventory

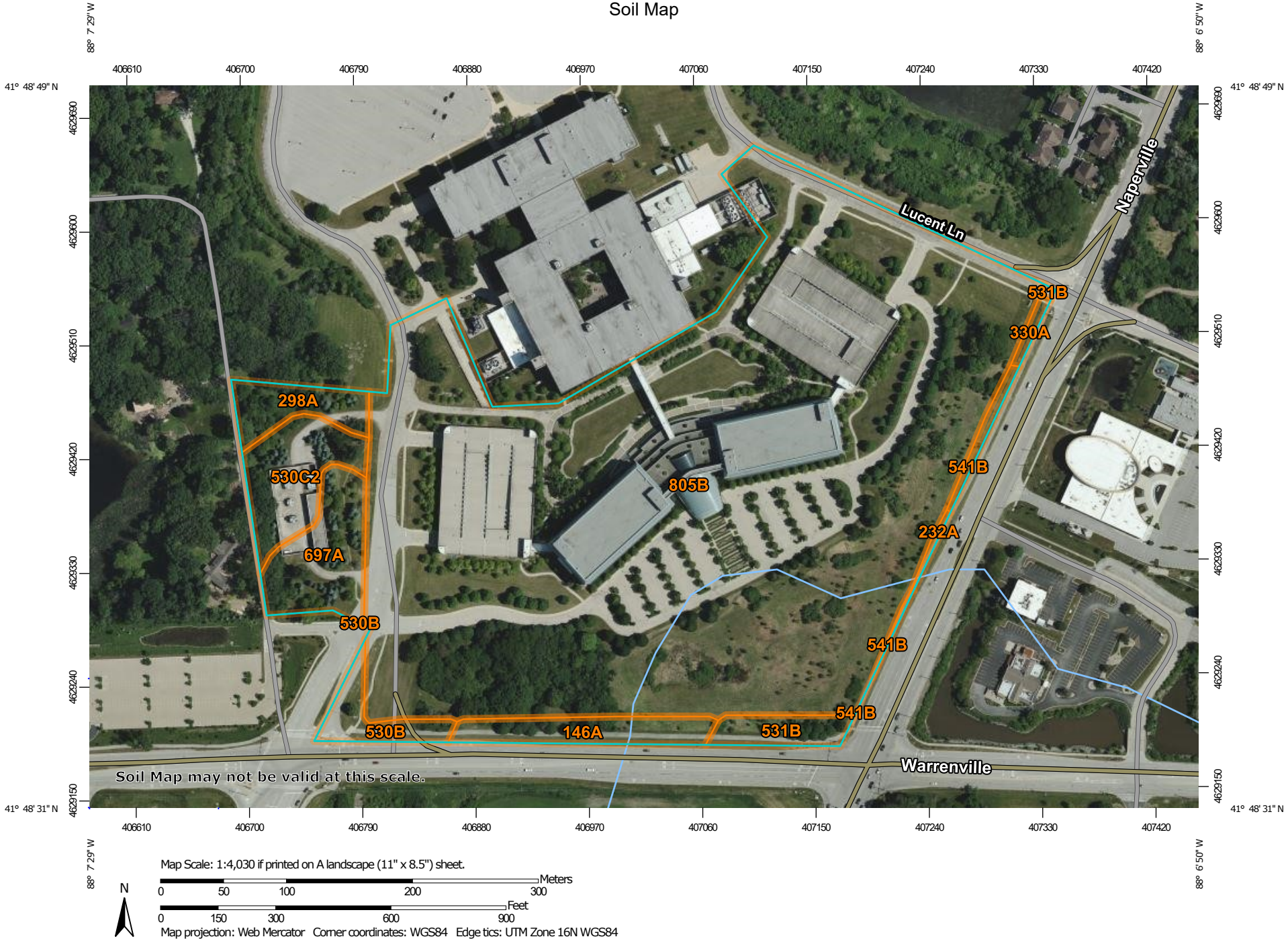
1960 West Lucent Lane



February 12, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine


88° 7' 29" W
88° 6' 50" W
41° 48' 49" N
41° 48' 31" N
406610
406700
406790
406880
406970
407060
407150
407240
407330
407420
4629690
4629600
4629510
4629420
4629330
4629240
4629150
Lucent Ln
Naperville
Warrenville
531B
330A
298A
530C2
805B
541B
232A
697A
530B
541B
541B
530B
146A
531B
Soil Map may not be valid at this scale.
Map Scale: 1:4,030 if printed on A landscape (11" x 8.5") sheet.
N
0 50 100 200 300 Meters
0 150 300 600 900 Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: DuPage County, Illinois
Survey Area Data: Version 20, Aug 21, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 13, 2020—Jul 6, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
