

Attached is the agenda packet for the April 3, 2023 Board Meeting. For those of you with Drop Box, the file will be placed in the Drop Box Folder.

**The Village Board meeting will begin at 7:00 PM. With the new Village Board meeting format, all discussions and business will occur at the Village Board meeting. After consideration of the meeting minutes and accounts payable, the meeting will proceed to new and old business.**

Please contact the Mayor if you have any questions or if you wish to attend the meeting electronically.

James McDonald, Mayor  
Mary Konrad, Clerk  
Stacy Michael, Treasurer



Trustees:  
Allena Barbato  
Jake Cramond  
Karen Harms  
Jeff Nielsen  
Tom O'Reilly  
Doug Savell

## VILLAGE BOARD MEETING

April 3, 2023

7:00 pm

1. Call to Order & Roll Call
2. Pledge of Allegiance
3. Public Comment
4. Approval of the Minutes
  - a. March 20, 2023 Regular Village Board Meeting
5. Accounts Payable – April 3, 2023
6. Mayor
7. Village Board Reports
8. Staff Reports
9. Old Business
  - a. Ordinance 2023-04-01: An Ordinance Granting Preliminary Approval for the Starling Senior Apartment Development at 0 Deep Lake Rd.
10. New Business
  - a. Resolution No: 2023-04-01: A Resolution Designating Signatories on Depository Accounts of the Villa of Lake Villa.
  - b. Discussion: Bee City USA
  - c. Resolution No. 2023-04-02: A Resolution Supporting and Committing Local Funds for a ComEd Green Region Grant Application
  - d. Discussion: IDOT Land Bridge updates
  - e. Discussion and Approval: FY23/24 Budget updates
11. Executive Session
12. Adjournment

James McDonald, Mayor  
Mary Konrad, Clerk  
Stacy Michael, Treasurer



Trustees:  
Allena Barbato  
Jake Cramond  
Karen Harms  
Jeff Nielsen  
Tom O'Reilly  
Doug Savell

**DATE:** March 14, 2023  
**TO:** Village Board of Trustees  
**FROM:** Michael Strong  
Village Administrator  
**RE:** Agenda Transmittal

**Old Business**

- a. **Ordinance 2023-04-01: An Ordinance Granting Preliminary Approval for the Starling Senior Apartment Development at 0 Deep Lake Rd.**

Staff Contact: Michael Strong, Village Administrator

The Village Board is scheduled to continue its deliberation relative to an Ordinance granting preliminary approval for a proposed senior apartment development located at 0 Deep Lake Road, an approximate 5 acre parcel, located in the Lake Tower Crossing Development. The matter was tabled by the Village Board during their regular meeting on March 20, 2023.

The Developer, Lincoln Avenue Capital, LLC., is seeking rezoning of the property to the Village's UR-4 Zoning District and approval of an amendment to an existing Conditional Use Permit for the Lake Tower Crossing Phase 3 Planned Development that was approved via Ordinance 2020-07-07. Such amendment would permit a Residential Planned Development for Elderly Housing and to permit the Developer to construct a forty (40) unit senior apartment development which would be age-restricted to persons 55 years of age and older with a mix of one-bedroom and two-bedroom units. Pursuant to the Village Code, the Village Board may approve the Plan Commission's recommendation and adopt the Ordinance, approve with additional conditions, deny the request, and/or remand the matter back to the Plan Commission to further investigate specific matters relative to the development.

**Suggested Motion:** *Motion to approve Ordinance 2023-04-01 Granting Preliminary Approval for the Proposed Starling Senior Apartment Development at 0 Deep Lake Road*

## **New Business**

**a. Resolution No. 2023-04-03: A Resolution Designating Signatories on Depository Accounts of the Villa of Lake Villa.**

Staff Contact: Michael Strong, Village Administrator

The Village Board will discuss and consider approving a resolution amending the signatories for the Village. With the departure of the Village's Administrative Services Director, the Village needs to update the designated signatories for checks and other financial documents. The Resolution would amend the existing signatories by removing the Administrative Services Director from those authorized.

Suggested Motion: *Motion to approve Resolution 2023-04-03 A Resolution Designating Signatories on Depository Accounts of the Village of Lake Villa.*

**b. Discussion: Bee City USA**

Staff Contact: Michael Strong, Village Administrator

The Village Board will hear a presentation from Joe Gannon, a local resident, who recently met with Village staff regarding the Xerces Society for Invertebrate Conservation "Bee City USA" program. This is a national program aimed at expanding and conserving pollinators and native planting habitats to promote ecosystem vitality for invertebrates. Mr. Gannon has galvanized local support for the program, and will present to the Village Board to discuss the program. Additional information relative to Mr. Gannon's proposal is included in the agenda packet.

Suggested Motion: *No formal action is requested, item is scheduled for discussion purposes only. However, Direction will be sought on whether the Village should pursue a formal commitment with the Xerces Society for Invertebrate Conservation.*

**c. Resolution No. 2023-04-04: A Resolution Supporting and Committing to Funding Local Funds for a ComEd Green Region Grant Application**

Staff Contact: Michael Strong, Village Administrator

In accordance with direction provided during the Budget Workshop on March 13, Village staff has submitted a grant opportunity to expand plantings adjacent to the Cedar Crossing tot lot park. The proposed project would include the installation of an approximate 600 square foot pollinator garden located along the entryway into the park. The garden would include various species of pollinators and other



flowering plants along with educational signage educating residents about pollinators and the public about their importance and relevance to supporting the regional ecosystem. A copy of the scope of work and aerial showing the area for plantings is included in the agenda packet. The grant would cover up to 50% of the proposed cost, or \$5,000 based on estimates provided by the Village's contractor. A commitment for funding is required if the Village receives the grant. The Village anticipates grant awardees will be notified sometime in July.

Suggested Motion: *Motion to Approve a Resolution Supporting and Committing to Funding Local Funds for a ComEd Green Region Grant Application*

**d. Discussion: IDOT Land Bridge update**

Staff Contact: Michael Strong, Village Administrator and Robert Doeringsfield, Village Engineer

Village Staff is scheduled to brief the Village Board on the status of IDOT's Land Bridge project, an approximately \$9,000,000 IDOT project that will extend between McKinley Avenue to Cleveland Avenue. The Project is tentatively scheduled to start later this spring, pending utility relocation work that is necessary to accommodate the work. Robert Doeringsfield, Village Engineer, has been participating in pre-construction meetings and will provide an overview of the project to the Village Board. Additionally, staff will present our plans for ongoing communication and participation in meetings so that residents can stay informed on the status of this project.

Suggested Motion: *No formal action is requested, item is scheduled for discussion purposes only.*

**e. Discussion & Approval: FY23/24 Budget updates**

Staff Contact: Stacy Michael, Administrative Services Director

Village Staff will be providing updates relative to the proposed FY2023/2024 Budget. Amendments will be presented based on feedback provided by the Village Board during their Budget Workshop. New worksheets have been provided in the agenda packet and will be discussed further during the meeting. Direction will be sought on finalizing the budget, so that it can be prepared for formal Village Board adoption during the meeting on April 17, 2023.

Suggested Motion: *Motion to Approve Operating and Capital Budget for FY23/24.*

**VILLAGE OF LAKE VILLA  
VILLAGE BOARD  
REGULAR MEETING  
March 20<sup>th</sup>, 2023**

***Call to Order:*** Mayor McDonald called the meeting to order at 7:00 p.m.

***Present:*** Mayor McDonald, Clerk Konrad, Trustees: Harms, Nielsen, Barbato, O'Reilly, Cramond and Savell, Village Administrator Michael Strong, Treasurer Stacy Michael, Police Chief Rochelle Tisiani, Public Works Supervisors Ryan Horton and Village Attorney Rebecca Alexopolus.

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

***Public Comment:*** A resident raised the issue of parking on McKinley which the resident states creates limited parking. A resident raised issue of the residential development to be located at 0 Deep Lake, preferring different zoning.

***Minutes:*** It was moved by Trustee Nielsen and seconded by Trustee Barbato to approve the March 6th, 2023 Village Board meeting minutes.

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

It was moved by Trustee Harms and seconded by Trustee Savell to approve the March 13th, 2023 Village Board Budget Workshop minutes.

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

***Finance:*** It was moved by Trustee O'Reilly and seconded by Trustee Barbato to approve the Accounts Payable Report for March 20<sup>th</sup>, 2023 in the amount of \$238,778.44

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

***Mayor:***

The St. Patrick's Day Parade held on March 11<sup>th</sup> was a success with amount of people attending and serving 275 Corn Beef and Cabbage at the VFW. The Easter Egg Hunt will be held April 1<sup>st</sup>, 2023.

***Staff Reports:***

Trustee Barbato spoke on behalf of a resident, with a home based business seeking to expand which is in conflict with current ordinances. Trustee Barbato requested review of these ordinances to possibly address the issue.

Public Works supervisor, Ryan Horton, advised he is working with the Police Department in preparing an Emergency Management Response Plan to be presented later.

Chief of Police, Rochelle Tisinai, advised that they are applying for a grant that, if awarded, would be used for purchase of a 2<sup>nd</sup> radar sign. Officer Dryer has successfully completed certification as the Certified Training Instructor, allowing to train multiple facets of law enforcement.

The Village Administrator advised that the Village will be applying for an Open Lands Grant to cover the costs of a Pollinator Garden.

***New Business:***

**Resolution No. 2023-03-01: A Resolution to Induce the Redevelopment of Certain Property within a TIF District (201 Park Avenue)**

The Village Board conferred on the approval of a Resolution declaring the Village's intention to fund a proposed redevelopment project using Tax Increment Financing (TIF) funds from the Village's Downtown TIF Fund. The redevelopment project is related to the acquisition of the property located at 201 Park Avenue and renovation of the space to accommodate a manufacturing business that is seeking to relocate to Lake Villa. The Village and the developer would enter into a formal Redevelopment Agreement that would lay out the amount of TIF Funds eligible for reimbursement, and under what conditions and terms such financing would be reimbursed to the developer.

It was moved by Trustee Harms and seconded by Trustee Savell to approve Resolution 2023-03-01 A Resolution inducing the Redevelopment of Certain Property located within a TIF District

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

**Ordinance No. 2023-03-03: An Ordinance Granting Preliminary Approval for the Proposed Starling Senior Apartment Development at 0 Deep Lake Rd.**

The Village Board conferred on the approval of an Ordinance granting

preliminary approval to a proposed senior apartment development located at 0 Deep Lake Road, an approximate 5-acre parcel located in the Lake Tower Crossing Development. The Developer, Lincoln Avenue Capital, LLC., is seeking rezoning of the property to would permit a Residential Planned Development for Elderly Housing and to permit the Developer to construct a forty (40) unit senior apartment development which would be age-restricted to persons 55 years of age and older with a mix of one-bedroom and two-bedroom units. The Plan Commission held a Public Hearing on January 19, 2023 recommended approval of the Petitioner's application. The Village Code allows the Village Board to approve the Plan Commission's recommendation and adopt the Ordinance, approve with additional conditions, deny the request, and/or remand the matter back to the Plan Commission to further investigate specific matters relative to the development.

It was moved by Trustee O'Reilly and seconded by Trustee Nielsen to approve Ordinance 2023-03-03 Granting Preliminary Approval for the Proposed Starling Senior Apartment Development at 0 Deep Lake Road

**ROLL CALL VOTE WAS:**

**AYES: 1(Savell)**

**NAYS: 3 (Nielsen, O'Reilly, Cramond)**

**ABSENT: 0**

**ABSTAIN: 2 (Harms, Barbato)**

**MOTION DID NOT CARRY**

It was moved by Trustee Barbato and seconded by Trustee O'Reilly to table Ordinance 2023-03-03 until April 3<sup>rd</sup>, 2023 to allow matters concerning adjacent properties.

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

**Authorization to Purchase a Ford F550 from LaFontaine Ford (Birch Run, MI)**

The Village Board conferred on the approval to purchase a replacement public works vehicle included in the FY2023 Fleet Replacement Fund budget. The Village obtained competitive pricing from multiple sources relative to a Ford 550 which will replace a 5-yard Dump Truck that is currently used for snow plowing, material hauling, and other public works functions.

It was moved by Trustee Nielsen and seconded by Trustee Harms to authorize the purchase of a Ford F550 from LaFontaine Ford, of Birch Run, Michigan, in an amount not to exceed \$121,847, plus a 5% contingency in the amount of \$6,092 for unforeseen or unanticipated vehicle acquisition costs.

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

### **Ordinance No. 2023-03-04: Disposal of Surplus Property**

The Village Board conferred on whether to recommend approval of an Ordinance disposing of surplus Village property. In reviewing items for disposal, various used equipment and vehicles that have been identified as beyond useful life and deemed appropriate for disposal.

It was moved by Trustee Harms and seconded by Trustee O'Reilly to approve Ordinance 2023-03-04 Authorizing the Sale of Surplus Property Owned by the Village of Lake Villa.

#### **ROLL CALL VOTE WAS:**

**AYES:** 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)

**NAYS:** 0

**ABSENT:** 0

**ABSTAIN:** 0

**MOTION CARRIED**

### **Resolution No. 2023-03-02: Opposing IDNR Lake Michigan Water Allocation Review Fee.**

During the March 6, 2023, Village Board meeting, a Resolution was proposed Water Allocation Review Fee that the Illinois Department of Natural Resources (IDNR) is proposing to enact for allocation for Lake Michigan water. To receive Lake Michigan Water, communities must be permitted a specific quantity, or allocation, of water dedicated to them for their use. The allocation is determined based on a calculation of the number and types of expected users with a population growth factor applied. IDNR is now proposing possible legislation that would impose a "*review fee*" of up to \$5,000 from all Lake Michigan water allocation permittees. The fee would be graduated based upon the volume of water granted to an agency in a given year. This proposed legislation would affect approximately 125 municipalities as well as other water agencies like CLCJAWA. In response to the proposed legislation, CLCJAWA has prepared a resolution for its membership to object to the imposition of the fee. Therefore, the Village Board conferred on a resolution opposing the proposed IDNR fee.

It was moved by Trustee O'Reilly and seconded by Trustee Cramond to approve Resolution 2023-03-02 Opposing the Proposed IDNR Lake Michigan Water Allocation Review Fee.

#### **ROLL CALL VOTE WAS:**

**AYES:** 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)

**NAYS:** 0

**ABSENT:** 0

**ABSTAIN:** 0

**MOTION CARRIED**

### **Ordinance 2020-03-05: Abating a Portion of the Amount of Taxes Levied for General Obligation Refunding Bonds**

The Village Board conferred on the approval of an Ordinance abating the property tax dedicated as an alternative revenue to the Village's 2015 series water bonds. Annually, the Village is required to abate the property taxes dedicated as an alternative revenue source for the Village's 2015 series water bonds. The Ordinance states that the Village met its financial obligations to pay the bonds; therefore, the property taxes dedicated as an alternative revenue source can be abated.

It was moved by Trustee Nielsen and seconded by Trustee Barbato to approve Ordinance 2023-03-05 Abating a Portion of Taxes Levied for General Obligation Refunding Bonds

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

***Old Business:* Discussion: NIMEC Electric Aggregation Program**

During the regular meeting on March 6, 2023, the Village Board authorized the Mayor has executed a 14-month Power Supply Agreement with MC Squared Energy Services, LLC (Chicago, IL) that secures a fixed rate of 7.45 cents per kilowatt-hour for residents and small businesses in Lake Villa. This compares to ComEd's current rate of 9.665 cents per kilowatt-hour.

Execution of the Agreement will restart the Village's Municipal Electric Aggregation Program beginning in June 2023. Village Staff provided an overview and schedule for the aggregation program during the meeting on March 20.

It was moved by Trustee Barbato and seconded by Trustee Harms to Ratify an Executed Power Supply Agreement with MC Squared Energy Services, LLC. For a 14-month term the Village's Municipal Electricity Aggregation Program

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

***Executive Session:***

It was moved by Trustee Harms and seconded by Trustee Savell to go into executive session at 8:15pm for personnel and land acquisition.

**ROLL CALL VOTE WAS:**

**AYES: 6 (Harms, Nielsen, Barbato, O'Reilly, Cramond, Savell)**

**NAYS: 0**

**ABSENT: 0**

**ABSTAIN: 0**

**MOTION CARRIED**

***Adjournment:*** It was moved by Trustee Nielsen and seconded by Trustee Harms to adjourn at 8:53pm.

***APPROVED BY ME THIS \_\_\_\_\_ April, 2023***

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***JAMES MCDONALD, MAYOR***

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***MARY KONRAD, CLERK***

03/30/2023 03:50 PM

User: CDENZEL

DB: Lake Villa

## CUSTOM INVOICE REPORT FOR VILLAGE OF LAKE VILLA

EXP CHECK RUN DATES 03/21/2023 - 04/03/2023

BOTH JOURNALIZED AND UNJOURNALIZED

BOTH OPEN AND PAID

Page: 1/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: AEP ENERGY AEP ENERGY		
BANK CODE: 40208		
03292023-3995	LITE RT/25 683 BLAZING STER DR	49.74
03302023-3984	0 IL83 TFLT RT/25	33.30
TOTAL BANK CODE: 40208		83.04
TOTAL VENDOR AEP ENERGY AEP ENERGY		83.04
VENDOR CODE: AFLAC AFLAC		
BANK CODE: 40208		
887305	AFLAC	2,370.65
TOTAL BANK CODE: 40208		2,370.65
TOTAL VENDOR AFLAC AFLAC		2,370.65
VENDOR CODE: ANTAUT ANTIOCH AUTO PARTS		
BANK CODE: 40208		
276717	CREDIT/ BILLED OVER QUOTED PRICE	(18.00)
276671	TURN X-LARGE ROTOR	39.00
280060	TRUCK # 13	283.63
280079	TRUCK # 13/ ALTERNATOR	283.63
280093	HYDRAULIC OIL/ OIL CAN	89.16
TOTAL BANK CODE: 40208		677.42
TOTAL VENDOR ANTAUT ANTIOCH AUTO PARTS		677.42
VENDOR CODE: BADGLO BADGER GLOVE & SAFETY, INC.		
BANK CODE: 40208		
054053	UNIFORM ALLOWANCE- DAN/ GLOVES- PW- SAF	151.00
TOTAL BANK CODE: 40208		151.00
TOTAL VENDOR BADGLO BADGER GLOVE & SAFETY, INC.		151.00
VENDOR CODE: BILPRE BILLER PRESS & MFG., INC.		
BANK CODE: 40208		
BP-8728	CITATION COMPLAINT FORMS	1,373.90
TOTAL BANK CODE: 40208		1,373.90
TOTAL VENDOR BILPRE BILLER PRESS & MFG., INC.		1,373.90
VENDOR CODE: BLUCRO BLUE CROSS/BLUE SHIELD		
BANK CODE: 40208		
03302023	BCBS MARCH 2023 COVERAGE	43,022.72
TOTAL BANK CODE: 40208		43,022.72
TOTAL VENDOR BLUCRO BLUE CROSS/BLUE SHIELD		43,022.72
VENDOR CODE: BUREQU BURRIS EQUIPMENT CO.		
BANK CODE: 40208		



03/30/2023 03:50 PM

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## CUSTOM INVOICE REPORT FOR VILLAGE OF LAKE VILLA

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INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: BUREQU BURRIS EQUIPMENT CO.		
BANK CODE: 40208		
PS2010565-1	KUBOTA	52.94
PS2010453-1	PLUG KIT/ WASHER/ AXLE OIL	59.25
TOTAL BANK CODE: 40208		112.19
TOTAL VENDOR BUREQU BURRIS EQUIPMENT CO.		112.19
VENDOR CODE: CASH CASH		
BANK CODE: 40208		
03302023-AWC	WINDOW CLEANING - MARCH 2023	21.00
03092023	NSWWA LUNCH	50.00
02242023	VILLAGE HALL PLANTS	13.87
03142023	ST. PATRICK'S DAY LUNCHEON	6.83
03132023	ST. PATRICK'S DAY LUNCHEON	14.46
TOTAL BANK CODE: 40208		106.16
TOTAL VENDOR CASH CASH		106.16
VENDOR CODE: CLADAV CLARENCE DAVIDS & CO		
BANK CODE: 40208		
PROP-23-000052	DEPOSIT ANNUAL FLOWER PROPOSAL - VILLAGE	193.05
PROP-23-000051	DEPOSIT ANNUAL FLOWER PROPASAL - LEHMANN	742.50
PROP-23-000050	DEPOSIT ANNUAL FLOWER PROPOSAL- LEHMANN :	507.54
TOTAL BANK CODE: 40208		1,443.09
TOTAL VENDOR CLADAV CLARENCE DAVIDS & CO		1,443.09
VENDOR CODE: COMED COMED		
BANK CODE: 40208		
03302023-3203	TFLT, METERED 0 RT 83	49.40
03302023-4047	222 OAK KNOLL DR UNIT A	2,309.72
TOTAL BANK CODE: 40208		2,359.12
TOTAL VENDOR COMED COMED		2,359.12
VENDOR CODE: CONF S CONSERV FS, INC.		
BANK CODE: 40208		
102025247	596.3 GAL DIESEL	2,235.54
102025248	397.7 GAL UNL GAS	1,337.86
TOTAL BANK CODE: 40208		3,573.40
TOTAL VENDOR CONF S CONSERV FS, INC.		3,573.40
VENDOR CODE: CORMAI CORE & MAIN LP		
BANK CODE: 40208		
S531003	METER REPLACEMENT	1,488.00
TOTAL BANK CODE: 40208		1,488.00

03/30/2023 03:50 PM

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Page: 3/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: CORMAI CORE & MAIN LP		
TOTAL VENDOR CORMAI CORE & MAIN LP		1,488.00
VENDOR CODE: DATINT DATA INTEGRATORS, INC.		
BANK CODE: 40208		
23094	NEWSLETTER/ UTILITY BILLING MARCH 2023	407.95
TOTAL BANK CODE: 40208		407.95
TOTAL VENDOR DATINT DATA INTEGRATORS, INC.		407.95
VENDOR CODE: DEKCOM DEKIND COMPUTER CONSULTANTS		
BANK CODE: 40208		
35558	OFFICE 365	2,953.00
TOTAL BANK CODE: 40208		2,953.00
TOTAL VENDOR DEKCOM DEKIND COMPUTER CONSULTANTS		2,953.00
VENDOR CODE: DYNENE DYNEGY ENERGY SERVICES		
BANK CODE: 40208		
306942723031	ELECTRIC SUPPLIER -MARCH 2023	8,975.04
TOTAL BANK CODE: 40208		8,975.04
TOTAL VENDOR DYNENE DYNEGY ENERGY SERVICES		8,975.04
VENDOR CODE: ELYPRO ELYTE PRODUCTIONS		
BANK CODE: 40208		
E05702	ST. PATRICK'S DAY	1,526.28
TOTAL BANK CODE: 40208		1,526.28
TOTAL VENDOR ELYPRO ELYTE PRODUCTIONS		1,526.28
VENDOR CODE: EMPBENCOR EMPLOYEE BENEFITS CORPORATION		
BANK CODE: 40208		
3973597	FSA MEDICAL EXCESS INVOICE	851.95
3967435	BEST FLEX PLAN/ COBRA SECURE	120.00
3950060	FSA	623.34
TOTAL BANK CODE: 40208		1,595.29
TOTAL VENDOR EMPBENCOR EMPLOYEE BENEFITS CORPORATIC		1,595.29
VENDOR CODE: FACMOTPAR FACTORY MOTOR PARTS CO.		
BANK CODE: 40208		
162-139747	RETURN 12 VOLT/ TRUCK # 5	(27.27)
50-4436685	SQUAD # 271	148.00
162-139749	TRUCK # 13	(143.98)
162-139748	TRUCK # 15/ SEMI LOADED BRAKE CALIPER	(201.60)
63-429250	TRUCK # 15- GAS A JUST SHOCK	137.66
50-4417518	TRUCK # 15- STEERING STABILIZER	48.62
162-139095	TRUCK # 15- BRAKE LINING KIT	528.85
162-139845	SQUAD # 271	547.44

03/30/2023 03:50 PM

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INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: FACMOTPAR FACTORY MOTOR PARTS CO.		
BANK CODE: 40208		
162-139911	TRUCK # 13	303.63
TOTAL BANK CODE: 40208		1,341.35
TOTAL VENDOR FACMOTPAR FACTORY MOTOR PARTS CO.		1,341.35
VENDOR CODE: GOVHR GOVHR USA, LLC		
BANK CODE: 40208		
1-03-23-182	RECRUITMENT FEE- 1ST PYMT- ASSISTANT TO	4,750.00
1-03-23-183	RECRUITMENT FEE- 1ST PYMT- FINANCE DIREC	4,750.00
TOTAL BANK CODE: 40208		9,500.00
TOTAL VENDOR GOVHR GOVHR USA, LLC		9,500.00
VENDOR CODE: GRAINGER GRAINGER		
BANK CODE: 40208		
9645907651	PARKS SUPPLIES- TRASH BAGS	96.18
TOTAL BANK CODE: 40208		96.18
TOTAL VENDOR GRAINGER GRAINGER		96.18
VENDOR CODE: IACOP ILLINOIS ASSOC OF CHIEFS OF POLICE		
BANK CODE: 40208		
13082	2023 ILACP ANNUAL CONF	329.00
TOTAL BANK CODE: 40208		329.00
TOTAL VENDOR IACOP ILLINOIS ASSOC OF CHIEFS OF POLI		329.00
VENDOR CODE: ICOPS ICOPS		
BANK CODE: 40208		
ICOPS 03232023	PAY PERIOD 03/04-03/17/2023	276.00
TOTAL BANK CODE: 40208		276.00
TOTAL VENDOR ICOPS ICOPS		276.00
VENDOR CODE: ILSECSTA ILLINOIS SECRETARY OF STATE		
BANK CODE: 40208		
AF11007	KIA PLATE RENEWAL	151.00
TOTAL BANK CODE: 40208		151.00
TOTAL VENDOR ILSECSTA ILLINOIS SECRETARY OF STATE		151.00
VENDOR CODE: JACFRO JACK FROST IRON WORKS INC		
BANK CODE: 40208		
13668	REPAIR PLOW	760.00
TOTAL BANK CODE: 40208		760.00

03/30/2023 03:50 PM

User: CDENZEL

DB: Lake Villa

## CUSTOM INVOICE REPORT FOR VILLAGE OF LAKE VILLA

EXP CHECK RUN DATES 03/21/2023 - 04/03/2023

BOTH JOURNALIZED AND UNJOURNALIZED

BOTH OPEN AND PAID

Page: 5/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: JACFRO JACK FROST IRON WORKS INC		
	TOTAL VENDOR JACFRO JACK FROST IRON WORKS INC	760.00
VENDOR CODE: JGUNI J.G. UNIFORMS		
BANK CODE: 40208		
111676	UNIFORM ALLOWANCE- ESTEBAN GOMEZ	294.40
	TOTAL BANK CODE: 40208	294.40
	TOTAL VENDOR JGUNI J.G. UNIFORMS	294.40
VENDOR CODE: JIM BOWLES JIM BOWLES		
BANK CODE: 40208		
03202023-SHELL	TRAINING/ TRAVEL- JIM BOWLES	53.03
03302023	TRAINING/ TRAVEL- JIM BOWLES	335.16
	TOTAL BANK CODE: 40208	388.19
	TOTAL VENDOR JIM BOWLES JIM BOWLES	388.19
VENDOR CODE: KIMMID KIMBALL MIDWEST		
BANK CODE: 40208		
100864797	SHOP SUPPLIES	20.99
100864479	SHOP SUPPLIES	645.01
	TOTAL BANK CODE: 40208	666.00
	TOTAL VENDOR KIMMID KIMBALL MIDWEST	666.00
VENDOR CODE: LAFONFOR LAFONTAINE FORD OF BIRCH RUN		
BANK CODE: 40208		
03232023	2022 FORD SUPER DUTY	121,847.00
	TOTAL BANK CODE: 40208	121,847.00
	TOTAL VENDOR LAFONFOR LAFONTAINE FORD OF BIRCH RUN	121,847.00
VENDOR CODE: LAKINT LAKESIDE INTERNATIONAL TRUCKS		
BANK CODE: 40208		
2303099P	TRUCK # 6	97.04
2303100P	TRUCK # 6	99.65
	TOTAL BANK CODE: 40208	196.69
	TOTAL VENDOR LAKINT LAKESIDE INTERNATIONAL TRUCKS	196.69
VENDOR CODE: LCMUNLEA LAKE COUNTY MUNICIPAL LEAGUE		
BANK CODE: 40208		
03272023	2023-2024 LCML DUES	1,085.67
	TOTAL BANK CODE: 40208	1,085.67
	TOTAL VENDOR LCMUNLEA LAKE COUNTY MUNICIPAL LEAGUE	1,085.67

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Page: 6/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: LCTREAS LAKE COUNTY TREASURER		
BANK CODE: 40208		
280207945	FEBRUARY 2023 BUILDING SERVICES	2,818.60
430033657	SIGN SHOP -FEB 2023	86.40
TOTAL BANK CODE: 40208		2,905.00
TOTAL VENDOR LCTREAS LAKE COUNTY TREASURER		2,905.00
VENDOR CODE: LKCNTBRL LAKE COUNTY TREASURER		
BANK CODE: 40208		
110001014	DATA CONVERSION- REIMB TYLER TECHN INV#	11.50
110000974	DATA CONVERSION- REIMB TYER TECHN INV# 1	722.26
TOTAL BANK CODE: 40208		733.76
TOTAL VENDOR LKCNTBRL LAKE COUNTY TREASURER		733.76
VENDOR CODE: LVPOL LAKE VILLA POLICE PENSION FUND		
BANK CODE: 40208		
LVPOL 03232023	PAY PERIOD 03/04-03/17/2023	5,960.37
TOTAL BANK CODE: 40208		5,960.37
TOTAL VENDOR LVPOL LAKE VILLA POLICE PENSION FUND		5,960.37
VENDOR CODE: MAGIC MAGIC DAVE		
BANK CODE: 40208		
090923	RETAINER FEE FOR COF BALLOON ART	100.00
TOTAL BANK CODE: 40208		100.00
TOTAL VENDOR MAGIC MAGIC DAVE		100.00
VENDOR CODE: MENANT MENARDS - ANTIOCH		
BANK CODE: 40208		
26148	RETURN FROM INVOICE 25971	(20.20)
26149	SHOP SUPPLIES	60.03
25931	SHOP SUPPLIES- LADDER	237.97
25930	SHOP SUPPLIES	63.92
25853	PARKS SUPPLIES	48.30
25938	SHOP SUPPLIES/ STREET SUPPLIES	78.05
25810	SHOP SUPPLIES	26.57
25971	SHOP # 2 SUPPLIES	50.16
26202	SHOP SUPPLIES- SOLAR RAIL LIGHT	11.19
26094	SHOP SUPPLIES- SANDING BELTS	17.98
26150	FENCE REPAIR/ WATER SUPPLIES WELL 8/9	18.37
TOTAL BANK CODE: 40208		592.34
TOTAL VENDOR MENANT MENARDS - ANTIOCH		592.34
VENDOR CODE: MIDAGR MIDWEST AGGREGATES		
BANK CODE: 40208		
1852639	COLD MIX UPM	534.60

03/30/2023 03:50 PM

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BOTH JOURNALIZED AND UNJOURNALIZED

BOTH OPEN AND PAID

Page: 7/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: MIDAGR MIDWEST AGGREGATES		
BANK CODE: 40208		
TOTAL BANK CODE: 40208		534.60
TOTAL VENDOR MIDAGR MIDWEST AGGREGATES		
		534.60
VENDOR CODE: MUNFLEMANA MUNICIPAL FLEET MANAGERS ASSOCIATIO		
BANK CODE: 40208		
03302023	MUNICIPAL MANAGER MEMBERSHIP	50.00
TOTAL BANK CODE: 40208		50.00
TOTAL VENDOR MUNFLEMANA MUNICIPAL FLEET MANAGERS AS		
		50.00
VENDOR CODE: NACO NACO RETIREMENT SOLUTIONS		
BANK CODE: 40208		
NACO 03232023	PAY PERIOD 03/04-03/17/23	2,725.38
TOTAL BANK CODE: 40208		2,725.38
TOTAL VENDOR NACO NACO RETIREMENT SOLUTIONS		
		2,725.38
VENDOR CODE: NEMRT NORTH EAST MULTI-REGIONAL		
BANK CODE: 40208		
322148	TRAINING/ TRAVEL -ZACHARY BECH/ KURTIS K	100.00
TOTAL BANK CODE: 40208		100.00
TOTAL VENDOR NEMRT NORTH EAST MULTI-REGIONAL		
		100.00
VENDOR CODE: NICOR NICOR GAS		
BANK CODE: 40208		
03232023-1446	910 PARK AVE	0.38
03232023-8978	129 CENTRAL AVE # 2	3.56
03232023-3390	500 E GRAND AVE # 3	0.28
03232023-3343	1509 OAKLAND DR- LIFT STATION	2.60
03292023-96935	485 N MILWAUKEE/ MANSION	15,087.95
TOTAL BANK CODE: 40208		15,094.77
TOTAL VENDOR NICOR NICOR GAS		
		15,094.77
VENDOR CODE: PITBOW PITNEY BOWES GLOBAL FINANCIAL SERVI		
BANK CODE: 40208		
1022740521	RED INK	182.58
TOTAL BANK CODE: 40208		182.58
TOTAL VENDOR PITBOW PITNEY BOWES GLOBAL FINANCIAL S		
		182.58
VENDOR CODE: PLAILL PLAY ILLINOIS, LLC		
BANK CODE: 40208		
1571	CEDAR CROSSING PARK	5,820.60

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BOTH OPEN AND PAID

Page: 8/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: PLAILL PLAY ILLINOIS, LLC		
BANK CODE: 40208		
TOTAL BANK CODE: 40208		5,820.60
TOTAL VENDOR PLAILL PLAY ILLINOIS, LLC		5,820.60
VENDOR CODE: POMPS POMP'S TIRE SERVICE		
BANK CODE: 40208		
2100003418	TRUCK # 20	410.00
2100003788	KUBOTA	460.00
290241547	SQUAD # 292	870.92
TOTAL BANK CODE: 40208		1,740.92
TOTAL VENDOR POMPS POMP'S TIRE SERVICE		1,740.92
VENDOR CODE: RACK'MUP RACK 'M UP		
BANK CODE: 40208		
52049	SERVICE CALL OUT -LIFT INSPECTION	360.00
TOTAL BANK CODE: 40208		360.00
TOTAL VENDOR RACK'MUP RACK 'M UP		360.00
VENDOR CODE: ROGSHO ROGAN SHOES, INC.		
BANK CODE: 40208		
280225	UNIFORM ALLOWANCE- JIM BOWLES	140.25
TOTAL BANK CODE: 40208		140.25
TOTAL VENDOR ROGSHO ROGAN SHOES, INC.		140.25
VENDOR CODE: SAFARI SAFARILAND, LLC		
BANK CODE: 40208		
123-025819	UNIFORM ALLOWANCE- JAMES DECARO	179.00
TOTAL BANK CODE: 40208		179.00
TOTAL VENDOR SAFARI SAFARILAND, LLC		179.00
VENDOR CODE: STREICH STREICHER'S		
BANK CODE: 40208		
I1622100	UNIFORM ALLOWANCE- ESTEBAN GOMEZ	109.00
I1621755	BEAN BAGS	632.00
TOTAL BANK CODE: 40208		741.00
TOTAL VENDOR STREICH STREICHER'S		741.00
VENDOR CODE: TECAME TECHSTAR AMERICA CORPORATION		
BANK CODE: 40208		
46020	YRLY CONTRACT RATE FOR 4/29/2023- 4/27/2	2,099.25
TOTAL BANK CODE: 40208		2,099.25

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BOTH OPEN AND PAID

Page: 9/10

INVOICE NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: TECAME TECHSTAR AMERICA CORPORATION		
	TOTAL VENDOR TECAME TECHSTAR AMERICA CORPORATION	2,099.25
VENDOR CODE: TESASS TESKA ASSOCIATES, INC.		
BANK CODE: 40208		
13041	STARLING SENIOR- DEVELOPMENT REVIEW/ PL	930.00
13041	SSSA MAPPING	2,595.00
	TOTAL BANK CODE: 40208	3,525.00
	TOTAL VENDOR TESASS TESKA ASSOCIATES, INC.	3,525.00
VENDOR CODE: THEPRIFAC THE PRINTING FACTORY		
BANK CODE: 40208		
31521	BUDGET TABS	362.00
	TOTAL BANK CODE: 40208	362.00
	TOTAL VENDOR THEPRIFAC THE PRINTING FACTORY	362.00
VENDOR CODE: THESTA STANDARD INSURANCE COMPANY RC		
BANK CODE: 40208		
03152023	APRIL 2023 VISION INSURANCE	105.55
03152023	MARCH 2023 DENTAL INSURANCE	2,487.69
03302023	LIFE INSURANCE APRIL 2023	1,077.70
	TOTAL BANK CODE: 40208	3,670.94
	TOTAL VENDOR THESTA STANDARD INSURANCE COMPANY RC	3,670.94
VENDOR CODE: THOELE THOMPSON ELEVATOR		
BANK CODE: 40208		
23-0834	INSPECTION- SANCTUARY COMM HOUSE	41.00
23-0815	4 ELEVATOR CODE INSPECTIONS/ CERTIFICATE	192.00
	TOTAL BANK CODE: 40208	233.00
	TOTAL VENDOR THOELE THOMPSON ELEVATOR	233.00
VENDOR CODE: ULINE ULINE, INC.		
BANK CODE: 40208		
161378781	PARK SUPPLIES- DOG WASTE BAGS	102.67
	TOTAL BANK CODE: 40208	102.67
	TOTAL VENDOR ULINE ULINE, INC.	102.67
VENDOR CODE: USABLU USA BLUE BOOK		
BANK CODE: 40208		
288341	WELL HOUSE CHEMICAL CONVERSION	116.52
	TOTAL BANK CODE: 40208	116.52
	TOTAL VENDOR USABLU USA BLUE BOOK	116.52



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INVOICE		
NUMBER	DESCRIPTION	AMOUNT
VENDOR CODE: WARDIR WAREHOUSE DIRECT		
BANK CODE: 40208		
5460236-0	OFFICE SUPPLIES- FASH DRIVE/ HILIGHTER/	131.50
5458545-0	OFFICE SUPPLIES- TISSUE	58.99
5454954-0	OFFICE SUPPLIES- PAPER	153.71
5453028-1	OFFICE SUPPLIES- FLASH DRIVE	101.90
TOTAL BANK CODE: 40208		446.10
TOTAL VENDOR WARDIR WAREHOUSE DIRECT		446.10
GRAND TOTAL:		257,665.78

02/28/23  
03/01/23  
03/09/23  
03/10/23  
03/13/23

VILLAGE OF LAKE VILLA

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ORDINANCE NO. 2023-04-01

AN ORDINANCE GRANTING PRELIMINARY APPROVAL  
FOR A REQUEST FOR REZONING AND  
FOR AN AMENDMENT TO AN EXISTING CONDITIONAL USE PERMIT  
FOR A PLANNED DEVELOPMENT PREVIOUSLY GRANTED BY  
VILLAGE OF LAKE VILLA ORDINANCE NO. 2020-07-07  
FOR THE LAKE TOWER CROSSING PHASE 3 PLANNED DEVELOPMENT  
AND A CONDITIONAL USE PERMIT FOR THE PROPOSED  
STARLING SENIOR APARTMENTS PLANNED DEVELOPMENT

(RE: Petition of Lincoln Avenue Capital, LLC -  
0 Deep Lake Road, Lake Villa, IL)

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ADOPTED BY THE  
CORPORATE AUTHORITIES  
OF THE  
VILLAGE OF LAKE VILLA, ILLINOIS  
THIS 3<sup>rd</sup> DAY OF APRIL, 2023.

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Published in pamphlet form by authority of the Corporate Authorities of the Village of Lake Villa,  
Lake County, Illinois, this 3<sup>rd</sup> day of April, 2023.

AN ORDINANCE GRANTING PRELIMINARY APPROVAL  
FOR A REQUEST FOR REZONING AND  
FOR AN AMENDMENT TO AN EXISTING CONDITIONAL USE PERMIT  
FOR A PLANNED DEVELOPMENT PREVIOUSLY GRANTED BY  
VILLAGE OF LAKE VILLA ORDINANCE NO. 2020-07-07  
FOR THE LAKE TOWER CROSSING PHASE 3 PLANNED DEVELOPMENT  
AND A CONDITIONAL USE PERMIT FOR THE PROPOSED  
STARLING SENIOR APARTMENTS PLANNED DEVELOPMENT

(RE: Petition of Lincoln Avenue Capital, LLC -  
0 Deep Lake Road, Lake Villa, IL)

WHEREAS, the Village of Lake Villa (the “Village”) has received an application from the Petitioner, Lincoln Avenue Capital, LLC or its assigns (hereinafter referred to as the “Petitioner”), the contract purchaser of the property commonly known as 0 Deep Lake Road, Lake Villa, IL which is identified as P.I.N. 02-28-201-178 (the “Property”) requesting rezoning of the Property to the Village’s UR-4 Zoning District and approval of an amendment to an existing Conditional Use Permit for a Planned Development previously granted by Village of Lake Villa Ordinance No. 2020-07-07 for the Lake Tower Crossing Phase 3 Planned Development and a Conditional Use Permit for a Residential Planned Development for Elderly Housing and to permit the Petitioner to construct a forty (40) unit senior apartment development which shall be age-restricted to persons 55 years of age and older, with a mix of one-bedroom and two-bedroom apartments on the Property, as well as other related and/or required improvements which include but are not limited to water mains, sanitary sewers, storm sewers, storm water management facilities, parking, lighting, landscaping, and off-site sidewalks (hereinafter sometimes collectively referred to as the “Development”); and

WHEREAS, the Property consists of approximately 5.208 acres of vacant land located generally on the west side of Deep Lake Road and south of both Grass Lake Road and Tower

Drive in the Village of Lake Villa which is presently zoned and classified as part of the Village's SB (Suburban Business) Zoning District, within the corporate limits of the Village; and

WHEREAS, the Property is legally described as follows:

LOT A IN LAKE TOWER CROSSING PLANNED UNIT DEVELOPMENT PHASE 2, BEING A RESUBDIVISION OF PART OF SECTION 28, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS ACCORDING TO THE PLAT THEREOF RECORDED MAY 1, 2008 AS DOCUMENT NUMBER 6340408, IN THE VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS.

P.I.N. 02-28-201-178 (Approx. 5.208 acres)  
; and

WHEREAS, the Village of Lake Villa, Illinois, pursuant to the applicable Illinois statutes, has adopted Zoning Regulations as set forth in Chapter 10 of the Lake Villa Village Code, as amended from time to time (the "Zoning Regulations") and certain subdivision regulations as set forth in Chapter 11 of the Lake Villa Village Code, as amended from time to time (the "Subdivision Regulations") to regulate, among other things, land use and development within the Village; and

WHEREAS, Title 10, "Zoning Regulations", and Title 11, "Subdivision Regulations", of the Lake Villa Village Code provide regulations for the planning, review, and approval of conditional use permits for planned unit developments ("PUDs") within the Village; and

WHEREAS, the Petitioner has proceeded through the preliminary approval phase for rezoning of the Property from the Village's SB (Suburban Business) Zoning District to the Village's UR-4 Zoning District (the "Application") and for a Conditional Use Permit for the establishment of an Elderly Housing development as permitted in the UR-4 Zoning District on property which currently is located within and is part of the Lake Tower Crossing Phase 3 Planned Development, and has also applied to the Village for amendments to the existing Conditional Use for the Lake Tower Crossing Phase 3 Planned Development which was previously authorized by Village of Lake Villa Ordinance No. 2020-07-07 in order to establish said Development; and

WHEREAS, commencing on January 19, 2023 and concluding on February 21, 2023, the Village's Plan Commission, pursuant to proper notice, did conduct a public hearing on the Petitioner's Application; and

WHEREAS, at the conclusion of such public hearing, the Plan Commission did recommend approval of the Petitioner's Application based upon certain findings of fact and subject to certain conditions as follows:

I. FINDINGS OF FACT:

1. The Property consists of approximately 5.208 acres, more or less, is located within the corporate limits of the Village of Lake Villa, is commonly known as 0 Deep Lake Road, Lake Villa, IL (Permanent Index Number 02-28-201-178) and is generally located on the west side of Deep Lake Road and south of both Grass Lake Road and Tower Drive in the Village of Lake Villa and is legally described as follows:

LOT A IN LAKE TOWER CROSSING PLANNED UNIT DEVELOPMENT PHASE 2, BEING A RESUBDIVISION OF PART OF SECTION 28, TOWNSHIP 46 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS ACCORDING TO THE PLAT THEREOF RECORDED MAY 1, 2008 AS DOCUMENT NUMBER 6340408, IN THE VILLAGE OF LAKE VILLA, LAKE COUNTY, ILLINOIS.

2. The Property is presently zoned and classified as part of the Village's SB (Suburban Business) Zoning District, subject to the Lake Tower Crossing Phase 3 Planned Development. The Petitioner is also requesting rezoning to the UR-4 Zoning District to permit the construction, operation and maintenance of one three (3) story building consisting of senior apartment dwelling units, not exceeding forty (40) units in a single building, having a mix of one- or two-bedroom apartments intended for persons 55 years of age and older and other related improvements, including parking, lighting, landscaping, and storm water management facilities which would be in lieu of the 91 apartments previously authorized by the aforesaid Ordinance No. 2020-07-07, which senior apartments proposal will also require a modification of the phasing requirements set forth in Section 4(P) of Ordinance No. 2020-07-07 (collectively referred to as the "Development").
3. The proposed amendments to the Conditional Use Permit previously approved for the Property by Ordinance No. 2020-07-07 (the "existing Conditional Use Permit") and the New Conditional Use Permit requested by the Petitioner to authorize the Development:
  - (a) are consistent with the particular physical surroundings of the Property, the mixed uses on properties in the general vicinity thereof, and the present zoning of the Property, and that the granting of certain relief from the Village's Zoning Regulations will not be detrimental to the public welfare or injurious to other property owners in the vicinity of the Property;

- (b) are consistent with the general purpose and intent of the Lake Villa Zoning Regulations;
- (c) are consistent with the Village's Comprehensive Plan;
- (d) are designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity;
- (e) will not significantly diminish the safety, use and enjoyment of surrounding property;
- (f) will be adequately served by essential public facilities and services such as streets, police and fire service, drainage, refuse disposal, and schools, or such services will be provided by the Petitioner at the Petitioner's sole expense;
- (g) do not create excessive additional requirements at public expense for public facilities and service and will not be detrimental to the economic welfare of the community;
- (h) do not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors;
- (i) will provide vehicular access to the Property designed so that such use does not create any interference with traffic on surrounding public thoroughfares;
- (j) will not result in the destruction, loss, or damage of a natural, scenic, or historic feature of major importance;
- (k) will comply with all additional regulations in this Ordinance specific to the Conditional Use Permit requested.
- (l) will be consistent with the existing zoning of and with the existing uses of nearby properties;
- (m) will not diminish property values by the particular zoning restrictions at issue or by granting of the proposed New Conditional Use;
- (n) will not diminish property values and will promote the general health, safety, and welfare;
- (o) will provide a gain to the public as a result of the establishment of the proposed New Conditional Use for a senior apartment building, and there will be no hardship imposed upon the Petitioner;
- (p) will satisfy a community need for the uses which are the subject of the New Conditional Use Permit requested by the Petitioner;
- (q) will be consistent with the intent and purpose of the Lake Villa Zoning Regulations;

- (r) will be generally compatible with the character of the UR-4 Zoning District and the neighborhood in which it will be located;
  - (s) will preserve the value of the surrounding residential area and will be compatible with surrounding land uses;
  - (t) The Property is suitable for the Development;
  - (u) The Village has undertaken its planning and land use regulations with great care;
  - (v) The Property contains no topographical, environmentally sensitive, or historical features which require preservation;
4. The proposed amendments to the existing Conditional Use Permit as provided by Village of Lake Villa Ordinance No. 2020-07-07 and the New Conditional Use Permit for Elderly Housing would authorize the establishment, operation, and maintenance of a planned development for Elderly Housing in the nature of one 3-story apartment building consisting of not more than forty (40) senior apartment dwelling units in a single building, pursuant to the Village's Zoning Regulations in the UR4 Zoning District to which District the Property will be rezoned and re-classified, and the Village has hereby determined that the proposed Development is compatible with other uses permitted in the UR4 Zoning District;
  5. The proposed Development is consistent with the stated purpose of the planned development regulations set forth in the Village's Zoning Regulations and the proposed preliminary plan meets the requirements and standards for planned developments.
  6. The proposed preliminary plan for this planned development indicates that the New Conditional Use will produce a public benefit meeting the planning objectives and standards of the Village.
  7. The design of the proposed preliminary plan makes adequate provision for public services, provides adequate control over vehicular traffic, provides for and protects areas for common open space and other amenities.
  8. The proposed Development will be compatible with and beneficial to the adjacent properties and to the neighborhood, and the proposed Development is a desirable addition to the Village's available housing options, tax base and economic well being.
  9. In reviewing requests for Conditional Uses, the following standards were reviewed and considered pursuant to the Village's Zoning Code:
    - (a) Location: The site shall be so situated that the proposed use is compatible with the existing or planned future development in the area.

The Plan Commission found that the proposed Development is located along an arterial with compatible commercial development to the north and residential development to the west.

- (b) Zoning District Requirements: All regulations of the zone in which a conditional use is located shall apply to such uses, except where specifically amended by the conditions under which the conditional use permit is granted.

The Plan Commission found that zoning variances may be provided through the adoption of the conditional use for a planned development.

- (c) Lot Area: A conditional use shall be located on a lot or a zoning lot which conforms to the applicable zone regulations, unless the lot area requirement is specified in this section.

The Plan Commission found that the proposed Development is in compliance with minimum requirements of the UR4 Zoning District.

10. In evaluating a Planned Development, the Plan Commission considered the degree to which that development varies from underlying zoning standards of the district in which it will be located, and also considered benefits of the development such as the following (summary of Lake Villa Zoning Ordinance Section 9-1-2):

- (a) The proposed Development will provide a number of off-site connected sidewalks for use by both residents of the Development and other residents of the Village; or
- (b) The amount of landscaping is substantially greater than the minimum required by the Village Code; or
- (c) With the new building elevation, the proposed Development has substantially greater architectural amenities; or
- (d) Other extraordinary site amenities, including the community garden and a dog-run area.

The Plan Commission found that the proposed Development exceeds the amount of landscaping that is required by providing two of the standards:

- (i) The proposed Development provides a number of connected off-site sidewalks for use by residents of the Development and for use by Village residents; and
- (ii) The proposed Development exceeds landscape requirements by providing common open space, a community garden and dog run.

11. The Plan Commission also considered: (a) the degree to which the Development exhibits extra care and attention to details in excess of Village requirements which enhance the character of the Development, (b) the degree to which any requested increase in density reflects an investment in better design, landscaping, or facilities, and (c) the degree to which the developer has gone to better preserve critical natural environments, restore or mitigate degraded or distressed environments, alleviated off-site problems, and/or provided other improvements.

The Plan Commission found that the proposed Development will provide moderate-density senior apartments which are needed in the community, as well as additional open space, in the form of a number of off-site connected sidewalks, community garden and dog run, a sidewalk along Deep Lake Road, and also exceeds requirements for parking and accessible parking spaces.



The proposed Development is located along an easily accessible arterial, complements the commercial development to the north, and serves as a buffer to residential development to the west.

The wet bottom detention basin shall be designed with native wetland vegetation to enhance the natural environment and the abutting wetland to the south.

II. CONDITIONS OF PRELIMINARY APPROVAL: The Plan Commission of the Village recommended that the Petitioner be granted preliminary approval, subject to the following conditions:

1. Prior to commencement of construction:
  - (a) The Petitioner shall construct or pay for the construction of all stormwater management, sanitary sewer, water system improvements required for the Development, all in accordance with the final engineering approved by the Village Administrator and post a letter of credit as a performance guarantee for all required on-site and off-site improvements required for the Development, other than for the senior apartment building itself.
  - (b) The Petitioner shall pay all required developer school and park impact fees prior to the commencement of construction and transition impact fees as provided by Section 8-5-2 of the Lake Villa Village Code prior to the Village's issuance of the building permit for the Development.
  - (c) The Petitioner shall secure in writing all permits and approvals from the Village, from the IEPA, from CLCJAWA, from Fox Lake and Lake County Public Works, for sewer, water and storm sewer service for the Development.
  - (d) The Petitioner shall provide evidence satisfactory to the Village's consultant that adequate water, sanitary sewer and stormwater storage capacity has been reserved to serve the balance of the Lake Tower Crossing Planned Development.
  - (e) The Petitioner shall secure in writing all permits and approvals from the Lake County Division of Transportation for all access, road improvements, or other transportation infrastructure required for the Development.
  - (f) The Petitioner shall file with the Village Treasurer an irrevocable letter of credit approved by the Village Attorneys and in an amount approved by the Village Administrator as a performance guarantee for all required on-site and off-site improvements for the Development, other than for the senior apartment building itself.
2. Within six (6) months of the Petitioner's acquisition of the development site, the Village shall establish a back-up Special Service Area for the Development with a maximum SSA special tax rate not to exceed .10%. The Petitioner's maintenance obligations for the Development will be secured by the back-up Special Service Area and shall be subject to a 30-day notice and cure period for the following maintenance and other purposes:
  - (a) Infrastructure, including but not limited to streets, water and sanitary sewer services, sidewalks, trails, and landscaping. This does not include any water mains and sanitary sewer mains which will be dedicated to and maintained by the Village.
  - (b) Maintenance of common areas and amenities.
  - (c) Snow removal and ice control within the Development.
  - (d) Payment of any unpaid water and sewer bills.

The Village will not levy any special taxes to fund said back-up Special Service Area so long as the Petitioner complies in a timely manner with all of its maintenance obligations for the Development.

3. Prior to the issuance of any temporary or final Certificate of Occupancy for the Development, the Petitioner shall provide to the Village “as built” final plans showing the precise location of all improvements to the Property, including all buildings, utilities, streets, sidewalks, detention or retention ponds and drainage swales, dog run and community garden.
4. The Final Plat for the Development shall include the dedication of an easement over, under, across, and through designated portions of the Property for the purpose of maintenance and reconstruction by the Village of any water and sewer mains to be dedicated to the Village, if any, at such times and in such circumstances as the Village deems expedient, but the Village shall have the right but not the obligations to perform any of such work. The Village shall also have such a blanket easement over the Property, but not the obligation to perform such maintenance as it deems necessary through such a Special Service Area.
5. During both the construction and operation of the Development, the Petitioner shall, at its expense, comply with all of the consultation recommendations of the Illinois Department of Natural Resources relative to Blanding’s Turtles, King Rail and Least Bittern.
6. The following submittals are the subject of this recommendation for preliminary PUD approval:
  - (a) Preliminary Landscape Plan Set dated 02/06/23 by Manhard Consulting;
  - (b) Photometric Plan dated 02/06/23 by Manhard Consulting;
  - (c) Revised Preliminary Engineering Plan Set dated 02/06/23 by Manhard Consulting;
  - (d) Stormwater Brochure dated 02/06/23 by Manhard Consulting;
  - (e) Wetland Report dated 02/06/23 by Gary R. Webber Associated, Inc.;
  - (f) Revised Elevation and Floorplans dated 02/16/23 by North Arrow Architecture;
  - (g) IDNR Consultation EcoCat Review #2306326 dated November 14, 2022
7. At the Plan Commission hearing on the Petitioner’s Application, the Petitioner submitted the following the major revisions:
  - (a) Site Plan Changes and Modifications: The Petitioner has submitted revised preliminary engineering plans and a revised plat that modifies the site plan for the Development which includes, among other things, reducing the size of the building footprint, increasing setbacks from the property lines, relocating the refuse container enclosure to the East side of the senior apartment building and designating the western access road to the parking lot as for emergency vehicular access only.
  - (b) Stormwater Management: The Petitioner has submitted revisions to its preliminary stormwater management report and engineering plans which include the installation of a CDS© Water Quality Structure (Hydrodynamic separator) that will be installed in the outfall pipe adjacent to the parking lot, the purpose of which structure will be to remove garbage, debris, hydrocarbons and other sediment from the stormwater runoff that flows into the on-site detention basin which will be constructed on the Property. This

outfall pipe will now discharge into a level spreader to discharge the stormwater toward the Painted Lakes detention basin.

- (c) Landscape/Tree Preservation: The Petitioner has proposed to preserve additional existing trees on the Property. Additionally, a greater amount of buffer yard shrubs have been proposed by the Petitioner to be planted on the west side of the Development to provide greater landscaping buffering between the Development and the adjacent residential townhome development. Lastly, the Petitioner has removed Round-Up from its specifications for plant material installation, and a more environmentally-friendly alternative, AquaPro Aquatic Herbicide, is now proposed for site preparation and planting preparation purposes.
  - (d) Architectural Elevations: The Petitioner has submitted a new architectural elevation and details for the proposed senior apartment building. Pursuant to direction provided by the Plan Commission, new architectural details to the Building's roofline are now being proposed, including an asphalt shingle mansard roof, face brick along the lower level of the Building, and cementitious fiber lap siding on the second and third floors.
- 8. An accurate elevation of the profile of the north side of the senior apartment building shall be presented to the Plan Commission and reviewed as part of Final P.U.D. approval.
  - 9. The sidewalk proposed by the Petitioner to be located in the public right-of-way of Deep Lake Road shall be extended approximately 100 more feet to the south so it extends along the entire boundary of the Property along Deep Lake Road.
  - 10. The Plan Commission has recommended that the Conditional Use for this Development and the rezoning of the Property to the UR4 Zoning District should both automatically terminate unless the Petitioner commences construction of the Development within four (4) years after Final P.U.D. approval, but this date should be able to be extended by the Corporate Authorities of the Village by a separate ordinance at their sole discretion.
  - 11. An exception from Section 10-2-2 (Definition of "Elderly Housing") of the Village of Lake Villa Zoning Regulations should be granted to the Petitioner by the Ordinance providing for final PUD approval for the Development to allow these senior apartments to be age-restricted, but for persons of 55 years of age and older, notwithstanding the fact that the Zoning Regulations would otherwise require Elderly Housing to be age-restricted to persons 62 years of age and older.

WHEREAS, subject to the terms and conditions hereinafter set forth, the Mayor and Board of Trustees of the Village have determined that it is in the best interests of the Village and its residents to grant preliminary (i.e., conceptual and tentative) approval of the Petitioner's Application for the Property in accordance with the Zoning Ordinance of the Village and the other applicable ordinances of the Village:

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Lake Villa, Lake County, Illinois, as follows:

SECTION 1: The Corporate Authorities of the Village find that the facts stated in the preamble of this Ordinance are true and correct and the same are incorporated into the text of this Ordinance as findings of fact to the same extent as if each had been set forth in its entirety herein.

SECTION 2: The Mayor and Board of Trustees of the Village of Lake Villa hereby accept and tentatively and conceptually approve the Recommendation and Findings of Fact of the Lake Villa Plan Commission dated February 21, 2023, which are hereby incorporated herein by reference.

SECTION 3: Preliminary Approval of Petitioner's Application: Subject to the terms and conditions of this Ordinance, as well as the conditions and limitations in the Zoning Regulations and/or Subdivision Regulations of the Village, the Mayor and Board of Trustees hereby tentatively and conceptually approve the Petitioner's Application for Rezoning to the UR-4 Zoning District, for amendments to the existing Conditional Use Permit, as amended, as provided by Village of Lake Villa Ordinance No. 2020-07-07, and for Preliminary Approval of a Conditional Use for an Elderly Housing Planned Unit Development which consists of the following revised preliminary exhibits, copies of which are attached hereto as Group Exhibit A and thereby made a part hereof:

- (a) Preliminary Landscape Plan Set dated 02/06/23 by Manhard Consulting;
- (b) Photometric Plan dated 02/06/23 by Manhard Consulting;
- (c) Revised Preliminary Engineering Plan Set dated 02/06/23 by Manhard Consulting;
- (d) Stormwater Brochure dated 02/06/23 by Manhard Consulting;
- (e) Wetland Report dated 02/06/23 by Gary R. Webber Associated, Inc.;
- (f) Revised Elevation and Floorplans dated 02/16/23 by North Arrow Architecture;
- (g) IDNR Consultation EcoCat Review #2306326 dated November 14, 2022

Notwithstanding anything shown on or implied by the above preliminary exhibits, no variation, exception or waiver shall be approved or implied by this Ordinance or by the Ordinance which may grant final PUD approval, unless such variation(s), exception(s), or waiver(s) are each specifically and expressly stated in writing in one or both of such ordinances. Any approval of

preliminary exhibits for the purposes of this Ordinance, and/or by the Ordinance hereafter providing for final PUD approval, and/or by any amendments thereto shall not constitute approval of said plans for any other purposes under the Lake Villa Village Code, the Lake Villa Zoning Regulations, or any other applicable ordinances of this Village, and no grant of any variation(s), waiver(s) or exception(s) from any ordinances of the Village are intended or provided unless same are specifically and expressly stated in one or both of said PUD ordinances.

SECTION 4: Express Conditions of Preliminary Approvals: The preliminary approvals for the proposed Development granted pursuant to this Ordinance shall be subject to the following conditions, restrictions, and limitations, and the Petitioner's failure to comply with any of the provisions of this Ordinance may, in the reasonable discretion of the Village Board, and upon adoption of a subsequent Ordinance relative thereto, revoke such preliminary approvals as herein granted:

- (A) No Authorization for Development Activity: The approvals granted by this Ordinance are not and shall not be interpreted in any manner as an authorization for Petitioner and/or its assigns, employee(s), contractor(s), and/or agent(s) to commence any development activity on the Property. The approval(s) granted in this Ordinance are preliminary only and do not authorize and/or imply the authorization of the issuance of any Village permit(s) for the Development, including but not limited to no watershed development permit(s), no building permit(s), no earth-moving permit(s), nor any sewer or water connection permits, which permits shall not occur unless and until the Village Board has first issued its final approval of a Conditional Use Permit for a Planned Development for the Property by a separate and subsequent Ordinance of the Village. The Conditional Use Permit for the Development, as ultimately approved in final form by a separate Ordinance, shall be subject to such reasonable conditions of approval as the Village Board shall determine to be necessary, expedient, desirable, and/or appropriate and may include, at the sole discretion of the Village Board,

such other requirement(s) and/or condition(s) which shall be applicable to the proposed Development.

(B) Prior to commencement of construction of the Development:

- (i) The Petitioner shall obtain and record a permanent access easement to provide the Development access for ingress and egress to and from Tower Road.
- (ii) The Petitioner shall, at its sole expense, construct or pay for the construction of all stormwater management facilities and all sanitary sewer and water system improvements required for the Development as determined by the Village Administrator, all in accordance with the final engineering which will be approved by the Village.
- (iii) The Petitioner shall pay all required developer school and park impact fees prior to the commencement of construction. The Petitioner has also agreed to voluntarily pay builder transition permit fees as provided by Section 8-5-2 of the Lake Villa Village Code at the time individual building permits are issued to the Petitioner.
- (iv) The Petitioner shall secure in writing all permits and approvals from the Village, from CLCJAWA, from Fox Lake and Lake County Public Works, for sewer, water and storm sewer service for the Development.
- (v) The Petitioner shall secure in writing all permits and approvals from the Lake County Division of Transportation for all access, road improvements, or other transportation infrastructure required for the Development, including the sidewalk within the Deep Lake Road right-of-way.
- (vi) The Petitioner shall file with the Village Treasurer an irrevocable letter of credit in a form acceptable to the Village Attorney and in an amount approved by the Village Administrator as a performance guarantee for all required on-site and off-site improvements for the Development, other than the senior apartment building itself.
- (vii) With respect to the Property, the Village shall record a release of that certain Statement of Agreement dated September 14, 2005 by and between DEKA Investments, L.L.C. and the Village Re: Lake Tower Crossing P.U.D. recorded with the Lake County, IL Recorder on October 6, 2005 as Document 5871255.

(C) Within six (6) months of the Petitioner's acquisition of the Property, the Village shall establish a back-up Special Service Area for the Development with a maximum SSA special tax rate not to exceed .10%. The Petitioner's maintenance obligations for the Development will be secured by such back-up Special Service Area and shall be subject to a 30-day notice and cure period for the following maintenance and other purposes:

- (i) Infrastructure, including but not limited to streets, water and sanitary sewer services, stormwater management improvements, sidewalks, and landscaping, and a permanent easement in favor of the Village for such improvements pursuant to which the Village shall have the right but not the obligation to do any such maintenance, should the Petitioner and/or its successor(s) and/or assign(s) fail to do so. However, this does not include any water mains and sanitary sewer mains, which will be dedicated to and maintained by the Village and located in an easement in favor of the Village for such purposes;
- (ii) Maintenance of common areas and amenities;
- (iii) Snow removal and ice control within the Development; and
- (iv) Payment of any unpaid water and sewer bills.

The Village will not levy any special taxes to fund said back-up Special Service Area so long as the Petitioner complies in a timely manner with all of its maintenance obligations for the Development.

- (D) Prior to the issuance of the final Certificate of Occupancy for the Development, the Petitioner shall provide to the Village “as built” final plans showing the precise location of all improvements on or related to the Property, including all buildings, utilities, sewer mains, water mains, streets, sidewalks, detention and/or retention ponds, drainage swales and other stormwater management facilities.
- (E) The Final Plat of Subdivision for the Development shall include the dedication to the Village of a non-exclusive easement over, under, across, and through designated portions of the Property for the purpose of maintenance by the Village of the water and sewer mains to be dedicated to the Village at such times and in such circumstances as the Village deems expedient.
- (F) The Petitioner shall also record in favor of the Village and the Lake Villa Township Fire Protection District, as part of the Final Plat of Subdivision for the Development, a permanent non-exclusive blanket access easement over the Property for police protection, fire and EMS services, and building inspection services.
- (G) Prior to issuance by the Village of a final occupancy permit for the Development, the Petitioner shall cause to be installed in each dwelling unit and in each of the common spaces

of the senior apartment building, smoke and fire detection, and fire suppression pursuant to plans approved in advance in writing by both the Fire Protection District and the Village, and such systems shall each pass operational inspections by the Fire Protection District. The Petitioner shall also install such knock boxes as requested by the Fire Protection District.

- (H) The final engineering for the Development shall include final engineering for the design and construction of all off-site sidewalks, one of which shall be installed from the Development to Tower Road along the West side of the Village Water Tower site, along the North side of such Water Tower site along Tower Road, and South on the West side of Deep Lake Road to where the Property is no longer adjacent to Deep Lake Road, which sidewalks shall be constructed of a hard surface material of either asphalt or concrete. Such sidewalks shall be dedicated to the Village after completion by the Petitioner and acceptance of such sidewalks by the Village.
- (I) During both the construction and operation of the Development, the Petitioner shall, at its expense, comply with all of the endangered species consultation recommendations of the Illinois Department of Natural Resources (“IDNR”) relative to Blanding’s Turtles, King Rail and Least Bittern, as follows, provided, however, these standards may be narrowed or otherwise modified in the Village ordinance granting final approval for the Conditional Use Permit for the proposed PUD if and to the extent that the IDNR modifies its consultation recommendation:
  - a. Blanding’s Turtle:
    - (i) All on-site personnel shall be educated by the Petitioner about this species and be instructed to stop work immediately and contact the Department (Brad Semel, Natural Heritage Division, 815-675-2386, Ext. 216) if any such turtles are encountered in the project area.
    - (ii) Fliers with photos of adult and juvenile Blanding’s turtles, and life-history information, shall be distributed by the Petitioner to personnel and to the Petitioner’s contractors and subcontractors.
    - (iii) Exclusionary fencing as approved by the Village Administrator shall be installed by the Petitioner, at the Petitioner’s expense, around any area disturbed by the



Development during construction and thereafter to partition off any wetland areas before the active season of such turtles (March 1<sup>st</sup> – November 1<sup>st</sup>).

- (iv) Exclusionary fencing shall be trenched into the ground (a minimum of 4 inches), and inspected daily for Blanding's turtles by the Petitioner or by its agent(s).
    - (a) Fencing shall be installed by the Petitioner, at the Petitioner's expense, with turnarounds at open ends and at any access openings needed in the fencing, in order to redirect animals away from openings.
  - (v) Excavations shall be inspected daily by the Petitioner for trapped wildlife and safely covered overnight. Soil or other potential turtle nesting medium stockpiles shall also have exclusionary fencing installed around the perimeter to discourage turtle nesting and potential harm to the animals.
  - (vi) A permanent exclusionary barrier as approved by the Village Administrator between any wetlands and the project site shall be incorporated into project plans and installed by the Petitioner, at the Petitioner's sole expense, to prevent turtles from entering areas where they may be adversely impacted by daily activity. Such barrier shall include turnarounds where needed and shall be trenched by the Petitioner into the soil a minimum of 4 inches.
- b. King Rail and Least Bittern: To avoid adverse impacts to King Rail and Least Bittern, the Petitioner shall be required to take the following steps:
- (i) A 50-foot buffer shall be maintained on all wetlands;
  - (ii) When feasible, work near wetlands shall be avoided between April 1<sup>st</sup> and September 30<sup>th</sup> to avoid the prime nesting and fledgling season for these protected bird species;
  - (iii) All lighting shall be fully shielded fixtures that emit no light upward;
  - (iv) Only "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) shall be used to minimize blue emission.
  - (v) The only lighting used on the Property shall be limited to the exact space and those lumens needed to meet the Development's safety requirements.
- c. If additional protected resources are unexpectedly encountered during the Development's construction and operations, the Petitioner must comply with the applicable IDNR and federal statutes and regulations.
- d. No take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the Illinois Endangered Species Act, the Fish and Aquatic Life Act, the Wildlife Code and other applicable authority.
- (J) Fees and Costs: In compliance with applicable provisions of the Village of Lake Villa Village Code, including but not limited to Title 10, "Zoning Regulations", Title 11, "Subdivision Regulations", and Section 1-5-3, "Debts and Legal Obligations Due to the Village" thereof, Petitioner is and shall be required to timely pay all applicable fees and costs and/or to reimburse the Village for any and all costs incurred by the Village relating to the

proposed development of the Property and any approvals related thereto (including but not limited to review and preparation of documents for granting preliminary and final approvals thereof and enforcement of such approvals), including any costs associated with the review and approval of plans and other documents prepared or to be prepared by Petitioner relative to the proposed Development. Any amount not paid within 30 days after delivery of a demand in writing for such payment shall, along with interest and the costs of collection, become a lien upon the Property, and the Village shall have the right to foreclose such lien in the name of the Village as in the case of foreclosure of liens against real estate, provided, however, that such lien shall be subordinate to any mortgage or regulatory agreement recorded against the Property. The Village shall provide a tax-exempt letter to the Petitioner but only relative to materials used to construct public improvement(s) to be owned by or dedicated to the Village.

- (K) Binding Effect: The rights and obligations set forth in this Ordinance shall be and are binding upon and inure to Petitioner and upon any and all of Petitioner's heirs, successors, and assigns, and upon any and all successor legal or beneficial owners of all or any portion of the Property; provided that the effect of this Ordinance shall be superseded upon passage of an ordinance granting the rezoning and final PUD approval for the Property. To the extent that a successor becomes bound to the obligations created herein pursuant to a transferee assumption agreement acceptable to the Village, and such successor demonstrates to the Village that it has the financial viability to meet the obligations herein, the Petitioner shall be released from its obligations under this Ordinance, but only to the extent of the transferee's assumption of such liability. The failure of the Petitioner to provide the Village with an enforceable transferee assumption agreement as herein provided shall result in the Petitioner remaining fully liable for all of its obligations under this Ordinance but shall neither preclude a transfer nor relieve the transferee of its liability for all such obligations as a successor to

Petitioner. Notwithstanding the foregoing, Petitioner may assign its rights and obligations set forth in this Ordinance to one or more affiliates, which affiliate(s) will become the fee simple owner of the Property, and the Village consents to such assignment to Petitioner's affiliate(s) without the need for a transferee assumption agreement, but the assignment of this Ordinance and the preliminary approval herein provided to any third party other than an affiliate of the Petitioner shall require such a transferee assumption agreement executed by such third-party transferee and the written consent of the Corporate Authorities of the Village.

- (L) Duration and Vacation of Approved Preliminary Plan: The Approved Preliminary Plans shall remain in force subject to the limitations set forth in Section 11-2-2 of the Lake Villa Village Code and 65 ILCS 5/11-12-8, but such preliminary approval may be extended at the sole discretion of the Corporate Authorities of the Village.

(M) Indemnification:

- (1) The Village agrees to cooperate with the Petitioner, and/or its successors and/or assigns, in defending any action which contests any aspect of this Ordinance or of the rezoning of the Property and Conditional Use for a Planned Development which are granted preliminary approval herein. The Petitioner, for itself individually as well as on behalf of its successors and/or assigns, agrees to hold harmless and indemnify the Village, its elected and appointed officials, officers, employees, and other agents (the "Indemnified Village Parties") relative to any such actions and/or costs, claims, or expenses relative thereto, and all costs, including attorneys' fees, incurred by the Village in connection therewith (but excluding any actions, costs, claims, or expenses resulting from the gross negligence or willful misconduct of the Indemnified Village Parties) shall be paid for by the Petitioner or reimbursed to the Village by the Petitioner. The Village may require reasonable deposit(s) by the Petitioner to cover any such

anticipated costs in the event that the Village receives notice of any threatened or actual actions and/or costs, claims, or expenses. The Village shall refund to Petitioner any deposit remaining upon its reasonable determination that no further anticipated costs will be incurred by the Village.

- (2) The Petitioner hereby undertakes and agrees, to the greatest extent permitted by law, only as to its own acts or omissions, to indemnify, defend, save and keep harmless the Indemnified Village Parties from and against any loss, cost, damage, liability, claim or expense, including attorneys' fees, which any of the Indemnified Parties may suffer, incur or sustain from or arising out of any injuries to or death of any person or persons, or damage to or loss of any real or personal property, including but not limited to damage to the Property of the Petitioner and/or to the property of tenants or invitees of the tenants, including but not limited to damages due to or resulting directly or indirectly from the Property and/or from any use and/or occupancy of the Property and/or from the Conditional Use Permit herein granted preliminary approval (but excluding any actions, costs, claims, or expenses resulting from the gross negligence or willful misconduct of the Indemnified Village Parties).

(N) Remedies:

- (1) Any violation of this Ordinance shall also be deemed a violation of the Village of Lake Villa Zoning Code and the Lake Villa Village Code and each day such a violation exists or continues shall constitute a separate offense. As provided in the Village of Lake Villa Village Code, each such offense shall be punishable by a mandatory minimum daily fine of not less than \$100.00 per day and not more than \$750.00 per day as provided by the Village of Lake Villa Zoning Regulations and the Lake Villa Village Code.

(2) In the event the Petitioner, and/or its successors and/or assigns, fails to timely pay or reimburse the Village for any fees and/or expenses due pursuant to this Ordinance, or pursuant to the other applicable ordinances of the Village, or if the Petitioner otherwise violates this Ordinance, or is otherwise in default in its obligations under this Ordinance, and has been notified of and failed to cure such default within forty-five (45) days after receipt of such notice by the Petitioner and/or its successor(s) and/or assign(s) (“Cure Period”), the Village shall be entitled to all remedies available at law and/or in equity and, in addition to all other remedies available including those otherwise set forth in this Ordinance, the Village may suspend, revoke, or decline to issue any building, occupancy and/or other permit, license(s), or approvals required by the ordinances of the Village and/or the Village may suspend or revoke the Conditional Use Permit herein granted; provided, however, that the Village shall not suspend or revoke the Conditional Use Permit herein granted without providing a hearing, if requested by the Petitioner in writing to the Village within the Cure Period, before the Mayor and Board of Trustees of the Village. Such notices as required by this Subparagraph 2 may be sent via U.S. Certified Mail, Return Receipt Requested, and Postage Prepaid.

(O) Severability Clause: It is the intention of the Corporate Authorities that this Ordinance and every provision thereof shall be considered separable and the invalidity of any section, clause, provision, part, or portion of any section, clause, or provision of this Ordinance shall not affect the validity of any other portion of this Ordinance. If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance, or any part thereof. The Corporate Authorities

hereby declare that it would have approved each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, subdivision, paragraphs, sentences, clauses or phrases be declared unconstitutional, invalid or ineffective.

- (P) Exhibits: Attached hereto as Group Exhibit A and thereby incorporated herein by reference, are all the submittals which were reviewed and considered by the Plan Commission and by the Board of Trustees of the Village. All such exhibits attached to this Ordinance are deemed to be and are expressly made a part of and incorporated into this Ordinance to the same extent as if each such exhibit had been set forth in its entirety in the body of this Ordinance, provided, however, the exhibits attached to this Ordinance as herein provided are tentative, conceptual, and preliminary only (i.e., tentative and conceptual), and the incorporation by reference of such exhibits shall not constitute final approval for the purposes of issuance by the Village of building permits, Watershed Development Ordinance permits, or for any other Village permits or approvals.
- (Q) Approval Authority: If any provisions of this Ordinance delegate approval authority to any Village officer, employee, or agent for any aspect of this Ordinance, then either the Petitioner or such officer, employee, or agent of the Petitioner, and/or its successors and/or assigns, as the case may be, shall have the right to have any such decision of such Village officer, employee or agent, or his or her designee, reviewed, reconsidered, and a final decision thereon made by the Board of Trustees of the Village. Any reference in this Ordinance to the authority of the Mayor or the Village Administrator to grant or deny an approval shall, whether or not so specified, include the authority for such decision to be reviewed and made by the Mayor and Board of Trustees as the Corporate Authorities of the Village.

SECTION 5: This Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided however, that the approval(s) granted by this Ordinance shall have no force or effect unless and until Petitioner has caused a duly authorized person to execute and thereafter file with the Village the unconditional agreement and consent in the form entitled “Acceptance” attached hereto and by this reference incorporated herein and made a part hereof (the “Acceptance”); provided further that, if the Petitioner does not so file the Acceptance within sixty (60) days following the passage of this Ordinance, the Village Board may, in its discretion and without public notice or hearing, repeal this Ordinance and thereby revoke all preliminary approvals granted in this Ordinance.

SECTION 6: The sidewalk proposed by the Petitioner to be located in the public right-of-way of Deep Lake Road shall be extended approximately 100 more feet to the south beyond that which is shown on Group Exhibit A so it extends along the entire boundary of the Property along Deep Lake Road.

SECTION 7: The Plan Commission has recommended that the Conditional Use for this Development and the rezoning of the Property to the UR4 Zoning District should both automatically terminate unless the Petitioner commences construction of the Development within four (4) years after Final P.U.D. approval, but this date should be able to be extended by the Corporate Authorities of the Village by a separate ordinance at their sole discretion.

SECTION 8: The Village Clerk is hereby directed to publish this Ordinance in pamphlet form and this Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law but only upon written acceptance thereof by the Petitioner. The Village Clerk is also hereby directed to record a certified copy of this Ordinance, with all attachments, with the Lake County Recorder of Deeds.

Passed by the Corporate Authorities on April 3<sup>rd</sup>, 2023, on a roll call vote as follows:

AYES: Trustees

NAYS:

ABSENT:

ABSTAIN:

Approved by the Mayor on April 3<sup>rd</sup>, 2023.

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James McDonald, Mayor,  
Village of Lake Villa

ATTEST:

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Mary Konrad, Village Clerk

Published in pamphlet form this 3<sup>rd</sup> day of April, 2023.



ACCEPTANCE

The undersigned on behalf of the Petitioner, Lincoln Avenue Capital, LLC as the Petitioner, and its successors and assigns, hereby states that the undersigned is a duly authorized agent of the Petitioner and on behalf of such Petitioner hereby accepts, consents to and agrees to the terms, conditions, and restrictions of the foregoing Ordinance this \_\_\_\_ day of \_\_\_\_\_, 2023.

PETITIONER:

Lincoln Avenue Capital, LLC

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Its Authorized Manager and Authorized Agent

## GROUP EXHIBIT A

### 2023 APPROVED PRELIMINARY PLANS

- (a) Preliminary Landscape Plan Set dated 02/06/23 by Manhard Consulting;
- (b) Photometric Plan dated 02/06/23 by Manhard Consulting;
- (c) Revised Preliminary Engineering Plan Set dated 02/06/23 by Manhard Consulting;
- (d) Stormwater Brochure dated 02/06/23 by Manhard Consulting;
- (e) Wetland Report dated 02/06/23 by Gary R. Webber Associated, Inc.;
- (f) Revised Elevation and Floorplans dated 02/16/23 by North Arrow Architecture;
- (g) IDNR Consultation EcoCat Review #2306326 dated November 14, 2022

EXHIBIT B

FORM OF LETTER OF CREDIT

(Issuer's Letterhead)

IRREVOCABLE LETTER OF CREDIT NO. \_\_\_\_\_

Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Amount: \_\_\_\_\_

Applicant/Permittee: \_\_\_\_\_

(Name)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(City, State, Zip Code)

BENEFICIARY: Village of Lake Villa  
65 Cedar Avenue  
Lake Villa, IL 60046

PERMITTEE: \_\_\_\_\_

ADDRESS OF PROJECT: \_\_\_\_\_

BUILDING PERMIT NO. \_\_\_\_\_

Dear Beneficiary:

The undersigned Bank (the "Bank" or the "Issuer") hereby established in your favor our Irrevocable Letter of Credit No. \_\_\_\_ which is available for negotiation of your draft at sight, drawn on \_\_\_\_\_, bearing the clause: "Drawn under \_\_\_\_\_ Irrevocable Letter of Credit No. \_\_\_\_\_", and accompanied by:

A signed statement by any officer, or authorized employee, or agent of the Village stating that:

1. The Mayor or Village Administrator has found that the construction, addition, and/or remodeling of the Project as identified above has not been completed in a timely manner and in compliance with the rules, regulations and provisions of the Village of Lake Villa Village Code and with State law; and/or
2. This letter of credit will expire within thirty-five (35) days or less and the Village has not received a renewal letter of credit; and/or
3. The Village has received written notice that this Letter of Credit is about to expire, and no replacement letter of credit in a form satisfactory to the Village of Lake Villa has been received by it on or before thirty-five (35) days prior to the expiration of this letter of credit; and/or
4. The Permittee has not paid, or caused to be paid within forty-five (45) days of the date when billed by the Village, professional expenses incurred by the Village relating to the Project.

Notwithstanding the expiration date stated above, this Letter of Credit shall continue in full force and effect and shall not expire unless and until the Village has been given written notice by

certified mail, return receipt requested, that the Letter of Credit is about to expire. The Letter of Credit shall thereafter expire thirty-five (35) days after said notice, but no sooner than the above-described expiration date.

The undersigned Bank hereby undertakes and engages that all demands made in conformity with this Irrevocable Letter of Credit will be duly honored upon presentation. If, within three (3) business days of the date any demand made in conformity with this Irrevocable Letter of Credit is presented, the undersigned Bank fails to honor the same, we agree to pay all attorneys' fees, court costs, and other expenses incurred by the Village of Lake Villa in enforcing the terms of this Letter of Credit.

We hereby engage with drawers and/or bona fide holders that drafts drawn and negotiated in conformity with the terms of this credit will be duly honored on presentation and that drafts accepted within the terms of this Letter of Credit will be duly honored at maturity. The amount of each draft must be endorsed on the reverse of this Letter of Credit by the Bank. Any demand made on this Letter of Credit may be presented by U.S. mail, overnight courier, or in person to any office or branch of the Bank in Illinois.

Any action to enforce or otherwise relating to this Letter of Credit shall be brought in Lake County, Illinois, and Illinois law shall govern.

Very truly yours,

\_\_\_\_\_  
("Bank")

By: \_\_\_\_\_  
President

[CORPORATE SEAL]

ATTEST:

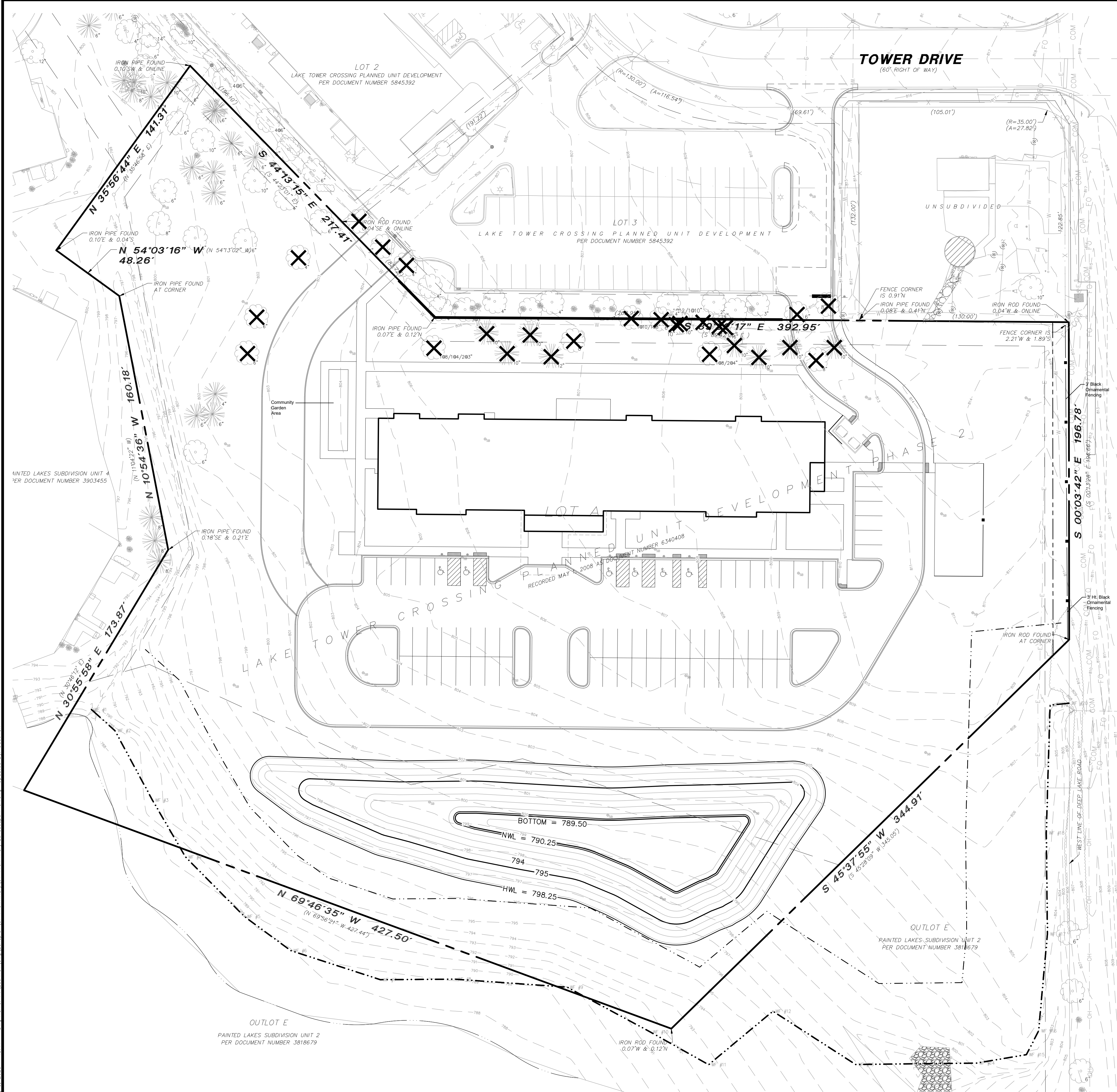
By: \_\_\_\_\_  
Secretary



Jon Bradley Dethloff, ASLA, PLA  
Illinois Registered Landscape Architect # 157-001632  
Expires 08/31/2023



February 3, 2023 -- 15:14 Draw Name: P:\work\01\Draw\Landscaping\01-Preliminary\Landscaping Plan.dwg Updated By: bethhoff



TREE AND WOODLAND  
COMPENSATION/REPLACEMENT

Requirement: The developer or owner(s) shall replace any trees six inches (6") in diameter or greater dbh and/or a significant number of less caliper trees that are to be removed. The developer or owner(s) shall replace these trees including planting, according to the following size schedule:

Standards for Replacement of Woodlands:

Trunk size of removed Tree (in DBH) Number of Replacement Trees

3"-8"	1 - 3" Caliper Tree	14 - Total number of Removed 3"-8" Trees = 14 Replacement Trees
9"-15"	2 - 3" Caliper Trees	12 - Total number of Removed 9"-15" Trees = 24 Replacement Trees
16"-23"	3 - 3" Caliper Trees	1 - Total number of Removed 16"-23" Trees = 3 Replacement Trees
24"-35"	3 - 4" Caliper Trees	
36" or greater	5 - 4" Caliper Trees	

Total Number of Replacement Trees Required: 41 Trees

Legend

- 21" X Tree to be Removed
- 21" Protective Fencing for Tree to be Preserved
- Vulnerable Area

Root Pruning

Existing tree roots greater than one (1) inch in diameter, measured at the edge of excavation, shall be pruned within 24 hours of the time they have been damaged by construction activity. The severed root shall be pruned at the edge of excavation, or one (1) inch beyond the entire damaged portion of the tree root, if damaged root extends beyond the edge of excavation into undisturbed soil.

All cuts shall be cleanly made with sharp tools.

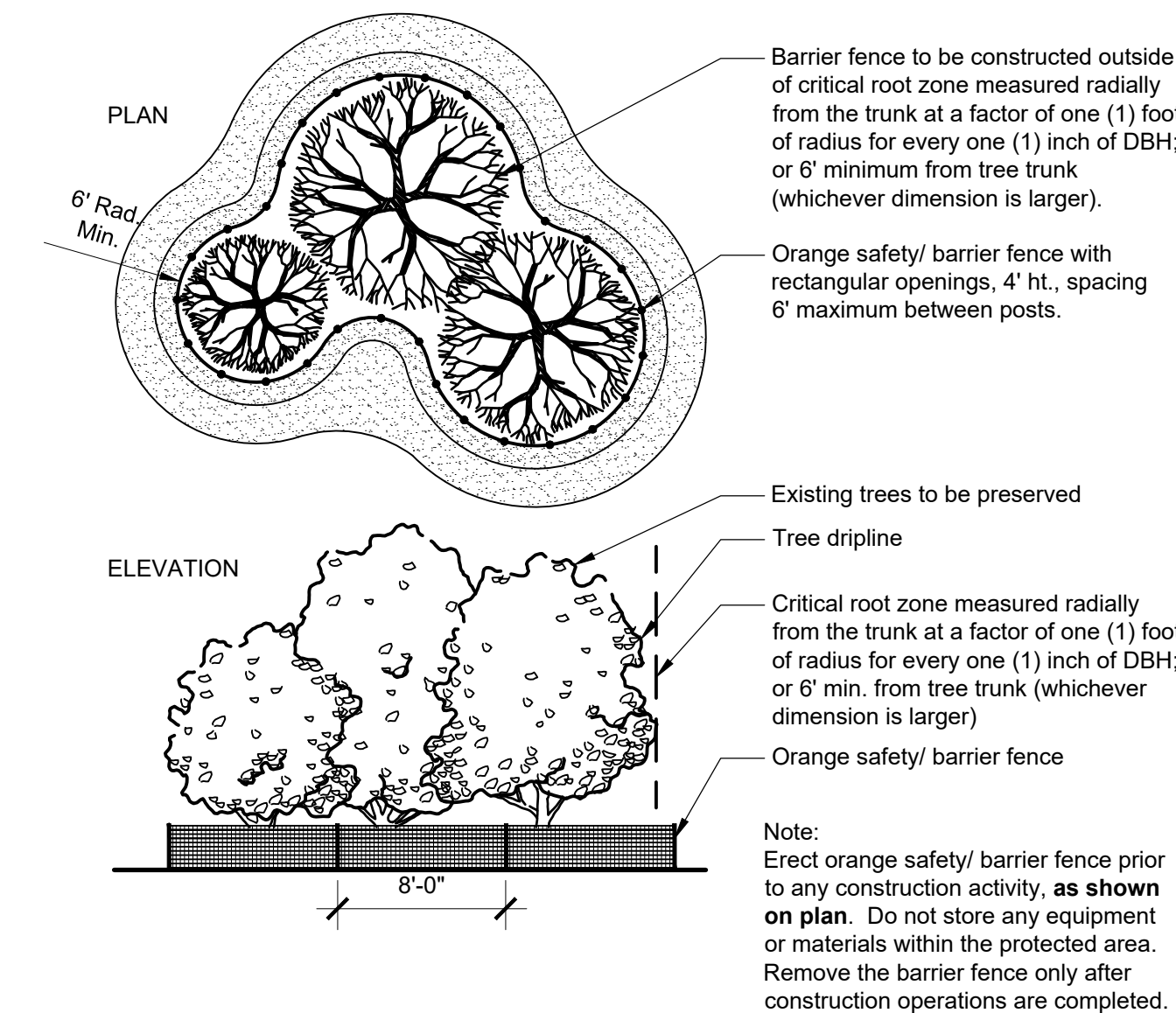
The excavated area around the existing tree roots shall be backfilled as soon as construction activities permit.

Amended existing soil shall be used as backfill material within the disturbed root zone areas not receiving drainage or subbase stone items. Amended existing soil shall be amended with peat or compost in the ratio of one part organic to seven parts existing soil.