146A	Elliott silt loam, 0 to 2 percent slopes	1.1	2.3%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	0.1	0.1%
298A	Beecher silt loam, 0 to 2 percent slopes	0.9	2.0%
330A	Peotone silty clay loam, 0 to 2 percent slopes	0.1	0.3%
530B	Ozaukee silt loam, 2 to 4 percent slopes	0.7	1.5%
530C2	Ozaukee silt loam, 4 to 6 percent slopes, eroded	1.6	3.5%
531B	Markham silt loam, 2 to 4 percent slopes	0.7	1.4%
541B	Graymont silt loam, 2 to 5 percent slopes	0.2	0.5%
697A	Wauconda silt loam, 0 to 2 percent slopes	1.7	3.7%
805B	Orthents, clayey, undulating	38.5	84.6%
Totals for Area of Interest		**45.5**	**100.0%**

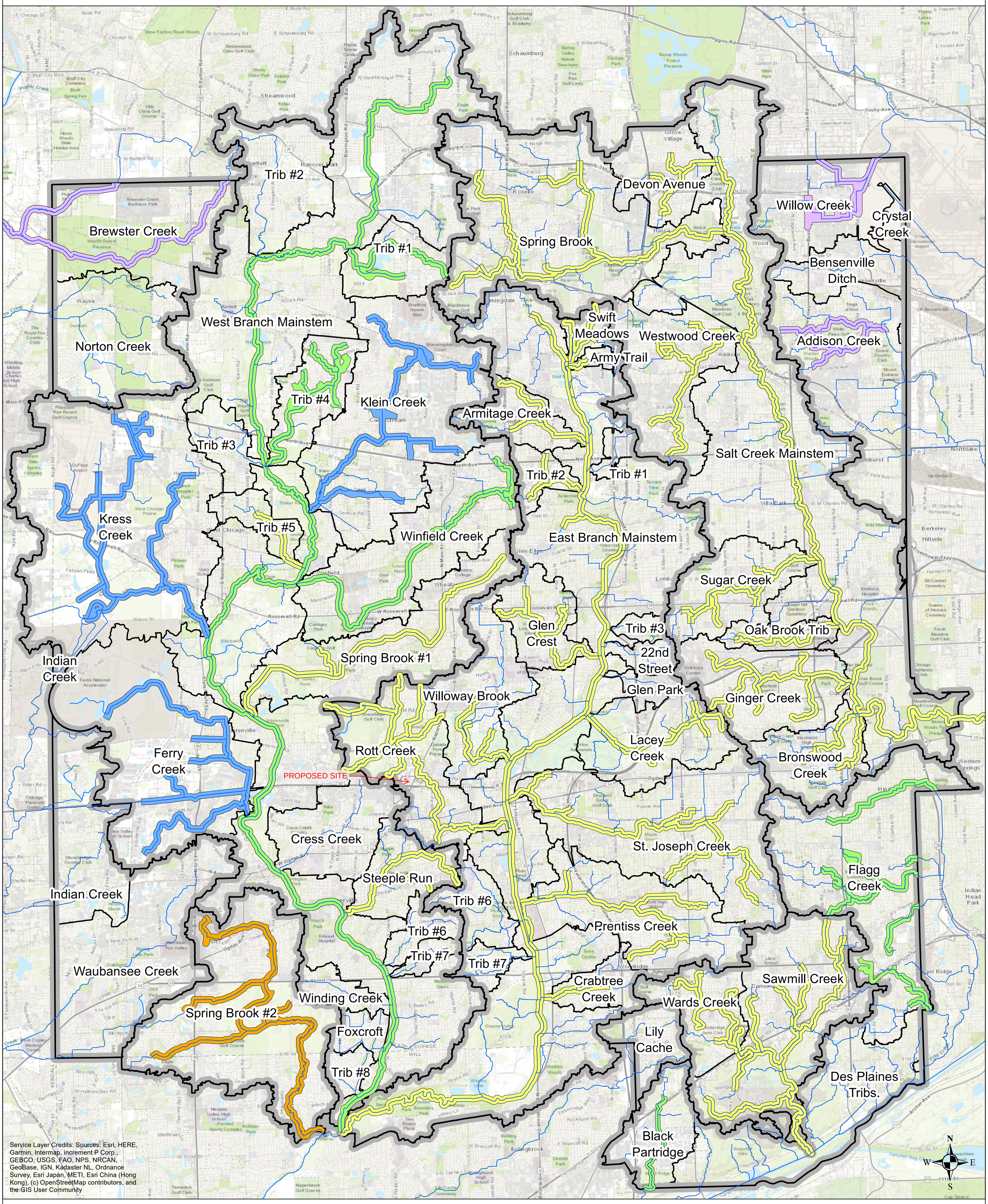
Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different

Watershed Model Reference Map



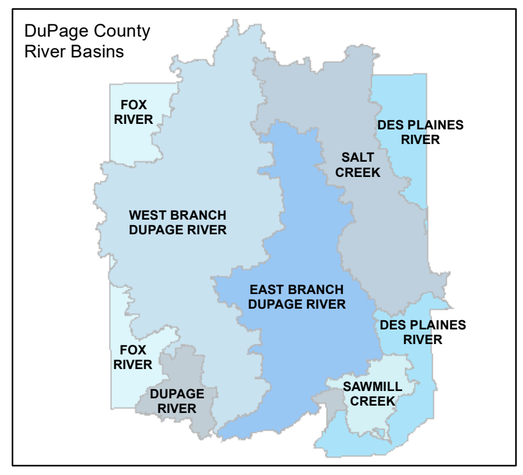
Watershed Model Status

- FEMA APPROVED FLOODPLAIN MAP MODEL
- FLOODPLAIN MAP MODEL
- MODEL IN DEVELOPMENT
- WATERSHED PLAN MODEL
- WATERSHED PLAN MODEL USING HEC2/HEC-RAS
- WATERSHED PLAN MODEL/FLOODPLAIN MAP MODEL

FEQ Model Status Table

Watershed	Model Status	Watershed	Model Status
DP Flagg	Watershed Plan Model	WB Winfield	Watershed Plan Model
DP Flagg (63rd)	Watershed Plan Model	WB Spring Brook #1	FEMA Approved Floodplain Map Model
DP Flagg (59th)	Watershed Plan Model	EB Rott	FEMA Approved Floodplain Map Model
DP Flagg (Plainfield)	Watershed Plan Model	WB Ferry	Floodplain Map Model Being Updated
Sawmill Creek Main Stem	FEMA Approved Floodplain Map Model	DU Spring Brook #2	Model In Development
DP Flagg (79th)	Watershed Plan Model	DP Black Partridge	Watershed Plan Model
SW Wards	FEMA Approved Floodplain Map Model	SC Spring Brook	FEMA Approved Floodplain Map Model
Salt Creek Main Stem	FEMA Approved Floodplain Map Model	SC Devon Avenue	FEMA Approved Floodplain Map Model
SC Westwood	FEMA Approved Floodplain Map Model	East Branch DuPage Mainstem	FEMA Approved Floodplain Map Model
SC Sugar Creek	FEMA Approved Floodplain Map Model	EB Swift Meadows	FEMA Approved Floodplain Map Model
SC Oak Brook	FEMA Approved Floodplain Map Model	EB Army Trail	FEMA Approved Floodplain Map Model
SC Ginger Creek	FEMA Approved Floodplain Map Model	EB Armitage Creek	FEMA Approved Floodplain Map Model
SC Bronswood	FEMA Approved Floodplain Map Model	EB Trib #2	FEMA Approved Floodplain Map Model
WB Steeple Run	FEMA Approved Floodplain Map Model	EB Glen Crest	FEMA Approved Floodplain Map Model
West Branch DuPage River Mainstem	Watershed Plan Model	EB Willoway	FEMA Approved Floodplain Map Model
WB Trib #1/Keeneyville	Watershed Plan Model	EB Lacey	FEMA Approved Floodplain Map Model
WB Klein	Floodplain Map Model Being Updated	EB Prentiss	FEMA Approved Floodplain Map Model
WB Trib #4	Watershed Plan Model	EB Crabtree	FEMA Approved Floodplain Map Model
WB Kress	Floodplain Map Model Being Updated	WB Trib #5	FEMA Approved Floodplain Map Model