Vulnerable Area Protection Methods

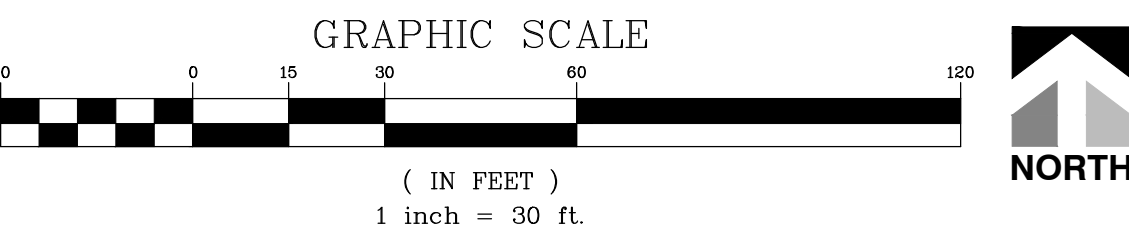
All tree root zones designated as "Vulnerable" shall receive special care and attention during construction. These areas contain roots for large trees that are within the construction area. Since these trees have high value to the project, efforts shall be made to preserve these trees, however the property owner will not be held liable if the trees do not survive.

An arborist should be consulted prior to construction to provide advice on preservation techniques. Each tree and construction condition is unique so an arborist is best qualified to provide a recommendation for each tree. Preservations may include root pruning, crown pruning, hormone treatment, fertilizers, soil amendments, excavation techniques, etc.



1 TREE PROTECTION PLAN  
N.T.S.

320190.33-01



DATE	REVISIONS	COMMENTS
02/05/23		REVISED PER VILLAGE COMMENTS

**Manhard**  
CONSULTING  
One Oakwood Park, Suite 200, Lincolnshire, IL 60069  
630.754.0005  
manhard.com  
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers  
Construction Managers • Environmental Scientists • Landscape Architects • Planners

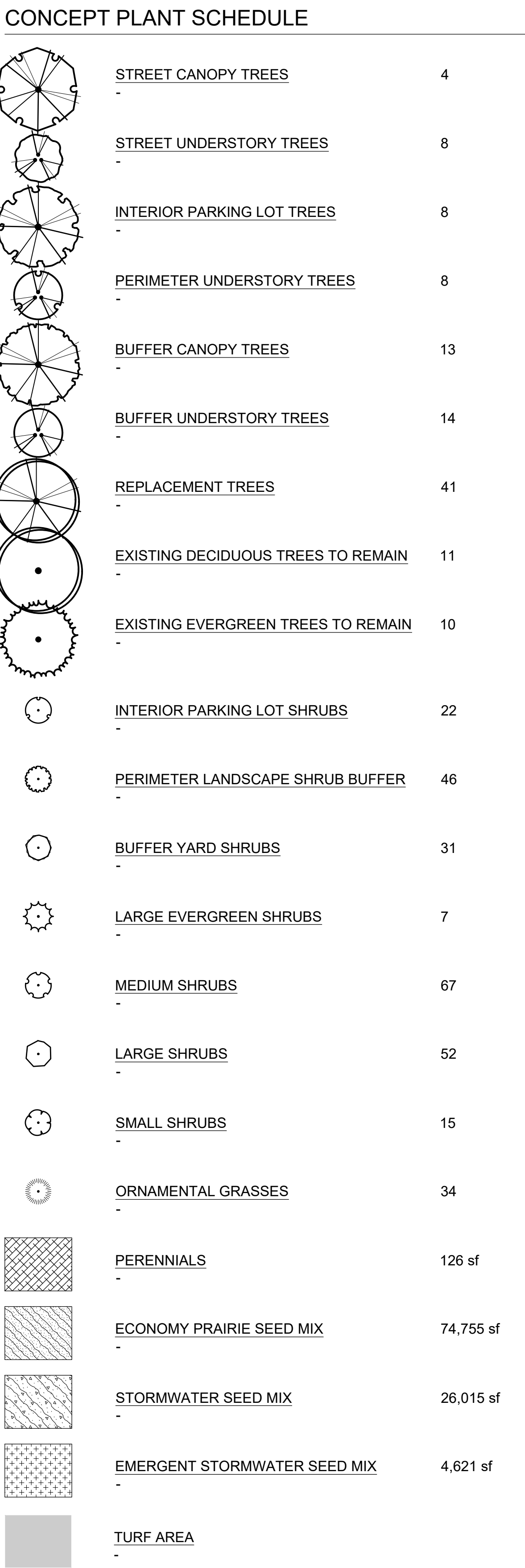
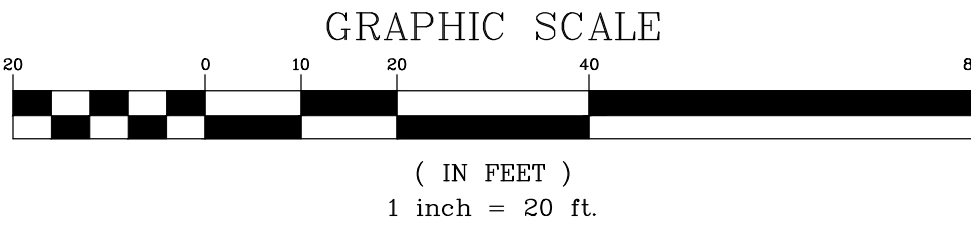
LAKE VILLA SENIOR LOFTS  
VILLAGE OF LAKE VILLA, ILLINOIS  
TREE PRESERVATION PLAN

PROJ. MGR.: MDE  
PROJ. ASSOC.: JBD  
DRAWN BY: JBD  
DATE: 11-23-22  
SCALE: 1"=30'

SHEET  
L2 OF L6  
LAC.LVL01

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## PART 1 - GENERAL

A. Provide trees, shrubs, perennials and groundcovers as shown and specified. This work includes:

1. Spreading of topsoil or soil preparation
2. Trees, shrubs, perennials and groundcovers
3. Planting mixes
4. Mulch and planting accessories
5. Fertilizer and herbicide
6. Maintenance
7. Warranty of plant material

B. The Contractor shall verify all existing conditions and dimensions in the field prior to bidding and report any discrepancies to the Owner or his/her representative.

- A. Comply with site work requirements
- B. Plant names indicated must comply with 'Standardized Plant Names' as adopted by the latest edition of American Joint Committee of Horticultural Nomenclature. Names of varieties which are not listed should conform with those generally accepted by the nursery trade. Stock should be legibly tagged.
- C. All plant materials shall conform to the 'American Standards for Nursery Stock' (ASNS), latest edition, published by the American Association of Nurserymen, Washington, D.C.
- D. All plant material shall be grown and supplied within a 50 mile radius of the project for a minimum of two full growing seasons.
- E. Adhere to sizing requirements as listed in the plant list and/or bid form for the project. A plant shall be measured in its natural standing position.

I. Container grown deciduous and/or evergreen shrubs will be acceptable in lieu of balled and burlapped shrubs subject to specified limitations for container grown stock. Size of container grown material must conform to size/height requirements of plant list.

- A. Fertilizer shall be delivered in original, unopened and undamaged packaging. Containers shall display weight, analysis and manufacturer's name. Store fertilizer in a manner that will prevent wetting and deterioration.
- B. Take all precautions customary concerning proper trade practice in preparing plants for transport. Plants shall be dug, packed and transported with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock and on arrival, the certificate shall be filed with the landscape architect. All plants must be protected from drying out. No plant material cannot be planted immediately upon delivery, said material should be properly protected in a manner that is acceptable to the landscape architect. Heeled-in plants must be watered daily. No plant material shall be bound with rope or wire in a manner that could strip bark or break or shear branches.
- C. Plant material transported on open vehicles should be covered with a protective covering to prevent wind burn.
- D. Dry, loose topsoil shall be provided for planting bed mixes. Muddy or frozen topsoil is unacceptable as working with medium in this condition will destroy its structure, making root development more difficult.

- A. Notify landscape architect at least seven (7) working days prior to installation of plant material.
- B. It shall be the Contractor's responsibility to locate and protect all existing above and below ground utilities. Utilities can be located and marked (in Illinois) by calling J.U.I.E. at (800)892-0123.
- C. The Contractor shall provide, at his/her own expense, protection against trespassing and damage to seeded areas, planted areas, and other construction areas until the preliminary acceptance. The Contractor shall provide barricades, temporary fencing, signs, and written warning or policing as may be required to protect such areas. The Contractor shall not be responsible for any damage caused by the Owner after such warning has been issued.
- D. The Contractor shall be responsible for the protection of crowns, trunks and roots of existing trees, shrubs, lawns, paved areas and other landscaped areas that are to remain intact. Existing trees, which may be subject to construction damage, shall be boxed, fenced or otherwise protected before any work is started. The Owner desires to preserve those trees within and adjacent to the limits of construction except those specifically indicated to be removed on the Drawings. The contractor shall erect protective tree fencing and tree armor at locations indicated on the drawings and around all trees on any tree which is to be preserved. Protective fencing shall be erected between the limits of construction and any tree preservation areas shown on the Drawings.
- E. A complete list of plants including a schedule of sizes, quantities and other requirements is shown on the Drawings and on the bid form. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

A. All plantings shall be maintained by the Contractor for a period of 90 days after preliminary acceptance by the Owner or his/her representative. Maintenance shall include, but is not limited to: mowing and edging turf, pulling weeds, watering turf and plant material and annual flower maintenance.

A. All plant material (excluding annual color), shall be warranted for one (1) year after the end of the 90 day maintenance period. The end of the maintenance period is marked by the final acceptance of the Contractor's work by the Owner or his/her representative. Plant materials will be warranted against defects including death and unsatisfactory growth, except for defects resulting from abuse or damage by others, or unusual phenomena or incidents which are beyond the control of the Contractor. The warranty covers a maximum of one replacement per item.

**A. Plants:** Provide typical of their species or variety, with normal, densely developed branches and vigorous, fibrous root systems. Only sound, healthy, vigorous plants which are free from sunscald injuries, disfiguring knots, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation shall be provided. All plants shall have a fully developed form without voids and open patches.

1. Balled and burlapped plants shall have a firm natural ball of earth of sufficient diameter and depth to encompass a root system necessary for a full recovery of the plant. Root ball sizes shall comply with the latest edition of the "American Standards for Nursery Stock" (ANSI). Root balls that are cracked or mushroomed are unacceptable.
2. Container grown stock should be grown for an amount of time that is of sufficient length for the root system to have developed enough to hold its soil together, firm and whole. Plants will not be loose in their containers, nor shall they be pot-bound and all container grown stock will comply with the sizes stated on the plant list.
3. No evidence of wounds or pruning cuts shall be allowed unless approved by the Landscape Architect.
4. Evergreen trees shall be branched to the ground. The height of evergreen trees are determined by measuring from the ground to the first lateral branch closest to the top. Height and/or width of other trees are measured by the mass of the plant not the very tip of the branches.
5. Shrubs and small plants shall meet the requirements for spread and/or height indicated in the plant list. The height measurement shall be taken from ground level to the average height of the top of the plant, not the longest branch. Single stem or thin plants will not be accepted. Side branches shall be flushed with growth and have good form to the ground. Plants shall be in a moist, vigorous condition, free from dead wood, bruises or other root or branch injuries.

A. Topsoil:  
 1. Topsoil shall be fertile, natural topsoil of a loamy character, without admixture of subsoil material. Topsoil shall be reasonably free from clay, lumps, coarse sand, stones, plants, roots, sticks and other foreign materials with a pH between 6.5 to 7.0.

B. Topsoil for seed areas shall be a minimum of 6".

C. Soil amendments shall be as follows:  
 1. For trees and shrubs the plant pit will be backfilled with pulverized black dirt.  
 2. For perennials and ornamental grasses the soil mixture will be as follows: CM-63 General Purpose Peat Based Mix as supplied by Midwest Trading. Top beds with 8" of CM-63 and till into existing beds to a depth of 8". Soil mixtures are available from Midwest Trading. Midwest Trading, St. Charles, IL 60174 (630) 365-1990

E. Herbicide:  
1. AquaPro Aquatic Herbicide or approved equivalent

G. Water:

1. Water service will be available on the site, with the cost of water being paid by the Owner. Transporting of the water from the source to the work areas shall be the responsibility of the Landscape Contractor. All necessary hose, piping, tank truck, etc. shall be supplied by the Landscape Contractor.

- H. Guying:
  - 1. Stakes: 5/8" x 40" steel eye anchor with 4" helix
  - 2. Cable:
    - a. Trees under 5": flexible 1/8" galvanized aircraft cable, 7x7 strand or approved equal
    - b. Trees 5" and over: flexible 3/16" galvanized aircraft cable, 7x7 strand or approved equal.
  - 3. Turnbuckles: 5/16", eye and eye, with 4" takeup.
  - 4. Hose: new two-ply reinforced rubber hose, minimum 1/2" I.D.

A. Examine proposed planting areas and conditions of installation. Do not start planting work until unsatisfactory conditions are corrected.

- A. All planting techniques and methods shall be consistent with the latest edition of 'Horticulture Standards of Nursemyn, Inc.' and as detailed on these Drawings.
- B. Planting shall be performed by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.
- C. All underground utilities must be located and marked clearly.

D. Apply AquaPro Aquatic Herbicide or approved equivalent to kill any existing vegetation in all areas to be planted. Confirm length of waiting period between chemical application and plant installation with manufacturer. Do not begin planting operations until prescribed post-application waiting period has elapsed. Take extreme care to avoid chemical drift to adjoining properties of landscape plantings.

- E. Prior to all planting, rototill all areas to be landscaped to prepare for plant installation to a minimum depth of 12". Eliminate uneven areas and low spots. Maintain levels, levels, profiles and contour. Changes in grade are to be gradual. Blend slopes into level areas. Remove all debris, weeds and undesirable plants and their roots from areas to be planted. Remove all concrete slag larger than 2" in diameter.
- F. Topsoil shall be spread over the site at a minimum depth of 6". For those areas which are indicated as prairie or natural areas on the Drawings, a topsoil depth of 18" is recommended where possible.
- G. It shall be the responsibility of the landscape contractor to prepare all seeded areas by disking and raking prior to planting seed. Soil shall be loosened and scarified to a minimum depth of 6". Fine grading of all seeded areas is required. Maximum size of stone or topsoil lump is 1".
- H. Locate all plant material as indicated or as approved in the field by the Landscape Architect. If obstructions are encountered which are not shown on the drawings, then do not proceed with planting operations until alternate plant locations have been selected.
- I. Planting holes shall be constructed as shown on the planting details. Holes shall be hand dug or machine dug. Great care will be taken to not excavate the hole deeper than the root ball and the diameter shall be a minimum of two times the root ball width. Remove any materials encountered in excavation that may be injurious to plant growth, including stones larger than 2" in diameter or other debris. Soil to be used as backfill should be pulverized.
- J. Provide pre-mixed planting mixture for use around root systems and root balls of the plants. The mixtures are outlined in section B of part 2-02.
- K. Prior to planting, provide additional topsoil to all planting beds to bring the finish grade of the bed to 2" above lawn grade and to finish grade of adjacent hard surface grades.
- L. Add 2" thickness of mushroom compost to all annual, perennial and groundcover beds. Finish grade bed and install plants.

- A. Set plant material in the planting hole to proper grade and alignment. Set plants upright and plumb. Set planting material 2" above the adjacent finish grade. Remove burlap from top 1/3 of root ball. Remove treated burlap (green). Cut and remove or cut and fold down upper half of wire basket, dependent upon tree size. Backfill hole by firmly tamping soil to avoid any air pockets or voids.
- B. Set balled and burlapped plants in the planting hole and compact 8" of soil around the base of the ball. Backfill remaining space with planting mixture. Water plants immediately after planting to eliminate all voids and thoroughly soak the plant root ball.
- C. Space groundcover plants according to dimensions given on the plans. Adjust spacing as necessary to evenly fill planting bed with indicated number of plants. Plant to within 18" of the trunks of trees and shrubs or at the edge of the plant ball, whichever is closest. Plant to within 12" of edge of bed.
- D. Mulching:
  1. Install 4" depth of mulch around all tree and shrub beds as indicated on drawings or planting details. Mulch shrub planting areas as continuous beds. Do not place mulch directly against tree trunk; form mulch to create an inverted cone around trunk.
  2. Mulch perennial, groundcover and annual planting beds with 2" mushroom compost. Water mulched areas thoroughly after placing mulch.

- Tree wrapping is not required, unless the Contractor feels it is necessary due to characteristics of a particular species or past experience with the species. The landscape architect will be notified as to which trees are to be wrapped and shall inspect the trunk(s) before wrapping. Tree wrap will not be used to cover damage or defects. When wrapping is done, trunks will be wrapped spirally with approved tree wrapping tape that is not less than 4" wide, and securely tied with suitable cord at the top, bottom and 2" intervals along the trunk. Wrap from ground to the height of the first branch.
- F. **Staking and guying of trees is optional.** If the Contractor chooses to stake all or part of the trees, he/she shall use the method specified in the planting details. One (1) stake is to be used on trees of 1" caliper and under, or 4" height and under. Two (2) stakes are to be used on trees of 1" to 2 3/4" caliper. Guy trees of 3" caliper or larger at three (3) per tree. The root ball will not be pierced with a stake. Stakes are to be driven at least eighteen (18) inches into subsoil below the planting hole. Stakes and wire attachments shall be removed after three months for spring planted material and by the following May for fall planted stock by the Contractor. Staking and guying should be done immediately after lawn seeding or sodding operations.
- G. **Seeding of specified lawn areas on plans will be treated as follows:**
1. Topsoil shall be spread over all areas to be seeded to a minimum depth of 6" when compacted (to be performed by others).
  2. Seed mixture and application rate - use Premium seed mix as supplied by Arthur Clesen, Inc. Apply at a rate of 5 lbs./1,000 s.f.
  3. Apply fertilizers and conditioners at the rate specified per soil test findings. In lieu of soil test results, apply two (2) tons of ground agricultural limestone and 1000 lbs. 10-10-10 or equivalent analysis fertilizer per acre. At least 40% of the fertilizer nitrogen shall be of an organic origin.
  4. Soil preparation areas where vehicular traffic has compacted the soil shall be loosened/scarified to a minimum depth of 6" before fertilizing and seeding. Fine grading of all seeded areas is required. Maximum size of stone or topsoil lump is 1".
  5. Watering seeded areas shall be done to ensure proper germination. Once seeds have germinated, watering may be decreased but the seedlings must never be allowed to dry out completely. Frequent watering should be continued approximately four (4) weeks after germination or until grass has become sufficiently established to warrant watering on an "as needed" basis.
  6. Turf is being established on a variety of slope conditions. It shall be the Contractor's responsibility to determine and implement whatever procedures he/she deems necessary to establish the turf as part of his/her work. Seeded areas will be accepted when all areas show a uniform stand of the specified grass in healthy condition and at least 90 days have elapsed since the completion of this work. The Contractor shall submit with his/her bid a description of the methods and procedures he/she intends to use.

- H. Erosion Control Blanket/
  - 1. Erosion Control Blanket shall be installed per manufacturer's recommendation in all areas shown on the plan.
  - 2. Install S-75 Erosion Control Blanket as manufactured by North American Green or approved equal.
  - 3. Blanket should be premarked with staple pattern.
  - 4. Staples should be 8" wire staples, applied at two (2) per square yard minimum.
  - 5. Suitable erosion control practices shall be maintained by the CONTRACTOR in accordance with Illinois Urban Manual and all applicable Soil Erosion and Sedimentation Control ordinances and the PLANS.
- I. Sodding of specified lawn areas on plans will be completed as follows:
  - 1. Rake soil surface to receive sod to completely remove any soil crust no more than one day prior to laying sod.
  - 2. Moisten prepared surface immediately prior to laying sod. Water thoroughly and allow surface moisture to dry before planting lawns. Do not create a muddy soil condition.

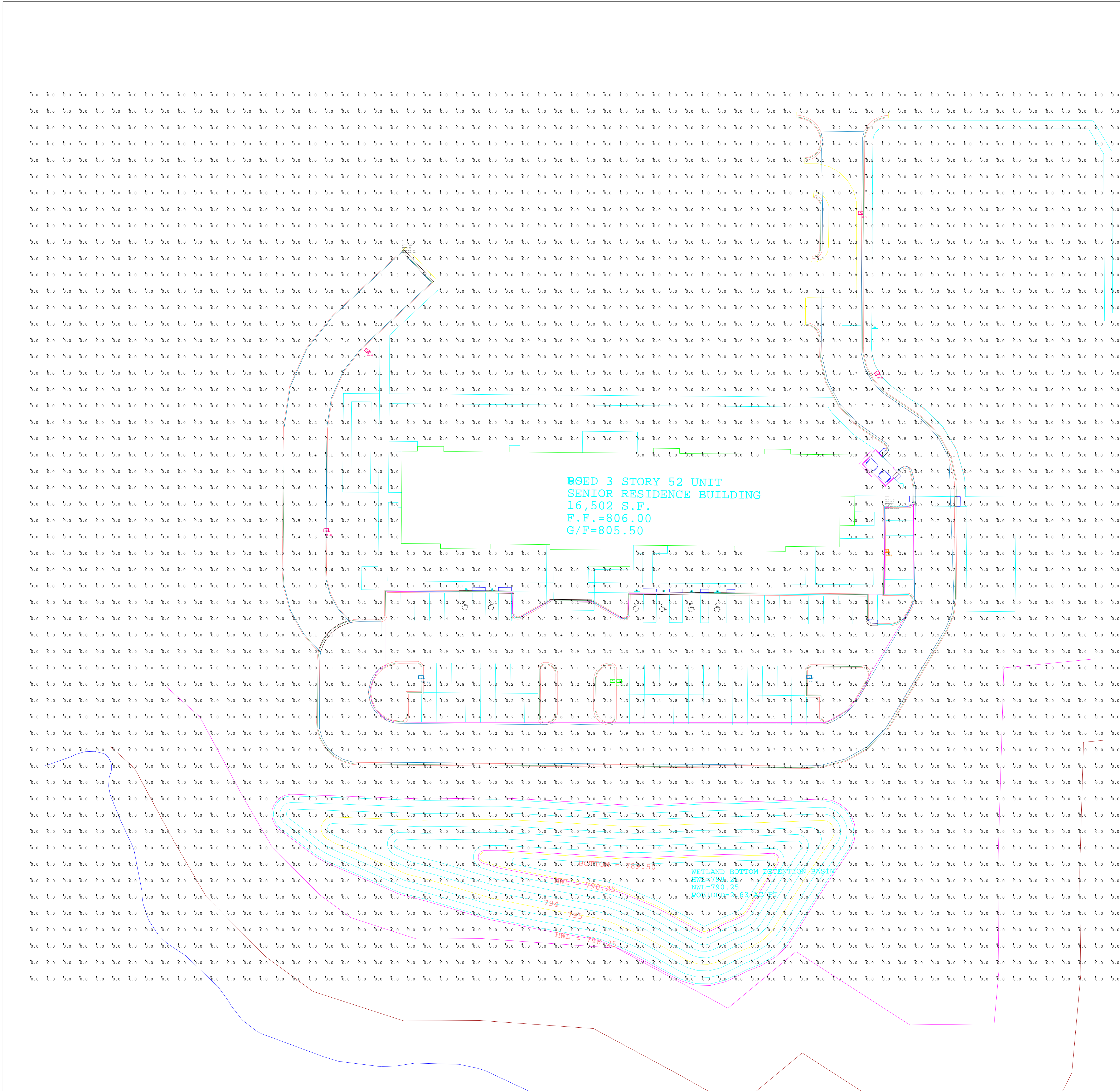
5. Sod shall be laid within 24 hours from the time of stripping. Do not plant dormant sod or if the ground is frozen.
6. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Sod strips fitted into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent sod.
7. Place top elevation of sod 1/2 inch below adjoining edging or paving.
8. Water sod thoroughly with a fine spray immediately after planting.
9. After sod and soil have dried, roll seeded areas to ensure a good bond between the sod and soil and to remove minor depressions and irregularities.
10. Sodded slopes 3:1 or greater shall be staked to prevent erosion and washout.
11. Warranty sounding for a period of one (1) year from the end of the 90 day maintenance period. If sod fails or lacks vigor and full growth as determined by the Landscape Architect, the Contractor will repeat site preparation operations and re-sod affected areas at the Contractor's expense.
12. Note: Sod shall be a premium Kentucky Bluegrass blend, and is required in all areas indicated on the plans as well as areas which have been affected by construction. Sod can be placed as long as water is available and the ground surface can be properly prepared. Sod shall not be laid on frozen or snow-covered ground. Sod shall be strongly rooted, not less than two (2) years old and free of weeds and undesirable native grasses. Sod should be machine cut to pad thickness of 3/4" (plus or minus 1/4"), excluding top growth and thatch. Provide only sod capable of vigorous growth and uniformity when planted (viable, not dormant). Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on the upper 10% of pad will not be accepted.

A. All plantings shall be maintained by the Contractor for a period of 90 days after preliminary acceptance by the Owner or his/her representative. Maintenance shall include but is not limited to: mowing and edging turf, pulling weeds, watering turf areas and plant material plus annual flower maintenance. The Contractor will reset settled plants to proper grade and position. Dead material will be removed. Stakes and guy wires will be tightened and repaired as required.

A. All plant material (excluding annual color), shall be warranted for one (1) year after the end of the 90 day maintenance period. The end of the maintenance period is marked by the final acceptance of the Contractor's work by the Owner or his/her representative.

A. The Contractor shall protect the property of the Owner and the work of other contractors. The Contractor shall also be directly responsible for all damage caused by the activities and for the daily removal of all trash and debris from his/her work area to the satisfaction of the landscape architect .

[illegible]



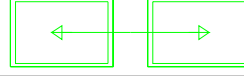
Chicago Lightworks  
505 Warrenville Rd.  
Suite 101  
Lisle, IL 60532

Prepared By:  
M Brizzell  
(630) 320-2948  
MBrizzell@chicagolightworks.com

Rev	Date	3,000 Kelvin Reduced poles
-	-	-
-	-	-
-	-	-
-	-	-

Project Name: Starling Senior Apartments  
Lake Villa  
NOT TO SCALE  
Date: 2/6/2023



Luminaire Schedule						
Symbol	Label	Qty	Description	LLF	Lum. Watts	Lum. Lumens
	F3H	1	ECF-S-32L-365-VVV-G2-3-HIS	0.900	40	4292
	F4B2B	1	ECF-S-32L-365-VVV-G2-4	0.900	40	5637
	F5VV	2	ECF-S-32L-365-VVV-G2-5VV	0.900	40	5604
	F2H	4	ECF-S-32L-365-VVV-G2-2-HIS	0.900	40	4219

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_I	Illuminance	Fc	0.11	6.3	0.0	NA	NA
Drive	Illuminance	Fc	0.62	4.9	0.0	NA	NA
Parking	Illuminance	Fc	0.71	6.3	0.1	7.10	63.00



Chicago Lightworks  
505 Warrenville Rd.  
Suite 101  
Lisle, IL 60532

Prepared By:  
M Brizzell  
(630) 320-2948  
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Rev	Date	Comments
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Project Name: <b>Starling Senior Apartments Lake Villa</b>  NOT TO SCALE  Date: <b>2/6/2023</b>	
--------------------------------------------------------------------------------------------------------------------	--



**Gardco EcoForm Gen-2** combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

## Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	
ECF-S							
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	365 365mA 530 530mA 700 700mA 1A 1050mA 1.2A 1200mA	WW-G2 Warm White 3000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2 CW-G2 Cool White 5000K, 70CRI Generation 2	AR² Arm Mount (standard)  The following mounting kits must be ordered separately (See accessories)  SF³ Slip Fitter Mount (fits to 2 3⁄8" O.D. tenon)  WS Wall mount with surface conduit rear entry permitted  RAM² Retrofit arm mount kit	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270°  Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270°  Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270°  Type 5 5 Type 5 5W Type 5W	AFR Auto Front Row AFR-90 Auto Front Row, Rotated left 90° AFR-270 Auto Front Row, Rotated right 270°  BLC Back Light Control BLC-90 Back Light Control rotated at 90° BLC-270 Back Light Control rotated at 270°  LCL¹⁹ LEED Corner Optic Left RCL¹⁹ LEED Corner Optic Right	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)
	48L 48 LEDs (3 modules)	900 900mA 1A 1050mA 1.2A¹⁹ 1200mA					
	64L 64 LEDs (4 modules)	900 900mA 1A¹⁹ 1050mA					

Options					
Dimming controls	Motion sensing lens	Photo-sensing	Electrical	Luminaire	Finish
<b>DD<sup>4,8</sup></b> 0-10V External dimming (for controls by others) <b>DCC<sup>4,5,6,18</sup></b> Dual Circuit Control <b>FAWS<sup>4,5,18</sup></b> Field Adjustable Wattage Selector <b>LLC<sup>4,6,7,8,18</sup></b> Integral wireless module <b>BL<sup>14,7,18</sup></b> Bi-level functionality <b>SRDR<sup>4,5,6,8,17</sup></b> SR driver connected to Zhaga socket  <b>DynaDimmer: Automatic Profile Dimming</b> <b>CS50<sup>4,8</sup></b> Safety 50% Dimming, 7 hours <b>CM50<sup>4,8</sup></b> Median 50% Dimming, 8 hours <b>CS30<sup>4,8</sup></b> Safety 30% Dimming, 7 hours <b>CM30<sup>4,8</sup></b> Median 30% Dimming, 8 hours	<b>IMRI3<sup>15</sup></b> Integral with #3 lens <b>IMRI7<sup>16</sup></b> Integral with #7 lens	<b>PCB<sup>8,9</sup></b> Photocontrol Button <b>TLRD5<sup>10,17</sup></b> Twist Lock Receptacle 5 Pin <b>TLRD7<sup>10,17</sup></b> Twist Lock Receptacle 7 Pin <b>TLRPC<sup>9,10,11,17</sup></b> Twist Lock Receptacle w/ Photocell	<b>Fusing</b> <b>F1<sup>9</sup></b> Single (120, 277, 347VAC) <b>F2<sup>9</sup></b> Double (208, 240, 480VAC)  <b>Pole Mount Fusing</b> <b>FP1<sup>9</sup></b> Single (120, 277, 347VAC) <b>FP2<sup>9</sup></b> Double (208, 240, 480VAC) <b>FP3<sup>9</sup></b> Canadian Double Pull (208, 240, 480VAC)  <b>Surge Protection (10kA standard)</b> <b>SP2</b> Increased 20kA	Square Pole Adapter included in standard product  <b>TB<sup>12</sup></b> Terminal Block <b>RPA<sup>13</sup></b> Round Pole Adapter (fits to 3"- 3.9" O.D. pole)  <b>HIS<sup>14</sup></b> Internal House Side Shield	<b>Textured</b> <b>BK</b> Black <b>WH</b> White <b>BZ</b> Bronze <b>DGY</b> Dark Gray <b>MGY</b> Medium Gray  <b>Customer specified</b> <b>RAL</b> Specify optional color or RAL (ex: RAL7024) <b>CC</b> Custom color (Must supply color chip for required factory quote)

- BL-IMRI3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- Mounts to a 4" round pole with adapter included for square poles.
- Limited to a maximum of 45 degrees aiming above horizontal.
- Not available with other dimming control options.
- Not available with motion sensor.
- Not available with photocontrol.
- Must specify a motion sensor lens.
- Not available in 347 or 480V
- Must specify input voltage.
- TLRD5, TLRD7 and TLRPC receptacle pins 4 & 5 are capped off when ordered with any of the Dimming controls DD or FAWS or LLC.
- Not available in 480V. Order photocell separately with TLRD5/7.
- Not available with DCC.
- Not available with SF and WS. RPAs provided with black finish standard.
- HIS not available with Type 5, 5W, BLC, BLC-90, BLC-270, LCL or RCL optics.
- Not available with DD, DCC, and FAWS dimming control options.
- Not available with DD, DCC, FAWS and LLC dimming control options.
- When ordering SRDR, controller (by others) to be used on socket must be SR compatible (See specifications for more details). Consult factory for lead time. All 7 pins in NEMA receptacle are connected to SR driver. SRDR not available with TLRD5 or TLRPC.
- 0-10V dimming driver standard.
- LCL and RCL not available with 48L-1.2A or 64L-1A.

# ECF-S EcoForm small

## Area luminaire

EcoForm Accessories<sup>21</sup> (ordered separately, field installed)

Shielding Accessories

FOR F2H & F3H

Footnotes

20. Not available with Type 5 or 5W optics

21. Consult Signify to confirm whether specific accessories are BAA-compliant.

House Side shield

Standard optic orientation:

HIS-32-H<sup>20</sup> Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-H<sup>20</sup> Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-H<sup>20</sup> Internal House Side Shield for 64 LEDs (4 modules)

Optic at 90 or 270 orientation:

HIS-32-V<sup>20</sup> Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-V<sup>20</sup> Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-V<sup>20</sup> Internal House Side Shield for 64 LEDs (4 modules)

Luminaire Accessories

ECF-BD-G2 Bird deterrent

ECF-RAM-G2-(F) Retrofit Arm mount kit

ECF-SF-G2-(F) Slip Fitter Mount (fits to 2 3/8" O.D. tenon)

ECF-WS-G2-(F) Wall mount with surface conduit rear entry permitted

EcoForm PTF2 (pole top fitter fits 23/8-21/2" OD x 4" depth tenon)

EcoForm PTF3 (pole top fitter fits 3-31/2" OD x 6" depth tenon)

EcoForm PTF4 (pole top fitter fits 31/2-4" OD x 6" depth tenon)

PTF2-ECF-S/L-1-90-(F) 1 luminaire at 90°

PTF2-ECF-S/L-2-90-(F) 2 luminaires at 90°

PTF2-ECF-S/L-2-180-(F) 2 luminaires at 180°

PTF2-ECF-S/L-3-90-(F) 3 luminaires at 90°

PTF2-ECF-S/L-4-90-(F) 4 luminaires at 90°

PTF2-ECF-S/L-3-120-(F) 3 luminaires at 120°

PTF3-ECF-S/L-1-90-(F) 1 luminaire at 90°

PTF3-ECF-S/L-2-90-(F) 2 luminaires at 90°

PTF3-ECF-S/L-2-180-(F) 2 luminaires at 180°

PTF3-ECF-S/L-3-90-(F) 3 luminaires at 90°

PTF3-ECF-S/L-4-90-(F) 4 luminaires at 90°

PTF3-ECF-S/L-3-120-(F) 3 luminaires at 120°

PTF4-ECF-S/L-1-90-(F) 1 luminaire at 90°

PTF4-ECF-S/L-2-90-(F) 2 luminaires at 90°

PTF4-ECF-S/L-2-180-(F) 2 luminaires at 180°

PTF4-ECF-S/L-3-90-(F) 3 luminaires at 90°

PTF4-ECF-S/L-4-90-(F) 4 luminaires at 90°

PTF4-ECF-S/L-3-120-(F) 3 luminaires at 120°

(F) = Specify finish

Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

Catalog Number	12NC	Catalog Number	12NC
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BZ	912401466002	RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK	912401534560
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-MGY	912401466003	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ	912401466016
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BK	912401534554	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY	912401466017
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BZ	912401466004	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK	912401534561
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-MGY	912401466005	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ	912401466018
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BK	912401534555	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY	912401466019
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BZ	912401466006	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BK	912401534562
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-MGY	912401466007	RS-ECF-RAM-G2-DGY	912401466487
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BK	912401534556	RS-ECF-RAM-G2-MGY	912401466488
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BZ	912401466008	RS-ECF-RAM-G2-WH	912401466485
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-MGY	912401466009	RS-ECF-RAM-G2-BZ	912401466486
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BK	912401534557	RS-ECF-RAM-G2-BK	912401466484
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ	912401466010	RS-HIS-32-H	912401466489
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-MGY	912401466011	RS-HIS-48-H	912401466491
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BK	912401534558	RS-HIS-64-H	912401466493
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BZ	912401466012		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-MGY	912401466013		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BK	912401534559		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BZ	912401466014		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-MGY	912401466015		

# ECF-S EcoForm small

## Area lumineaire

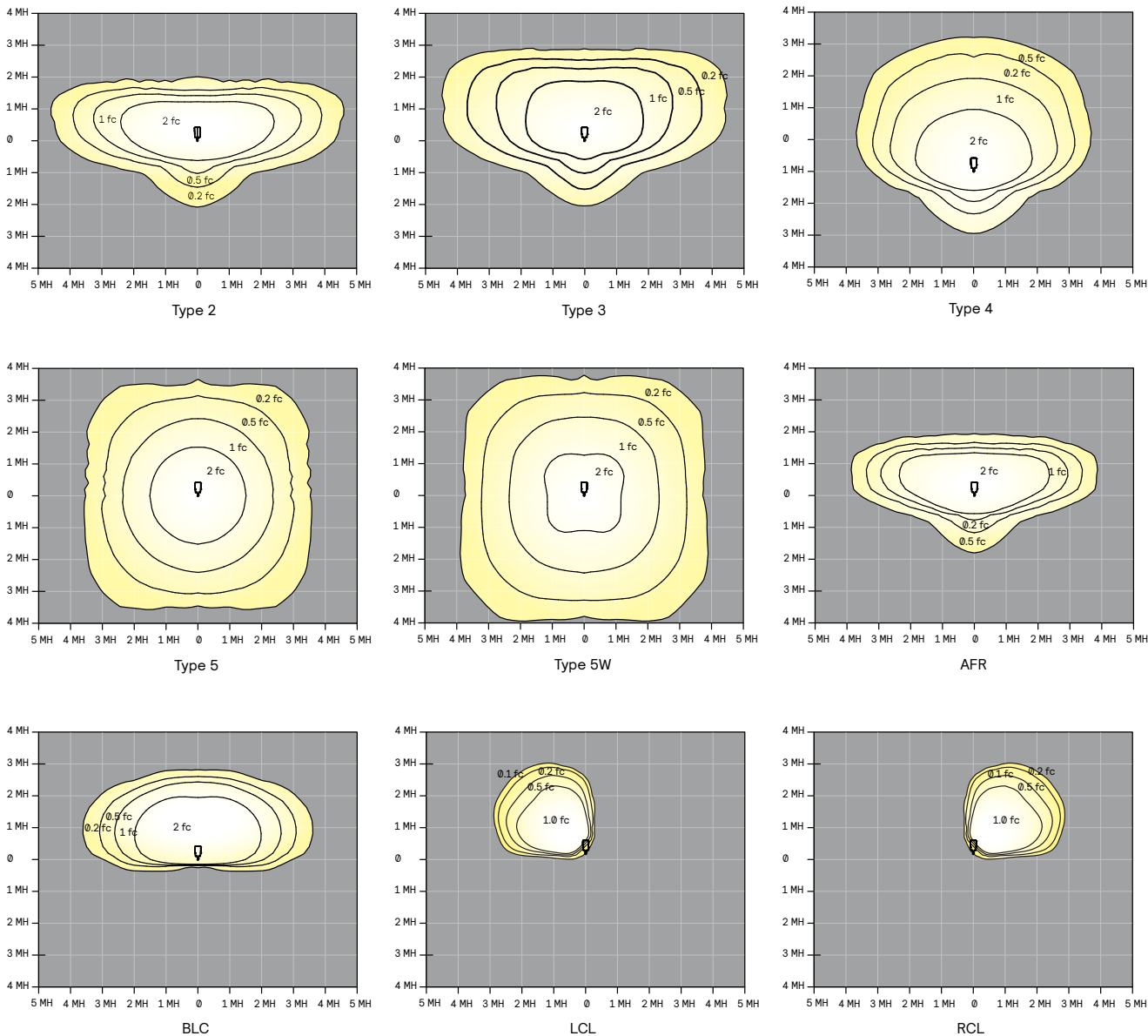
### Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L70 Hours	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>120,000 hours	>99%

### Optical Distributions

Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.





# ECF-S EcoForm small

## Area luminaire

### 3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,508	B1-U0-G1	138	5,428	B1-U0-G2	136	5,637	B1-U0-G2	141	5,790	B3-U0-G1	145	5,604	B3-U0-G1	140
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,159	B2-U0-G2	129	7,055	B1-U0-G2	127	7,327	B1-U0-G2	132	7,526	B3-U0-G2	135	7,284	B3-U0-G2	131
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,234	B2-U0-G2	127	9,034	B2-U0-G2	124	9,452	B2-U0-G2	130	9,707	B4-U0-G2	133	9,395	B4-U0-G2	129
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,001	B3-U0-G2	123	12,719	B2-U0-G2	120	13,306	B2-U0-G3	126	13,665	B4-U0-G2	129	13,227	B4-U0-G2	125
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,421	B3-U0-G3	119	14,108	B2-U0-G3	116	14,760	B2-U0-G3	121	15,158	B4-U0-G2	125	14,671	B4-U0-G2	121
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,115	B3-U0-G3	127	16,744	B3-U0-G3	124	17,518	B2-U0-G3	130	17,990	B4-U0-G2	133	17,413	B5-U0-G3	129
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	19,381	B3-U0-G3	122	18,960	B3-U0-G3	119	19,836	B3-U0-G4	125	20,372	B5-U0-G3	128	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	21,515	B3-U0-G3	118	21,048	B3-U0-G4	115	22,020	B3-U0-G4	121	22,616	B5-U0-G3	124	21,888	B5-U0-G3	120
ECF-S-64L-900-WW-G2-x	64	900	3000	178	22,652	B3-U0-G3	127	22,161	B3-U0-G4	125	23,185	B3-U0-G4	130	23,810	B5-U0-G3	134	23,045	B5-U0-G3	130
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	25,520	B3-U0-G3	124	24,966	B3-U0-G4	121	26,120	B3-U0-G4	127	26,150	B5-U0-G3	127	25,964	B5-U0-G4	126

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,706	B2-U0-G1	143	3,691	B0-U0-G1	94	2,449	B0-U0-G1	62
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,417	B2-U0-G1	133	5,005	B0-U0-G2	91	3,183	B0-U0-G1	58
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,567	B2-U0-G2	131	6,409	B0-U0-G2	89	4,106	B0-U0-G1	57
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,467	B3-U0-G2	128	9,024	B1-U0-G2	87	5,793	B0-U0-G2	56
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,939	B3-U0-G2	123	10,010	B1-U0-G2	84	6,426	B0-U0-G2	54
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,731	B3-U0-G2	131	11,880	B1-U0-G2	89	7,626	B0-U0-G2	57
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	20,076	B3-U0-G2	127	13,453	B1-U0-G2	86	8,636	B0-U0-G2	55
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	22,288	B3-U0-G2	122	14,934	B1-U0-G3	83			
ECF-S-64L-900-WW-G2-x	64	900	3000	178	23,465	B3-U0-G2	132	15,723	B1-U0-G3	90	10,093	B0-U0-G2	58
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	26,437	B4-U0-G3	128	17,714	B1-U0-G3	87			

### 4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-NW-G2-x	32	700	4000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-NW-G2-x	64	900	4000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

# ECF-S EcoForm small

## Area luminaire

### 5000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-CW-G2-x	32	700	5000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-CW-G2-x	64	900	5000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25063	B5-U0-G3	141	24258	B5-U0-G4	136
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27526	B5-U0-G3	134	27330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-CW-G2-x	32	700	5000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-CW-G2-x	64	900	5000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

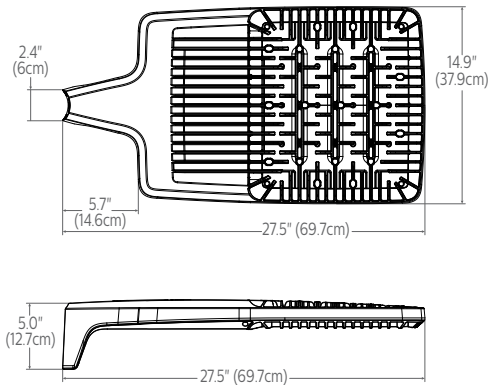
# ECF-S EcoForm small

## Area lumineuse

### Dimensions

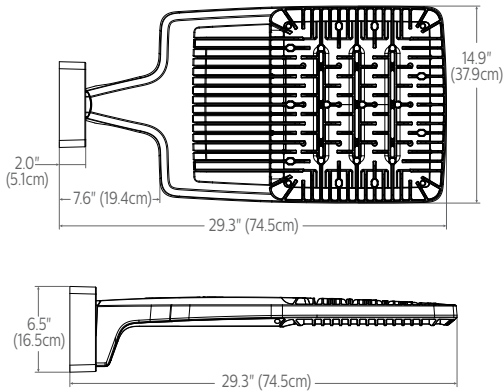
#### Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



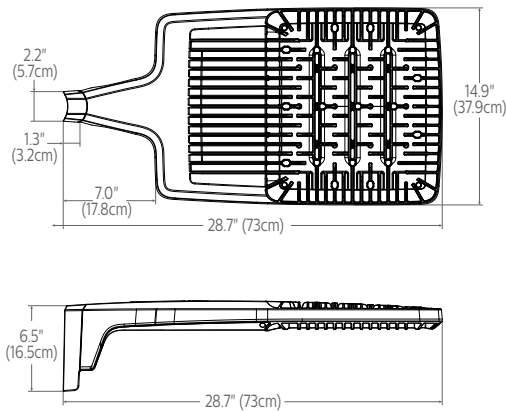
#### Wall (WS)

Weight: 27 Lbs. (12. 2Kg)EPA: 0.27ft² (.025m²)



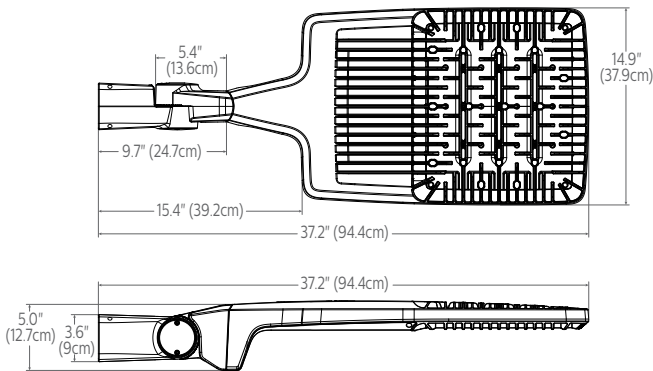
#### Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

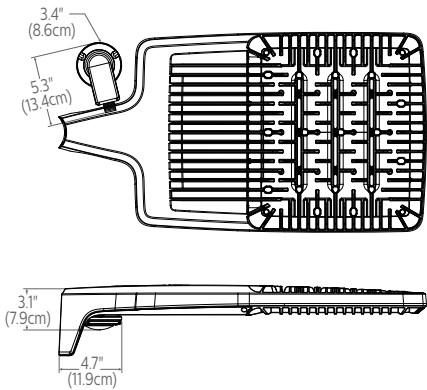


#### Slip fitter (SF)

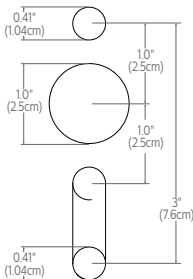
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



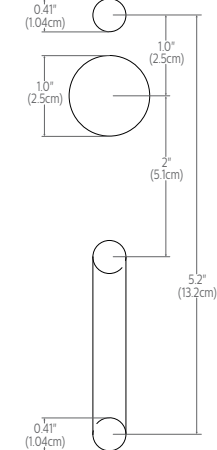
#### Outboard IMR-HVU sensor



#### Standard Arm (AR) drill pattern



#### Retrofit Arm (RAM) drill pattern



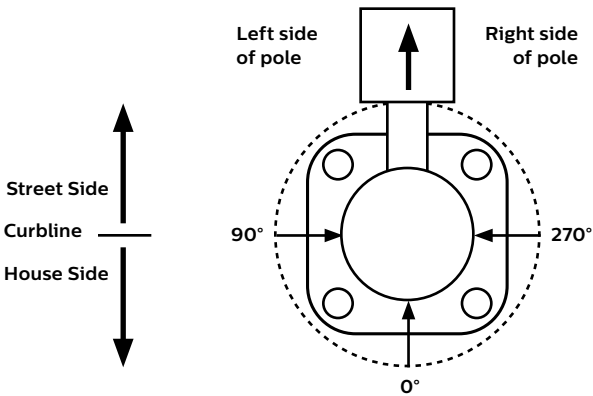
# ECF-S EcoForm small

## Area luminaire

### Optical Orientation Information

#### Standard Optic Position

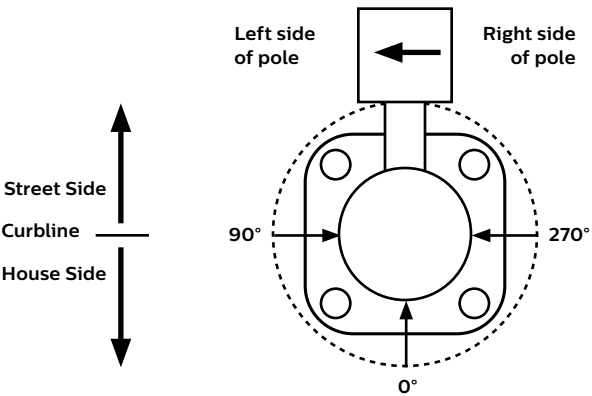
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

#### Optic Rotated Left (90°) Optic Position

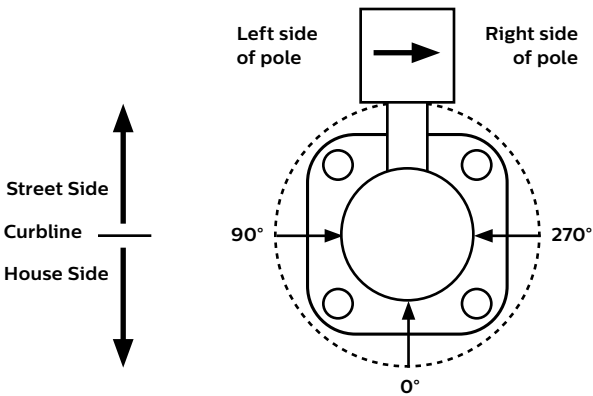
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

#### Optic Rotated Right (270°) Optic Position

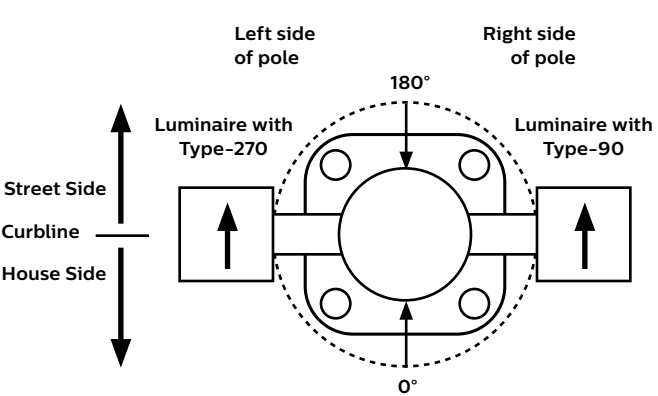
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

#### Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

# ECF-S EcoForm small

## Area luminaire

### Specifications

#### Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

#### Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2018. Testing includes vibration in three axes, all performed on the same luminaire.

#### Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

#### Energy saving benefits

System efficacy up to 152 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

#### Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions, including a dedicated BLC, LCL, and RCL optics to provide the best backlight control possible for those stringent requirements around property lines. Types 2, 3, 4, AFR, and BLC when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

#### Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories. Note that only fixed mounts (AR, RAM, WS) are required to meet IDA compliance. SF mounting will not meet IDA.

#### Control options

**0-10V dimming (DD):** Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

**Dual Circuit Control (DCC):** Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

**Sensor Ready Zhaga Socket Connector (SRDR):** Product equipped with Sensor Ready drivers connected to 4-pin Zhaga Book 18 compliant receptacle designed for sensor and other control system applications. Receptacle is rated IP66 assembly in a compact design that provides a sealed electrical interface and rated UV resistance, mounted on underside of the luminaire, protective dust cap included. When a controller not provided by Signify is used with Sensor Ready Zhaga socket connector, the controller must be certified to work with the Xitanium SR LED drivers as part of the SR certified program. SRDR can be used with NEMA 7-pin twist lock receptacle, which is mounted on top of the luminaire.

**Automatic Profile Dimming (CS/CM/CE/CA):** Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM – 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

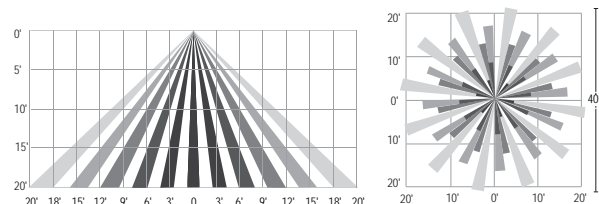
**Field Adjustable Wattage Selector (FAWS):** Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

**Note:** Typical value accuracy +/- 5%

**Wireless system (LLC):** Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

#### LLC wireless controller with #3 lens



#### Motion response options

**Bi-Level Infrared Motion Response (BL-IMRI):** Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

**Infrared Motion Response with Other Controls:** When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

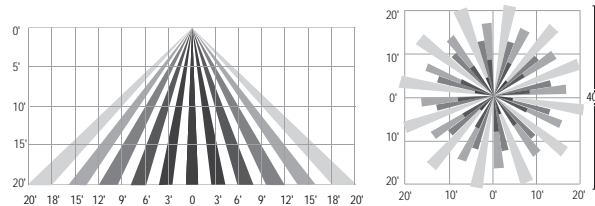
# ECF-S EcoForm small

## Area luminaire

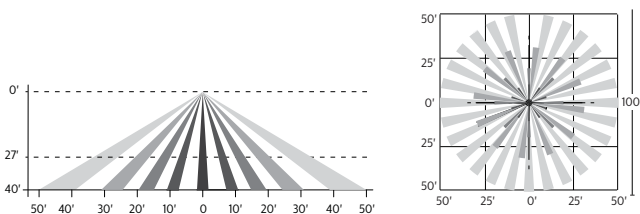
### Specifications

**Infrared Motion Response Lenses (IMRI3/IMRI7):** Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens



### Electrical

**Twist-Lock Receptacle (TLRD5/TLRD7/TLRPC):** Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TLRD7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When ordering a twist-lock receptacle with a photocell (TLRPC), the receptacle used is a 5-pin receptacle, so pins 6 and 7 are not available (no SR driver). 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

### Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit [www.signify.com/baa](http://www.signify.com/baa) to view a current list of BAA-compliant products to confirm this product's current compliance.

**Driver:** Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. All drivers are 0-10V dimming to 10% power standard, except when using Sensor Ready (SR) drivers, which uses DALI protocol (options CS50/CM50/CS30/CM30, SRDR, and TR7). Drivers are RoHS and FCC Title 47 CFR Part 15 compliant.

**Button Photocontrol (PCB):** Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

**Surge protection (SP1/SP2):** Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

### Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

### Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: [signify.com](http://signify.com)

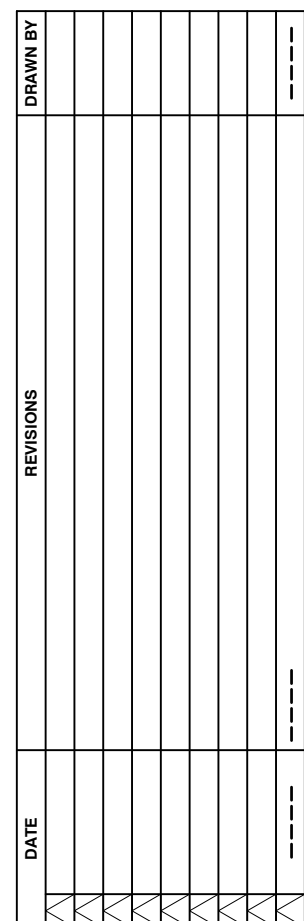
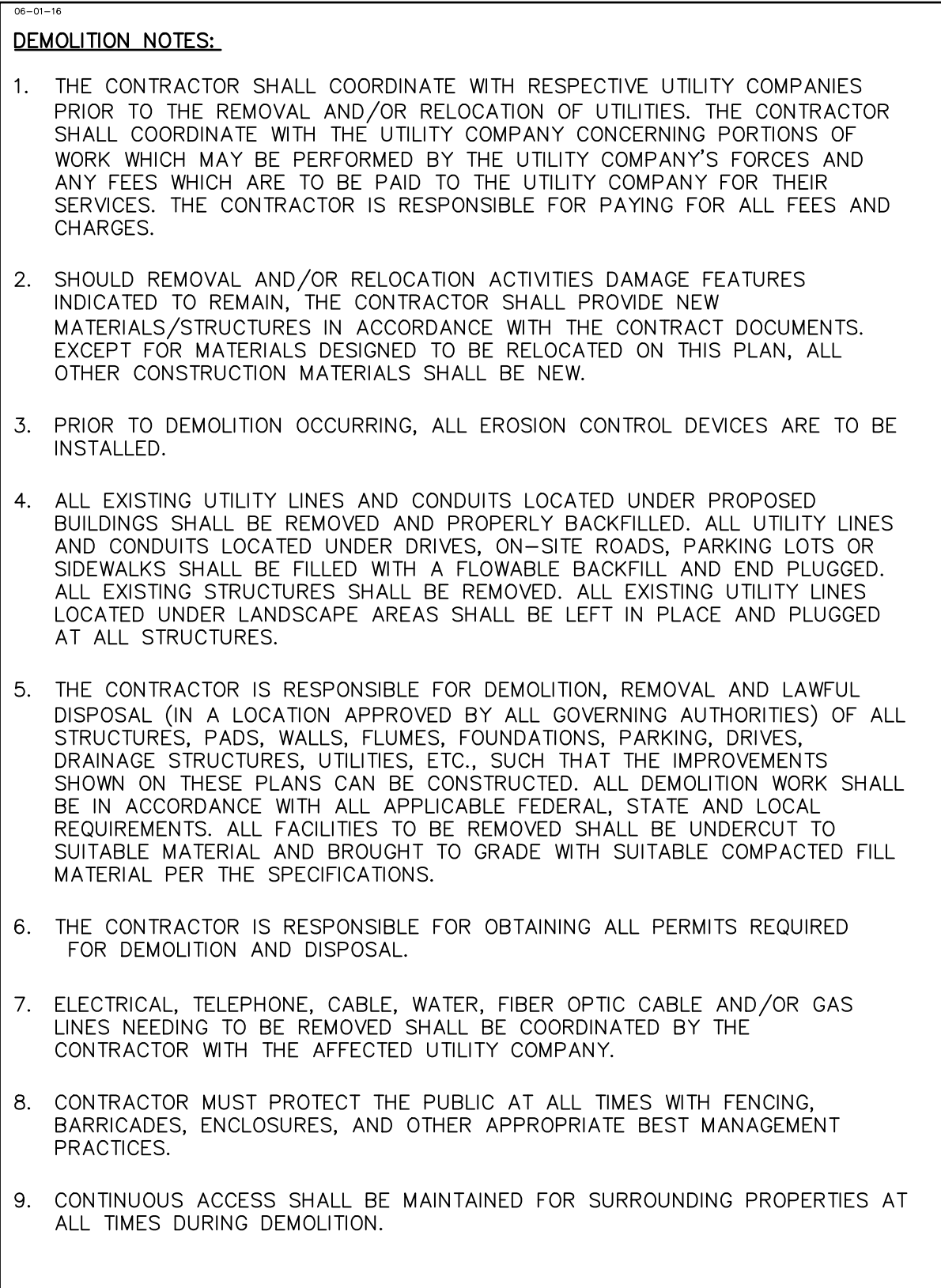
### Warranty

EcoForm luminaires feature a 5-year limited warranty. See [signify.com/warranties](http://signify.com/warranties) for complete details and exclusions.

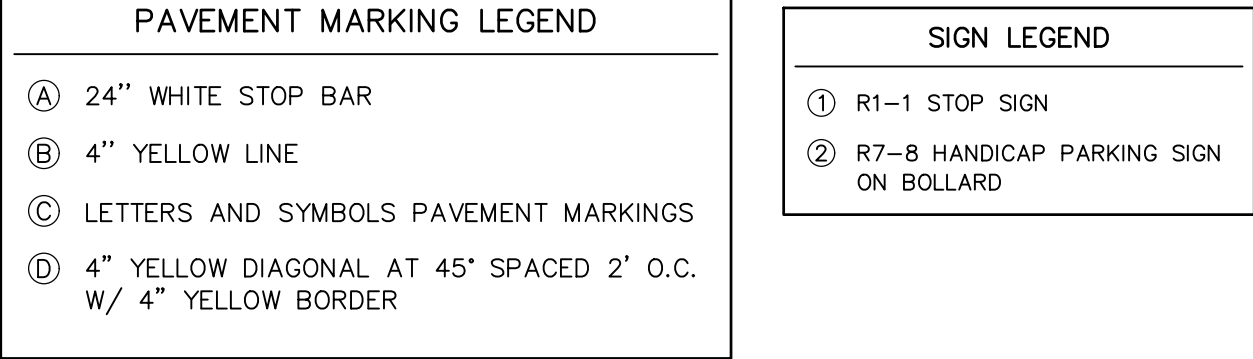








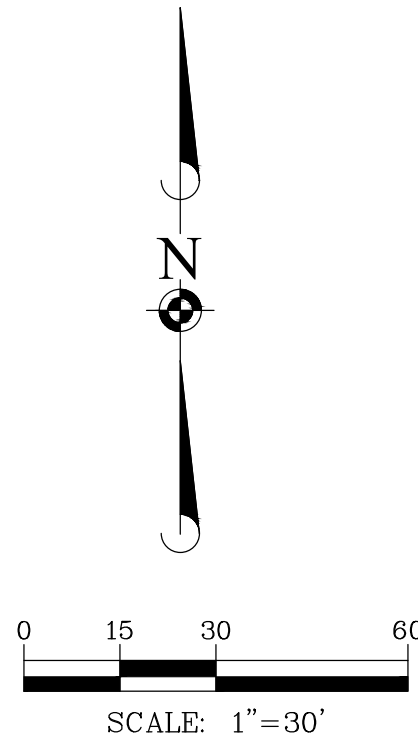












1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
4. IF SHOWING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF ROUNDED ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRY UTILITY LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
6. LIGHTING AND UNDERGROUND CABLE, IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
7. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
8. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
9. AT LOCATIONS WHERE WATER MAIN CROSSES BENEATH OR LESS THAN 18" ABOVE A SEWER, PROVIDE WATER MAIN PROTECTION PER STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
10. ELEVATIONS GIVEN FOR STORM SEWER STRUCTURES LOCATED IN CURB LINE ARE PAVEMENT ELEVATIONS.
11. ALL WATER MAIN SHALL BE 5'-6" BELOW FINISHED GRADE TO TOP OF MAINS UNLESS NOTED OTHERWISE.
12. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
13. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HERE ON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
14. ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
15. PROVIDE CONCRETE COLLAR FOR ALL DRAINAGE STRUCTURES IN PAVEMENT, NOT ADJACENT TO CURB. SEE CONCRETE COLLAR DETAIL ON DETAIL SHEET.
16. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO EXISTING SANITARY MANHOLES.
17. EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
18. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
19. ALL D.I. WATERMAIN PIPE AND D.I. WATERMAIN FITTINGS SHALL BE WRAPPED.

**Manhard**  
CONSULTING

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manhard.com

Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers  
Construction Management • Environmental Scientists • Industrial Architects • Planners  
Construction Management • Environmental Scientists • Industrial Architects • Planners

PROJ. MGR.: MDE  
 PROJ. ASSOC.: MJC  
 DRAWN BY: SB  
 DATE: 02-06-23  
 SCALE: 1"=30'

**SHEET**

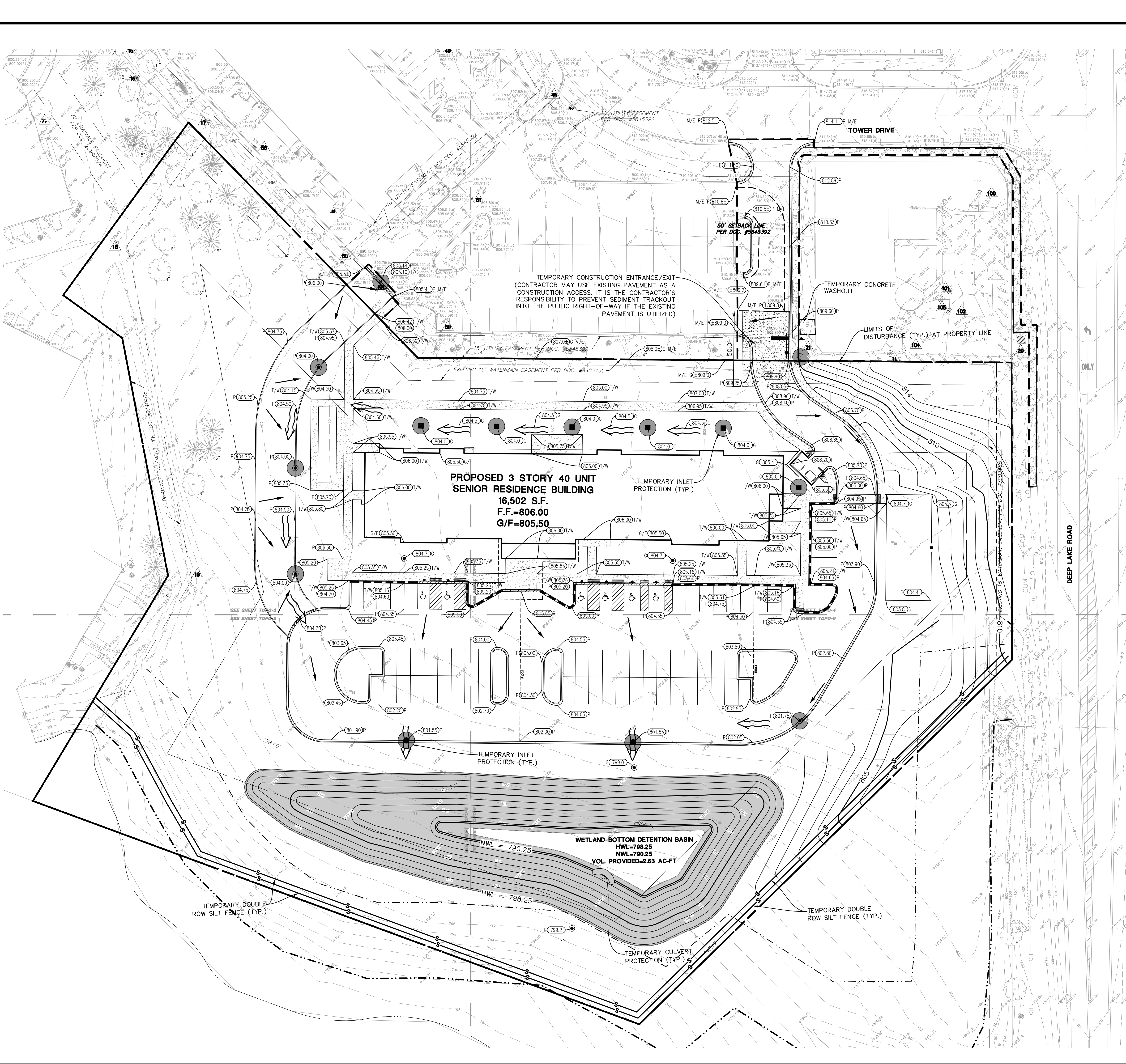
**5 OF 7**

**LAC.LVL01**

**PRELIMINARY PLANS- NOT FOR CONSTRUCTION**







**SOIL EROSION AND SEDIMENTATION CONTROL GENERAL NOTES:**

- ALL VEGETATIVE AND STRUCTURAL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE ILLINOIS URBAN MANUAL.
- MAINTENANCE AND REPLACEMENT OF EROSION CONTROL ITEMS, WHEN DIRECTED BY THE OWNER, SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF SAID MEASURES SHALL BE MADE IMMEDIATELY.
- INSTALL ALL PERIMETER SILT FENCING PRIOR TO ANY CLEARING OR GRADING. ON-SITE SEDIMENT CONTROL MEASURES AS SHOWN AND SPECIFIED BY THIS EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE CONSTRUCTED AND FUNCTIONAL PRIOR TO INITIATING CLEARING, GRADING, STRIPPING, EXCAVATION OR FILLING ACTIVITIES ON THE SITE.
- STORM WATERS FALLING ON THE ENTIRE SITE SHALL BE DIVERTED INTO THE DETENTION BASIN. PRIOR TO BEGINNING MASS EXCAVATION, THE CONTRACTOR SHALL CONSTRUCT SILTATION CONTROL MEASURES AS REQUIRED TO INTERCEPT SURFACE WATERS BEFORE THEY FLOW ONTO ADJACENT PROPERTY AND CONVEY THEM TO THE DETENTION BASIN.
- STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA.
- TEMPORARY SEED MIXTURE SHALL BE APPLIED AT 64 LBS/ACRE.
- INLET PROTECTION SHALL BE INSTALLED UNDER THE GRATING OF EACH DRAINAGE STRUCTURE.
- STABILIZATION OF TOPSOIL STOCKPILES SHALL BE INITIATED IMMEDIATELY UPON COMPLETION UNLESS THEY WILL BE DISTURBED WITHIN FOURTEEN (14) CALENDAR DAYS. STABILIZATION OF STOCKPILES MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. ALL SOIL STORAGE PILES SHALL BE PROTECTED FROM EROSION WITH SILT FENCE ON THE DOWN SLOPE SIDE OF THE PILES.
- DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
- WATER PUMPED DURING CONSTRUCTION OPERATION SHALL BE FILTERED.
- DUST CONTROL SHALL BE PERFORMED ON A DAILY BASIS USING WATER DISPERSED FROM A TRUCK MOUNTED TANK WITH STANDARD DISCHARGE HEADER TO PROVIDE A UNIFORM RATE OF APPLICATION.
- TEMPORARY GRAVEL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED, ADJUSTED OR RELOCATED AS NECESSARY TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADS. ANY SEDIMENT REACHING A PUBLIC ROAD SHALL BE REMOVED BY SHOVELING OR STREET CLEANING BEFORE THE END OF EACH WORKING DAY.
- ANY LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF ANY GUTTER OR DRAINAGE STRUCTURE DURING CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.
- OVERLAND FLOW SHALL BE DIRECTED TO THE DETENTION BASIN PRIOR TO LEAVING THE SITE.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE CLIENT OR OTHER JURISDICTIONAL GOVERNMENTAL ENTITIES.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL JURISDICTIONAL GOVERNMENTAL AGENCY REQUIREMENTS WITHIN 30 DAYS OF FINAL STABILIZATION.

**SOIL PROTECTION CHART**

PERMANENT SEEDINGS	TEMPORARY SEEDINGS	TEMPORARY SEEDINGS	TEMPORARY SEEDINGS
A - KENTUCKY BLUEGRASS 30 LBS./AC. WITH PERMANENT FERTILIZER 30 LBS./AC.	B - KENTUCKY BLUEGRASS 120 LBS./AC. WITH PERMANENT FERTILIZER 45 LBS./AC. 2 TONS STRAW MULCH PER ACRE	C - SPRING DATE D - 4" MULCH FOR GRAVEL RYE E - SOIL (NURSERY GROWN ACTIVITIES) F - STRAW MULCH 2 TONS PER ACRE	* IRRIGATION NEEDED DURING JAN., MAY AND SEPTEMBER ** IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOOMY

NOTE: THIS CHART IS A GUIDE TO ASSIST THE CONTRACTOR IN UNDERSTANDING OPTIONS FOR SOIL STABILIZATION. THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THIS CHART. ANY CONTACT SHALL BE DECIDED WITH THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

**CONSTRUCTION SEQUENCE:**

- INSTALL SILT FENCE AT LOCATIONS AS INDICATED ON THE PLANS.
- PROVIDE STABILIZED CONSTRUCTION ENTRANCE.
- CONSTRUCT TEMPORARY SEDIMENT TRAPS AND/OR BASINS.
- STRIP EXISTING TOPSOIL FROM PROPOSED LIMITS OF DISTURBANCE AND STOCKPILE WHERE SHOWN ON PLANS.
- PROVIDE SILT FENCE AROUND THE BASE OF THE STOCKPILES.
- CONSTRUCT STORMWATER MANAGEMENT (DETENTION) FACILITIES TO SUB-GRADE AND INSTALL OUTLET PIPES.
- COMPLETE TOPSOIL PLACEMENT AND PERMANENT SEEDING AND SOOING OF STORMWATER MANAGEMENT FACILITIES.
- CUT AND FILL SITE TO PLAN SUB-GRADE.
- CONSTRUCT UNDERGROUND IMPROVEMENTS, I.E. SANITARY SEWER WATERMAIN AND STORM SEWER\*\*, ETC.
- CONSTRUCT PAVEMENT IMPROVEMENTS PER PLAN.
- COMPLETE CONSTRUCTION OF SITE WITH PERMANENT STABILIZATION.
- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
- \*\* INSTALL INLET PROTECTION AROUND DRAINAGE STRUCTURES AS CONSTRUCTED.

**LEGEND**

- S — S — TEMPORARY SILT FENCE (PERIMETER EROSION BARRIER)
- EROSION CONTROL BLANKET (NORTH AMERICAN GREEN 50 75) (SEEDING PER LANDSCAPE PLAN)
- TEMPORARY GRAVEL CONSTRUCTION
- TEMPORARY STORM STRUCTURE PROTECTION
- TEMPORARY CULVERT INLET PROTECTION
- TEMPORARY PERFORATED RISER PAVEMENT DRAINAGE FLOW
- LIMITS OF DISTURBANCE/CONSTRUCTION

**IDNR CONSULTATION #911930**

**BLANDING'S TURTLE**

- BLANDING'S TURTLES LEAVE WATERBODIES TO NEST IN NEARBY UPLAND AREAS. TO AVOID POTENTIAL IMPACTS TO BLANDING'S TURTLES AND THEIR NESTS, THE DEPARTMENT RECOMMENDS NO GROUND DISTURBANCE ACTIVITIES BE INITIATED BETWEEN MAY 1<sup>ST</sup> AND SEPTEMBER 30<sup>TH</sup> TO AVOID TAKING ANY NESTS THAT MAY OCCUR IN THE PROJECT AREA.
- THE DEPARTMENT RECOMMENDS EXCLUSIONARY SILT FENCING BE INSTALLED AROUND THE WORK AREA DURING CONSTRUCTION (TRENCHED INTO THE GROUND) AND INSPECTED DAILY FOR BLANDING'S TURTLES AND OTHER WILDLIFE. SILT FENCE SHOULD BE STRICTLY MAINTAINED ALL YEAR DURING CONSTRUCTION IN THIS PROJECT LOCATION. EXCAVATIONS SHOULD BE INSPECTED DAILY FOR TRAPPED WILDLIFE AND SAFELY COVERED OVERNIGHT. SOIL STOCKPILES OR OTHER POTENTIAL TURTLE NESTING MEDIUM SHOULD ALSO HAVE EXCLUSIONARY FENCING INSTALLED AROUND THE PERIMETER TO DISCOURAGE TURTLE NESTING AND POTENTIAL HARM.
- THE DEPARTMENT RECOMMENDS ALL ON-SITE PERSONNEL BE EDUCATED ABOUT THIS SPECIES AND BE INSTRUCTED TO CONTACT THE DEPARTMENT IMMEDIATELY IF THEY ARE ENCOUNTERED IN THE PROJECT AREA. FLIES WITH PHOTOS OF ADULT AND JUVENILE BLANDING'S TURTLES, AND LIFE-HISTORY INFORMATION, SHOULD BE DISTRIBUTED TO PERSONNEL. THE FLYER SHOULD ALSO CONTAIN CONTACT INFORMATION FOR THE DEPARTMENT (CONSULTATION SECTION, 217-785-5500). BE ADVISED, STATE-LISTED SPECIES MAY NOT BE HANDLED WITHOUT APPROPRIATE PERMITS PURSUANT TO THE ILLINOIS ENDANGERED SPECIES PROTECTION ACT.
- AFTER CONSTRUCTION, THE DEPARTMENT RECOMMENDS FENCING BE INSTALLED IN SUCH A MANNER AS TO EXCLUDE TURTLES, INCLUDING HATCHLINGS, FROM ENTERING THE RETAIL AREA WHERE THEY CAN BE HARMED BY VEHICLE TRAFFIC AND MOWING ACTIVITIES. THIS CAN BE ACCOMPLISHED BY BURYING FENCING A MINIMUM OF 6 INCHES IN THE GROUND AND COVERING THE BOTTOM 2 FEET OF FENCING WITH GALVANIZED WIRE MESH OF AN APPROPRIATE DIAMETER TO PREVENT HATCHLING TURTLES FROM ACCESSING THE SITE. THIS FENCE IS MOST NECESSARY ON THE SOUTH AND EAST BOUNDARIES OF THE PROJECT AREA.

STATE-LISTED MIGRATORY WETLAND BIRD SPECIES

GIVEN THE CURRENT HABITAT TYPE AND PROXIMITY OF THE PROJECT TO THE WETLAND, IT IS POSSIBLE THAT STATE-LISTED MIGRATORY WETLAND BIRDS AND OTHER MIGRATORY BIRD SPECIES US THE PROJECT ARE FOR NESTING. TO AVOID HARM TO THESE SPECIES AND POTENTIAL VIOLATIONS OF THE ILLINOIS ENDANGERED SPECIES PROTECTION ACT, THE DEPARTMENT RECOMMENDS:

- NO INITIAL VEGETATION CLEARING, AND GROUND DISTURBANCE ACTIVITIES OCCUR DURING THE NESTING PERIOD OF STATE-LISTED MIGRATORY WETLAND BIRD SPECIES, FROM MAY 1<sup>ST</sup> THROUGH SEPTEMBER 30<sup>TH</sup>. THIS ALSO REFLECTS THE SUGGESTED TURTLE NESTING DATES.
- ALL OUTDOOR LIGHTING SHOULD BE DOWNWARD-POINTING, TO AVOID IMPACTS TO THE NOCTURNAL HUNTING AND NAVIGATION OF STATE-LISTED MIGRATORY WETLAND BIRD SPECIES.

NATURAL AREAS

TO AVOID AND MINIMIZE IMPACTS TO THE ADJACENT WETLAND AND NATURAL AREAS IN THE VICINITY, THE DEPARTMENT RECOMMENDS:

- STRICTLY FOLLOW BMPs FOR SEDIMENT AND EROSION CONTROL AND STORMWATER MANAGEMENT ON THE RETAIL PROPERTY. THE DEVELOPER SHOULD CONSIDER INSTALLING PERVIOUS SURFACES AND RAIN GARDENS OR BIOSWALES PLANTED WITH NATIVE VEGETATION TO MANAGE STORMWATER AND IMPROVE WATER QUALITY AND AVOID IMPACTS TO THE ADJACENT WETLANDS.
- THE RETAIL FACILITY IMPLEMENTS A "REFUSE MANAGEMENT PLAN" TO HELP PREVENT REFUSE FROM ENTERING ADJACENT NATURAL AREAS. THIS SHOULD INCLUDE ROUTINE LITTER PICK-UP ON THE PROPERTY AND ADEQUATE REFUSE CONTAINERS ON THE PROPERTY. THE BOUNDARY FENCING MENTIONED FOR TURTLES WILL ALSO HELP WITH REFUSE MANAGEMENT.

DATE: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

DATE: \_\_\_\_\_

**Manhard CONSULTING**

116 West Illinois, The Plaza, Chicago, IL 60654  
Tel: 312.824.3801 Fax: 312.824.0965  
manhard.com  
Civil Engineers • Surveyors • Water Resources Engineers • Water & Wastewater Engineers  
Construction Managers • Environmental Scientists • Landscape Architects • Planners

**STARLING SENIOR APARTMENTS**

**LAKE VILLA, ILLINOIS**

**SOIL EROSION AND SEDIMENT CONTROL PLAN**

**PRELIMINARY PLANS - NOT FOR CONSTRUCTION**

PROJ. MGR.: MDE

PROJ. ASSOC.: MJC

DRAWN BY: SB

DATE: 02-06-23

SCALE: 1"=30'

SHEET

**7** OF **7**

LAC.LVL01

THESE EROSION CONTROL PLANS ARE A PORTION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (EPA) TOTAL REQUIREMENTS FOR A COMPLETE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY THE GENERAL NPDES PERMIT NO. IL010. CLIENT AND/OR CONTRACTOR WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL NPDES PERMIT AND COMPLETION OF THE COMPLETE SWPPP.









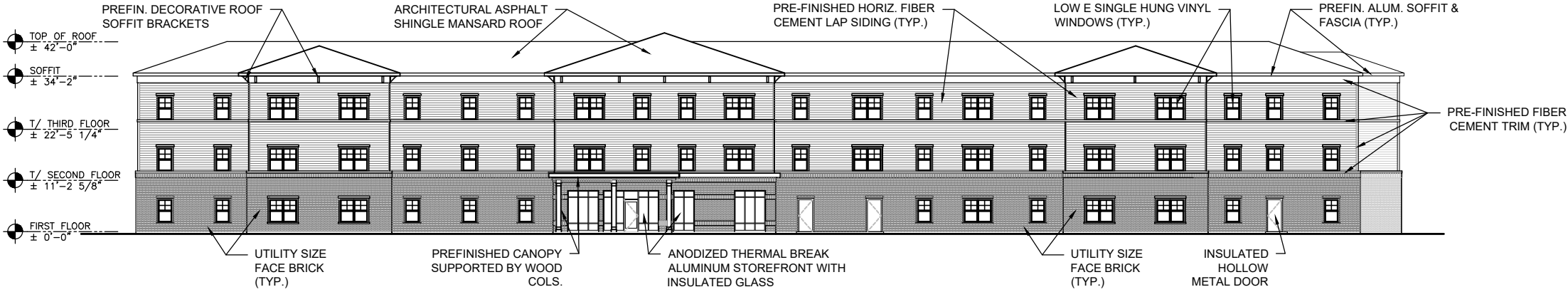
1 FRONT ELEVATION  
SCALE: N.T.S.



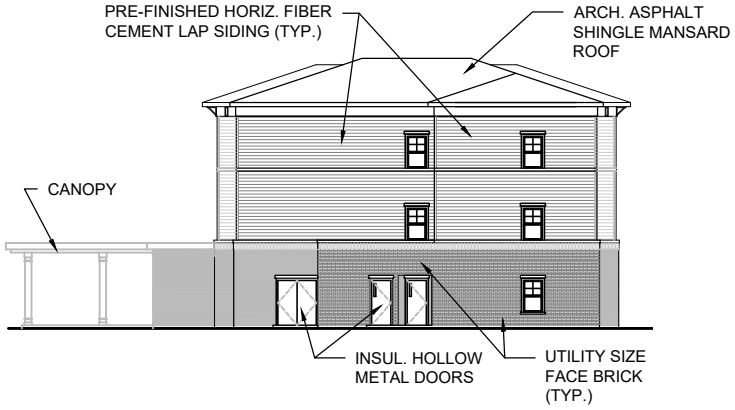
**NORTH ARROW**  
ARCHITECTURE  
524 WEST ST. CHARLES ROAD  
VILLA PARK, ILLINOIS 60181

**STARLING SENIOR APARTMENTS**  
0 DEEP LAKE ROAD  
LAKE VILLA, IL 60046

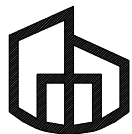
PID #
DATE: 1/27/2023



1 SOUTH (FRONT) ELEVATION  
SCALE: 1/32" = 1'-0"



2 EAST ELEVATION  
SCALE: 1/32" = 1'-0"



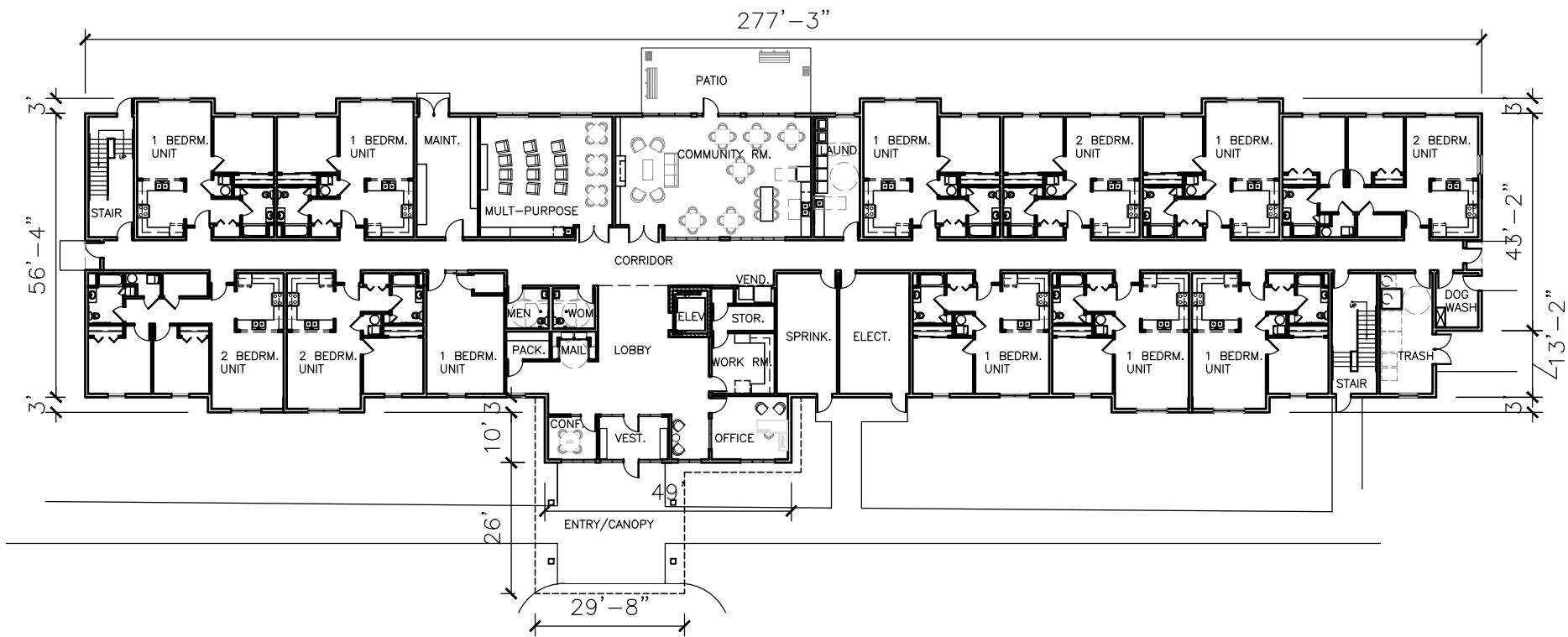
**NORTH ARROW**  
ARCHITECTURE  
524 WEST ST. CHARLES ROAD  
VILLA PARK, ILLINOIS 60181

**STARLING SENIOR APARTMENTS**  
0 DEEP LAKE ROAD  
LAKE VILLA, IL 60046

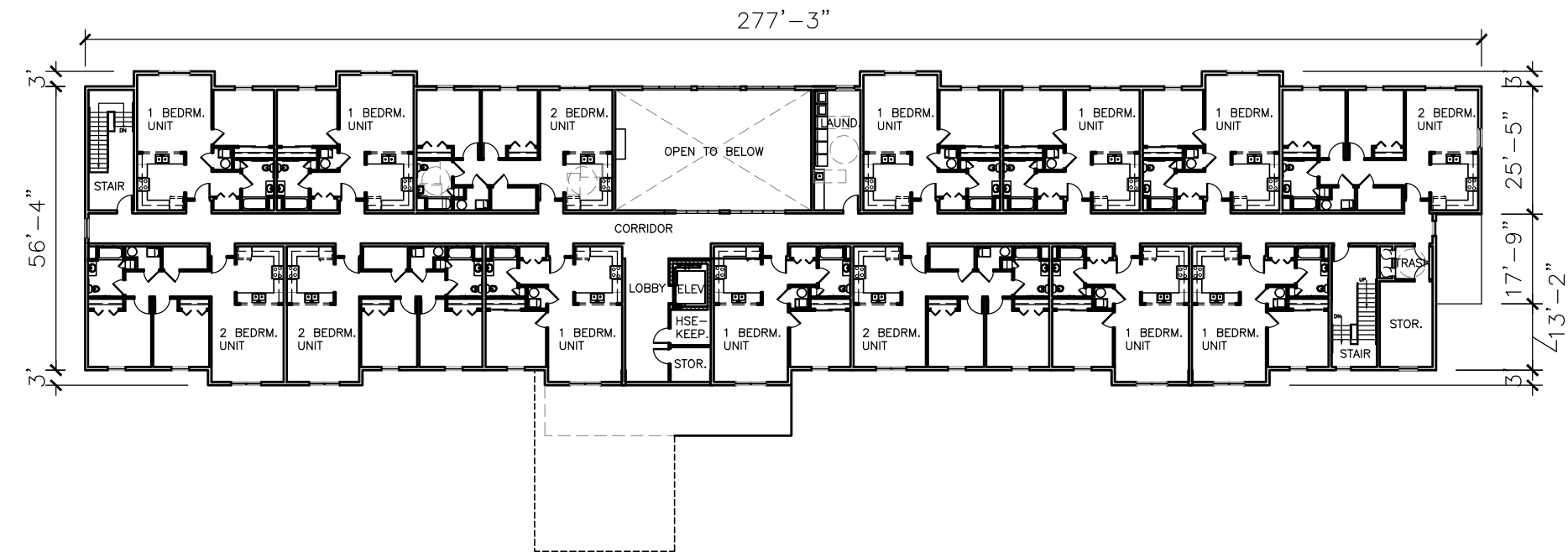
PID #
DATE: 1/27/2023

**A3.0**





1 FIRST FLOOR PLAN  
SCALE: 1/32" = 1'-0"



2 SECOND FLOOR PLAN  
SCALE: 1/32" = 1'-0"



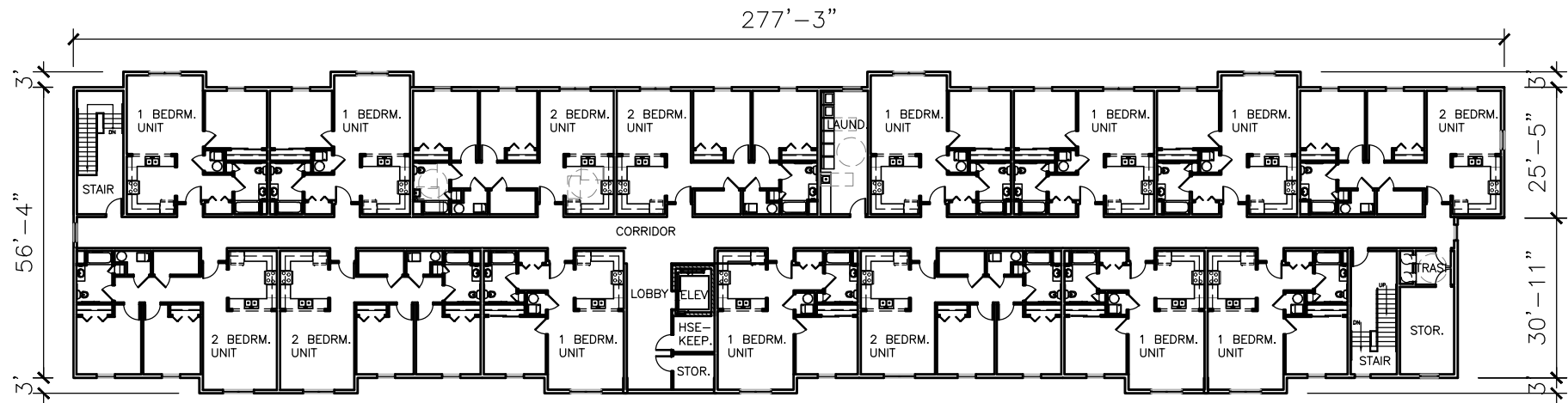
**NORTH ARROW**  
ARCHITECTURE  
524 WEST ST. CHARLES ROAD  
VILLA PARK, ILLINOIS 60181

**LAKE VILLA**  
0 DEEP LAKE ROAD  
LAKE VILLA, IL 60046

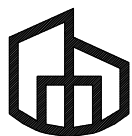
PID #

DATE:  
1/27/2023

**A1.0**



1 THIRD FLOOR PLAN  
SCALE: 1/32" = 1'-0"



**NORTH ARROW**  
ARCHITECTURE  
524 WEST ST. CHARLES ROAD  
VILLA PARK, ILLINOIS 60181

**LAKE VILLA**  
0 DEEP LAKE ROAD  
LAKE VILLA, IL 60046

PID #

DATE:  
1/27/2023

**A2.0**

**PROPOSED LAKE VILLA SENIOR LOFTS  
VILLAGE OF LAKE VILLA, ILLINOIS  
PRELIMINARY STORMWATER MANAGEMENT PLAN**

**INTRODUCTION**

The proposed Lake Villa Senior Lofts site is +/- 5.21 acres located at the southwest corner of Grass Lake Road and Deep Lake Road in Lake Villa, Illinois. These improvements will consist of a construction of a building includes car parking, grading and paving activities, installation of underground utilities, and soil erosion control measures. Stormwater Management was previously provided for the developed area north of the site (WT Group Storm Management Report). Stormwater management for the proposed improvements will be provided through additional storm sewers and an additional on-site basin, providing detention per the new Bulletin 75 rainfall data. A Bulletin 75 Nomograph was used to calculate preliminary detention requirements for the proposed improvements and modeled calculations will be performed in the final stormwater phase. This report serves as a Preliminary Stormwater Management Plan for the proposed site stormwater design.

**PROJECT DECSCRIPTION**

The project is located near the southwest corner of Grass Lake Road and Deep Lake Road intersection in the Village of Lake Villa, Illinois. The site is in Section 28, Township 46 North, and Range 10 East. It is bordered on the west by a neighborhood, to the north by the Lake House Restaurant and Water Tower, to the east by Deep Lake Road, and to the south by an existing detention basin. This project will be served by the proposed detention basin.

**EXISTING CONDITIONS**

The existing conditions of the site are an undeveloped site. The existing drainage is through sheet flow to the existing detention basin or to a swale that drains to the basin. The site is free of floodplain but wetland have been identified off-site to the south.

**PROPOSED CONDITIONS**

The proposed conditions are design to contain the proposed site within the proposed detention basin. The onsite project area will drain via proposed storm sewer to a proposed 2.6 ac-ft detention pond with a NWL of 790.25 and HWL of 798.25. The calculations used to size the proposed detention basins using 0.15 cubic feet per second per acre. The proposed

detention was designed using Bulletin 75. The runoff volume reduction quantity was found by using the runoff depth of 0.39 inches, for the 39% impervious site, and finding it in the provided table in the LCWDO. The RVR Quantity found in the table was then multiplied by the total impervious area to find our site RVR of 2,712 cubic feet. Additionally, a hydrodynamic separator will be added in order to provide extra filtration of stormwater particulates.

All required detention and additional information for the project site is detailed in the stormwater calculations and exhibits provided.

### **ANALYSIS METHODS**

The procedures and assumptions used for the storm sewer and drainage design elements are listed below.

- Onsite curve numbers were calculated using 98 for impervious and 74 for pervious areas in the predeveloped condition and 80 for pervious areas in the postdeveloped condition
- The CN Exhibit and calculation attached to this report show the proposed CN to be 86.
- Required detention volume was found using a B-75 nomograph.
- RVR and water quality requirements were found using the Lake County Watershed Development Ordinance graphs and tables.

### **CONCLUSION**

In our professional opinion the proposed development's stormwater management system as described in this report conforms to the requirements set forth by the Village of Lake Villa Municipal Code.

Sincerely,

MANHARD CONSULTING, LTD

Matt Eagle

## CALCULATIONS



## COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Starling Senior Apartments PERMIT NUMBER: \_\_\_\_\_

LOCATION: Lake Villa, Illinois DATE: 12/29/2022

### TYPE OF AREA (SELECT WITH DROP-DOWN)

☒ DETAINED AREA ☐ MAJOR STORMWATER SYSTEM  
☐ UNRESTRICTED AREA ☐ OTHER: \_\_\_\_\_  
☐ UPSTREAM AREA

### CONDITION (SELECT WITH DROP-DOWN)

☐ PROPOSED CONDITION ☒ EXISTING CONDITION

### RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Pervious Surface		74	5.21	385.54

TOTALS: 5.21 385.54

### COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{385.54}{5.21} \rightarrow \text{Composite CN} = 74$$



## COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Starling Senior Apartments PERMIT NUMBER: \_\_\_\_\_

LOCATION: Lake Villa, Illinois DATE: 2/6/2023

### TYPE OF AREA (SELECT WITH DROP-DOWN)

☒ DETAINED AREA ☐ MAJOR STORMWATER SYSTEM  
☐ UNRESTRICTED AREA ☐ OTHER: \_\_\_\_\_  
☐ UPSTREAM AREA

### CONDITION (SELECT WITH DROP-DOWN)

☒ PROPOSED CONDITION ☐ EXISTING CONDITION

### RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Surface	N/A	98	1.68	164.64
Pervious Surface	D (next higher soil group per Lake County WDO)	80	3.50	280.00

TOTALS:

5.18

444.64

### COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{444.64}{5.18} \rightarrow \text{Composite CN} = 86$$



## NOMOGRAPH: BULLETIN 75 RAINFALL DATA

PROJECT: Starling Senior Apartments PERMIT NUMBER: \_\_\_\_\_

LOCATION: Lake Villa, Illinois DATE: 2/6/2023

### DEVELOPMENT INFORMATION

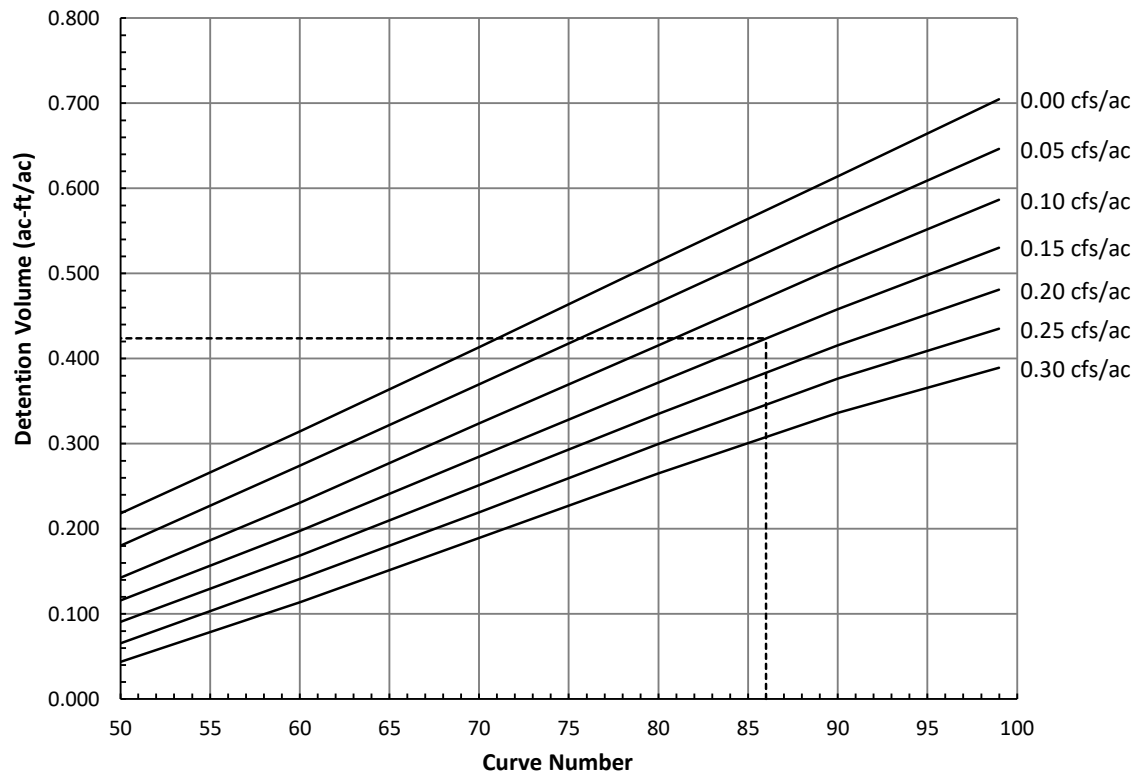
1. Detained Area (Hydrologically Disturbed Area)	4.300	acres
2. Curve Number	86.00	
3. Actual Release Rate	0.65	cfs

### REQUIRED DETENTION VOLUME

4. Required Detention Volume	1.82	ac-ft
------------------------------	------	-------

### NOMOGRAPH

## NOMOGRAPH: BULLETIN 75







## DETENTION VOLUME PROVIDED

PROJECT: Starling Senior Apartments PERMIT NUMBER: \_\_\_\_\_

LOCATION: Lake Villa, Illinois DATE: 1/23/2023

### AREA UNITS (CHOOSE WITH DROP-DOWN)

Units:

### POND / VAULT / SURFACE DETENTION VOLUME

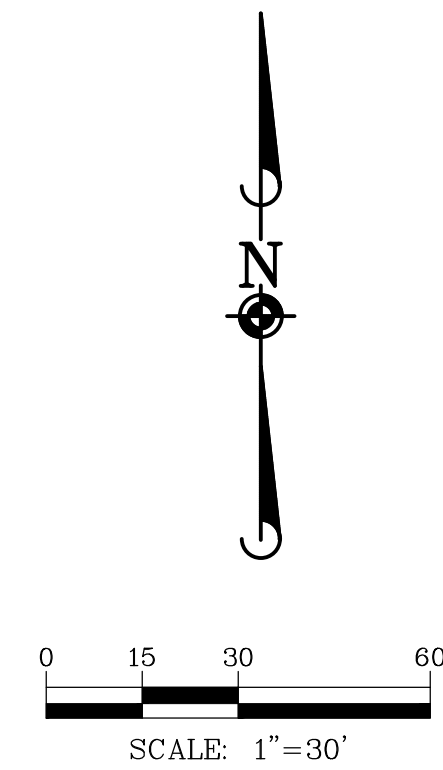
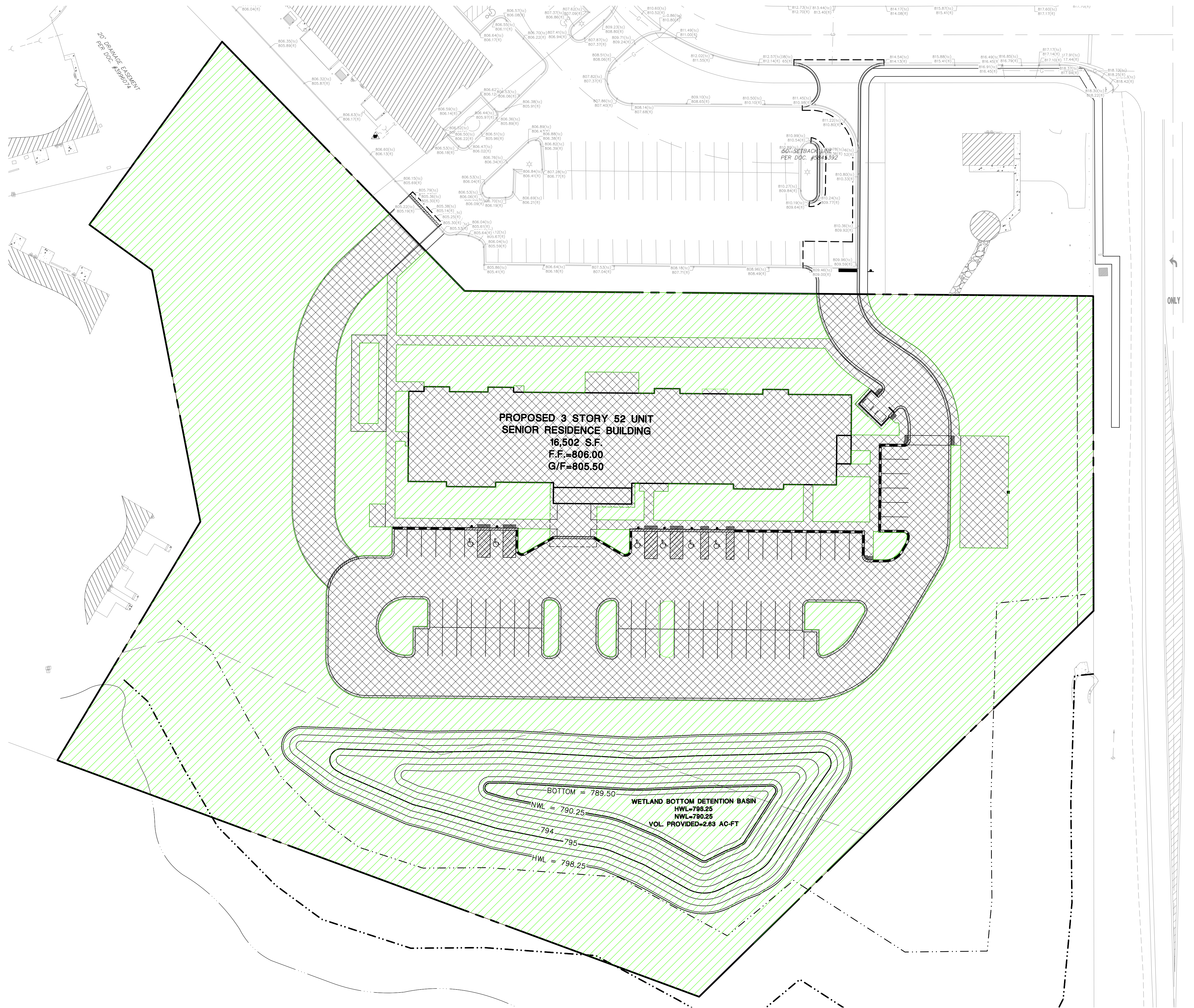
Elevation (ft)	Area (ft²)	Average Area (ft²)	Increment Volume (ac-ft)	Cumulative Volume (ac-ft)
790.25	4520.00			0.00
		5139.50	0.09	
791.00	5759.00			0.09
		6964.00	0.16	
792.00	8169.00			0.25
		9281.00	0.21	
793.00	10393.00			0.46
		11801.50	0.27	
794.00	13210.00			0.73
		14587.00	0.33	
795.00	15964.00			1.07
		17481.00	0.40	
796.00	18998.00			1.47
		20519.00	0.47	
797.00	22040.00			1.94
		23611.50	0.54	
798.00	25183.00			2.48
		25584.00	0.15	
798.25	25985.00			2.63

### TOTAL DETENTION VOLUME

Total Detention Volume (ac-ft)

2.63





PROPERTY LINE

PROPOSED IMPERVIOUS AREA  
 AREA=1.68 ACRES  
 C = 0.90

PROPOSED PERVIOUS AREA  
 AREA=3.50 ACRES  
 C = 0.45

WEIGHTED C = 0.60

**PROPOSED 3 STORY 52 UNIT  
SENIOR RESIDENCE BUILDING**  
**16,502 S.F.**  
**F.F.=806.00**  
**G/F=805.50**

BOTTOM = 789.50  
 L = 790.25  
 794  
 795  
 L = 798.25

**WETLAND BOTTOM DETENTION BASIN**  
**HWL=798.25**  
**NWL=790.25**  
**VOL. PROVIDED=2.63 AC-FT**

[illegible]

**Manhard**  
CONSULTING LTD.<sup>TM</sup>  
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Civil Engineers • Surveyors • Water Resources Engineers • Water & Wastewater Engineers

**LAKE VILLA SENOIR LOFTS**

**LAKE VILLA, ILLINOIS**

**IMPERVIOUS EXHIBIT**

PROJ. MGR.: KJC  
PROJ. ASSOC.: MJC  
DRAWN BY: SB  
DATE: 02/06/23  
SCALE: 1"=30'

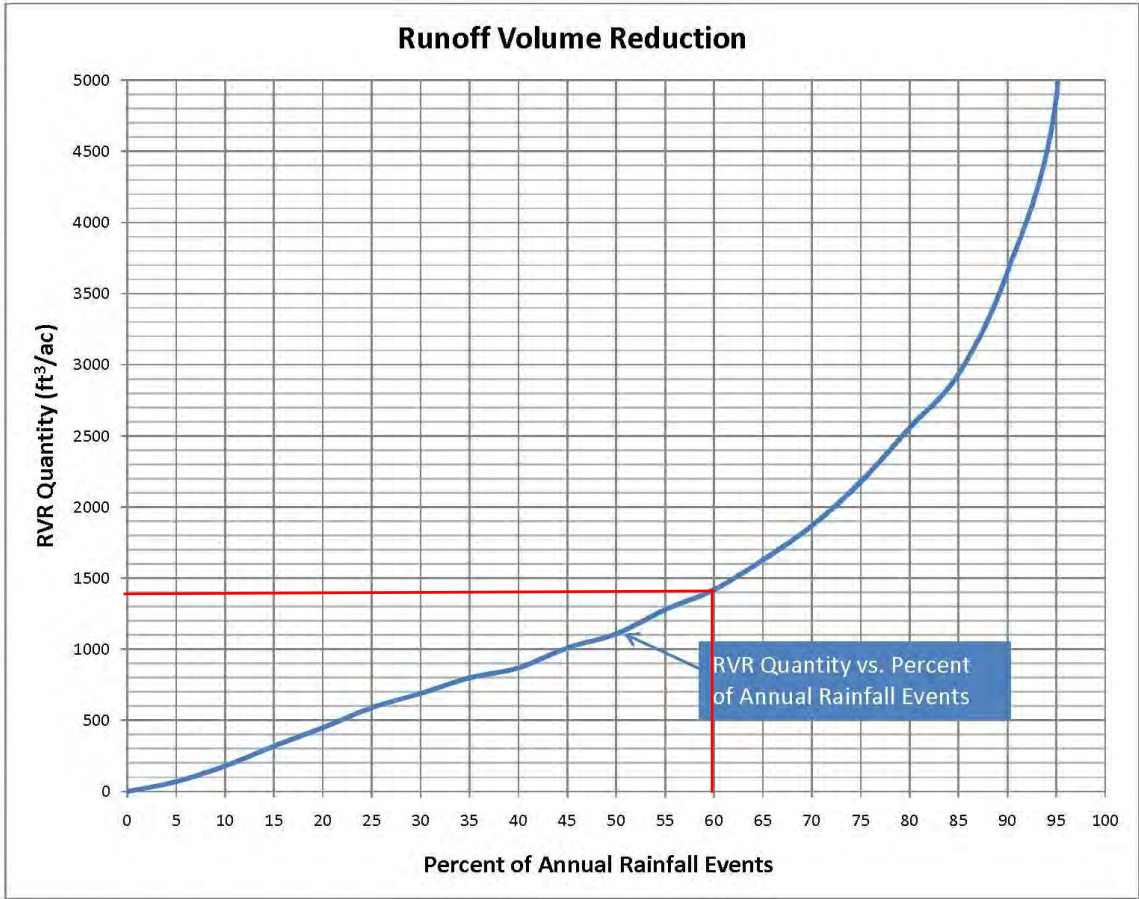
**SHEET**  
**EXH**

**LAC.LVL01**

**NOT FOR CONSTRUCTION**



Percent of Annual Rainfall Events	100% impervious values	
	Runoff Depth (in)	RVR Quantity ft <sup>3</sup> /ac new impervious
0	0	0
5	0.02	70
10	0.05	180
15	0.09	320
20	0.12	450
25	0.16	590
30	0.19	690
35	0.22	800
40	0.24	870
45	0.28	1010
50	0.30	1110
55	0.35	1280
60	0.39	1420
65	0.45	1630
70	0.51	1870
75	0.60	2180
80	0.70	2560
85	0.81	2940
90	1.01	3660
95	1.35	4900
99	2.41	8760



Runoff Depth based on Figure 3 of the Center For Watershed Protection Report.

Runoff Depth = P\*R where:

P = Rainfall Depth (inches)

R=Volumetric Runoff Coefficient = 0.95 for 100% impervious cover [0.05+0.009(I), where I is 100% (impervious cover)]

RVR Quantity = Runoff Depth (in) / 12 (in/ft) \* 43560 (ft²/ac)



## RUNOFF VOLUME REDUCTION PROVIDED

**PROJECT:** Starling Senior Apartments **PERMIT NUMBER:** \_\_\_\_\_

**LOCATION:** Lake Villa, Illinois **DATE:** 1/23/2023

### AREA UNITS (CHOOSE WITH DROP-DOWN)

Units:

### POND / VAULT / SURFACE DETENTION VOLUME

Elevation (ft)	Area (ft²)	Average Area (ft²)	Increment Volume (ac-ft)	Cumulative Volume (ac-ft)
789.25	2906.00			0.00
		3512.50	0.06	
790.00	4119.00			0.06
		4319.00	0.02	
790.25	4519.00			0.09

### TOTAL DETENTION VOLUME

Total RVR Volume (ac-ft)

0.09



# **WETLAND DELINEATION REPORT**

Grass Lake Road & Deep Lake Road

Lake Villa, Lake County, IL

Manhard Consulting, LTD.

MA2242

November 22, 2022  
Revised February 3, 2023



**GARY R. WEBER ASSOCIATES, INC.**

LAND PLANNING ECOLOGICAL CONSULTING LANDSCAPE ARCHITECTURE

# WETLAND DELINEATION REPORT

Grass Lake Road & Deep Lake Road

Pin #0228201178

Lake Villa, Lake County, IL

Prepared for:

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Manhard Consulting, LTD.  
116 West Illinois St, Floor 7  
Chicago, IL 60654

Attn: Matt Eagle, P.E.

Prepared by:

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Gary R. Weber Associates, Inc.  
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Project Reference Information

MA2242

November 22, 2022

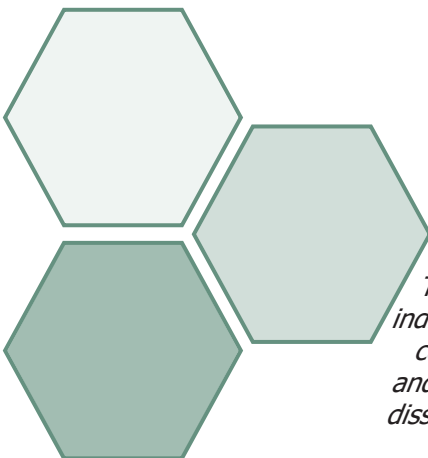
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Project Staff

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## CONTENTS

1.0 Introduction	1
1.1 Delineation Summary	1
1.2 Regulations Summary	1
1.3 Threatened and Endangered Species	2
2.0 Project Purpose	3
3.0 Exhibit Summary	4
4.0 Methods	5
5.0 Reviewed On-site Conditions	7
5.1 Water Resources Summary	6
6.0 Regulatory Statement	8
6.1 Federal Regulations	8
6.2 Municipal and State Regulations	8
8.0 Recommendations	10
9.0 References	11

APPENDIX A – WATER RESOURCES MAPS: EXHIBIT A-G

APPENDIX B – SITE PHOTOS: EXHIBIT H

APPENDIX C – WETLAND DETERMINATION FORMS

APPENDIX D – THREATENED AND ENDANGERED SPECIES CONSULTATION

## WETLAND DELINEATION REPORT

Project Name:	Grass Lake Road & Deep Lake Road MA2242	Client:	Manhard Consulting, LTD.
Location:	Lake Villa, Lake Villa Township, Lake County, IL, 60046,		
Parcel PIN #	0228201178		
PLSS	NE S28 T46N R10E		
Coordinates	Latitude: 42.439678 Longitude: -88.063754		
Field Ecologist:	Lisa Pajon		
Supervised by:	Ellen Raimondi (CWS)		
Date of site visit:	11/3/2022		

### 1.0 INTRODUCTION

Gary R Weber Associates performed a formal wetland delineation within the study area located on Deep Lake Road, Lake Villa, Lake County, IL (Exhibit A: Location), hereafter referred to as the study area. It is generally bounded by Deep Lake Road to the east, by commercial property to the north, and by wetland and residential properties to the west and south. The study area, as presented in this report, represents the property limits investigated by GRWA for the presence of regulated surface water resources. These limits do not necessarily reflect the boundaries of any proposed development activities. It is within the Sequoit Creek sub-watershed and the Fox River Watershed.

#### 1.1 SITE DESCRIPTION

The study area (approximately 4.97-acres) consists of a turf field with a lightly a scrub-shrub border to the north and east (see Photo 1-2). The field is an elevated building pad that was constructed around 1999.

One (1) wetland complex totaling over 10 acres in size, with approximately 0.06-acres within the study area boundaries was identified. The wetland consists of a mix of emergent vegetation and open water with a connected drainage swale at Deep Lake Road. The wetland extends on-site in the southwest corner of the study area

Wetland acreages provided in this report are estimations; a survey of staked boundaries must be performed to obtain exact size and location information. A summary of regulations is provided in Section 1.2.

#### 1.2 REGULATION SUMMARY

Basic information regarding wetland regulations may be found in the Regulatory Statement portion of this report. Briefly, the U.S. Army Corps of Engineers (USACE) regulates all Waters of the United States that are currently or historically navigable and all wetlands that are connected to or associated with these waterways. In Lake County, isolated wetlands are regulated through implementation of a countywide watershed development ordinance. Lake County requires a minimum buffer width of 50 feet for wetlands greater than 2.5 acres.

Wetland 1 extends to the west and enters a complex that is part of the Sequoit Creek drainage and is likely regulate by the USACE.

At the time of this wetland delineation report, current regulations state that this delineation is valid for 3 years from the date of site verification.



### 1.3 THREATENED AND ENDANGERED SPECIES

Based on a 11/10/2022 review of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, sensitive (federally threatened or endangered) plant or animal species habitat are not located on or adjacent to the study area (see attached USFWS Review Summary). Further consultation with this agency may not be required for a Section 404 Permit from the USACE

According to the Illinois Department of Natural Resources (IDNR), the following protected resources may be in the vicinity of the project location: Deep Lake INAI Site, Loon Lake INAI Site, Sun Lake INAI Site, Sun, Lake Nature Preserve, Blanding's Turtle (*Emydoidea blandingii*), King Rail (*Rallus elegans*), Least Bittern (*Ixobrychus exilis*) (see INDR EcoCAT correspondence).

The IDNR has provided conservation recommendations for the above listed protected resources. See the below summary and EcoCAT consultation included in Appendix E.

- Deep Lake INAI, Loon Lake INAI, Sun Lake INAI, & Sun Lake Nature Preserve: Adverse effects are unlikely.
- Blandings Turtle: Construction should be completed in inactive season from November 1-March 1. Exclusionary fencing around the construction area and daily checks for turtles should be initiated if time frame cannot be met.
- King Rail and Least Bittern: 50 ft buffer should be maintained on all wetlands, and if possible all work near wetlands should be completed between September 30-April 1 to avoid the prime nesting and fledging season.
- Lighting recommendations have been made for all external fixtures.

## 2.0 PROJECT PURPOSE

The purpose of the site visit was to identify regulated surface wetland, non-wetland water resources or Waters of the United States (WOUS) on, or within 100 feet, of the study area. A floodplain determination was not included as part of our investigation.

On-site wetland areas encountered were delineated using standard methods sanctioned by the United States Army Corps of Engineers in the Corps of Engineers Wetlands Delineation Manual (1987) and 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. Plant observations were made for calculating the Coefficient of Conservatism (Ĉ) and Floristic Quality Index (FQI) for each wetland plant community using the Wilhelm method (Swink and Wilhelm, 1994).

Observations also were made to determine if wetlands present within the study area were high-quality aquatic resources based on the Lake County Watershed Development Ordinance. Observed wildlife and evaluation of resource quality are also reported as required by the Chicago District USACE.

On-site non-wetland water resources encountered were given established Ordinary High Water Mark (OHWM) boundaries using the definitions described in Section 404 of the Clean Water Act (CWA Section 404(b).(1) Guidelines (40CFR230)

### 3.0 EXHIBIT REVIEW

- The **Location Map** identifies approximate location of study area and nearby major roadways (Exhibit A)
- The **National Wetlands Inventory** identifies no wetlands within the study area (Exhibit B).
- The **Lake County Wetland Inventory** identifies a **Wetland** within the southern portion of the study area. This is a designation assigned to areas with a high potential for exhibiting hydric soil, hydrophytic vegetation and required hydrologic conditions (Exhibit C).
- The **Soil Map** identifies the following soils within the study area:

530D2 Ozaukee silt loam – Non-hydric  
840B Zurich and Ozaukee silt loams – Non-hydric  
840C2 Zurich and Ozaukee silt loams – Non-hydric  
979B Grays and Markham silt loams – Non-hydric

Field evaluations are made to determine if a hydric inclusion may be present (Exhibit D).

- The **United States Geologic Survey (USGS) Topographic Map** does not identify any surface drainage within or adjacent to the study area (Exhibit E)
- The **Flood Insurance Rate Map** identifies the study area outside the 500-year floodplain (Exhibit F).
- The **Water Resources Summary** identifies approximately locations and boundaries of water resources within the study area. Location of Wetland 1 is denoted (Exhibit G).
- The **Site Photographs** show conditions exhibited within the study area at the time of the site visit (Exhibit H)

## 4.0 METHODS

Prior to the site visit, a preliminary site evaluation is performed using aerial photography and natural resource mapping. Potential wetland areas and non-wetland waters units identified by these resources are evaluated in the field.

### 1987 USACE Wetland Delineation Manual and 2010 Regional Supplement.

Potential wetland areas were investigated to determine if they meet the requirements for a wetland based on the USACE parameters of vegetation, hydrology, and soils. In general, positive indication of each of the three parameters must be demonstrated to classify an area as wetland. Each of these parameters is discussed below.

**Vegetation** – Three vegetative indicators are applied to plant communities in order to determine if the hydrophytic vegetation criterion is met.

1. More than 50% of the dominant plant species across all strata must be hydrophytic (water tolerant). Wetland plants fall into three indicator classes based on differing tolerances to water level and soil saturation. These indicators are rated obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC).
2. The prevalence index is 3.0 or less. The prevalence index is a weighted-average wetland indicator status of all plant species in a sampling plot. The index is used to determine whether hydrophytic vegetation is present on sites where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test.
3. Over 50% of non-wetland plants in a sample area exhibit morphological adaptations for life in wetlands. To apply this indicator, adapted plants must occur in areas where indicators of hydric soil and wetland hydrology are present.

**Hydrology** – To be considered a wetland, an area must have 14 or more consecutive days of flooding or ponding, or a water table 12 inches or less below the soil surface, during the growing season at a minimum frequency of 5 years in 10. Wetland hydrology indicators are divided into four groups as described below:

- Group A – Observation of Surface Water or Saturated Soils
- Group B – Evidence of Recent Inundation
- Group C – Evidence of Recent Soil Saturation
- Group D – Evidence from Other Site Conditions or Data

**Soils** - To be considered a wetland, an area must contain hydric soil. Hydric soils are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic (lacking oxygen) conditions in the upper part. Soils generally, but not always, will develop indicators that are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in a saturated and anaerobic environment. The most current edition of the United States Department of Agriculture, Natural Resource Conservation Service *Field Indicators of Hydric Soils in the United States* is used for identification of hydric soils. Field indicators of hydric soils include but are not limited to the presence of any of the following: histic epipedon, sulfidic odor, at least 2 centimeters of muck, depleted matrix, and/or redoximorphic features. Field indicators are usually examined in the top 20 inches of the soil. Soil colors are determined using *Munsell Soil Color Charts*.

Areas meeting these three criteria are staked in the field for surveying purposes. Boundaries are demarcated in the field with pink flagged pin stakes labeled "WETLAND DELINEATION." Staked boundaries are mapped on an aerial photograph included in this report. Approximate off-site wetland boundaries are

identified on the aerial photograph and were determined using available aerial photographs, wetland maps, and field observation.

#### The Ordinary High Water Mark (OHWM)

Potential non-wetland water resources were investigated to determine if they meet requirements for a regulated WOUS or isolated waters unit based on USACE parameters.

Ordinary High Water Mark (OHWM) boundaries were established using the definition provided in 33 CFT Part 328.3 of the Clean Water Act. The OHWM is defined as the line on the shore established by the fluctuations of water. This line can be identified by physical characteristics such as a clear, natural line on the bank, changes in the character of the soil, shelving, vegetation matted down, bent, or absent, leaf litter disturbed or washed away, sediment deposition, water staining, the presence of litter and debris, destruction of terrestrial vegetation, sediment sorting, scour, multiple observed or predicted flow events, and abrupt change in plant community.

## 5.0 REVIEWED ON-SITE CONDITIONS

### 5.1 WATER RESOURCES SUMMARY

Wetland 1. This wetland (approximately over 10 acres in total size and 0.06 acres on-site) is located outside to the south within the southwestern portion of the study area.

The wetland is a complex characterized by emergent vegetation and portions of open water. A drainage route along Deep Lake Rd connects to the wetland complex and is included in the identified boundaries. A prairie buffer separates the wetland complex from the turf building pad within the study area. The wetland complex appears to provide water flow to Sequoit Creek, west of the study area. See photos 3-7 for reference.

The wetland is identified on the NWI, Lake County Wetland Inventory, and the USGS Topographic map.

Sample points were established within and adjacent to the on-site portion of Wetland 1 to characterize the vegetation, soils, and hydrology (Exhibit G: Aerial Photograph). The on-site wetland boundaries and a portion of the drainageway along Grass Lake Rd. were demarcated with 18 pink flagged pin stakes.

The on-site portion of Wetland 1 was primarily vegetated by Sandbar Willow (*Salix interior*), Narrow-leaved Cattails (*Typha angustifolia*), Awn-Fruit Sedge (*Carex stipata*) and Dark Green Bulrush (*Scirpus atrovirens*). The mapped soil series are 530D2 Ozaukee silt loam, a non-hydric soil, and 840C2 Zurich and Ozaukee silt loams, a non-hydric soil. USDA field indicators A11: Depleted Below Dark Surface, A12: Thick Dark Surface, provided evidence of hydric soil. Saturation, geomorphic position, and the FAC-neutral test provided evidence of persistent hydrology (See Wetland Determination Data Forms).

The field investigation was done outside of the growing season. Floristic dominance was assessed by observing available seed heads, general morphology, and non-dormant vegetation. Floristic quality may need to be assessed in the spring.

## 6.0 REGULATORY STATEMENT

### 6.1 Federal Regulations

The deposition of dredge or fill materials into federally jurisdictional wetlands or Waters of the United States is regulated by the USACE under Section 404 of the Clean Water Act.

The Nationwide Permit authorizes 0.1 acre or less of low quality wetlands to be filled without mitigation. If over 0.1 acre is proposed for filling or is subject to secondary impacts, in-kind mitigation may be required at a ratio of 1.5:1, or greater. The aggregate total loss of waters of the U.S. authorized by NWP cannot exceed 0.5 acre or 300 linear feet of streambed.

Under the existing regulations, secondary impacts (both on-site and off-site) from filling also must be evaluated. Mitigation may be required at a higher rate if a project will significantly alter wetland functions such as stormwater detention, water filtration, sediment trapping, and/or wildlife habitat.

Before mitigation will be approved, reasonable proof that avoidance or minimization of wetland impacts has been attempted must be provided to the Corps.

A USACE permit is not required if the wetlands are avoided and construction erosion near a wetland is controlled.

### 6.2 Municipal and State Regulations

Lake County Watershed Development Ordinance: The Lake County Watershed Development Ordinance regulates the development of all areas within the county. Plans for development must include provisions for stormwater conveyance, and conservation of streams and channels, lakes, ponds, or wetlands that exist on the site. A soil erosion and sediment control plan must be provided. Buffer areas are required for all areas defined as “Waters of the U.S.” including isolated wetlands, lakes and ponds. Buffer areas are divided into 2 types, linear buffers and water body buffers.

Linear buffers will be designated along both sides of all channels meeting the definition of “Waters of the U.S” or “Isolated Waters of Lake County”. Minimum buffer widths are as follows:

- When the linear water body has a watershed greater than 20 acres but less than 1.0 square mile, the minimum buffer width will be 50 feet on each side of the linear water body;
- When the linear water body has a watershed greater than 1.0 square mile, the minimum buffer width will be 30 feet on each side of the linear water body;
- Linear exceptional functional value wetlands and streams with an Index of Biotic Integrity greater than 40 will have a minimum buffer width of 100 feet on each side of the linear water body.

Water body buffers will encompass all non-linear bodies of water meeting the definition of “Waters of the United States” or “Isolated Waters of Lake County”. Minimum buffer widths are as follows:

- For water bodies and wetlands greater than 1/3 acre but less than 1.0 acre in size, the minimum buffer width is 30 feet;
- For water bodies and wetlands greater than 1.0 acre but less than 2.5 acres in size, the minimum buffer width is 40 feet;
- For water bodies and wetlands greater than 2.5 acres in size, the minimum buffer width is 50 feet;
- Non-linear high quality aquatic resources shall have a minimum buffer width of 100 feet.

Mitigation for impacts to isolated wetlands is required within Lake County for:

- Wetland impacts greater than or equal to one-tenth (0.1) acres of Isolated Waters of Lake County that are high-quality aquatic resources (HOAR).
- Wetland impacts greater than or equal to one-quarter (0.25) acres of Isolated Waters of Lake County that are not high-quality aquatic resources.

Mitigation shall provide for the replacement of the Wetland environment lost to development at the following proportional rates (i.e. creation acreage to wetland acreage):

- For wetland impacts to areas that are not high-quality aquatic resources under Categories I, II and III, a minimum of 1.5:1 mitigation ratio for fully certified wetland mitigation bank credits;
- A minimum of 3:1 for wetland impacts that are high-quality aquatic resources
- A minimum of 6:1 for wetland impacts that are high-quality forested wetlands as defined in Appendix L.
- For wetland impacts to open waters that are not high-quality aquatic resources under Categories I, II, and III, a minimum of 1:1 mitigation ratio shall be required.

Illinois Department of Natural Resources Agency Action Plans for Interagency Wetlands Policy Act of 1989: The Illinois Interagency Wetlands Policy Act of 1989 is intended to ensure that there is no overall net loss of the State's existing wetland acres or their functional values resulting from State-supported activities. The Act charges State agencies with a further duty to "preserve, enhance and create wetlands where necessary to increase the quality and quantity of the State's wetland resource base."

The Interagency Wetlands Policy Act of 1989 states that any construction, land management or other activity performed by, or for which financial assistance is administered or provided by, a State agency that will result in an adverse impact to a wetland shall be subject to compliance. This includes, but is not limited to the following:

- The alteration, removal, excavation, or dredging of soil, sand, gravel, minerals, organic matter, vegetation, or naturally occurring minerals of any kind from a wetland;
- The discharge or deposit of fill material or dredged material in a wetland;
- The alteration of existing drainage characteristics, sedimentation patterns, or flood retention characteristics of a wetland;
- The disturbance of water level or water table of a wetland;
- The destruction or removal of plant life that would alter the character of a wetland, except for activities undertaken in accordance with the Illinois Noxious Weed Act;
- The transfer of State owned wetlands to any entity other than another state agency; and
- Other actions that cause or may cause adverse wetland impacts.

The Act is to be implemented through a State Wetland Mitigation Policy. The State Wetland Mitigation Policy requires preservation of wetlands as the primary objective. Where adverse wetland impacts are unavoidable, progressive levels of compensation based upon the level of impact to the existing wetland and the location of compensation wetlands are required.

Archaeological Survey Requirements: An archaeological survey may be required before a Section 404 permit will be issued for wetland impacts. The U.S. Army Corps of Engineers will make this determination as part of the permit application review. The archaeological survey must cover all areas of the study area, not wetlands only. If you already have a letter from the Illinois Historic Preservation Agency (IHPA) stating an archaeological survey is required, you should act on it because the USACE will support this notification.



## 7.0 RECOMMENDATIONS

One (1) wetland complex was identified within the study area. The overall wetland is over 10 acres in size, with approximately 0.006 acres located within the study area boundaries. In Lake County, wetlands over 2.5 acres require a minimum buffer width of 50 feet.

Based on connection with regulated waterways off-site, the Wetland 1 complex may be under USACE jurisdiction.

The U.S. Army Corps of Engineers has the final authority in determining the jurisdictional status of the wetlands identified on site. GRWA recommends that a request for jurisdictional determination be sent to the U.S. Army Corps of Engineers as soon as possible.

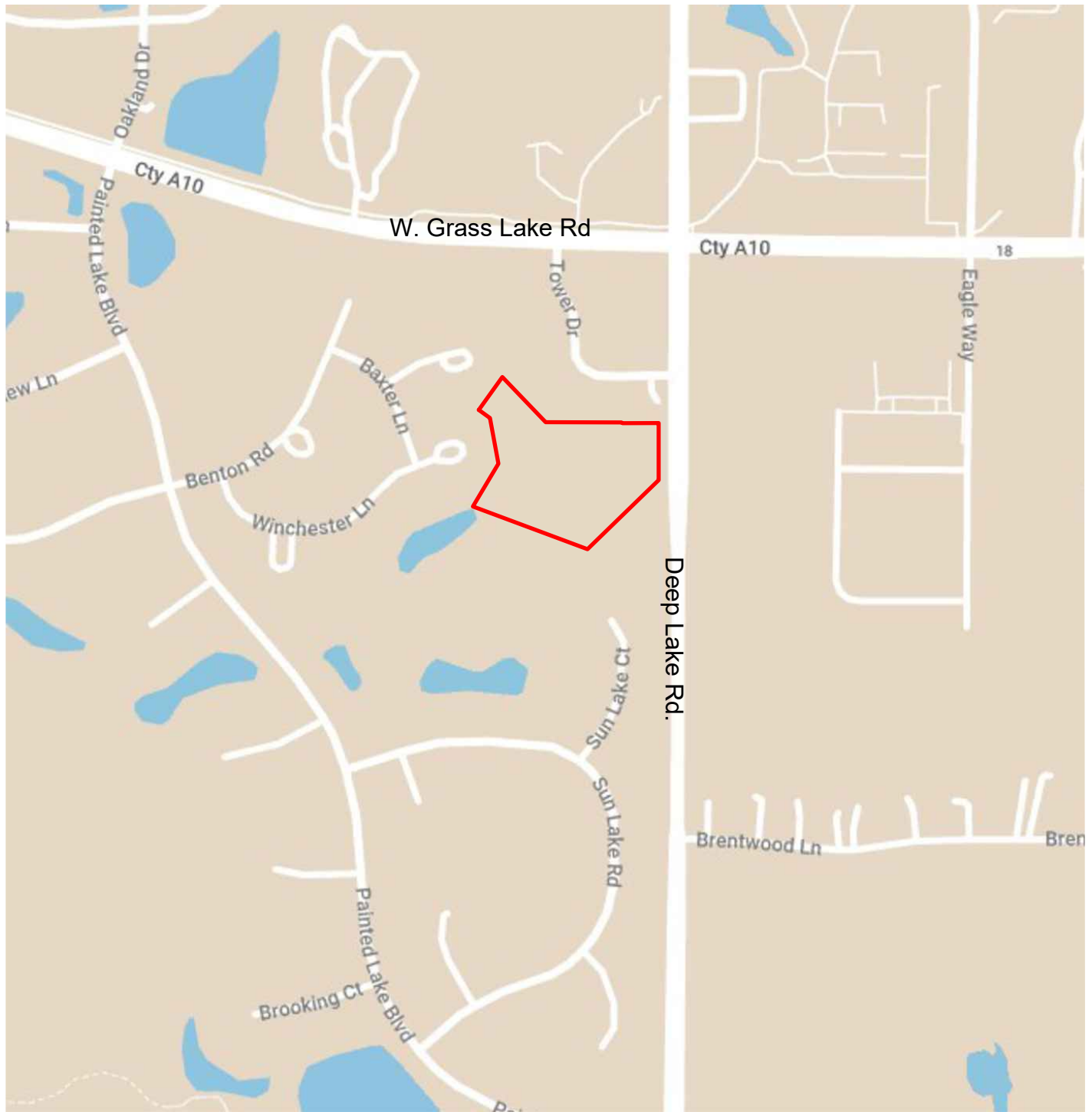
Any impacts to jurisdictional wetland, Waters of the U.S., or associated buffers will require U.S. Army Corps of Engineers and Lake County notification. GRWA can assist you with the request for jurisdictional determination, permit applications, agency negotiations, wetland design plans, and mitigation plans which may be applicable to your project. The wetland consultant should be involved during the planning and design stages of the project to avoid complications with the agencies after the plan has been drafted. Proper planning regarding wetlands can reduce delays caused by the permitting process and costly changes in site plans.

The Corps of Engineers will not perform wetland boundary verifications during the winter season. If an application for a wetland permit will be submitted to the Corps of Engineers during the winter months, we recommend that a request for concurrence of jurisdictional boundaries be sent to the Corps during the growing season. This will prevent a delay in the permitting process. GRWA is available to assist you with obtaining Corps concurrence.

## 8.0 REFERENCES

- Cowardin, L.M., Carter, V., Golet, F.D., and LaRoe, E.T., 1979, "Classification of Wetlands and Deepwater Habitats of the United States," FWA/OBS-79/31, U.S. Fish & Wildlife Service, Office of Biological Services, Washington, D.C.
- Department of Defense, Corps of Engineers, Department of the Army, November 13, 1986, Federal Register, 33 C.F.R., parts 320 through 330.
- Environmental Laboratory, 1987, "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Illinois Department of Natural Resources. "Agency Action Plans for Interagency Wetlands Policy Act of 1989." <http://dnr.state.il.us/wetlands/ch6d.htm>.
- Lake County, 1992, Lake County Watershed Development Ordinance, Revised June 11, 2013.
- Munsell Soil Color Charts. 2000. GretagMacbeth, New Windsor, New York.
- Reed, P.E., Jr., 1988, "National List of Plant Species that Occur in Wetlands: North Central (Region 3), "U.S. Fish & Wildlife Service Biol. Rep. 88(26.3). 99p.
- Swink F. and G. Wilhelm, 1994, "Plants of the Chicago Region", 4<sup>th</sup> Edition, Indianapolis: Indiana Academy of Science.
- United States Army Corps of Engineers (USACE). 1992. Clarification and interpretation of the 1987 manual. Memorandum For Distribution, Major General Arthur E. Williams, March 6, 1992.
- United States. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0), U.S. Army Engineer Research and Development Center.
- United States Department of Agriculture, Natural Resources Conservation Service, 2013, "Web Soil Survey 3.0/ National Cooperative Soil Survey." <http://websoilsurvey.nrcs.usda.gov>.
- United States Department of Agriculture, Natural Resources Conservation Service. "Field Indicators of Hydric Soils in the U.S. - Guide for Identifying and Delineating Hydric Soils". Version 6.0, 2006.
- United States Department of the Army, Corps of Engineers, and U.S. Environmental Protection Agency, "Supreme Court Ruling Concerning CWA Jurisdiction over Isolated Waters," January 19, 2001.
- United States Supreme Court, "Solid Waste Agency of Northern Cook County vs. United States Army Corps of Engineers (No. 99-1178)," January 9, 2001.
- Wetland Training Institute, Inc. (WTI). 1989. Field Guide for Delineating Wetlands: Unified Federal Method. WTI 89-1. 131pp.
- Wilhelm, G. and L. Masters. Floristic Quality Assessment Computer Program, Version 1.0. Conservation Research Institute. Elmhurst, Illinois. October 2000.