Watershed Model Status as of 4-10-2023



DuPage County
Stormwater Management
421 North County Farm Road
Wheaton, IL 60187
(630) 407-6700

TAB 9

MAINTENANCE

JACOB & HEFNER ASSOCIATES
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

TAB 9: MAINTENANCE SUMMARY

All on-site stormwater management facilities
will be owned and maintained by the property owner.

Stormwater Management Maintenance Measures

Storm Sewer

Routine inspections and maintenance of the storm sewer shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

1. Storm sewer shall be inspected and kept clean of debris at all inlets, restrictors, sumps and existing restrictors. If any debris is found near the restrictors, it shall be removed immediately. Storm structures shall be inspected periodically and/or after any rainfall event of 0.5" or more.
2. Reset covers/lids as-needed.
3. Any damaged storm structure or sewer shall be repaired or replaced as soon as possible.

Rain Garden

Routine inspections and maintenance of the rain garden shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

1. Visual inspections to verify the design capacity is being maintained.
2. Removal of accumulated sediment that would negatively affect the BMP.
3. Planted and seeded areas shall be maintained and replaced as necessary to retain design intentions.
4. Check and repair any eroded areas within the facility.

Swales / Curb Cuts / Overland Flow Routes

Routine inspections and maintenance of the swales, curb cuts and overland flow routes shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

1. Visual inspections to verify the design capacity is being maintained.
2. Removal of accumulated sediment that would negatively affect the drainage way.
3. Planted and seeded areas shall be maintained and replaced as necessary to retain design intentions.
4. Regular mowing to control vegetation; It is recommended that any native vegetation remain uncut (within Rain Garden).
5. Check and repair any eroded areas within the facility.

Vegetated Areas

Routine inspections and maintenance of the vegetated areas shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

1. Planted and seeded areas shall be maintained and replaced as necessary to prevent erosion.
2. Regular mowing to control vegetation; It is recommended that any native vegetation remain uncut (within Rain Garden).

TAB 10

SECURITY COST ESTIMATE

JACOB & HEFNER ASSOCIATES

1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
P 630-652-4600
F 630-652-4601