## Appendix A: Water Resource Maps (Exhibits A-G)



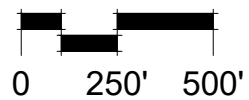
## LEGEND

PLSS: NE S28 T46N R10E

Latitude: 42.439678

Longitude: -88.063754

Study Area



SCALE: 1"=500'



NORTH

Coordinates provided by Earth Point for Google Earth



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## Grass Lake Rd & Deep Lake Rd Lake Villa, IL

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## LOCATION MAP

Provided by: Google Maps

## EXHIBIT A

Created by: MGK

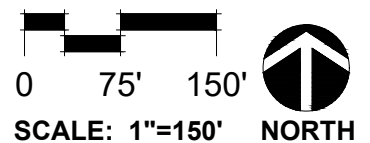
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## LEGEND

 Estuarine and Marine Deepwater	 Freshwater Pond	 Study Area
 Estuarine and Marine Wetland	 Lake	
 Freshwater Emergent Wetland	 Other	
 Freshwater Forested/Shrub Wetland	 Riverine	



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## Grass Lake Rd & Deep Lake Rd Lake Villa, IL

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## NATIONAL WETLANDS INVENTORY MAP

Provided by: U.S. Fish and Wildlife Service

## EXHIBIT B

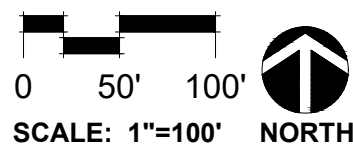
Created by: MGK Checked by:





## LEGEND

- Study Area
- Lake County Wetland
- ADvanced IDentification Wetlands



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Lake Villa, IL

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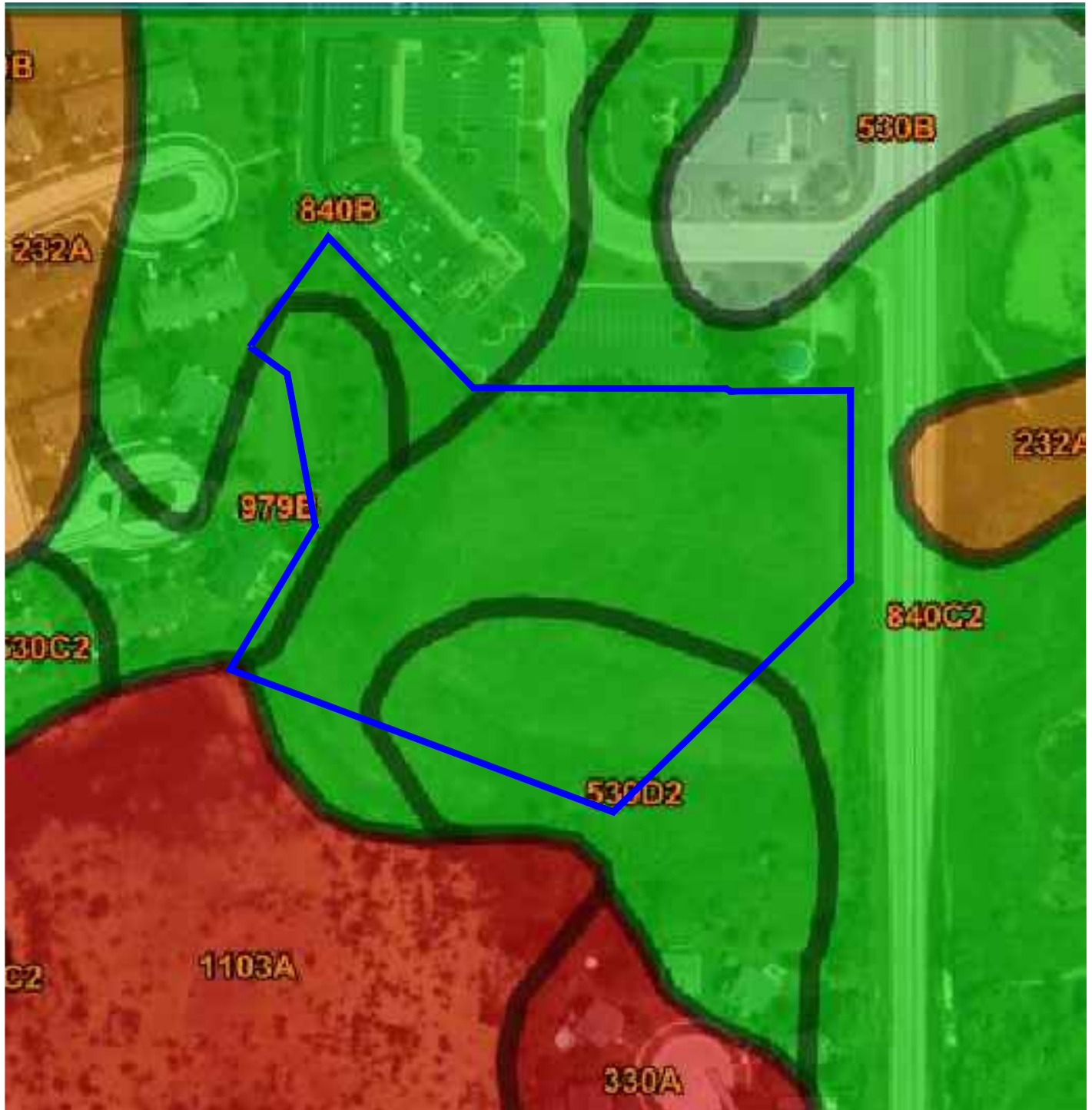
LAKE CO. WETLAND  
INVENTORY MAP

Provided by: Lake County Parcel Viewer

EXHIBIT C

Created by: MGK Checked by:

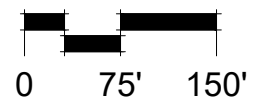




## LEGEND

- Hydric Soil (100%)
- Predominantly Hydric (66-99%)
- Partially Hydric (33-65%)
- Predominantly Non-hydric (1-32%)
- Non-hydric (0%)

Study Area



SCALE: 1"=150'



NORTH



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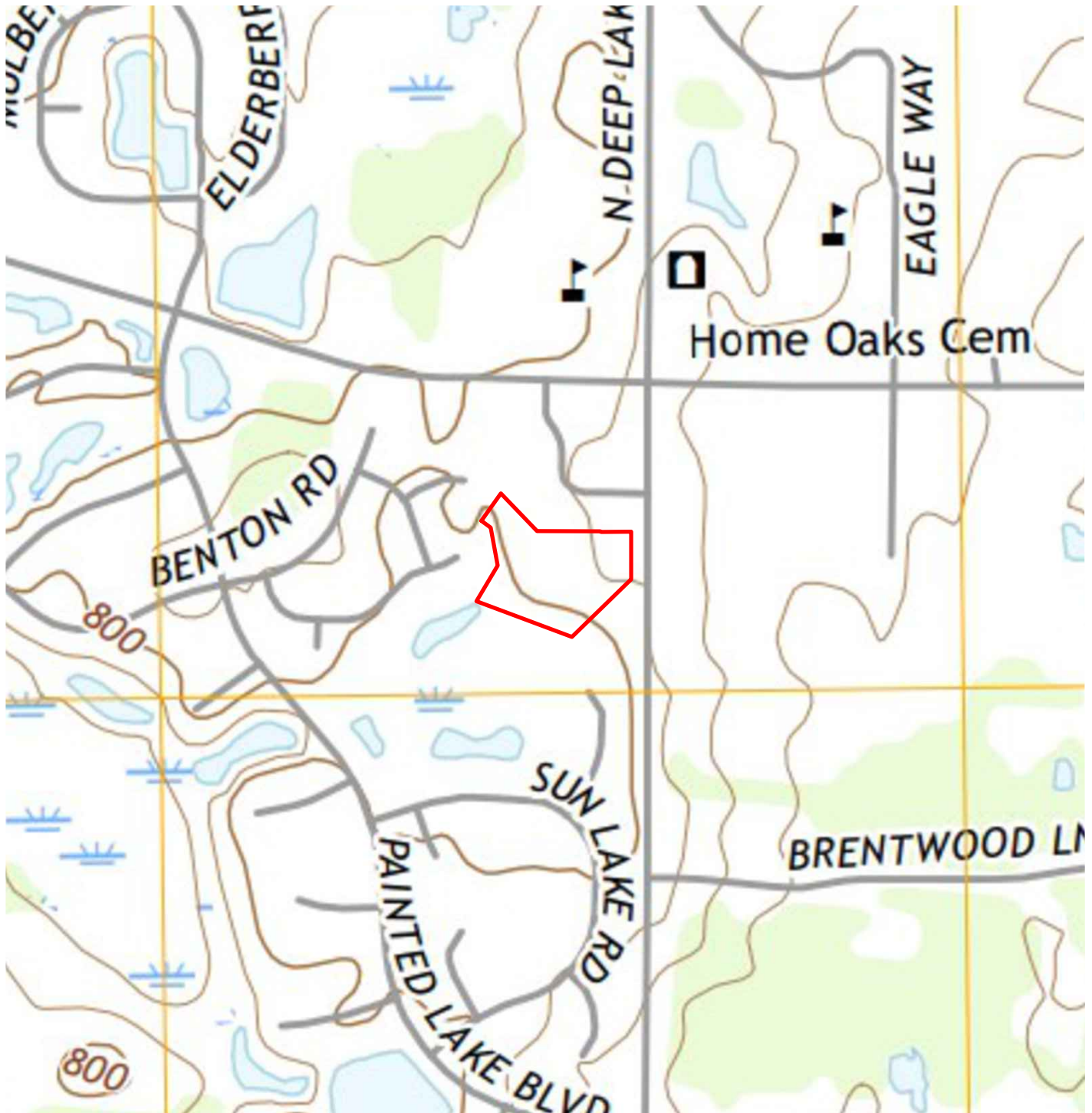
## SOIL SURVEY MAP

Web Soil Survey 3.0 (Lake County)  
USDA Natural Resources Conservation Service

## EXHIBIT D

Created by: MGK

Checked by:

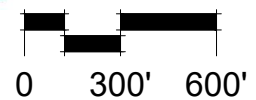


## LEGEND

Perennial Stream	
Perennial River	
Intermittent Stream	
Intermittent River	

Marsh or swamp	
Submerged marsh	
Wooded marsh or swamp	
Submerged wooded marsh or swamp	

Perennial Lake/Pond	
Intermittent Lake/Pond	
Study Area	



SCALE: 1"=600'



NORTH



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Lake Villa, IL

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USGS TOPOGRAPHIC MAP

Provided by: USGS Topographic (Antioch)

EXHIBIT E

Created by: MGK

Checked by:





## LEGEND

Regulatory Floodway



Special Floodway



1% Annual Chance Flood Hazard



0.2% Annual Chance Flood Hazard



Area of Undetermined Flood Hazard



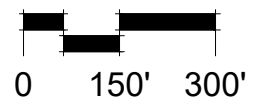
Future Conditions 1% Annual Chance Flood Hazard



Area with Reduced Risk Due to Levee



Study Area



SCALE: 1"=300'



NORTH



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FLOOD INSURANCE MAP

Provided by: Federal Emergency Management Agency

EXHIBIT F

Created by: MGK

Checked by:





# LEGEND

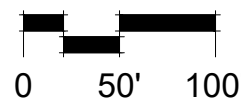
Study Area - 4.97 Acres

Flagged Wetland Boundaries

Off-site Wetland Boundaries (not flagged)



Sample Points A-F



SCALE: 1"=100'



NORTH

Provided by: Google Earth - Image date 4/6/2017



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Grass Lake Rd & Deep Lake Rd  
Lake Villa, IL

MA2242  
Manhard Consulting, LTD.

## WATER RESOURCES SUMMARY

DATE OF SITE VISIT: 11/3/2022

## EXHIBIT G

Created by: MGK

Checked by:

## Appendix B: Site Photographs (Exhibit H)





*Photo 1: View of turf field that encompasses the majority of the site (facing south).*



*Photo 2: View of the southern edge of the turf field and the start of the wetland off-site to the south (facing southwest).*



GARY R. WEBER  
ASSOCIATES, INC.

Grass Lake Rd & Deep Lake Rd  
Lake Villa, IL, 60046

MA2242  
Manhard Consulting, LTD.

SITE PHOTOGRAPHS

11/3/2022

EXHIBIT H





*Photo 3: View of the on-site portion of Wetland 1 and the west stormwater culvert that feeds into it (facing west).*



*Photo 4: Base of prairie slope and edge of wetland (facing north).*



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*Photo 5: Overview of open water and emergent north edge of wetland. Adjacent to prairie slope (facing west).*



*Photo 6: Stormwater culvert under Deep Lake Rd. Flagged as part of WL1 (facing north).*



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*Photo 7: View of the drainage swale extending from the Deep Lake Rd culvert. Flagged as part of WL1 (facing south).*



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EXHIBIT H



## Appendix C: Wetland Determination Data Forms

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp: 11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>MA2242 / Grass Lake Rd &amp; Deep Lake Rd</u>	City/County: <u>Lake Villa / Lake County</u>	Sampling Date: <u>11/3/2022</u>
Applicant/Owner: <u>Manhard Consulting, LTD.</u>	State: <u>IL</u>	Sampling Point: <u>A</u>
Investigator(s): <u>Lisa Pajon</u>	Section, Township, Range: <u>NE S28 T46N R10E</u>	
Landform (hillside, terrace, etc.): _____		Local relief (concave, convex, none): _____
Slope (%): _____	Lat: <u>42.439678</u>	Long: <u>-88.063754</u> Datum: _____
Soil Map Unit Name: <u>840C2 Zurich and Ozaukee silt loams</u>		NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No _____ (If no, explain in Remarks.)		
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> 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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: In ditch near road	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Cornus racemosa</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">10 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Phalaris arundinacea</u></td><td></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Typha angustifolia</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>3. <u>Symphyotrichum novae-angliae</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>4. <u>Solidago altissima</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1. _____					2. _____							=Total Cover			<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>Dominance Test worksheet:</b>          Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)          Total Number of Dominant Species Across All Strata: <u>4</u> (B)          Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>Prevalence Index worksheet:</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>230</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.09</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>Hydrophytic Vegetation Indicators:</b>          _____ 1 - Rapid Test for Hydrophytic Vegetation  <u>X</u> 2 - Dominance Test is &gt;50%  <u>X</u> 3 - Prevalence Index is ≤3.0<sup>1</sup>          _____ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)          _____ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="border: 1px solid black; padding: 5px;"> <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____       </div>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>230</u> (B)	Prevalence Index = B/A = <u>2.09</u>	
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## SOIL

Sampling Point: A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix	Redox Features				Texture	Remarks	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 2/1	100					Loamy/Clayey	Small Gravel, Wet, Silty
14-20	10YR 4/2	70	10YR 2/1	20		M	Loamy/Clayey	
			10YR 5/4	10	C	M		Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils <sup>3</sup> :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Coast Prairie Redox (A16)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Redox Depressions (F8)				

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):	Hydric Soil Present?	Yes	No
Type: _____ Depth (inches): _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Remarks: \_\_\_\_\_

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="3"/>
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: MA2242 / Grass Lake Rd & Deep Lake Rd City/County: Lake Villa / Lake County Sampling Date: 11/3/2022  
Applicant/Owner: Manhard Consulting, LTD. State: IL Sampling Point: B  
Investigator(s): Lisa Pajon Section, Township, Range: NE S28 T46N R10E  
Landform (hillside, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_  
Slope (%): \_\_\_\_\_ Lat: 42.439678 Long: -88.063754 Datum: \_\_\_\_\_  
Soil Map Unit Name: 840C2 Zurich and Ozaukee silt loams NWI classification: \_\_\_\_\_  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Turf upland point	

**VEGETATION – Use scientific names of plants.**

<b>Tree Stratum</b> (Plot size: <u>30</u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover	<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>80</u> x 3 = <u>240</u> FACU species <u>30</u> x 4 = <u>120</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>110</u> (A) <u>360</u> (B) Prevalence Index = B/A = <u>3.27</u>
<b>Herb Stratum</b> (Plot size: <u>5</u> ) 1. <u>Poa pratensis</u> 70 Yes FAC 2. <u>Dactylis glomerata</u> 20 No FACU 3. <u>Taraxacum officinale</u> 10 No FACU 4. <u>Plantago major</u> 10 No FAC 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 110 =Total Cover	<b>Hydrophytic Vegetation Indicators:</b> ____ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% ____ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Woody Vine Stratum</b> (Plot size: <u>30</u> ) 1. _____ 2. _____ =Total Cover	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
Remarks: (Include photo numbers here or on a separate sheet.)	

## SOIL

Sampling Point: B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 2/1	100					Loamy/Clayey	Silty
6-10	2.5Y 4/4	80	10YR 2/1	20			Loamy/Clayey	Gravel

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
---------------------------------------------------------------------------------	---------------------------------------------------

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No Hydro

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp: 11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: MA2242 / Grass Lake Rd & Deep Lake Rd      City/County: Lake Villa / Lake County      Sampling Date: 11/3/2022  
 Applicant/Owner: Manhard Consulting, LTD.      State: IL      Sampling Point: C  
 Investigator(s): Lisa Pajon      Section, Township, Range: NE S28 T46N R10E  
 Landform (hillside, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): \_\_\_\_\_ Lat: 42.439678      Long: -88.063754      Datum: \_\_\_\_\_  
 Soil Map Unit Name: 530D2 Ozaukee silt loam      NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year?    Yes X    No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed?    Are "Normal Circumstances" present?    Yes X    No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic?    (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?    Yes <u>X</u> No _____ Hydric Soil Present?    Yes <u>X</u> No _____ Wetland Hydrology Present?    Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: In wetland	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%;"> <tr> <td style="width: 35%;"> <b>Tree Stratum</b> (Plot size: <u>30</u> )             </td> <td style="width: 15%; text-align: center;">Absolute % Cover</td> <td style="width: 15%; text-align: center;">Dominant Species?</td> <td style="width: 35%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Salix nigra</u></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">40 =Total Cover</td><td></td><td></td></tr> </table> <table style="width: 100%;"> <tr> <td style="width: 35%;"> <b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> )             </td> <td style="width: 15%; text-align: center;">Absolute % Cover</td> <td style="width: 15%; text-align: center;">Dominant Species?</td> <td style="width: 35%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Salix interior</u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">30 =Total Cover</td><td></td><td></td></tr> </table> <table style="width: 100%;"> <tr> <td style="width: 35%;"> <b>Herb Stratum</b> (Plot size: <u>5</u> )             </td> <td style="width: 15%; text-align: center;">Absolute % Cover</td> <td style="width: 15%; text-align: center;">Dominant Species?</td> <td style="width: 35%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Carex stipata</u></td><td style="text-align: center;">90</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. <u>Phalaris arundinacea</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">100 =Total Cover</td><td></td><td></td></tr> </table> <table style="width: 100%;"> <tr> <td style="width: 35%;"> <b>Woody Vine Stratum</b> (Plot size: <u>30</u> )             </td> <td style="width: 15%; text-align: center;">Absolute % Cover</td> <td style="width: 15%; text-align: center;">Dominant Species?</td> <td style="width: 35%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">=Total Cover</td><td></td><td></td></tr> </table>	<b>Tree Stratum</b> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Salix nigra</u>	40	Yes	OBL	2. _____				3. _____				4. _____				5. _____				40 =Total Cover				<b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Salix interior</u>	30	Yes	FACW	2. _____				3. _____				4. _____				5. _____				30 =Total Cover				<b>Herb Stratum</b> (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Carex stipata</u>	90	Yes	OBL	2. <u>Phalaris arundinacea</u>	10	No	FACW	3. _____				4. _____				5. _____				6. _____				7. _____				8. _____				9. _____				10. _____				100 =Total Cover				<b>Woody Vine Stratum</b> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. _____				2. _____				=Total Cover				<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Dominance Test worksheet:</b>          Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)          Total Number of Dominant Species Across All Strata: <u>3</u> (B)          Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>130</u></td> <td>x 1 = <u>130</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>170</u> (A)</td> <td><u>210</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.24</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Hydrophytic Vegetation Indicators:</b>  <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation  <u>X</u> 2 - Dominance Test is &gt;50%  <u>X</u> 3 - Prevalence Index is ≤3.0<sup>1</sup>  <u>  </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="border: 1px solid black; padding: 5px;"> <b>Hydrophytic Vegetation Present?</b>    Yes <u>X</u>    No _____       </div>	Total % Cover of:	Multiply by:	OBL species <u>130</u>	x 1 = <u>130</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>170</u> (A)	<u>210</u> (B)	Prevalence Index = B/A = <u>1.24</u>	
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Remarks: (Include photo numbers here or on a separate sheet.)																																																																																																																																									

## SOIL

Sampling Point: C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 2/1	100					Loamy/Clayey	Small Gravel, Wet, Silty
14-20	10YR 4/2	70	10YR 2/1	20			Loamy/Clayey	
			10YR 5/4	10	C	M		Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Redox Depressions (F8)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):		Hydric Soil Present?	
Type: _____		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Depth (inches): _____			

Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
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<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations:				Wetland Hydrology Present?	
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____		
(includes capillary fringe)					

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

Remarks:



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: MA2242 / Grass Lake Rd & Deep Lake Rd City/County: Lake Villa / Lake County Sampling Date: 11/3/2022  
Applicant/Owner: Manhard Consulting, LTD. State: IL Sampling Point: D  
Investigator(s): Lisa Pajon Section, Township, Range: NE S28 T46N R10E  
Landform (hillside, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_  
Slope (%): \_\_\_\_\_ Lat: 42.439678 Long: -88.063754 Datum: \_\_\_\_\_  
Soil Map Unit Name: 840C2 Zurich and Ozaukee silt loams NWI classification: \_\_\_\_\_  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Center of slope	

**VEGETATION – Use scientific names of plants.**

<b>Tree Stratum</b> (Plot size: <u>30</u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover	<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>100</u> (A) <u>410</u> (B) Prevalence Index = B/A = <u>4.10</u>
<b>Herb Stratum</b> (Plot size: <u>5</u> ) 1. <u>Sorghastrum nutans</u> 45 Yes FACU 2. <u>Solidago altissima</u> 30 Yes FACU 3. <u>Baptisia alba</u> 15 No FACU 4. <u>Solidago ptarmicoides</u> 5 No UPL 5. <u>Silphium laciniatum</u> 5 No UPL 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 100 =Total Cover	<b>Hydrophytic Vegetation Indicators:</b> 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Woody Vine Stratum</b> (Plot size: <u>30</u> ) 1. _____ 2. _____ =Total Cover	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
Remarks: (Include photo numbers here or on a separate sheet.)	

## SOIL

Sampling Point:     D    

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 2/1	100					Loamy/Clayey	Small gravel, silty
14-20	10YR 4/2	70	10YR 2/1	20		M	Loamy/Clayey	
			10YR 5/4	10	C	M		Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Same hydric soil but very dry in top 10"

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No hydro

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>MA2242 / Grass Lake Rd &amp; Deep Lake Rd</u>	City/County: <u>Lake Villa / Lake County</u>	Sampling Date: <u>11/3/2022</u>
Applicant/Owner: <u>Manhard Consulting, LTD.</u>	State: <u>IL</u>	Sampling Point: <u>E</u>
Investigator(s): <u>Lisa Pajon</u>	Section, Township, Range: <u>NE S28 T46N R10E</u>	
Landform (hillside, terrace, etc.): _____	Local relief (concave, convex, none): _____	
Slope (%): _____	Lat: <u>42.439678</u>	Long: <u>-88.063754</u>
	Datum: _____	
Soil Map Unit Name: <u>840C2 Zurich and Ozaukee silt loams</u>	NWI classification: _____	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>X</u> No _____ (If no, explain in Remarks.)		
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> 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 <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present?                      Yes <u>X</u> No _____	
Wetland Hydrology Present?            Yes <u>X</u> No _____	
Remarks: In wetland at edge of cattails	

**VEGETATION – Use scientific names of plants.**

<b>Tree Stratum</b> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
=Total Cover			
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> )			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
=Total Cover			
<b>Herb Stratum</b> (Plot size: <u>5</u> )			
1. <u>Typha angustifolia</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>
2. <u>Scirpus atrovirens</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>
3. <u>Carex stipata</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
=Total Cover			
<b>Woody Vine Stratum</b> (Plot size: <u>30</u> )			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
=Total Cover			
Remarks: (Include photo numbers here or on a separate sheet.)			

**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 <u>100</u>	x 1 = <u>100</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>100</u> (B)
Prevalence Index = B/A = <u>1.00</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting  
data in Remarks or on a separate sheet)  
Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must  
be present, unless disturbed or problematic.

**Hydrophytic  
Vegetation  
Present?**                      Yes X    No \_\_\_\_\_

## SOIL

Sampling Point: E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 2/1	98	10YR 4/6	2	C	M	Loamy/Clayey	Gravel and Debris in Top 8"
8-20	10YR 4/2	70	10YR 2/1	20	D	M	Loamy/Clayey	
			10YR 5/4	10	C	M		Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Remarks:

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____    No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes _____    No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes _____    No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp: 11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>MA2242 / Grass Lake Rd &amp; Deep Lake Rd</u>	City/County: <u>Lake Villa / Lake County</u>	Sampling Date: <u>11/3/2022</u>
Applicant/Owner: <u>Manhard Consulting, LTD.</u>	State: <u>IL</u>	Sampling Point: <u>F</u>
Investigator(s): <u>Lisa Pajon</u>	Section, Township, Range: <u>NE S28 T46N R10E</u>	
Landform (hillside, terrace, etc.): _____	Local relief (concave, convex, none): _____	
Slope (%): _____	Lat: <u>42.439678</u>	Long: <u>-88.063754</u>
Datum: _____		
Soil Map Unit Name: <u>530D2 Ozaukee silt loam</u>	NW1 classification: _____	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>X</u> No _____ (If no, explain in Remarks.)		
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> 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 <u>X</u> Hydric Soil Present?    Yes <u>X</u> No _____ Wetland Hydrology Present?    Yes _____    No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____    No <u>X</u>
Remarks: On slope north of C	

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
1. _____																					
2. _____																					
3. _____																					
4. _____																					
5. _____																					
		=Total Cover																			
Sapling/Shrub Stratum	(Plot size: <u>15</u> )				<b>Prevalence Index worksheet:</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>370</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.08</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>120</u> (A)	<u>370</u> (B)	Prevalence Index = B/A = <u>3.08</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>60</u>	x 2 = <u>120</u>																				
FAC species <u>10</u>	x 3 = <u>30</u>																				
FACU species <u>30</u>	x 4 = <u>120</u>																				
UPL species <u>20</u>	x 5 = <u>100</u>																				
Column Totals: <u>120</u> (A)	<u>370</u> (B)																				
Prevalence Index = B/A = <u>3.08</u>																					
1. <u>Salix interior</u>		<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Pyrus calleryana</u>		<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
3. _____																					
4. _____																					
5. _____																					
		<u>20</u> =Total Cover																			
Herb Stratum	(Plot size: <u>5</u> )				<b>Hydrophytic Vegetation Indicators:</b>  <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  </u> 2 - Dominance Test is >50% <u>  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Equisetum hyemale</u>		<u>50</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Solidago altissima</u>		<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Sorghastrum nutans</u>		<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Ratibida pinnata</u>		<u>10</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Panicum virgatum</u>		<u>10</u>	<u>No</u>	<u>FAC</u>																	
6. _____																					
7. _____																					
8. _____																					
9. _____																					
10. _____																					
		<u>100</u> =Total Cover																			
Woody Vine Stratum	(Plot size: <u>30</u> )				<b>Hydrophytic Vegetation Present?</b> Yes _____    No <u>X</u>																
1. _____																					
2. _____																					
		=Total Cover																			
Remarks: (Include photo numbers here or on a separate sheet.)																					

## SOIL

Sampling Point: F

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
No hydro			

## Appendix D: Threatened and Endangered Species Consultation



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

November 14, 2022

Lisa Pajon  
Natural Resources Consultant  
402 W. Liberty Drive  
Wheaton, IL 60187

**RE: Grass Lake Rd & Deep Lake Rd ment  
Consultation Program  
EcoCAT Review #2306326  
Lake County**

Dear Mrs. Pajon:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed action consists of the construction of a development with associated stormwater and utilities (42.440°, -88.069°).

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

## **Illinois Natural Areas Inventory (INAI) Sites**

**Deep Lake  
Loon Lake  
Sun Lake**

## **Illinois Nature Preserves Commission Lands**

**Sun Lake Nature Preserve**

## **State Threatened or Endangered Species**

**Blanding's Turtle (*Emydoidea blandingii*)  
King Rail (*Rallus elegans*)  
Least Bittern (*Ixobrychus exilis*)**

Due to the project scope and proximity to protected resources the Department recommends the following actions be taken to avoid adversely impacting listed species in the vicinity of the project:

**Deep Lake INAI, Loon Lake INAI, Sun Lake INAI, & Sun Lake Nature Preserve**

The Department has determined adverse impacts to these protected natural areas are unlikely.

### **Blanding's Turtle**

To avoid adverse impacts to Blanding's Turtles, the Department recommends the following:

- All on-site personnel should be educated about this species and be instructed to stop work immediately and contact the Department (Brad Semel, Natural Heritage Division, 815-675-2386 ext. 216) if they are encountered in the project area. Fliers with photos of adult and juvenile Blanding's turtles, and life-history information, should be distributed to personnel.
- Exclusionary fencing should be installed around the work area, or at a minimum, to partition off any wetland areas before the active season (March 1st - November 1st). Exclusionary fencing should be trenched into the ground (a minimum of 4 inches) and inspected daily for Blanding's turtles. Fencing should be installed with turn-arounds at open ends and at any access openings needed in the fencing, in order to redirect animals away from openings.
- Excavations should be inspected daily for trapped wildlife and safely covered overnight. Soil or other potential turtle nesting medium stockpiles should also have exclusionary fencing installed around the perimeter to discourage turtle nesting and potential harm.
- A permanent exclusionary barrier between any wetlands and the project site should be incorporated into project plans to prevent turtles from entering areas where they may be adversely impacted by daily activity. The barrier should include turn-arounds where needed and be trenched into the soil a minimum of 4 inches.
- If erosion control blanket is to be used, the Department also recommends that wildlife-friendly plastic-free blanket be used around wetlands and adjacent to natural areas, if not feasible to implement project wide, to prevent the entanglement of native wildlife.

### **King Rail & Least Bittern**

To avoid adverse impacts to King Rail and Least Bittern, the Department recommends the following:

- A 50-foot buffer should be maintained on all wetlands.
- When feasible, work near wetlands should be avoided between April 1<sup>st</sup> and September 30<sup>th</sup> to avoid the prime nesting and fledging season for these protected bird species.
- Any required night lighting should follow International Dark-Sky Association (IDA) guidance to minimize the effect of light pollution on wildlife; including shielding fixtures so no light travels upward, using "warm-white" or filtered LEDs (CCT < 3,000 K) to minimize blue emission, and avoiding over-lighting.

Given the above recommendations are adopted the Department has determined that impacts to these protected resources are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

*In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.*

Consultation on the part of the Department is closed unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed



action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action 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 project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

This letter does not serve as permission to take any listed or endangered species. As a reminder, no take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the *Illinois Endangered Species Act*, the *Fish and Aquatic Life Act*, the *Wildlife Code* and other applicable authority.

The Department also offers the following conservation measures be considered to help protect native wildlife and enhance natural areas in the project area:

- Good housekeeping practices should be implemented and maintained during and after construction to prevent trash and other debris from inadvertently blowing or washing into nearby natural areas.
- Post construction invasive species control should be considered, especially near any natural areas.

Please contact me with any questions about this review.

Sincerely,



Bradley Hayes  
Manager, Impact Assessment Section  
Division of Real Estate Services and Consultation  
Office of Realty & Capital Planning  
Illinois Department of Natural Resources  
One Natural Resources Way  
Springfield, IL 62702  
Bradley.Hayes@Illinois.gov  
Phone: (217) 782-0031

**Applicant:** Gary R. Weber Associates, Inc.  
**Contact:** Lisa Pajon  
**Address:** 402 W. Liberty Drive  
Wheaton, IL 60187

**IDNR Project Number:** 2306326  
**Date:** 11/10/2022

**Project:** Grass Lake Rd & Deep Lake Rd  
**Address:** Deep Lake Road, Lake Villa

**Description:** Proposed above ground development with associated stormwater and utilities

### Natural Resource Review Results

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

Deep Lake INAI Site  
Loon Lake INAI Site  
Sun Lake INAI Site  
Sun Lake Nature Preserve  
Blanding's Turtle (*Emydoidea blandingii*)  
King Rail (*Rallus elegans*)  
Least Bittern (*Ixobrychus exilis*)

**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:** Lake

**Township, Range, Section:**  
46N, 10E, 28



**IL Department of Natural Resources  
Contact**  
Bradley Hayes  
217-785-5500  
Division of Ecosystems & Environment

**Government Jurisdiction**  
U.S. Army Corps of Engineers

#### 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.

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

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## **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.

November 21, 2022

Matt Eagle  
Manhard Consulting, Ltd.  
116 W. Illinois Street.  
Chicago, IL 60604

RE: USFWS Threatened and Endangered Species IPaC Review Summary  
Grass Lake Rd & Deep Lake Rd, Lake Cook County, Illinois

Dear Mr. Eagle,

Gary R. Weber Associates Inc. reviewed the U.S. Fish and Wildlife Information for Planning and Consultation (IPaC) website on November 10, 2022 for federally listed threatened and endangered species. The IPaC program utilizes known or expected range of species, as well as additional areas outside of the range in which activities may indirectly affect a species. This review represents an informal consultation and further coordination with USFWS may be required for a formal consultation.

According to the IPaC consultation, seven (7) species are thought to be present in this location of Lake County (see below). Based on the 11/3/2022 site review, potential habitat for these species is not present within the project area and therefore would not negatively affect threatened or endangered species.

Site Summary:

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The study area (approximately 4.97-acres) consists of a turf field with a lightly a scrub-shrub border to the north and east. The field is an elevated building pad that was constructed around 1999.

The vegetated areas are entirely maintained, with mowed turf throughout the main area, and a narrow scrub-shrub community at the north boundary. The scrub-shrub consists of a few large trees and dense dogwood around the basin.

Habitat and Requirements:

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Threatened – Northern long-eared bat (*Myotis septentrionalis*): No Affect

According to the USFWS guidance, conditions suitable for the Northern long-eared bat (NLEB) includes wooded areas characterized by the presence of roosting trees and an herbaceous understory community. The bats will spend the summer foraging and roosting before overwintering in caves and mines from late October to April. Summer roosting trees required by the bats are characterized by mature trees containing potential roosting features (PRF) such as peeling and crevice forming bark, cavities, and dead snags. Foraging can occur in a variety of habitats including upland forests, edge habitats, wetlands, riparian buffers, and floodplain forests. An open, herbaceous understory is beneficial to supporting insect abundance for the bats to feed on.

The current site conditions contain few large trees that contain PRF, however no canopy is present and adjacent areas are either paved or maintained turf. These conditions are not suitable as habitat for the NLEB.

Endangered – Piping Plover (*Charadrius melodus*): No Affect

According to USFWS guidance, the piping plover is a summer resident that inhabits shoreline and coastal areas of the Great Lakes during the summer breeding season. The plover is a shorebird that prefers breeding habitat consisting of open, sparsely vegetated areas with alkali or unconsolidated substrates. Foraging habitat consist of mud flats or ephemeral pools with abundant vertebrate populations. Critical habitat has been designated for this species along the Great Lakes shoreline.

Current site conditions are not suitable for the Piping Plover.

Threatened – Red Knot (*Calidris canutus rufa*): No Affect

According to USFWS guidance, the red knot is primarily occurs in Illinois during migration in the spring and fall. Spring migrants arrive in May and fall migrants arrive in July. The red knot is a shorebird that typically uses sandy, open shoreline along Lake Michigan for foraging, but has also been observed at water reservoirs.

Current site conditions are not suitable for the Red Knot.

Endangered – Karner Blue Butterfly (*Lycaeides melissa samuelis*): No Affect

According to USFWS guidance, the karner blue butterfly require environments characterized by dry, sandy areas with open woodlands capable of supporting Wild Blue Lupine populations. The lupine is the only food source for larval butterflies as well as required for adult oviposition. Foraging adults require diverse blooming nectar resources.

Current site conditions are not suitable for the Karner Blue Butterfly due to lack of lupine presence.

Endangered – Monarch Butterfly (*Danaus plexippus*): No Affect

According to USFWS Species Status Assessment Report, Monarch Butterflies require environments containing both diverse blooming nectar resources for foraging during breeding and migration, and sufficient milkweed (*Asclepias spp.*) populations for oviposition and larval feeding.

Due to mowing activity and lack of wildflower presence, current site conditions are not suitable for the Monarch Butterfly.

Threatened – Eastern Prairie Fringed Orchid (*Platanthera leucophaea*): No Affect

According to USFWS guidance, the eastern prairie fringed orchid (EPFO) occurs in a wide variety of habitats. It requires full sun for optimum growth and can occur in tall grass silt-loam or sand prairies, sedge meadows, and fens. It is adaptive to natural patch disturbance and other dynamic disturbance regimes. It is occasionally found in successional environments.

Current site conditions are not suitable for the EPFO as there are no fens, sedge meadows, or sand prairies.

Endangered – Pitcher's Thistle (*Cirsium pitcher*): No Affect

According to USFWS guidance, the Pitcher's Thistle occurs in open sand dunes and beach ridges along Lake Michigan. This species was once extirpated in Illinois but has been reintroduced in Lake County.

Current site conditions are not suitable for the Pitcher's thistle.





## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

Chicago Ecological Service Field Office  
U.S. Fish And Wildlife Service Chicago Ecological Services Office  
230 South Dearborn St., Suite 2938  
Chicago, IL 60604-1507  
Phone: (312) 485-9337

In Reply Refer To:

November 10, 2022

Project Code: 2023-0014834

Project Name: Grass Lake Rd & Deep Lake Rd

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Additionally, please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S. District Court for the District of Columbia has ordered the Service to complete a new final listing

determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to be addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and

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recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **Chicago Ecological Service Field Office**

U.s. Fish And Wildlife Service Chicago Ecological Services Office  
230 South Dearborn St., Suite 2938  
Chicago, IL 60604-1507  
(312) 485-9337

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## Project Summary

Project Code: 2023-0014834

Project Name: Grass Lake Rd & Deep Lake Rd

Project Type: New Constr - Above Ground

Project Description: Proposed above ground development with associated stormwater and utilities.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.439811750000004,-88.06377054473049,14z>



Counties: Lake County, Illinois

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## Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Endangered
Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

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## Insects

NAME	STATUS
Karner Blue Butterfly <i>Lycaeides melissa samuelis</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6656">https://ecos.fws.gov/ecp/species/6656</a>	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>Follow the guidance provided at <a href="https://www.fws.gov/midwest/endangered/section7/s7process/plants/epfos7guide.html">https://www.fws.gov/midwest/endangered/section7/s7process/plants/epfos7guide.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/601">https://ecos.fws.gov/ecp/species/601</a>	Threatened
Pitcher's Thistle <i>Cirsium pitcheri</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8153">https://ecos.fws.gov/ecp/species/8153</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **IPaC User Contact Information**

Agency: Gary R Weber Associates  
Name: Michael Kellenberger  
Address: 402 W. Liberty Drive  
City: Wheaton  
State: IL  
Zip: 60187  
Email: mkellenberger@grwainc.com  
Phone: 6306687179

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LAND PLANNING   ECOLOGICAL CONSULTING  
LANDSCAPE ARCHITECTURE

402 W. LIBERTY DRIVE   WHEATON, ILLINOIS 60187  
TELEPHONE: 630-668-7197   FACSIMILE: 630-668-9693

VILLAGE OF LAKE VILLA

---

RESOLUTION NO. 2023-04-01

A CORPORATE RESOLUTION DESIGNATING SIGNATORIES  
ON DEPOSITORY ACCOUNTS OF THE VILLAGE OF LAKE VILLA

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ADOPTED BY THE  
BOARD OF TRUSTEES  
OF THE  
VILLAGE OF LAKE VILLA, ILLINOIS  
THIS 3<sup>th</sup> DAY OF APRIL, 2023

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A CORPORATE RESOLUTION DESIGNATING SIGNATORIES  
ON DEPOSITORY ACCOUNTS OF THE VILLAGE OF LAKE VILLA

WHEREAS, the Corporate Authorities of the Village of Lake Villa, Lake County, Illinois (sometimes referred to herein as “the Village”), have currently designated and authorized certain banks and other financial institutions as depositories of funds of the Village and funds which may come into the possession and/or control of the Village which may be deposited and invested to the credit of the Village and/or other beneficiaries thereof by those designated officers, agents, or employees of the Village; and

WHEREAS, the Village has previously passed various resolutions (all such previously adopted resolutions collectively referred to herein as the “prior resolutions designating authorized signatories”) whereby the Village authorized and designated certain Village officials to sign and/or endorse checks, drafts, and orders on behalf of the Village, and the Village now desires to repeal all of the aforesaid prior resolutions designating authorized signatories, and any other similar resolution previously adopted by the Village relative to the designation of Village officials who are authorized to sign and/or endorse checks, drafts, notes, bills of exchange, orders (including orders or directories in informal or letter form), securities, and other instruments on behalf of the Village, including but not limited to the authority to execute, establish, and/or modify accounts and any related documents with any depositories designated and authorized by the Village; and

WHEREAS, the Corporate Authorities of the Village desire to designate those certain Village officials as set forth in this Resolution as authorized signatories on behalf of the Village to sign and/or endorse checks, drafts, notes, bills of exchange, orders (including orders or directories in informal or letter form), securities, and other instruments on behalf of the Village, including but not

limited to the authority to execute, establish, and/or modify accounts and any related documents with any depositories designated and authorized by the Village:

NOW THEREFORE, BE IT RESOLVED by the Mayor and Board of Trustees of the Village of Lake Villa, Lake County, Illinois, as follows:

SECTION 1: That the Corporate Authorities of the Village find that the facts stated in the preamble hereof are true and correct and are incorporated herein by reference as if fully set forth.

SECTION 2: That the Corporate Authorities hereby approve and authorize the following:

A. That the signatures of two (2) of the following three (3) Village officials and/or employees, as more specifically herein provided, shall be required to sign and/or endorse any and all checks, drafts, notes, bills of exchange, orders (including orders or directories in informal or letter form), securities and other instruments, including but not limited to the authority to execute, establish, and/or modify accounts and any related documents, with any depositories designated and authorized by the Village, against any Village account and/or any funds at any time standing to the credit of the Village with any designated and authorized depository of the Village: Mayor James McDonald, Village Trustee Jeff Nielsen, Village Administrator Michael Strong.

B. That the signatures of two (2) of the following three (3) Village officials and/or employees, as more specifically herein provided, shall be required to sign any and all manual checks against any Village account and/or any funds at any time standing to the credit of the Village, with any designated and authorized depository of the Village: Mayor James McDonald, Village Trustee Jeff Nielsen, Village Administrator Michael Strong.

C. That the signatures of two (2) of the following three (3) Village officials and/or employees, as more specifically herein provided, shall be required to sign all documents to establish any new account for the credit of the Village and/or to modify existing accounts of

the Village, with any designated and authorized depository of the Village: Mayor James McDonald, Village Trustee Jeff Nielsen, Village Administrator Michael Strong.

SECTION 3: Attached to and expressly made a part of this Resolution is an updated and new form of ATTACHMENT A, “Designated Signatories”, which shall replace any other similar document previously adopted by the Village designating authorized signatories on behalf of the Village.

SECTION 4: All “prior resolutions designating authorized signatories”, and any other similar resolutions previously adopted by the Village designating authorized signatories on behalf of the Village are hereby repealed.

SECTION 5: The endorsements provided by any designated signatory for deposit to any Village account for the credit of the Village may be by the written or stamped endorsement of the Village without designation of the person making the endorsement.

SECTION 6: That the authorizations set forth in this Resolution will remain in effect until cancelled by later ordinance or resolution of the Corporate Authorities of the Village.

SECTION 7: This Resolution shall take effect from and after its passage and approval as provided by law.

Passed by the Corporate Authorities on April 3, 2023, on a roll call vote as follows:

AYES: Trustees

NAYS:

ABSENT:

ABSTAIN:

Approved by the Mayor on April 3, 2023

---

James McDonald, Mayor  
Village of Lake Villa

ATTEST:

---

Mary Konrad, Village Clerk  
Village of Lake Villa

[S E A L]

ATTACHMENT A

DESIGNATED SIGNATORIES

I, MARY KONRAD, the undersigned Village Clerk of the Village of Lake Villa, Lake County, Illinois, DO HEREBY CERTIFY that the following named persons are personally known to me to be the same persons who are duly elected and/or appointed by the Village and duly qualified to act in their respective capacity indicated below on behalf of the Village of Lake Villa as set forth opposite their respective names and that the signatures set forth above their respective names are the true and correct signature(s) of each such Village official.

MAYOR

\_\_\_\_\_  
James McDonald

VILLAGE TRUSTEE

\_\_\_\_\_  
Jeff Nielsen

VILLAGE ADMINISTRATOR

\_\_\_\_\_  
Michael Strong

DATED: \_\_\_\_\_, 2022

\_\_\_\_\_  
Mary Konrad, Village Clerk  
Village of Lake Villa


[S E A L]





# **Pollinator Conservation Initiatives - A Proposal For Lake Villa**

By Joseph Gannon



The actions of a single person can make a difference – every citizen can contribute to pollinator conservation and should have the opportunity to become engaged in ways that are meaningful.

**National Strategy to Promote the Health of Honeybees and Other Pollinators Task Force - The White House (2015)**



## Today's world is faced with increasing threats to a healthy biodiverse ecosystem and the many creatures that support it.

Pollinators are in decline in the USA and worldwide largely due to habitat loss, pesticides (and other pollutants), invasive species, and parasites (diseases). <sup>1</sup>

They serve a very important role in pollinating plants allowing them to reproduce and form seeds along with berries, fruits, and vegetables, which are part of the food chain for other species (including humans). Plants co-evolved with their pollinators. Without the pollinators the plants would have reduced or not reproduce. Their numbers will decrease resulting in reduced habitat and food for species that depend on them.

### Consider the following:

**Bees** - Bees are essential partners in producing much of our food supply. They're also important for biodiversity by pollinating plants which are crucial to our ecosystem. These plants in turn help prevent soil erosion and reduce the amount of carbon dioxide in the atmosphere.

They also provide habitat and food for many different insects and other animals.

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<sup>1</sup> <https://blog.nwf.org/2021/06/10-ways-to-save-pollinators/>



**The common eastern bumble bee in a garden on Berkshire Drive in Lake Villa, IL (photo by Joe Gannon)**

Unfortunately, however, they're in trouble and need our help. A recent study shows that 50% of bees are declining while 25% are in serious peril. <sup>2</sup> According to the study, major drivers for this decline include "habitat destruction and pesticide use."

### Not Just Bees Are Threatened

Although bees are very important pollinators, over 100,000 invertebrates (butterflies, moths, wasps, flies, mosquitos, and beetles) and over 1,000 mammals (birds, reptiles and amphibians), also act as pollinators."<sup>3</sup>

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<sup>2</sup> Pollinators in Peril - Kelsey Kopec & Lori Ann Burd • Center for Biological Diversity • February 2017 ([Pollinators in Peril: A Systematic Status Review of North American and Hawaiian Native Bees \(biologicaldiversity.org\)](https://www.biologicaldiversity.org/publications/pollinators_in_peril/))

<sup>3</sup> <https://blog.nwf.org/2021/06/10-ways-to-save-pollinators/>



## Threats to Other Species

Because our environment is so interconnected, threats to one species can affect others:

**Loss of Butterflies** - The iconic monarch butterfly - Illinois' state insect - that is "known for its spectacular annual journey of up to 4,000 kilometers across the Americas, has entered the IUCN Red List of Threatened Species as Endangered," due to similar threats.



**A female monarch butterfly on milkweed in Lake Villa, IL (Photo by Joe Gannon)**

**Loss of Birds** - According to the American Bird Conservancy, "in a single lifetime, 2.9 billion breeding adult birds have been lost from the United States and Canada." More than 90% of the total cumulative loss can be attributed to 12 bird families that are typical visitors to feeders across the U.S. including sparrows, warblers, blackbirds, and finches. The article notes that habitat loss is a driving factor behind these declines.





**Photo by Joe Gannon**

### Other Threats

**Invasive Species** - "An invasive species is an organism that is not indigenous, or native, to a particular area. Invasive species can cause great economic and environmental harm to the new area."<sup>4</sup>

Invasive species displace or wipe out native species, damage infrastructure, and threaten human livelihoods.

In Illinois, some of the most invasive species include purple loosestrife, garlic mustard, Japanese and bush honeysuckles, oriental bittersweet, burning bush, autumn olive, and

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<sup>4</sup> National Geographic Society - [www.nationalgeographic.org/encyclopedia/invasive-species/](http://www.nationalgeographic.org/encyclopedia/invasive-species/)

buckthorn.<sup>5</sup> Teasel, reed canary grass, and Canada thistle are also very invasive and displace native plants and reduce plant diversity and ecosystem health.<sup>6</sup>

In Lake County, the invasive species common or European buckthorn (*Rhamnus cathartica*) is of particular concern. Buckthorn accounts for 52.2% of the county's trees.

Not surprising, Lake Villa isn't immune to its presence. Here it can be found in HOA common areas, conservation easements, stormwater retention ponds, bioswales, parks and at the Lake County Forest Preserves. This adds insult to injury for pollinators that are already being stressed by diminishing habitat and other environmental factors.



**Example of a seed bearing buckthorn in Lake Villa (photo by Joe Gannon)**

### Why Buckthorn is So Bad

- It degrades the ecosystem since it outcompetes native species.
- Provides minimal benefits for wildlife. In fact, the berries that are eaten by the birds makes them sick - the seeds they expel during this process spreads the species.

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<sup>5</sup> [https://www.chicagobotanic.org/plantinfo/common\\_invasive\\_plants](https://www.chicagobotanic.org/plantinfo/common_invasive_plants)

<sup>6</sup> <https://www.mipn.org/Publications/>

- Can spread rapidly and is difficult to control.
- Kills off frogs <sup>7</sup>
- Seeds remain in the soil even after removal, increasing the likelihood of re-growth.
- Produces chemical compounds that inhibit the growth of other vegetation.<sup>8</sup>
- Once established, it can be time consuming, labor intensive and expensive to remove.
- Will grow back if it's cut. Removing it requires herbicide application or stump removal.
- If not removed correctly it can be a long-term problem and can grow up to 25 feet in height.

Information about identification and control of invasive plant species can be found on the following websites

- [https://www.chicagobotanic.org/plantinfo/common\\_invasive\\_plants](https://www.chicagobotanic.org/plantinfo/common_invasive_plants)
- <https://www.mipn.org/Publications/>
- <https://www.mipn.org/control/>
- <https://extension.illinois.edu/cook/invasive-plants>
- <https://extension.illinois.edu/invasives/invasive-plants>

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<sup>7</sup> Lincoln Park Zoo, Midwestern frogs decline, mammal populations altered by invasive plant, studies reveal, (Science News)

<sup>8</sup> Wisconsin Pollinators - How To Control Invasive Buckthorn -  
<https://www.wisconsinpollinators.com/Garden/TipsBuckthorn.aspx>



## Recommendation

**The city of Lake Villa is well-known for its many beautiful open spaces, parks and forest preserves that attract out-of-town visitors and residents alike.**

As noted in the **2022 Lake Villa Comprehensive Plan** “Not only can Lake Villa residents and visitors take full advantage of these assets but there’s potential to upgrade some areas as future development takes place.” It further states that “conserving these open spaces, natural resources, and planning new development strategically that respects these resources, will offer long-term, balanced growth and development patterns.”<sup>9</sup>

**Because pollinators provide significant benefits to our natural environment and are critical to a healthy ecosystem, we recommend the city of Lake Villa become a Bee City USA affiliate to help conserve these open spaces now and for future generations.**

**Further, the benefits of Bee City USA fit perfectly with the city’s mission of a “neighborly atmosphere [that] combines a business-friendly approach that welcomes innovation and community investment.”<sup>10</sup>**

## Program Overview

Bee City is a program founded by the **Xerces Society for Invertebrate Conservation** - an international nonprofit organization that since 1971 protects the natural world through the conservation of invertebrates and their habitats. (see <https://xerces.org/> for more information)

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<sup>9</sup> The 2022 Lake Villa Comprehensive Plan (p. 80) - [LAKE VILLA COMPREHENSIVE PLAN \(lake-villa.org\)](https://lake-villa.org/)

<sup>10</sup>IBID, P. 5



The program's goals are to:

- Galvanize communities to sustain pollinators, in particular the more than 3,600 species of native bees in this country
- Increase the abundance of native plants
- Provide nest sites,
- Reduce the use of pesticides.

There are currently more than 170 cities across the United States that participate in the program.

Three cities in Illinois include:

- Port Barrington
- Barrington Hills
- Hawthorn Woods

### **Flexible to Meet the Needs of the Community**

Bee City can be thought of as an “open source” model [that] allows cities to adopt the program to meet the unique needs of their communities (and their pollinator population and adapt it to work in private and public spaces ranging from parks, schools, libraries to neighborhood associations - all with the goal of making the world safer for pollinators one city at a time.”

More importantly, the program recognizes that each community has different needs and limited budgets to address these issues. As a result, the program “encourages cities to work with their existing resources noting “Pollinators don’t need showplaces, they need food (pollen and nectar) and places to mate, nest and overwinter.”<sup>11</sup>

### **Conservation Efforts Already Underway**

Some of the recent community-driven pollinator-friendly initiatives in Lake Villa that we are aware of include:

#### **Pollinator and Community Gardens**

- **Lakes Community High School** - In 2021 the Illinois Schoolyard Habitat Grant Program awarded the school a grant to plant a pollinator garden.
- **Prince Of Peace Catholic School** - A pollinator garden that is managed by students in the school garden club was expanded during 2022 as part of a new partnership with the parish Garden Gleaners ministry. With 700 sq ft of growing space in 20 beds, it features a variety of vegetables as well as plants for pollinators.

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<sup>11</sup> Protecting Pollinators: How to Save the Creatures That Feed Our World,” by Jodi Helmer, published by Island Press. (p52)



According to ministry director Chad Brandenburg, the food that is grown is then donated to local food pantries. The plan for this year has two beds dedicated to various types of flowers for pollinators. He notes that the purpose of the ministry is to help foster a growing spirit in the students and adults alike.



**Multi-functional garden at Prince of Peace Catholic School (courtesy of Prince of Peace)**

## Pollinator Knowledge Sharing

According to the Pollinator Task Force “a key component for success is developing partnerships that foster public education and awareness pertaining to pollinator protection and habitat conservation, and leveraging existing resources and relationships.”<sup>12</sup>

That’s why knowledge sharing is important. For example, to help promote the use of pollinator container gardens,, several residents of a townhome community in Lake Villa collaborated to create a guide on pollinator container gardens. This information was then shared with the community. This helped residents become more aware of pollinators and opportunities to help them.



**A 9-page pollinator container brochure with a recommended plant lists created by Jan Scheske and Joe Gannon**

## Removing invasive plants for habitat improvement

An important part of any conservation effort is to remove invasive species so they can be replaced with native species. According to Bee City USA’s website, removing invasives is

<sup>12</sup> IBID - P 19.

among the various types of Bee City activities that participants do to help improve pollinator habitat.

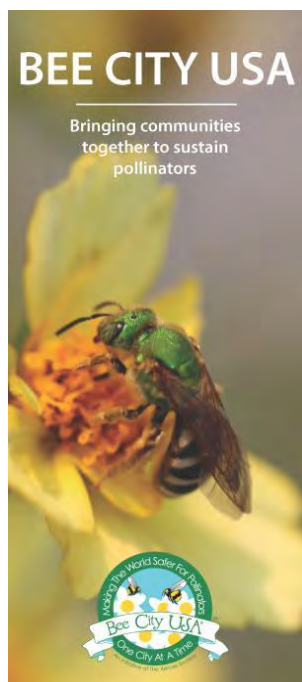
Over the years there's been a variety of conservation initiatives within the city to remove invasive species. For example, a current resident recalls working at Lehman Mansion 20-some years ago with his daughter to help remove buckthorn. We're also familiar with Lake Villa residents who have taken the initiative to remove buckthorn from their property.

Further, the Lake County Forest Preserve schedules volunteer workdays around the county to help remove buckthorn and other invasive species including Grant Woods and Duck Farm in Lake Villa.

These efforts can help mobile residents to contribute to the revitalization of areas which are affected by invasive species. It can also help foster a community spirit and increase awareness of the many benefits they bring to the community by getting involved.

## Bee City Benefits

According to Bee City USA there are multiple benefits to participating in the program:



### **Build community locally and nationally**

Brings the community together around a positive, shared cause and connects with others across the country that have made the same commitment.

Rather than a top down approach that is initiated by the city, Bee City promotes a collaborative spirit where residents and the city can work together to establish initiatives that help pollinators.

### **Ensures survival of vital animal species**

Help to ensure the survival of vital animal species crucial to our planet's functioning ecosystems.

### **Improves local food production**

Raises community awareness of how our food grows and improve local food production through expanded pollination. This includes pollinating residential and community gardens, resulting in better yields and size.

### **Supports small businesses**

Supports the growth of local businesses including native plant nurseries, pollinator friendly landscaping and eco-friendly residential communities.



### **Addresses pest problems with fewer pesticides**

Raise community awareness of the least toxic ways to tackle home and garden pest problems.

### **Heighten awareness of biological diversity**

Raises community awareness of the local environment's diversity of plant and pollinator species

## **Additional Benefits**

There are additional benefits that the city can be gained by participating in this program:

### **Helps create a buzz**

As the Plan notes, "successful economic development strategies depend on creating a "buzz" – pulling visitors and shoppers into town." By participating in this program, we feel it clearly differentiates Lake Villa demonstrating pollinator conservation. In doing so it helps increase public knowledge about these efforts and clearly differentiates the city through its participation.

Affiliates of Bee City USA and Bee Campus USA gain national recognition for their work to conserve pollinators. Affiliates are listed on the Bee City USA website and can use their affiliation to promote their community's commitment to conservation. There are also opportunities for affiliates to share their work through presenting as part of webinars and writing blog posts.<sup>13</sup>

### **Not just for farm crops**

Although bees are recognized for pollinating our food crops, they also contribute to the pollination of most flowers that are seen across the area.

#### **My Tomatoes are So Small This Year**

A neighbor decided to grow tomato plants in a container garden. Every day they diligently watered the plants and provided enough sunlight and TLC to create what they thought would be a bumper crop. But when harvest time came they were disappointed at the size and quantity of their tomatoes. However it wasn't surprising since the area is void of any bees in the surrounding area. Bees can help ensure that plants get the necessary nutrients to grow and thrive through pollination. While other factors such as weather also play a part in crop success, pollinators do too.

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<sup>13</sup> <https://beecityusa.org/wp-content/uploads/2021/03/All-Benefits-Bee-City.pdf>

## Can provide opportunities for students to draw closer to nature, and enrich their learning opportunities

In addition to Lakes High School and Prince of Peace Church, consider examples in across Lake County

- **The College of Lake County** - which currently is a Bee City Campus participant - “provides a variety of opportunities for students and community members to get involved in educational community service events to learn about pollinators, native plants and beekeeping.”<sup>14</sup>
- In 2021, the **Illinois Schoolyard Habitat Action Grants** program awarded grants to Seth Paine Elementary School: Community Unit School District #95, Lake Zurich, and Prairie Crossing Charter School in Grayslake.<sup>15</sup>

Becoming a Bee City participant allows opportunities for such initiatives. For example, Bee City Canada’s School Gardens project, featured a pollinator garden among various schools in the Toronto area.

According to Bee City “Through the simple task of gardening, children and communities can become more connected with nature, especially those in highly urbanized environments. Looking after a garden also promotes physical activity, self-sufficiency and encourages healthier eating that includes more fruit and vegetables. In addition, there have been studies which suggest that students who are exposed to outdoor learning activities can perform better academically.”<sup>16</sup>

## Is A Community Collaboration-Driven Process

The first step to participate in the program is to form a committee. This committee is composed of both residents and city members. Such an approach is critical to ensuring success.

These same principles to include residents (users) are commonly applied in conservation , product design and change management. By including members that represent the community, they become more invested in the process. This can produce a better result.

<sup>14</sup> Bee Campus USA - College of Lake County - [2022\\_College\\_of\\_Lake\\_County\\_IL.pdf \(beecityusa.org\)](#)

<sup>15</sup> Projects receive funding through Schoolyard Habitat grants - [Projects receive funding through Schoolyard Habitat Grants - Chronicle Media \(chronicleillinois.com\)](#) (Jan 22, 2021)

<sup>16</sup> Bee City School Garden Project Breaks Ground - (May 18, 2018)





Penn State University notes there are also a variety of benefits in community engagement that include: <sup>17</sup>

- **Increase the likelihood that projects or solutions will be widely accepted.** Citizens who participate in these processes show significant commitment to help make the projects happen.
- **Create more effective solutions.** Drawing on local knowledge from a diverse group creates solutions that are practical and effective.
- **Improve citizens' knowledge and skills in problem solving.** Participants learn about the issues in-depth. Greater knowledge allows them to see multiple sides of the problem. Citizens can practice communication and decision-making skills.
- **Empower and integrate people from different backgrounds.** Groups that feel ignored can gain greater control over their lives and their community. When people from different areas of the community work together, they often find that they have much in common.
- **Create local networks of community members.** The more people who know what is going on and who are willing to work toward a goal, the more likely a community is to be successful in reaching its goals.
- **Create several opportunities for discussing concerns.** Regular, on-going discussions allow people to express concerns before problems become too big or out of control.
- **Increase trust in community organizations and governance.** Working together improves communication and understanding. Knowing what government, community citizens and leaders, and organizations can and cannot do may reduce future conflict.

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<sup>17</sup> Why Community Engagement Matters - Penn State University Department of Agricultural Economics. [Why Community Engagement Matters — Department of Agricultural Economics, Sociology, and Education \(psu.edu\)](https://www.psu.edu/departments/agricultural-economics/why-community-engagement-matters)



## Collaboration and volunteering is an important part of success

### Opportunities to help endangered species such as the Rusty Patched Bumble Bee

In 2017, the U.S Fish and Wildlife placed the **Rusty Patched Bumble Bee** on the endangered species list - having lost nearly 90% of its range. A variety of stressors have contributed to this demise including “pathogens, pesticides, habitat loss and degradation, non-native and managed bees, the effects of climate change and small population biology.

<sup>18</sup>

However recent events are encouraging that this species may be making a comeback. For example, in 2022, nine were discovered at six of the 13 forest preserves in Lake County. <sup>19</sup>

<sup>18</sup> U.S Fish and Wildlife Service, Rusty Patched Bumble Bee - [www.fws.gov/species/rusty-patched-bumble-bee-bombus-affinis](http://www.fws.gov/species/rusty-patched-bumble-bee-bombus-affinis)

<sup>19</sup> Rusty Patched Bumble Bee Sightings Increase in Lake County - <https://www.lcfd.org/rusty-patched-bumble-bee/>

The National Fish and Wildlife notes that “saving a species from extinction is a group effort, with partners from national conservation organizations and agencies to local communities and citizens, we can’t do this alone” said Charlie Wooley, regional director for the Great Lakes Region of the U.S. Fish and Wildlife Service. “This is a great opportunity for those who live in the range of the rusty patched bumble bee to get involved in recovery, whether you live in a rural setting or urban areas where we’re finding the species. We encourage everyone to help by learning more about this interesting bee and providing flowers for pollen and nectar. Together we can make sure this important native pollinator doesn’t slip away.”<sup>20</sup>

Given the amount of open spaces throughout Lake Villa, there certainly are opportunities to help this endangered species make a comeback with increased bee conservation efforts.



**A rusty-patched bumble bee (Photo by U.S Fish and Wildlife Service / Wikimedia Commons)**

## Next Steps

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<sup>20</sup> Rusty Patched Bumble Bee Recovery Plan - <https://www.fws.gov/story/2021-11/rusty-patched-bumble-bee-recovery-plan>

1. Please review the Powerpoint presentation by Bee City to learn more about the program:

<https://beecityusa.org/wp-content/uploads/2020/12/Bee-City-USA-Applicant-Presentation-Narrated.pptx>

2. Get more info on application steps here:

<https://beecityusa.org/apply-to-bee-campus-usa/>



## About The Author

I moved to Lake Villa with my wife in 2002, having fallen in love with the city's open spaces. Though I enjoyed looking at nature, I rarely took advantage of the parks or enjoying it.

But that all changed in the summer of 2021. As I drove north on Route 83 in late July that year on two occasions within a week's time span I had noticed a monarch butterfly flying across the highway. While I was excited about seeing this iconic butterfly, my heart sank when I realized there was nothing but grass and nothing visible for the butterfly to get food or shelter. It was at that point I realized that I wanted to help the ecosystem in my community and give back any way I can to help.



At that point I sprung into action and enrolled at Morton Arboretum's N-ACT Program (Natural Areas Conservation Program). There I began to learn about how to restore natural areas. I also began to volunteer at Prairie Crossing in Grayslake and Lake County Forest Preserves to help with area conservation efforts.


## Additional Info

Joe is a certified LCFP Brush Pile Burn Boss and has earned the Illinois Department of Agriculture's Herbicide certificate (2023). Joe is also enrolled in The Pollinator Partnership Pollinator Steward Certification Program.

He's also achieved the Certified Pollinator Champion by Michigan State University. Additional training includes the Midwest Ecological Prescription Burn Crew Member Training Class (McHenry County), various wildland fire courses from the National Wildfire Coordinating Group and FEMA's National Incident System.







Joe is a member of the Society for Ecological Restoration, the Indiana Native Plant Society, Illinois Native Plant Society, and the Kansas Native Plant Society.

**Photo 1: Monarch butterfly courtesy of Mary Sullivan**

**Photo 2: Joe Gannon managing a brush pile burn at Lake County Forest Preserves Duck Farm Lake Villa, Feb 2022**

## Contributors

Thanks to the following who helped with document review and copy/ edits that greatly improved this document.

- Mary Sullivan
- Edith Vendel

## Thanks to The Following

A big thanks to the following people for their inspiration, feedback, support, advice, review and encouragement:

- Jan Young
- Jan Scheske

Also thanks to:

- Ken Klick for helping me see the big picture and steered me in the right direction early on in the process.
- Chad Brandenburg from Prince of Peace for providing me with photos and info about their garden.
- Laura Rost from Xerxes for answering my questions on Bee City USA. Your quick responses and detailed info is greatly appreciated.

## Links to Resources

### Bee City links

#### Powerpoint Presentation

<https://beecityusa.org/wp-content/uploads/2020/12/Bee-Campus-USA-Applicant-Presentation-Narrated.pptx>

#### Program Overview

<https://beecityusa.org/wp-content/uploads/2021/07/Program-Overview-Bee-City.pdf>

#### Brochure

[https://beecityusa.org/wp-content/uploads/2021/01/20-034\\_01\\_Bee\\_City\\_Brochure\\_1.pdf](https://beecityusa.org/wp-content/uploads/2021/01/20-034_01_Bee_City_Brochure_1.pdf)

#### Benefits/Why Join

<https://beecityusa.org/wp-content/uploads/2021/03/All-Benefits-Bee-City.pdf>

<https://beecityusa.org/benefits/>

#### Benefits of Green spaces

<https://www.jpost.com/health-and-wellness/article-728767>

<https://oem.bmj.com/content/oemed/early/2023/01/05/oemed-2022-108491.full.pdf>

#### How to Apply

<https://beecityusa.org/apply-to-bee-city-usa/>

<https://www.youtube.com/watch?v=h4YycdWLtkg>

#### Application Resources

<https://beecityusa.org/apply-to-bee-city-usa/#ApplicationResources>

## FAQs

<https://beecityusa.org/faqs/>

## Commitments to Be a Participant

<https://beecityusa.org/bee-city-usa-commitments/>

## List of cities

[https://beecityusa.org/current-bee-city-usa-affiliates/?filter affiliate type city 129a7=City%2C%20Town%2C%20Village%2C%20or%20County](https://beecityusa.org/current-bee-city-usa-affiliates/?filter%20affiliate%20type%20city%20129a7=City%20C%20Town%20C%20Village%20C%20or%20County)

## Affiliate Reports

Lists the activities that each city accomplished. These reports give you a good idea of what a city will do as a participant.

<https://beecityusa.org/work/2021-renewal-reports/>

## Blog

<https://beecityusa.org/blog/>

## Selected Articles about Pollinators

<https://www.frontiersin.org/articles/10.3389/fevo.2019.00220/full>

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0235492>

[Habitat loss and fragmentation disrupt plant-pollinator networks - Conservation Corridor](#)

[TransportationUtilityCorridorsPreventionBMPs.pdf \(pollinator.org\)](#)

[Rights of Way | Pollinator.org](#)

[Wild Pollinators Enhance Fruit Set of Crops Regardless of Honey Bee Abundance | Science](#)

[ipm-lawn-to-lake.pdf \(illinois.edu\)](#)

## Selected Bee City USA Participants

To get an idea of what individual cities do as a Bee City participant, check out the links below:

### **Barrington Hills**

[https://beecityusa.org/wp-content/uploads/2021/05/2021\\_village\\_of\\_barrington\\_hills.pdf](https://beecityusa.org/wp-content/uploads/2021/05/2021_village_of_barrington_hills.pdf)

<https://barringtonhills-il.gov/7949-2/>

<https://barringtonhills-il.gov/pollinator-week-june-21-27/>

### **Port Barrington, IL**

<https://www.portbarrington.net/bee-city/>

### **Hawthorn Woods, IL**

[https://beecityusa.org/wp-content/uploads/2022/07/2022\\_Hawthorn\\_Woods\\_IL.pdf](https://beecityusa.org/wp-content/uploads/2022/07/2022_Hawthorn_Woods_IL.pdf)

### **Columbus, IN**

<https://www.sierraclub.org/indiana/blog/2021/10/columbus-becomes-first-bee-city-usa-affiliate-indiana-blog-eric-riddle>

<https://1010wcsi.com/local-news/columbus-adopts-bee-city-usa-designation-to-protect-pollinators/>

### **Mequon, WI**

[https://www.ci.mequon.wi.us/sites/default/files/fileattachments/community/page/3351/2022\\_bee\\_city\\_usa\\_resolution.pdf](https://www.ci.mequon.wi.us/sites/default/files/fileattachments/community/page/3351/2022_bee_city_usa_resolution.pdf)

**A RESOLUTION OF THE VILLAGE OF LAKE VILLA,  
LAKE COUNTY, ILLINOIS, OF SUPPORT AND COMMITMENT OF LOCAL FUNDS FOR A  
COMED GREEN REGION GRANT APPLICATION**

**WHEREAS**, the Village of Lake Villa, Lake County, Illinois (the “*Village*”) is a duly organized and validly existing non-home rule municipality pursuant to Article VII, Section 6(a) of the Constitution of the State of Illinois of 1970; and,

**WHEREAS**, the Village is applying for a ComEd Green Region Grant for financial assistance to support the installation of a pollinator garden; and,

**WHEREAS**, the ComEd Green Region Grant is offering financial assistance through the ComEd Green Region Fund to support projects that promote the conservation of open space in Northern Illinois; and,

**WHEREAS**, it is necessary that an application be made to Openlands, the agency that is administering the ComEd Green Region Grant program; and,

**WHEREAS**, receipt of grant assistance is essential to allow the Village to undertake the project to improve and expand pollinators in appropriate open spaces that will support our local ecosystems; and,

**WHEREAS**, criteria of the ComEd Green Region Grant program are such that financial participation by the grantee or project beneficiary is required in conjunction with ComEd Green Region funds, and

**NOW, THEREFORE, BE IT RESOLVED** by the President and Board of Trustees of the Village of Lake Villa, of Lake County, Illinois, as follows:

*Section 1.* That the above recitals are incorporated herein and made a part hereof.



*Section 2.* That the Village of Lake Villa apply for a grant under the terms and conditions Openlands and the ComEd Green Region Fund shall enter into and agree to the understandings and assurances contained in said application.

*Section 3.* That the Village Administrator on behalf of the Village of Lake Villa execute such documents and all other documents necessary for carrying out of said application.

*Section 4.* That the Mayor and Village Clerk are authorized to provide such additional information as may be required to accomplish the obtaining of such grant.

*Section 5.* That the Village of Lake Villa does hereby commit funds from the Parks Capital Fund for use in conjunction with a ComEd Green Region Grant to install a pollinator garden adjacent to the Cedar Crossing park which will support the expansion of local pollinators in Lake Villa, such funds to equal 50% of the estimated project cost of \$10,000 or \$5,000.

*Passed* by the President and the Village Board of Trustees of the Village of Lake Villa, Illinois, this 3<sup>rd</sup> day of April, 2023.

AYES: Trustees

NAYS:

ABSENT:

ABSTAIN:

**APPROVED:**

---

Mayor James McDonald

*Attest:*

---

Village Clerk

James McDonald, Mayor  
Mary Konrad, Clerk  
Stacy Michael, Treasurer



Trustees:  
Allena Barbato  
Jake Cramond  
Karen Harms  
Jeff Nielsen  
Tom O'Reilly  
Doug Savell

**DATE:** March 30, 2023

**TO:** Village Board of Trustees

**FROM:** Stacy Michael  
Administrative Services Director

**RE:** Draft Budget Changes

Amendments to the budget are being presented based on feedback provided by the Village Board during their Budget Workshop. Motor Fuel Tax Fund Balances have been updated due to an after audit journal entry that was made. The FY22/23 projected ending balance is \$1,094,327.

Below are also additional updates that have been made.

- IMRF/Social Security – Moving all funds to Administration Fund only
- All salaries have been updated with the recommended 3% increase
- Water tower A has been moved to the General Capital Fund
- ARPA fund transfer of \$250,000 from General Capital to W/S Capital for water meter replacement program
- Added Well 7 Booster Station Construction to W/S Capital
- Removed Sewer Camera from W/S Capital
- Added 5 bike racks to Park Capital

**VILLAGE OF LAKE VILLA  
FISCAL YEAR 2023/24 BUDGET SUMMARY**

<b>GENERAL FUND</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
General Fund Revenue	5,531,562			4,975,222
Administrative		1,337,037		1,031,851
Police		2,577,506		2,473,966
Fleet		377,603		268,706
Streets		849,007		1,067,294
Buildings & Grounds		140,000		124,007
Special Events	25,000	61,500		68,252
<b>TOTAL</b>	<b>5,556,562</b>	<b>5,342,653</b>	<b>213,909</b>	<b>(58,856)</b>
<b>WATER/SEWER FUND</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
Water & Sewer Revenue	3,282,644			3,389,360
Water		1,826,222		1,787,083
Sewer		1,411,568	44,854	1,324,796
<b>TOTAL</b>	<b>3,282,644</b>	<b>3,237,790</b>	<b>44,854</b>	<b>277,481</b>
<b>ENTERPRISE FUNDS</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
Metra Fund	42,825	31,792	11,033	17,964
Mansion Fund	81,400	59,185	22,215	(67,708)
Special Events Fund	66,750	61,500	5,250	(14,853)
Garbage Fund	672,244	677,041	(4,797)	476
<b>SPECIAL FUNDS</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
Motor Fuel Tax Fund	218,303	120,000	98,303	(213,626)
Retirement Fund	-	-	-	(223,933)
Insurance Fund	240,960	240,960	-	108,426
Information Technology Fund	-	-	-	(38,914)
Fleet Maintenance Fund	280,000	-	280,000	11,294
<b>CAPITAL FUNDS</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
General Capital Fund	403,445	1,637,635	(1,234,190)	601,191
Water/Sewer Capital Fund	263,000	1,570,000	(1,307,000)	1,253,349
Parks Capital Fund	3,000	75,000	(72,000)	(20,250)
Downtown TIF Fund	260,000	603,550	(343,550)	239,213
Park Avenue TIF Fund	35,200	33,500	1,700	-
Downtown Business District	211,400	301,597	(90,197)	94,556
<b>FIXED ASSET FUNDS</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
Squad Car Replacement Fund	-	-	-	42,654
Public Works Fleet Replacement Fund	-	-	-	106,500
Water/Sewer Equipment Replacement Fund	-	-	-	72,000
<b>NON OPERATING FUNDS</b>	<b>FY 2023/24 REVENUE</b>	<b>FY 2023/24 EXPENSE</b>	<b>FY 2023/24 PERFORMANCE</b>	<b>FY 2022/23 PERFORMANCE</b>
Police Pension	1,003,581	711,500	292,081	256,104
Drug Forfeiture	2,000	-	2,000	336
DUI	-	20,100	(20,100)	(734)
Celebration of Summer	-	-	-	-

**VILLAGE OF LAKE VILLA  
FISCAL YEAR 2023/24 FUND BALANCES**

**OPERATING FUNDS**

<b>GENERAL FUND</b>			
FY 22/23 BEGINNING BALANCE	2,096,886	FY 23/24 BEGINNING BALANCE	2,363,968
FY 22/23 PROJECTED REVENUE	4,975,222	FY 23/24 PROJECTED REVENUE	5,556,562
FY 22/23 PROJECTED EXPENSES	4,708,139	FY 23/24 PROJECTED EXPENSES	5,342,653
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>2,363,968</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>2,577,877</b>

<b>WATER/SEWER FUND</b>			
FY 22/23 BEGINNING BALANCE	807,046	FY 23/24 BEGINNING BALANCE	1,084,527
FY 22/23 PROJECTED REVENUE	3,389,360	FY 23/24 PROJECTED REVENUE	3,282,644
FY 22/23 PROJECTED EXPENSES	3,111,879	FY 23/24 PROJECTED EXPENSES	3,237,790
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>1,084,527</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>1,129,382</b>

<b>METRA FUND</b>			
FY 22/23 BEGINNING BALANCE	34,614	FY 23/24 BEGINNING BALANCE	52,578
FY 22/23 PROJECTED REVENUE	43,860	FY 23/24 PROJECTED REVENUE	42,825
FY 22/23 PROJECTED EXPENSES	25,896	FY 23/24 PROJECTED EXPENSES	31,792
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>52,578</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>63,611</b>

<b>MANSSION FUND</b>			
FY 22/23 BEGINNING BALANCE	(128,307)	FY 23/24 BEGINNING BALANCE	(196,015)
FY 22/23 PROJECTED REVENUE	36,331	FY 23/24 PROJECTED REVENUE	81,400
FY 22/23 PROJECTED EXPENSES	104,039	FY 23/24 PROJECTED EXPENSES	59,185
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>(196,015)</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>(173,800)</b>

<b>SPECIAL EVENTS FUND</b>			
FY 22/23 BEGINNING BALANCE	(7,158)	FY 23/24 BEGINNING BALANCE	(22,011)
FY 22/23 PROJECTED REVENUE	53,399	FY 23/24 PROJECTED REVENUE	66,750
FY 22/23 PROJECTED EXPENSES	68,252	FY 23/24 PROJECTED EXPENSES	61,500
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>(22,011)</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>(16,761)</b>

<b>GARBAGE FUND</b>			
FY 22/23 BEGINNING BALANCE	86,066	FY 23/24 BEGINNING BALANCE	86,542
FY 22/23 PROJECTED REVENUE	682,361	FY 23/24 PROJECTED REVENUE	702,969
FY 22/23 PROJECTED EXPENSES	681,886	FY 23/24 PROJECTED EXPENSES	677,041
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>86,542</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>112,470</b>

<b>MOTOR FUEL TAX FUND</b>			
FY 22/23 BEGINNING BALANCE	1,307,953	FY 23/24 BEGINNING BALANCE	1,094,328
FY 22/23 PROJECTED REVENUE	442,223	FY 23/24 PROJECTED REVENUE	218,303
FY 22/23 PROJECTED EXPENSES	655,849	FY 23/24 PROJECTED EXPENSES	120,000
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>1,094,328</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>1,192,631</b>

**RETIREMENT FUND**

FY 22/23 BEGINNING BALANCE	79,636	FY 23/24 BEGINNING BALANCE	(144,297)
FY 22/23 PROJECTED REVENUE	-	FY 23/24 PROJECTED REVENUE	-
FY 22/23 PROJECTED EXPENSES	223,933	FY 23/24 PROJECTED EXPENSES	-
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>(144,297)</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>(144,297)</b>

**INSURANCE FUND**

FY 22/23 BEGINNING BALANCE	49,139	FY 23/24 BEGINNING BALANCE	157,565
FY 22/23 PROJECTED REVENUE	346,427	FY 23/24 PROJECTED REVENUE	240,960
FY 22/23 PROJECTED EXPENSES	238,001	FY 23/24 PROJECTED EXPENSES	240,960
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>157,565</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>157,565</b>

**CAPITAL FUNDS****GENERAL CAPITAL FUND**

FY 22/23 BEGINNING BALANCE	1,723,075	FY 23/24 BEGINNING BALANCE	2,324,266
FY 22/23 PROJECTED REVENUE	1,368,344	FY 23/24 PROJECTED REVENUE	403,445
FY 22/23 PROJECTED EXPENSES	767,153	FY 23/24 PROJECTED EXPENSES	1,637,635
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>2,324,266</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>1,090,076</b>

**WATER/SEWER CAPITAL FUND**

FY 22/23 BEGINNING BALANCE	1,552,067	FY 23/24 BEGINNING BALANCE	2,805,416
FY 22/23 PROJECTED REVENUE	2,218,396	FY 23/24 PROJECTED REVENUE	263,000
FY 22/23 PROJECTED EXPENSES	965,047	FY 23/24 PROJECTED EXPENSES	1,570,000
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>2,805,416</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>1,498,416</b>

**PARKS CAPITAL FUND**

FY 22/23 BEGINNING BALANCE	159,643	FY 23/24 BEGINNING BALANCE	139,393
FY 22/23 PROJECTED REVENUE	-	FY 23/24 PROJECTED REVENUE	3,000
FY 22/23 PROJECTED EXPENSES	20,250	FY 23/24 PROJECTED EXPENSES	75,000
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>139,393</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>67,393</b>

**DOWNTOWN TIF FUND**

FY 22/23 BEGINNING BALANCE	283,200	FY 23/24 BEGINNING BALANCE	522,413
FY 22/23 PROJECTED REVENUE	266,800	FY 23/24 PROJECTED REVENUE	260,000
FY 22/23 PROJECTED EXPENSES	27,587	FY 23/24 PROJECTED EXPENSES	603,550
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>522,413</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>178,863</b>

**PARK AVENUE TIF FUND**

FY 22/23 BEGINNING BALANCE	-	FY 23/24 BEGINNING BALANCE	17,304
FY 22/23 PROJECTED REVENUE	34,187	FY 23/24 PROJECTED REVENUE	35,200
FY 22/23 PROJECTED EXPENSES	16,883	FY 23/24 PROJECTED EXPENSES	33,500
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>17,304</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>19,004</b>

**DOWNTOWN BUSINESS DISTRICT**

FY 22/23 BEGINNING BALANCE	267,393	FY 23/24 BEGINNING BALANCE	361,949
FY 22/23 PROJECTED REVENUE	202,228	FY 23/24 PROJECTED REVENUE	211,400
FY 22/23 PROJECTED EXPENSES	107,672	FY 23/24 PROJECTED EXPENSES	301,597
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>361,949</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>271,752</b>



**FIXED ASSET FUNDS****SQUAD CAR REPLACEMENT FUND**

FY 22/23 BEGINNING BALANCE	92,776	FY 23/24 BEGINNING BALANCE	135,430
FY 22/23 PROJECTED REVENUE	82,080	FY 23/24 PROJECTED REVENUE	-
FY 22/23 PROJECTED EXPENSES	39,426	FY 23/24 PROJECTED EXPENSES	-
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>135,430</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>135,430</b>

**PUBLIC WORKS FLEET REPLACEMENT FUND**

FY 22/23 BEGINNING BALANCE	15,494	FY 23/24 BEGINNING BALANCE	121,994
FY 22/23 PROJECTED REVENUE	168,000	FY 23/24 PROJECTED REVENUE	-
FY 22/23 PROJECTED EXPENSES	61,500	FY 23/24 PROJECTED EXPENSES	-
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>121,994</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>121,994</b>

**WATER/SEWER EQUIPMENT REPLACEMENT**

FY 22/23 BEGINNING BALANCE	443,717	FY 23/24 BEGINNING BALANCE	515,717
FY 22/23 PROJECTED REVENUE	72,000	FY 23/24 PROJECTED REVENUE	-
FY 22/23 PROJECTED EXPENSES	-	FY 23/24 PROJECTED EXPENSES	-
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>515,717</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>515,717</b>

**NON-OPERATING FUNDS****POLICE PENSION**

FY 22/23 BEGINNING BALANCE	8,007,969	FY 23/24 BEGINNING BALANCE	8,264,073
FY 22/23 PROJECTED REVENUE	962,067	FY 23/24 PROJECTED REVENUE	1,003,581
FY 22/23 PROJECTED EXPENSES	705,963	FY 23/24 PROJECTED EXPENSES	711,500
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>8,264,073</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>8,556,154</b>

**DRUG FORFEITURE**

FY 22/23 BEGINNING BALANCE	16,814	FY 23/24 BEGINNING BALANCE	17,150
FY 22/23 PROJECTED REVENUE	2,976	FY 23/24 PROJECTED REVENUE	2,000
FY 22/23 PROJECTED EXPENSES	2,640	FY 23/24 PROJECTED EXPENSES	-
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>17,150</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>19,150</b>

**DUI FUND**

FY 22/23 BEGINNING BALANCE	24,165	FY 23/24 BEGINNING BALANCE	23,431
FY 22/23 PROJECTED REVENUE	6,063	FY 23/24 PROJECTED REVENUE	-
FY 22/23 PROJECTED EXPENSES	6,797	FY 23/24 PROJECTED EXPENSES	20,100
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>23,431</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>3,331</b>

**CELEBRATION OF SUMMER**

FY 22/23 BEGINNING BALANCE	6,855	FY 23/24 BEGINNING BALANCE	6,855
FY 22/23 PROJECTED REVENUE	-	FY 23/24 PROJECTED REVENUE	-
FY 22/23 PROJECTED EXPENSES	-	FY 23/24 PROJECTED EXPENSES	-
<b>MAY 1, 2023 PROJECTED BALANCE</b>	<b>6,855</b>	<b>MAY 1, 2024 PROJECTED BALANCE</b>	<b>6,855</b>

# GENERAL FUND REVENUE

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>TAXES</b>					
01-00-10-3010	REAL ESTATE TAXES	1,022,724	1,032,377	1,033,791	1,463,526
01-00-10-3020	ROAD & BRIDGE TAX	22,599	22,500	24,305	22,600
01-00-10-3030	SALES TAX (S-95%)	1,053,405	912,671	1,045,000	1,135,095
01-00-10-3040	STATE INCOME TAX (S-95%)	1,223,452	1,039,655	1,104,425	1,162,553
01-00-10-3070	USE TAX (S-95%)	317,264	333,404	311,738	342,299
01-00-10-3050	REPLACEMENT TAX	32,673	15,000	31,000	32,673
01-00-30-3130	CABLE FRANCHISE TAX	156,506	155,000	157,196	160,000
01-00-10-3140	TELECOMMUNICATIONS TAX	110,356	120,000	102,762	115,943
01-00-10-3150	UTILITY TAX-GAS	172,856	120,000	154,101	140,000
01-00-10-3151	UTILITY TAX-ELECTRIC	304,364	305,000	319,867	310,000
<b>TOTAL TAXES</b>		<b>4,416,199</b>	<b>4,055,606</b>	<b>4,284,186</b>	<b>4,884,690</b>
<b>LICENSES &amp; PERMITS</b>					
01-00-20-3110	LIQUOR LICENSE	34,150	19,400	34,000	30,000
01-00-20-3150	VENDING & AMUSMENT LICENSE	-	500	-	500
01-00-20-3160	VIDEO GAMING LICENSES	16,975	16,500	16,000	16,500
01-00-20-3170	BUSINESS REGISTRATION FEES	5,275	5,500	8,000	7,500
01-00-20-3210	BUILDING PERMITS	131,812	95,000	129,327	175,000
01-00-20-3211	WATERSHED PERMIT	-	50	-	50
01-00-20-3213	SITE DEVELOPMENT PERMITS	6,360	5,000	1,929	5,000
01-00-20-3214	LANDSCAPE INSPECTION FEE	-	500	-	100
01-00-20-3120	VEHICLE LICENSES	97,090	95,000	91,732	95,000
01-00-20-3250	IMPACT FEES	1,800	-	1,200	-
<b>TOTAL LICENSES &amp; PERMITS</b>		<b>293,462</b>	<b>237,450</b>	<b>282,187</b>	<b>329,650</b>
<b>OTHER REVENUE</b>					
01-00-30-3480	ZONING HEARING FEES	-	800	750	750
01-00-30-3481	NATURAL GAS FRANCHISE	17,204	17,204	17,204	17,204
01-00-30-3610	POLICE REPORTS	2,575	2,500	2,370	2,500
01-00-30-3710	COURT FINES	91,610	85,000	90,000	90,000
01-00-30-3720	PARKING & ORDINANCE FINES	21,680	25,000	8,560	8,500
01-00-30-3730	SEX OFFENDER REGISTRATION FEE	410	300	400	400
01-00-30-3810	INTEREST INCOME	44,602	45,000	45,000	45,000
01-00-30-3880	SCHOOL RESOURCE OFFICER	109,376	116,000	93,109	123,000
01-00-30-3890	OTHER REVENUE	47,711	20,000	151,455	23,868
01-00-00-3019	TRANSFER FROM OTHER FUNDS	-	-	-	6,000
<b>TOTAL OTHER REVENUE</b>		<b>335,167</b>	<b>311,804</b>	<b>408,848</b>	<b>317,222</b>
<b>TOTAL REVENUE</b>		<b>5,044,828</b>	<b>4,604,860</b>	<b>4,975,222</b>	<b>5,531,562</b>

## **TAXES**

### **REAL ESTATE TAXES 01-00-10-3010**

Budget amount is the amount levied for Property Tax Levy. Includes all real estate tax except for Police Pension Fund, insurance and retirement.

Corporate	\$ 458,555
Police	\$ 482,454
Streets	\$ 118,001
Liability Insurance	\$ 170,007
Social Security	\$ 179,012
IMRF	\$ 55,497
	<b>\$ 1,463,526</b>

### **ROAD & BRIDGE TAX 01-00-10-3020**

This revenue is received from Lake Villa Township for those roads within our municipality. The Village receives a portion of the amount the townships collect from their roads and bridges levy within the corporate limits of Village of Lake Villa.

### **SALES TAX 01-00-10-3030**

The Village currently receives 1% sales tax on eligible items sold in the Village. 2023/2024 assumes \$1,135,095 in total sales tax receipts. The first 95% of Sales Tax generated is pledged towards the General Operating Fund. 5% of the sales tax revenue is dedicated towards the General Capital Fund.

### **STATE INCOME TAX 01-00-10-3040**

This revenue is received from the Illinois Income Tax being returned to municipalities. Utilizing a population of 8,741 at an estimate of \$140.00 per person, the revenue is anticipated for 23/24 is \$1,162,553.

First 95% of Income Tax generated is pledged towards the General Operating Fund. 5% of the sales tax revenue is dedicated towards the General Capital Fund.

### **USE TAX 01-00-10-3070**

Local governments receive revenue from the State Use Tax rate. The funds are distributed from the Local Government Distributive Fund based on population (8,741). The State Use Tax is collected on purchases of personal property from out-of-state retailers, not including titled items (automobiles, etc.). The Village used the Illinois Municipal League estimate of \$43.39 in FY 2023/2024.

First 95% of Local Use Tax generated is pledged towards the General Operating Fund. 5% of the sales tax revenue is dedicated towards the General Capital Fund.

### **REPLACEMENT TAX 01-00-10-3050**

This revenue is derived primarily from the income tax on corporations. It replaces the revenue

received from the tax on corporate personal property prior to 1979. Municipalities receive a share of the distribution of these funds based upon the amount of corporate personal property tax collected for them in 1977 in proportion to the total amount of personal property tax collected. It also covers a portion of personal property replacement tax issued to the Road District.

#### **CABLE FRANCHISE 01-00-30-3130**

This revenue comes from the franchise fee of 5% of monthly royalty charged against Comcast and AT&T cable service. Fees are received quarterly.

#### **TELECOMMUNICATIONS TAX 01-00-10-3140**

As of 2003 the municipal telecommunications tax (5%) and the municipal tax on the occupation or privilege of transmitting messages and the municipal infrastructure maintenance fee (1%) were repealed and then combined into a single municipally imposed telecommunications tax of 6%. Reduction in landline phones is negatively impacting this revenue source.

#### **UTILITY TAX-GAS 01-00-10-3150**

A tax is imposed on all persons engaged in the business of distributing, supplying, furnishing, or selling gas for use or consumption within the corporate limits of the village and not for resale, at the rate of five percent (5%) of the gross receipts therefrom.

#### **UTILITY TAX-ELECTRIC 01-00-10-3151**

This revenue is received at a rate of 5% of electricity bills within the corporate limits of Village of Lake Villa. Pursuant to section 8-11-2 of the Illinois municipal code and any and all other applicable authority, a tax is imposed upon the privilege of using or consuming electricity acquired in a purchase at retail and used or consumed within the corporate limits of the village.

### **LICENSES & PERMITS**

#### **LIQUOR LICENSE 01-00-20-3110**

This revenue is received from liquor licenses and is based on the current fees and number of each classification.

#### **VENDING AMUSEMENT LICENSE 01-00-20-3150**

These receipts are derived from amusement and vending licenses for arcade machines per Village Code.

#### **VIDEO GAMING LICENSE 01-00-20-3160**

These receipts are derived from. 66 Video Gaming licenses @ \$250 per machine.

#### **BUSINESS REGISTRATION FEES 01-00-20-3170**

This revenue comes from business registrations @ \$25 per applicant per Village Code.

#### **BUILDING PERMITS 01-00-20-3210**

Miscellaneous permits based on history of building permit revenue.

**WATERSHED PERMITS 01-00-20-3211**

\$25 fee per Village Code for watershed inspections. Assumes 2 in FY 2023/2024.

**SITE DEVELOPMENT PERMITS 01-00-20-3213**

Site development permit issued with new construction.