Client Karis Critical

Project 1960 West Lucent Lane **Date** 6/12/2025

Project # H477 **By** RJC/SMW

Engineer's Statement of Probable Construction Cost - Surety Items

Item No.	Description	Quantity	Unit	Price	Amount
	Earthwork & Erosion Control				
1	Earth Excavation & Balance (structural material cut & fill)	125,000	CY	$4.00	$500,000.00
2	Fine Grade Subgrade	25,612	SY	$1.50	$38,418.33
3	Topsoil Strip, Stockpile & Respread	8,994	CY	$4.00	$35,976.00
4	Silt Fence	4,212	LF	$2.50	$10,530.00
5	Inlet Protection	39	EA	$250.00	$9,750.00
6	Lined Apron	5	EA	$800.00	$4,000.00
7	Ditch Checks	15	EA	$160.00	$2,400.00
8	Concrete Wash	2	EA	$500.00	$1,000.00
9	Stabilized Construction Entrance	2	EA	$2,000.00	$4,000.00
10	Turf Reinforcement Mat (SC 250)	273	SY	$3.00	$819.00
11	Erosion Control Blanket	12,612	SY	$1.60	$20,179.20
				Subtotal	**$627,073**
	Paving				
12	B6.12 Curb & Gutter	520	LF	$30.00	$15,600.00
13	Depressed B6.12 Curb & Gutter	255	LF	$25.00	$6,375.00
14	Asphalt Pavement w/ Stone Base	304	SY	$35.00	$10,647.78
15	5" PCC Sidewalk Pavement w/ Stone Base	803	SY	$90.00	$72,250.00
16	Detectable Warning	152	SF	$30.00	$4,560.00
				Subtotal	**$109,433**
	Storm Sewer				
17	24" Inlet	5	EA	$2,000.00	$10,000.00
18	48" Diameter Storm Structure	21	EA	$3,800.00	$79,800.00
19	60" Diameter Storm Structure	10	EA	$5,100.00	$51,000.00
20	72" Diameter Storm Structure	8	EA	$6,500.00	$52,000.00
21	84" Diameter Storm Structure	7	EA	$7,150.00	$50,050.00
22	96" Diameter Storm Structure	3	EA	$7,800.00	$23,400.00
23	RCP Storm Sewer 12"	1,274	LF	$40.00	$50,960.00
24	RCP Storm Sewer 15"	51	LF	$45.00	$2,295.00
25	RCP Storm Sewer 18"	664	LF	$50.00	$33,200.00
26	RCP Storm Sewer 24"	779	LF	$60.00	$46,740.00
27	RCP Storm Sewer 30"	983	LF	$75.00	$73,725.00
28	RCP Storm Sewer 36"	124	LF	$80.00	$9,920.00
29	RCP Storm Sewer 42"	352	LF	$85.00	$29,920.00
30	RCP Storm Sewer 48"	107	LF	$90.00	$9,630.00
31	RCP Storm Sewer 54"	375	LF	$100.00	$37,500.00
32	FES 12" W/Grate	3	EA	$1,200.00	$3,600.00
33	FES 48" W/Grate	1	EA	$4,200.00	$4,200.00
34	FES 54" W/Grate	1	EA	$4,700.00	$4,700.00
35	Trench Backfill	2,036	LF	$20.00	$40,720.00
36	4" Perforated Underdrain	281	LF	$20.00	$5,620.00
37	Clean Out	1	EA	$250.00	$250.00
38	Rain Garden	1	LS	$15,000.00	$15,000.00
				Subtotal	**$634,230**

JACOB & HEFNER ASSOCIATES
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Client Karis Critical

Project 1960 West Lucent Lane **Date** 6/12/2025

Project # H477 **By** RJC/SMW

Engineer's Statement of Probable Construction Cost - Surety Items

Item No.	Description	Quantity	Unit	Price	Amount
	Watermain				
39	12" Ductile Iron Watermain Pipe	2,255	LF	$90.00	$202,950.00
40	6" Ductile Iron Watermain Pipe	139	LF	$60.00	$8,340.00
41	Fire Hydrant, Valve & Tee	8	EA	$8,500.00	$68,000.00
42	Valve Vault	8	EA	$4,000.00	$32,000.00
43	Adjust Existing Watermain Structure Frame	4	EA	$1,000.00	$4,000.00
44	Connect to Existing Watermain	3	EA	$2,500.00	$7,500.00
45	Trench Backfill	1,330	LF	$25.00	$33,250.00
46	8" Ductile Iron Private Water Service (Estimated Size)	214	LF	$70.00	$14,980.00
				Subtotal	**$371,020**
47	Land Development Plantings	1	LS	$342,545.00	$342,545.00
48	Naturalized Area Plantings	1	LS	$25,050.00	$25,050.00
				Subtotal	**$367,595**
				Estimated Total for Improvements	**$2,109,350**

Notes:

1. This statement was prepared using standard cost estimating practices. It is understood and agreed that this is an estimate only, and that the Engineer shall not be held liable to the Owner or to a third party for any failure to accurately estimate the cost of the project, or any part thereof.
2. This statement is based on Final Site Improvement Plans for 1960 West Lucent Lane, prepared by Jacob & Hefner Associates, Inc., dated June 12, 2025. This estimate only includes Phase 1 quantities requiring surety.
3. Earthwork quantities are based on earthwork calculations prepared by Jacob and Hefner Associates, Inc. dated April 7th, 2025.
4. Landscape quantities are based on the Cost Opinion for Landscape Plans Final Phase 1, prepared by Gary R. Weber Associates, Inc., dated June 12, 2025.

TAB 11

VARIANCES

JACOB & HEFNER
ASSOCIATES

1333 Butterfield Road, Suite 300
Downers Grove, IL 60515
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F 630-652-4601

TAB 11: VARIANCE SUMMARY

No Stormwater related variances are being pursued as part of these proposed site improvements.