**LANDSCAPE INSPECTION FEE 01-00-20-3214**

\$50 fee per Village Code for landscape inspections. Assumes 10 in FY 2023/2024.

**VEHICLE LICENSE**

- All households within the village are charged an annual motor vehicle license fee which is billed in installments on the sewer and water bill.
- All households located in single-family dwellings, townhomes, and condominiums - \$36.
- All multi-family rental units - \$18 (per dwelling unit).
- All multiple-family rental units located within a building reserved exclusively for senior housing - \$12 (per dwelling unit).
- Senior Discount - \$12
- Commercial:

1 to 4	Vehicles	\$ 36
5 to 10	Vehicles	\$ 72
10+	Vehicles	\$108

**OTHER REVENUE**

**ZONING HEARING FEES 01-00-30-3480**

This revenue is received from zoning hearing fees such as variations, special use permits and re-zoning requests.

**NATURAL GAS FRANCHISE 01-00-30-3481**

Revenue from the Village’s Natural Gas Franchise Agreement with NICOR. Payment for 31,467 Therms at the average Therm cost over the past 3-years. 2023/2024 assumes an average Therm cost of 0.5467

**POLICE REPORTS 01-00-30-3610**

This is a fee that is charged for copies of police reports.

**COURT FINES 01-00-30-3710**

This revenue comes from fines through the Court system.



**PARKING & ORDINANCE FINES 01-00-30-3720**

This revenue comes from local ordinance violations through the Administrative Adjudication System.

**SEX OFFENDER REGISTRATION FEE 01-00-30-3730**

This revenue is from the Village share of the Sex Offender Registration fee.

**INTEREST INCOME 01-00-30-3810**

Income derived from investments.

**SCHOOL RESOURCE OFFICERS 01-00-30-3880**

This revenue consists of receipts from Allendale (\$60,000) paid quarterly, and from School Districts for special police detail such as directing traffic for buses, and \$63,000 from CCD #117 for School Resource Officer.

**OTHER REVENUE 01-00-30-3890**

This miscellaneous line item is for one-time receipts of unforeseen monies. This includes the payment of a retired employee paying full cost of Village Health insurance.

# ADMINISTRATION

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>PERSONNEL EXPENSES</b>					
01-10-10-4011	SALARY (Payroll Spread)	279,521	235,533	284,609	350,764
01-10-10-4015	PART-TIME	13,955	36,000	17,540	57,470
01-10-10-4014	OVERTIME (Payroll Spread)	-	50	63	100
01-10-10-4017	BENEFIT TIME COMPENSATION (Payroll Spread)	2,354	2,500	811	2,500
01-10-10-4020	SALARY-VILLAGE CLERK	3,500	3,500	3,500	3,500
01-10-10-4021	SALARY-MAYOR & TRUSTEES	23,150	25,000	24,900	28,330
01-10-10-4022	SALARY-ZONING & PLANNING	600	1,320	1,320	3,960
01-10-10-4110	HEALTH & LIFE INSURANCE (Payroll Spread)	63,736	54,000	64,795	70,968
01-10-10-4130	IMRF	-	-	70,674	85,209
01-10-10-4140	SOCIAL SECURITY	-	-	185,965	195,186
<b>TOTAL PERSONNEL EXPENSES</b>		<b>386,816</b>	<b>357,903</b>	<b>654,178</b>	<b>797,987</b>
<b>CONTRACTOR EXPENSES</b>					
01-10-20-4214	VACANT LOT MOWING	5,024	3,500	3,984	3,000
01-10-20-4310	AUDIT (S-70%)	16,719	16,875	17,938	23,450
01-10-20-4311	FINANCIAL MANAGEMENT CONTRACT (S-50%)	32,745	29,320	34,340	35,000
01-10-20-4330	LEGAL FEES	86,286	50,000	114,767	90,000
01-10-20-4391	CODIFICATION	3,237	4,000	1,978	4,500
01-10-20-4392	BUILDING INSPECTORS	62,894	57,000	61,888	65,000
01-10-20-4380	PLANNING	-	5,000	-	15,000
01-10-20-4813	EQUIPMENT MAINTENANCE	1,628	3,072	1,524	3,000
01-10-20-5215	IT SUPPORT (75%)	-	8,400	10,204	9,000
01-10-20-5216	MANAGED GIS SERVICES (20%)	-	-	-	6,000
<b>TOTAL CONTRACTOR EXPENSES</b>		<b>208,533</b>	<b>177,167</b>	<b>246,622</b>	<b>253,950</b>
<b>OTHER EXPENSES</b>					
01-10-60-4810	OFFICE SUPPLIES (S-35%)	7,197	7,350	7,100	7,350
01-10-60-4812	CREDIT CARD FEES (S-10%)	1,439	3,000	1,268	2,000
01-10-60-4430	PUBLISHING	3,936	2,000	724	1,500
01-10-60-4442	NEWSLETTER	1,050	1,200	1,694	2,500
01-10-60-4440	PRINTING	390	1,000	-	1,000
01-10-60-4530	TRAINING/TRAVEL	9,739	14,000	6,763	8,750
01-10-60-4531	MEMBERSHIPS	-	-	-	10,000
01-10-60-5190	MISCELLANEOUS EXPENSES	10,053	8,000	18,653	8,000
01-10-60-4811	INFORMATION TECH. FUND CONTRIBUTION	30,000	40,000	40,000	-
01-10-60-5217	SPECIAL EVENTS CONTRIBUTION	-	25,000	28,750	40,000
01-10-60-5201	NEW EQUIPMENT	2,880	3,500	2,100	2,500
01-10-60-5213	SOFTWARE LICENSES (50%)	-	27,145	24,000	25,000
01-00-60-4680	LIABILITY INSURANCE (75%)	-	-	-	176,500
01-10-60-5219	IMPACT FEE PAYMENTS	-	-	-	-
<b>TOTAL OTHER EXPENSES</b>		<b>66,684</b>	<b>132,195</b>	<b>131,052</b>	<b>285,100</b>
<b>TOTAL EXPENSES</b>		<b>662,032</b>	<b>667,265</b>	<b>1,031,851</b>	<b>1,337,037</b>

## **PERSONNEL EXPENSES**

### **SALARY 01-10-10-4011**

Salaries for Village Administrator, Administrative Services Director, Executive Assistant, Utility Billing Coordinator, Finance Clerk and auto allowance (\$3,000) for Administrator. Salaries based on percentage of time associated with this fund. Includes payout for retired Executive Assistant position for 6 months.

### **PART-TIME 01-10-10-4015**

Assumes 1 position at 1000 hours, plus an intern.

### **OVERTIME 01-10-10-4014**

Cost for overtime for office staff.

### **BENEFIT TIME COMPENSATION 01-10-10-4017**

Cost for payment of sick time compensation program based on the percentage of salaries in this fund.

### **SALARY-VILLAGE CLERK 01-10-10-4020**

Per Village Code, \$3,500 per year.

### **SALARY-MAYOR & TRUSTEES 01-10-10-4021**

Expenses for Mayor \$6,000 per year plus \$70.00 per meeting. Expenses for Trustees: \$70 per board meeting and other meetings. Assumes 24 board meetings plus other meetings as defined by Village Code.

### **SALARY-ZONING & PLANNING 01-10-10-4022**

Per Village Code each meeting costs include the following. Assumes twelve meetings.

Chairman (1)	\$60
Members (6)	\$45

### **HEALTH & LIFE INSURANCE 01-10-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per health insurance with renewal occurring in January annually.

### **IMRF 01-10-10-4130**

Illinois Municipal Retirement Fund.

### **SOCIAL SECURITY 01-10-10-4140**

The FICA rate of 7.65%

## **CONTRACTOR EXPENSES**

### **VACANT LOT MOWING 01-10-20-4214**

Costs to mow private properties in violation of property maintenance code. Costs are reimbursable via the lien process.

### **AUDIT 01-10-20-4310 (SPREAD)**

Portion of contractual costs for annual Village audit. 70% of expenses (Remaining costs in Water/Sewer/Police Pension).

### **FINANCIAL MANAGEMENT CONTRACT (SPREAD)**

Costs for financial management support contract. 50% of total cost.

### **LEGAL FEES 01-10-20-4330**

Costs for Village Attorney to attend meetings, write ordinances, conduct research, etc. Costs include all legal expenses, except police prosecution and adjudication.

### **CODIFICATION 01-10-60-4391**

Contractual cost for paper and online code updates. \$500 per year for online code.

### **BUILDING INSPECTORS 01-10-20-4392**

Costs for Lake County to perform plan review and building inspection services. \$67 per hour and assumes 820 annual hours.

### **PLANNER 01-10-20-4380**

Contract cost for outside contractor planning fees.

### **EQUIPMENT MAINTENANCE 01-10-20-4813**

Postage Machine Agreement	\$ 1,972	(100%)
Copier Maintenance	\$ 1,100	(100%)
	<b>\$ 3,072</b>	

### **IT SUPPORT 01-10-20-5215**

Assumes (75%) 80 per hour at 150 hours per year per the Village current agreement for these services.

### **MANAGED GIS SERVICES 01-10-20-5216**

20% split with water/sewer.

## **OTHER EXPENSES**

### **OFFICE SUPPLIES 01-10-60-4810**

Spread cost of officer supplies, 35%.

**CREDIT CARD FEES 01-10-60-4812**

10% of total credit card fees, remainder in Water/Sewer Fund.

**PUBLISHING 01-10-60-4430**

Costs for legal publications related to bids and public meetings.

**NEWSLETTER 01-10-60-4442**

Costs for printing bi-monthly newsletter. Cost for 17" x 11" color newsletter.

**PRINTING 01-10-60-4440**

Costs for printing various items.

**TRAINING/TRAVEL 01-10-60-4530**

Covers travel and training costs for administrative staff.

**MEMBERSHIPS 01-10-60-4531**

Covers the cost of annual memberships.

ITEM	COST
Chamber Luncheon	\$400
ILCMA	\$300
ICMA	\$1,000
Municipal Clerks	\$100
Lake County Partners	\$ 1,700 (\$.25 per capita)
ICSC	\$100
Lake County Municipal League	\$1,000
IL Municipal League	\$1,000
Chicago Agency for Planning	\$350
IL TIF Association	\$550
Chamber Dues	\$200
Mileage	\$300
Miscellaneous	\$3,000
<b>TOTAL</b>	<b>\$10,000</b>

**MISCELLANEOUS EXPENSES 01-10-60-5190**

Costs for unanticipated expenses.

**SPECIAL EVENTS FUND CONTRIBUTION 01-10-60-4441**

Fund contribution for the Special Events Fund.

**NEW EQUIPMENT 01-10-60-5201**



**SOFTWARE LICENSES 01-10-60-5213**

75% Admin, 25% Water, 25% Sewer

**Software Licenses**

Anti-Spam	\$	800
Off-Site Back-up	\$	3,100
Website fee	\$	2,400
Remote Access	\$	1,350
Laserfiche	\$	1,300
SeeClickFix	\$	7,800
Adobe Creative Suite	\$	1,000
EDR	\$	3,500
Exchange Online Plan for GCC	\$	4,000
Firewall replacement	\$	3,500
Network Detective Pro License	\$	600
BS&A	\$	8,000
Paylocity	\$	8,000
<b>Total</b>	<b>\$</b>	<b>30,950</b>

**IMPACT FEE PAYMENTS 01-10-60-5219**

Remittance for impact fees paid to Library District and the Fire Protection District.

**POLICE**

	<b>ACTUAL 2021/2022</b>	<b>BUDGET 2022/2023</b>	<b>EST. YR. END 2022/2023</b>	<b>BUDGET 2023/2024</b>
<b>PERSONNEL EXPENSES</b>				
01-20-10-4010 SALARY-FULL-TIME OFFICERS	1,428,382	1,566,201	1,500,555	1,699,886
01-20-10-4011 SALARY-POLICE CLERICAL	70,527	68,463	70,477	70,517
01-20-10-4012 PART-TIME OFFICERS	86,906	100,000	65,000	100,000
01-20-10-4014 OVERTIME, COURT & RANGE	71,051	65,000	93,715	75,000
01-20-10-4015 PART-TIME POLICE CLERICAL	14,561	13,000	13,726	28,314
01-20-10-4016 OIC PAY	10,967	8,000	9,995	14,000
01-20-10-4018 HOLIDAY PAY	38,470	20,000	16,100	20,000
01-20-10-4019 FTO PAY	1,414	1,000	2,000	1,500
01-20-10-4021 BENEFIT TIME COMPENSATION	6,821	6,500	6,236	6,800
01-20-10-4110 HEALTH & LIFE INSURANCE (Payroll Spread)	260,332	244,770	226,470	225,584
01-20-50-4022 POLICE COMMISSION PAYROLL	540	600	-	600
<b>TOTAL PERSONNEL EXPENSES</b>	<b>1,989,971</b>	<b>2,093,534</b>	<b>2,004,274</b>	<b>2,242,201</b>
<b>CONTRACTOR EXPENSES</b>				
01-20-20-4330 LEGAL FEES - PROSECUTION	36,312	30,000	36,707	37,000
01-20-20-4460 DISPATCHING	60,525	102,000	82,000	82,000
01-20-50-4330 POLICE COMMISSION & TRAINING ACADEMY	12,425	18,234	6,112	18,234
01-20-50-5191 POLICE COMMISSION EXPENSES	1,027	-	-	-
01-20-20-4393 POLICE POLICY PROGRAM	6,880	6,800	7,585	-
01-20-20-4710 RADIO NETWORK FEES	11,016	11,016	11,016	11,016
01-20-20-4813 EQUIPMENT MAINTENANCE	6,658	9,350	7,458	-
01-20-20-4331 ADMINISTRATIVE ADJUDICATION	525	2,100	-	2,100
01-20-20-4332 CRIME LAB	15,325	15,500	15,325	15,500
01-20-20-4333 STOLEN PROPERTY DATABASE	2,302	2,500	2,345	-
<b>TOTAL CONTRACTOR EXPENSES</b>	<b>152,995</b>	<b>197,500</b>	<b>168,548</b>	<b>165,850</b>
<b>OTHER EXPENSES</b>				
01-20-60-4170 UNIFORM ALLOWANCE	27,539	25,000	21,264	28,000
01-20-60-4171 VEST REPLACEMENTS	2,663	5,400	5,511	6,000
01-20-60-4393 POLICE POLICY	-	-	7,320	7,400
01-20-60-4530 TRAINING/TRAVEL	12,411	19,500	17,827	19,500
01-20-60-4531 MEMBERSHIPS	6,686	6,500	8,317	14,500
01-20-60-4560 RANGE & SUPPLIES	10,954	14,000	11,294	16,500
01-20-60-4570 PHYSICALS/TESTING	720	1,500	-	6,060
01-20-60-4810 OFFICE SUPPLIES (S-35%)	5,201	7,350	6,000	12,000
01-20-60-4440 PRINTING/PUBLIC RELATION	5,501	4,500	1,642	4,500
01-20-60-4940 SUPPLIES	967	6,000	6,023	6,000
01-20-60-5190 MISCELLANEOUS	5,305	7,000	4,000	8,000
01-20-60-5205 FLEET REPLACEMENT CONTRIBUTION	82,080	90,000	90,000	-
01-20-60-3897 FLEET REPAIR FUND CONTRIBUTION	112,000	112,000	112,000	-
01-20-60-5201 NEW EQUIPMENT	1,700	5,053	3,945	21,800
01-20-60-5213 SOFTWARE LICENSES	-	9,350	6,000	19,195
<b>TOTAL OTHER EXPENSES</b>	<b>273,727</b>	<b>313,153</b>	<b>301,144</b>	<b>169,455</b>
<b>TOTAL EXPENSES</b>	<b>2,416,693</b>	<b>2,604,187</b>	<b>2,473,966</b>	<b>2,577,506</b>

## **PERSONNEL EXPENSES**

### **SALARY-FULL-TIME OFFICERS 01-20-10-4010**

Salaries for current full-time police officers per collective bargaining agreement. Includes salaries for Chief, one Lieutenant position, and four Sergeants.

### **SALARY-POLICE CLERICAL 01-20-10-4011**

Salaries for 1 full-time records position.

### **SALARY-PART-TIME POLICE CLERICAL 01-20-10-4012**

Two part-time records position.

### **SALARY-PART-TIME OFFICERS 01-20-10-4012**

Costs for part-time officers @ \$28 per hour. Includes \$16,000 for part-time community service officer @ \$18 per hour.

### **OVERTIME, COURT & RANGE 01-20-10-4014**

Overtime for operations, court and range training.

### **OIC (OFFICER IN CHARGE) PAY 01-20-10-4016**

Per collective bargaining agreement, officer in charge receives extra hour of pay for 8 hour shift and 1.5 hours for 12-hour shift. Assumes 5.5 shifts per pay period @ \$32 per hour.

### **SICK PAY BUY BACK 01-20-10-4021**

Per collective bargaining agreement, sick pay buyback program for eligible staff members.

### **HOLIDAY PAY 01-20-10-4018**

Per collective bargaining agreement, pay for officers and non-union officers to work designated (10) number of holidays, one is a premium holiday (2.5 times regular pay).

### **FTO (FIELD TRAINING OFFICER) PAY 01-20-10-4019**

Per collective bargaining agreement, while training new officers, officer receives an extra hour per day. Assumes that no new full-time officers will be hired, but minimal amount included in the event a new officer is hired.

### **HEALTH & LIFE INSURANCE 01-20-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per new health insurance agreement.

### **POLICE COMMISSION HEARINGS 01-20-50-4022**

Costs for police commission members (3) @ \$45.00 per meeting.

### **IMRF 01-20-10-4130**

## **SOCIAL SECURITY 01-20-10-4140**

### **CONTRACTOR EXPENSES**

#### **LEGAL FEES 01-20-20-4330**

Court fees for prosecutions.

#### **DISPATCHING 01-20-20-4460**

Costs per dispatching agreement with FoxComm (\$80,000 per year) and Police Hearing Services (\$2,000) used in conjunction with dispatching services through Fox Comm.

#### **POLICE COMMISSION & ACADEMY 01-20-50-4330**

Costs for police commission testing for new hire officer list, polygraph, psychology and medical test. Also includes costs for two police officer academy slot.

#### **POLICE POLICY PROGRAM 01-20-20-4393**

Cost for annual licensing and maintenance fee police policy program with Lexipol.

#### **RADIO NETWORK FEES 01-20-60-4710**

Star Com Radio Network \$11,016 (\$34 per officer per month for 27 officers.)

#### **EQUIPMENT MAINTENANCE 01-20-20-4813**

ITEM	COST
PD camera system	\$300
Radar Certification	\$300
Livescan System	\$4,700
Camera System Warranty	\$600
Records maintenance	\$450
<b>The Beast (Investigations)</b>	\$1,000
PD copier maintenance	\$2,000
<b>TOTAL</b>	<b>\$9,350</b>

#### **ADMINISTRATIVE ADJUDICATION 01-20-20-4331**

Village's fee for the Adjudication process with the Village of Fox Lake. (\$175 per month)

#### **CRIME LAB 01-20-20-4332**

Costs for North East Illinois Regional Crime Lab at \$1.33 per resident, plus \$3,000 storage rental fee.

#### **LEADS DATABASE 01-20-20-4333**

Costs for stolen property database to track property that has been stolen.

## **OTHER EXPENSES**

### **UNIFORM ALLOWANCE 01-20-60-4170**

Costs for miscellaneous department issued equipment such as holsters, caps, etc. \$25,000.

### **VEST REPLACEMENT 01-20-60-4171**

Cost to replace 9 police vests.

### **POLICE POLICY PROGRAM 01-20-20-4393**

Cost for annual licensing and maintenance fee police policy program with Lexipol.

### **TRAINING/TRAVEL 01-20-60-4530**

Travel, training, fire arms, cyber, supervisor and tuition reimbursement.

### **MEMBERSHIPS 01-20-60-4531**

<b>Memberships</b>	<b>Annual Fee</b>
Lake County S/A Office Forensic Lab	\$2,995.00
Major Crash Assistance Team	\$500.00
TransUnion	\$1,000.00
Major Crimes Task Force	\$1,992.00
SmartSafety Software	\$156.00
ILEAS	\$120.00
Cardmember	\$150.00
IL Assoc of Chief's of Police	\$20.00
Lake County Police Chief Assoc	\$50.00
Axon license bundle	\$468.00
Mid-States Organized Crime	\$150.00
Critical Reach	\$360.00
NIPAS	\$6,100.00
<b>TOTAL</b>	<b>\$14,500</b>

### **RANGE-SHOOT & SUPPLIES 01-20-60-4560**

Taser products	\$ 2,500
Ammunition	\$ 10,150
Range Fees (6)	\$ 1,350
	<b>\$14,000</b>

### **PHYSICALS/TESTING 01-20-60-4570**

Cost for required employment physicals and testing.

### **OFFICE SUPPLIES 01-20-60-4810 (SPREAD)**

35% of costs for office supplies.



**PRINTING/PUBLIC RELATIONS 01-20-60-4440**

Costs for printing letterhead, forms, tickets and public relations materials.

**SUPPLIES 01-20-60-4940**

Costs for general supplies and for evidence processing.

**MISCELLANEOUS 01-20-60-5190**

Cost for unanticipated expenses.

**NEW EQUIPMENT 01-20-60-5201**

Radar Signs	\$4,200
NIPAS Equipment	\$15,000
Detective Laptop	\$2,600

**SOFTWARE LICENSES 01-20-60-5213**

**FLEET**

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>PERSONNEL EXPENSES</b>					
01-30-10-4011	SALARY (Payroll Spread)	66,449	78,668	28,373	66,717
01-30-10-4014	OVERTIME	-	1,000	1,260	3,500
01-30-10-4017	BENEFIT TIME COMPENSATION	-	1,000	-	1,000
01-30-10-4110	HEALTH & LIFE INSURANCE (Payroll Spread)	24,189	22,258	22,258	47,736
<b>TOTAL PERSONNEL EXPENSES</b>		<b>90,637</b>	<b>102,926</b>	<b>51,891</b>	<b>118,953</b>
<b>CONTRACTOR EXPENSES</b>					
01-30-20-4230	CONTRACT VEHICLE MAINTENANCE (75%)	38,286	45,000	80,321	30,000
<b>TOTAL CONTRACTOR EXPENSES</b>		<b>38,286</b>	<b>45,000</b>	<b>80,321</b>	<b>30,000</b>
<b>OTHER EXPENSES</b>					
01-30-60-4170	UNIFORM	-	-	-	400
01-30-60-4530	TRAINING/TRAVEL	-	-	-	500
01-30-60-4531	MEMBERSHIPS	-	-	-	2,000
01-30-60-4820	AUTOMOTIVE FUEL/OIL (75%)	77,121	104,000	100,240	82,500
01-30-60-4930	VEHICLE SUPPLIES (75%)	45,320	60,000	55,500	52,500
01-30-60-4931	MECHANIC TOOLS (75%)	-	-	-	750
01-30-60-4932	VEHICLE LEASES	-	-	-	90,000
<b>TOTAL OPERATING EXPENSES</b>		<b>122,442</b>	<b>164,000</b>	<b>155,740</b>	<b>228,650</b>
<b>TOTAL EXPENSES</b>		<b>251,365</b>	<b>311,926</b>	<b>287,952</b>	<b>377,603</b>

## **PERSONNEL EXPENSES**

### **SALARY 01-30-10-4011**

Salary for Village Mechanic. Payroll spread 75% Fleet, 12.5% water, 12.5% sewer.

### **OVERTIME 01-30-10-4014**

Cost for overtime for Mechanic.

### **BENEFIT TIME COMPENSATION 01-30-10-4017**

Cost for payment of sick time compensation program.

### **IMRF 01-30-10-4130**

Illinois Municipal Retirement Fund.

### **SOCIAL SECURITY 01-30-10-4140**

The FICA rate of 7.65%

## **CONTRACTOR EXPENSES**

### **MAINTENANCE-VEHICLES 01-30-20-4230**

Contractor costs for vehicle maintenance.

## **OTHER EXPENSES**

### **UNIFORM ALLOWANCE 01-30-60-4170**

Uniform expenses for the Mechanic

### **TRAINING/TRAVEL 01-30-60-4530**

Various training costs for the Mechanic such as training materials, classes and workshops

### **MEMBERSHIPS 01-30-60-4531**

Cost for annual memberships.

### **AUTOMOTIVE FUEL/OIL 01-30-60-4820**

75% of costs for fuel and oil.

### **SUPPLIES-VEHICLE 01-30-60-4930**

75 % of the costs for parts for fleet maintenance.

**MECHANIC TOOLS 01-30-60-4931**

75% of costs for any tools that the Mechanic may need.

**VEHICLE LEASES 01-30-60-4932**

Contracted lease payments for vehicles through Enterprise Fleet Management Services.

## STREETS

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>PERSONNEL EXPENSES</b>					
01-41-10-4013	SALARY (Payroll Spread)	310,607	244,168	280,793	305,579
01-41-10-4012	PART-TIME (Payroll Spread)	15,353	30,750	23,934	25,000
01-41-10-4014	OVERTIME (Payroll Spread)	25,586	25,000	26,192	30,950
01-41-10-4017	BENEFIT TIME COMPENSATION (Payroll Spread)	1,573	2,000	3,832	4,000
01-41-10-4110	HEALTH & LIFE INSURANCE (Payroll Spread)	74,588	76,000	74,800	72,243
<b>TOTAL PERSONNEL EXPENSES</b>		<b>427,707</b>	<b>377,918</b>	<b>409,552</b>	<b>437,772</b>
<b>CONTRACTOR EXPENSES</b>					
01-41-20-4320	ENGINEERING	82	6,000	6,000	10,000
01-41-40-4240	STREET MAINTENANCE	87,487	90,000	85,712	90,000
01-41-20-4242	STREET SWEEPING	5,150	5,400	5,275	5,400
01-41-40-4271	SIDEWALK MAINTENANCE	648	75,000	65,980	75,000
<b>TOTAL CONTRACTOR EXPENSES</b>		<b>93,367</b>	<b>176,400</b>	<b>162,967</b>	<b>180,400</b>
<b>OTHER EXPENSES</b>					
01-41-60-4170	UNIFORM ALLOWANCE (S-50%)	1,751	3,000	1,200	3,000
01-41-60-4530	TRAVEL/TRAINING	900	2,000	1,000	2,000
01-41-60-4531	MEMBERSHIPS	-	-	-	835
01-41-60-4570	TESTING/PHYSICALS	344	2,000	750	1,000
01-41-40-4241	STORM SEWERS	18,902	64,000	50,000	64,000
01-41-40-4260	ROAD SALT	49,726	67,000	120,128	-
01-41-40-4270	SIGNS & LIGHTS	4,155	5,000	5,274	5,000
01-41-40-4660	STREET LIGHT ELECTRICITY	195,246	135,000	133,785	135,000
01-41-40-4940	SUPPLIES	8,159	12,000	15,060	15,000
01-41-60-5205	FLEET REPLACEMENT CONTRIBUTION	67,800	67,800	67,800	-
01-41-60-3897	FLEET REPAIR FUND CONTRIBUTION	98,000	98,000	98,000	-
01-41-60-5201	NEW EQUIPMENT	-	1,800	1,779	5,000
<b>TOTAL OTHER EXPENSES</b>		<b>444,983</b>	<b>457,600</b>	<b>494,776</b>	<b>230,835</b>
<b>TOTAL EXPENSES</b>		<b>966,057</b>	<b>1,011,918</b>	<b>1,067,294</b>	<b>849,007</b>

## **PERSONNEL EXPENSES**

### **SALARY 01-41-10-4013**

Spread of salaries for time spent on Streets maintenance activities.

### **PART-TIME 01-41-10-4012 (SPREAD)**

Spread of expenses for two, 1,000 hour part-time positions, plus seasonal summer positions.

### **OVERTIME 01-41-10-4014**

Overtime is spread to Streets/Water/Sewer/Metra/Mansion based on the percentage of public works salaries in each fund. Costs for overtime are broken down below.

- On call compensation \$5,200
- On call pay \$15,750
- Other overtime \$10,000

### **SICK TIME COMPENSATION 01-41-10-4017**

Cost for payment of sick time compensation program based on the percentage of salaries in this fund.

### **HEALTH & LIFE INSURANCE 01-41-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per new health insurance agreement.

## **CONTRACTOR EXPENSES**

### **ENGINEERING 01-41-20-4320**

Miscellaneous engineering services for street related items such as drainage analysis, storm water and street analysis. Does not include costs for road resurfacing design and construction engineering.

### **MAINTENANCE-STREETS 01-41-40-4240**

Contractor costs for patching, crack filling and pavement marking.

### **STREET SWEEPING 01-41-40-4242**

Contractor costs for street sweeping (2 rotations) for 63 lane miles and 4 miles of parking facilities.

### **MAINTENANCE-SIDEWALKS 01-41-40-4271**

Contractor costs for sidewalk and curb removal/replacement.

## **OTHER EXPENSES**

### **UNIFORM ALLOWANCE 01-41-60-4170 (SPREAD)**

50% of Public Works uniforms, remaining costs in Water (25%) and Sewer (25%).



**TRAVEL/TRAINING 01-41-60-4530**

Various training costs for Streets activities such as training materials, classes and workshops.

**MEMBERSHIPS 01-41-60-4531**

Annual membership costs.

ILPSI

APWA \$185

IPWAMAN \$100

NIPSTA \$450

**TESTING/PHYSICALS 01-41-60-4570**

Costs for required employment testing and physicals.

**STORM SEWERS 01-41-40-4241**

Parts for maintenance and repair of municipal storm sewers such as pipes, structures and ditches.

**SALT 01-41-40-4260**

1,000 tons of de-icing materials under state and county bid at \$67 per ton.

**SIGNS & LIGHTS 01-41-40-4270**

Parts for repairs of municipal signs and street lights.

**ELECTRIC-STREET LIGHTS 01-41-40-4660**

Electricity costs for municipal street lights. Assumes reduction based on LED conversions of Village-owned street lights.

**SUPPLIES 01-41-40-4940**

Supplies for street maintenance such as cold patch, paint and equipment rental.

**NEW EQUIPMENT 01-41-60-5201**

Cost to purchase a brine sprayer.

## FACILITIES GROUNDS

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>CONTRACTOR EXPENSES</b>					
01-46-20-4213	MOWING/WEEDING	21,685	25,500	28,355	25,500
01-46-40-4210	MAINTENANCE-BUILDING	11,928	14,000	13,000	14,000
01-46-40-4211	MAINTENANCE-PARKS	16,192	15,280	12,542	16,500
01-46-40-4214	TREE & ROW MAINTENANCE	322	8,000	2,560	5,000
01-46-20-4215	POND TREATMENTS	14,248	14,000	14,522	14,600
01-46-60-4360	CLEANING SERVICE	6,915	8,540	7,640	8,000
<b>TOTAL CONTRACTOR EXPENSES</b>		<b>71,290</b>	<b>85,320</b>	<b>78,620</b>	<b>83,600</b>
<b>OTHER EXPENSES</b>					
01-46-40-4910	SUPPLIES-BUILDING	14,034	11,000	11,000	16,000
01-46-40-4911	SUPPLIES-PARKS	14,125	20,000	16,602	20,000
01-46-40-4920	BUILDING SOFTWARE FEES	2,187	2,400	2,294	2,400
01-46-60-4420	TELEPHONE/INTERNET (S-75%)	17,503	18,000	15,492	18,000
01-46-60-5201	NEW EQUIPMENT	3,750	-	-	-
<b>TOTAL OTHER EXPENSES</b>		<b>51,598</b>	<b>51,400</b>	<b>45,388</b>	<b>56,400</b>
<b>TOTAL EXPENSES</b>		<b>122,888</b>	<b>136,720</b>	<b>124,007</b>	<b>140,000</b>

## **CONTRACTOR EXPENSES**

### **MOWING/WEEDING 01-46-20-4213**

Mowing services for Glacier, Cedar Crossing 1 & 2, Loffredo, Steven Sherwood and Lehmann Parks. Assumes 30 rotations for weeding and weeding treatments for Cedar Avenue, Metra Station and Lehmann Park.

### **MAINTENANCE-BUILDING 01-46-40-4210**

Contract repairs, as needed, to municipal facilities such as Village Hall, Police Station, Public Works Facilities.

### **MAINTENANCE-PARKS 01-46-40-4211**

Contract maintenance at municipal parks such as weed treatments, tank pump-out at Loffredo Park and tree maintenance.

### **TREE & ROW MAINTENANCE 01-46-40-4214**

Contract tree maintenance and right of way maintenance.

### **POND TREATMENTS 01-46-20-4215**

Cost for chemical treatments to Steven Sherwood Park and the Longwood Centre Pond.

### **CLEANING SERVICE 01-46-60-4360**

Village Hall (\$45 per cleaning)	\$2,340
Police Department (\$100 per cleaning)	\$5,200
<u>Extra Cleaning</u>	<u>\$1,000</u>
	<b>\$8,540</b>

## **OTHER EXPENSES**

### **SUPPLIES-BUILDING 01-46-40-4910**

Supplies for municipal buildings such as paper supplies.

### **SUPPLIES-PARKS 01-46-40-4911**

Supplies for municipal parks.

### **BUILDING SOFTWARE FEES 01-46-40-4920**

7 licenses at \$320 annually, plus 2 administrative licenses at \$80 annually.

### **TELEPHONE/INTERNET 01-46-60-4420**

Telephone and internet for Police Public Works and Village Hall. 75% of costs for 11 staff cell phones, remaining in Water/Sewer.

### **NEW EQUIPMENT 01-46-60-5201**

# WATER SEWER REVENUE

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>USER FEES &amp; CHARGES</b>					
60-00-40-3510	WATER CUSTOMER SALES	2,027,454	1,861,934	2,025,369	1,947,521
60-00-40-3610	SEWER CUSTOMER SALES	1,251,944	1,340,669	1,244,256	1,223,623
60-00-40-3620	PENALTIES	48,007	30,000	50,000	40,000
<b>TOTAL OTHER REVENUE</b>		<b>3,327,405</b>	<b>3,232,603</b>	<b>3,319,625</b>	<b>3,211,144</b>
<b>OTHER REVENUE</b>					
60-00-50-3611	COUNTY SURCHARGE FEE	58,129	55,000	57,210	55,000
60-00-50-3600	METER SALES	6,405	1,000	-	1,000
60-00-30-3581	WATER INSPECTION FEES	560	500	300	500
60-00-30-3591	SEWER INSPECTION FEES	560	500	300	500
60-00-30-3800	MISCELLANEOUS REVENUE	6,823	10,000	5,100	7,000
60-00-30-3810	INTEREST EARNED	7,929	50,000	6,000	7,000
60-00-30-3890	NSF CHARGES	430	500	825	500
<b>TOTAL OTHER REVENUE</b>		<b>80,835</b>	<b>117,500</b>	<b>69,735</b>	<b>71,500</b>
<b>TOTAL REVENUE</b>		<b>3,408,240</b>	<b>3,350,103</b>	<b>3,389,360</b>	<b>3,282,644</b>

## **USER FEES & CHARGES**

### **WATER CUSTOMER SALES 60-00-40-3510**

\$9.88 per 1,000 gallons in FY 23/24. Accounts for minimum bill practice. Assumes \$30,000 in revenue for minimum billing.

### **SEWER CUSTOMER SALES 60-00-40-3610**

\$7.70 per 1,000 gallons in FY 23/24 (\$2.85 reduced sewer) and per approved rate schedule in FY 23/24. Assumes \$30,000 in revenue for minimum billing.

### **PENALTIES 60-00-40-3620**

Funds include 10% penalty for non-payment of water and sewer bills and \$100 reconnection charge. Assumes 30 reconnections.

## **OTHER REVENUE**

### **COUNTY SURCHARGE FEES**

Revenue from County Surcharge Fee collected by the Village, plus surcharge fee from businesses.

### **METER SALES 60-00-50-3600**

Funds from sale of new water meters for new construction.

### **WATER INSPECTION FEES 60-00-30-3581**

\$100 fee for the inspection of new construction and new replacement service taps. Assumes 5 inspections.

### **SEWER INSPECTION FEES 60-00-30-3591**

\$100 fee for the inspection of new construction and new replacement service taps. Assumes 5 inspections.

### **MISCELLANEOUS REVENUE 60-00-30-3800**

For one-time receipts, not anticipated such as insurance claims and auctioning of equipment.

### **INTEREST EARNED 60-00-30-3810**

Interest earned from investments based on percentage of funds from the W/S Fund.

### **NSF CHARGES 60-00-30-3890**

For charges related to not-sufficient fund payments.

# WATER

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>PERSONNEL EXPENSES</b>					
60-42-10-4013	SALARY (Payroll Spread)	201,920	181,715	185,396	221,912
60-42-10-4015	PART-TIME WATER (Payroll Spread)	22,327	15,375	11,964	14,805
60-42-10-4014	OVERTIME (Payroll Spread)	10,747	13,000	14,077	15,000
60-42-10-4017	BENEFIT TIME COMPENSATION (Payroll Spread)	2,831	1,500	1,965	2,000
60-42-10-4110	HEALTH & LIFE INSURANCE (Payroll Spread)	51,277	45,572	40,000	47,402
60-42-10-4130	IMRF	18,523	16,509	15,289	21,659
60-42-10-4140	SOCIAL SECURITY	17,366	15,804	14,677	18,349
<b>TOTAL PERSONNEL EXPENSES</b>		<b>324,990</b>	<b>289,475</b>	<b>283,367</b>	<b>341,127</b>
<b>CONTRACTOR EXPENSES</b>					
60-42-20-4231	METER READING SERVICES	2,175	1,107	1,107	860
60-42-20-4310	AUDIT (S-15%)	4,013	4,050	4,305	5,025
60-42-60-4440	PRINTING/BILLING (S-50%)	4,514	4,600	3,800	6,500
60-42-20-4311	FINANCIAL MANAGEMENT CONTRACT (S-25%)	16,373	14,660	17,170	17,500
60-42-20-4230	CONTRACT VEHICLE MAINTENANCE (12.5%)	-	-	-	5,000
60-42-40-4250	WATER SYSTEM MAINTENANCE	22,609	40,000	35,000	60,000
60-42-20-4320	ENGINEERING WATER	-	25,000	4,118	35,000
60-42-20-4330	LEGAL FEES	3,216	2,000	3,518	5,000
60-42-20-4351	CLC-JAWA	384,523	346,500	319,341	334,194
60-42-20-4352	CLC-JAWA CONNECTION FEES	227,250	234,900	234,900	234,900
60-42-20-4353	METER CALIBRATION/VERIFICATION	2,350	4,000	4,000	4,200
60-42-20-4213	MOWING	3,888	4,200	3,996	4,200
60-42-20-5215	IT SUPPORT (12.5%)	-	1,800	2,187	1,500
06-42-20-5216	MANAGED GIS SERVICES (40%)	-	-	-	12,000
<b>TOTAL CONTRACTOR EXPENSES</b>		<b>670,911</b>	<b>682,817</b>	<b>633,442</b>	<b>725,879</b>
<b>OTHER EXPENSES</b>					
60-42-60-4170	UNIFORM ALLOWANCE	602	1,500	1,000	1,500
60-42-60-4530	TRAINING/TRAVEL	1,083	1,500	1,627	2,000
60-42-60-4531	MEMBERSHIPS	-	-	-	450
60-42-40-4870	METERS - PARTS & REPAIRS (S-50%)	4,020	5,000	3,824	6,000
60-42-60-4810	OFFICE SUPPLIES (S-15%)	4,823	4,000	3,500	5,800
60-42-60-4680	LIABILITY INSURANCE (S-11%)	29,611	26,041	83,259	26,041
60-42-60-4812	CREDIT CARD FEES (S-45%)	6,477	13,500	6,654	8,000
60-42-40-4950	SUPPLIES-WATER	25,288	32,000	30,000	35,000
60-42-40-4610	NATURAL GAS	5,913	4,000	12,000	13,500
60-42-40-4660	ELECTRICITY	49,237	50,000	42,232	50,000
60-42-60-4420	TELEPHONE	2,753	3,000	2,509	3,000
60-42-60-4820	AUTOMOTIVE FUEL/OIL (12.5%)	-	-	-	13,750
60-42-60-4930	VEHICLE SUPPLIES (12.5%)	-	-	-	8,750
60-42-60-4931	MECHANIC TOOLS (12.5%)	-	-	-	125
60-42-40-4960	JULIE LOCATES	2,052	2,153	2,425	2,500
60-42-60-4961	GENERATOR LOAD BANK TESTING & REPAIRS	-	-	-	10,000
60-42-60-5019	DEBT SERVICE - 2015, 2016, 2021	554,381	554,381	526,645	554,300
60-42-60-5205	FLEET REPLACEMENT CONTRIBUTION	50,100	51,600	51,600	-
60-42-60-5206	EQUIPMENT REPLACEMENT CONTRIBUTION	35,000	36,000	36,000	-
60-42-60-3897	FLEET REPAIR FUND CONTRIBUTION	35,000	35,000	35,000	-
60-42-60-5203	INFORMATION TECH. FUND CONTRIBUTION	15,000	20,000	20,000	-
60-42-60-5201	NEW EQUIPMENT	789	-	-	6,000
60-42-60-5213	SOFTWARE LICENSES (25%)	-	13,573	12,000	12,500
<b>TOTAL OTHER EXPENSES</b>		<b>822,126</b>	<b>853,247</b>	<b>870,275</b>	<b>759,216</b>
<b>TOTAL EXPENSES</b>		<b>1,818,028</b>	<b>1,825,539</b>	<b>1,787,083</b>	<b>1,826,222</b>



## **PERSONNEL EXPENSES**

### **SALARY 60-42-10-4013**

Portion of salaries based on time spent on Water activities. Salary for Village Mechanic. Payroll spread 75% Fleet, 12.5% water, 12.5% sewer.

### **PART-TIME WATER 60-42-10-4015**

Spread (25%) of expenses for two, 1,000 hour part-time positions, plus seasonal summer positions.

### **OVERTIME 60-42-10-4014**

Overtime is spread to Streets/Water/Sewer/Metra/Mansion based on the percentage of public works salaries in each fund. Costs for overtime are broken down below.

On call compensation	\$6,000
On call pay	\$16,000
Other overtime	\$31,000

### **SICK TIME COMPENSATION 60-42-10-4017**

Cost for payment of sick time compensation program based on the percentage of salaries in this fund.

### **HEALTH & LIFE INSURANCE 60-42-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per new health insurance agreement.

### **IMRF 60-42-10-4130**

The value is calculated at the Village's projected contribution rate for eligible payroll in this fund.

### **SOCIAL SECURITY 60-42-10-4140**

Social Security and Medicare costs related to salaries in this fund.

## **CONTRACTOR EXPENSES**

### **METER READING SERVICES 60-42-20-4231 (SPREAD)**

50% of meter reading support (860).

### **AUDIT 60-43-20-4310 (SPREAD)**

Portion of contractual costs for annual Village audit. 15% of expenses.

### **PRINTING/BILLING 60-42-60-4440 (SPREAD)**

Postage	\$ 3,585	(50%)	(2,825 bi-monthly bills)
Contract Billing/Billing Stock	\$ 1,500	(50%)	
	<b>\$ 5,085</b>		

**FINANCIAL MANAGEMENT CONTRACT (SPREAD) 60-42-20-4311**

Costs for financial management support contract. 25% of total cost.

**CONTRACT VEHICLE MAINTENANCE 60-42-20-4230**

Contractor costs (12.5%)for vehicle maintenance.

**WATER SYSTEM MAINTENANCE 60-42-40-4250**

Contract Water System Maintenance, Water Testing Services, SCADA Maintenance, Water Main Repairs, Well Repairs, Hydrant/Valve Maintenance, water system leak survey.

**ENGINEERING-WATER 60-42-20-4320**

Costs for miscellaneous engineering work for water treatment operations.

**LEGAL FEES 60-42-20-4330**

Legal fees associated with the water system.

**CLC-JAWA 60-42-20-4351**

Contractor costs to purchase water from the Central Lake County Joint Action Water Agency (CLCJAWA).

**CLCJAWA CONNECTION FEES 60-42-20-4352**

Set cost per agreement with CLCJAWA for connection fees as established in Ordinance No. 2019-07-01.

**METER CALIBRATION/VERIFICATION 60-42-20-4353**

Contractor costs to calibrate and verify meter readings on Water Facilities Building meter.

**MOWING 60-42-20-4213**

Contractual costs for mowing water facilities and assumes 30 rotations.

**IT SUPPORT 60-42-20-5215**

Assumes (12.5%) 80 per hour at 150 hours per year per the Village current agreement for these services.

**MANAGED GIS SERVICES 60-42-20-5216**

Assumes 40%, split with admin and sewer.

**OTHER EXPENSES****UNIFORM ALLOWANCE 60-42-60-4170 (SPREAD)**

Cost split between Water (25%), Sewer (25%) and Streets (50%).

**TRAINING/TRAVEL 60-42-60-4530**

Various training costs for Water activities such as training materials, classes and workshops.

**MEMBERSHIPS 60-42-60-4531**

Cost for annual memberships, split 50/50 water and sewer.

IRWA	\$321
AWWA	\$372
APWA	\$93
NSWWA	\$100

**METERS-PARTS & REPAIRS 60-42-40-4870 (SPREAD)**

Cost for new meters and replacement meters (split with Sewer). Replacement meters are typically the responsibility of the Village. New meters are reimbursed.

**OFFICE SUPPLIES 60-42-60-4810 (SPREAD)**

15% of office supplies. Remaining costs in Administration (35%), Police (35%) and Sewer (15%).

**LIABILITY INSURANCE 60-42-60-4680 (SPREAD)**

Contribution to Insurance Fund for liability and workman's compensation insurance related to Water.

**CREDIT CARD FEES 60-42-60-4812 (SPREAD)**

45% of costs. Remaining in Sewer (45%) and Administration (10%).

**AUTOMOTIVE FUEL/OIL 60-42-60-4820**

12.5% of costs for fuel and oil.

**SUPPLIES-VEHICLE 60-42-60-4930**

12.5% of the costs for parts for fleet maintenance.

**MECHANIC TOOLS 60-42-60-4931**

12.5% of costs for any tools that the Mechanic may need.

**SUPPLIES-WATER 60-42-40-4950**

Supplies for Water repairs to operating controls, motors, pumps, chemical feed equipment, treatment facilities, elevated storage tanks, meters, valves, and hydrants. Includes costs for treatment chemicals; phosphate and chlorine.

**NATURAL GAS – WATER 60-42-40-4610**

Natural gas for water well house facilities.

**ELECTRIC 60-42-40-4660**

Electricity for water facilities.

**TELEPHONE 60-42-60-4420**

Well house phone costs and cellphone costs for water related personnel.

**JULIE LOCATES 60-42-40-4960**

Annual fee to be involved in the JULIE Underground Utility Locating Program, which is based on the number of calls per year. Assumes 2,000 calls @ \$1.02 per call, plus transmission charges.

**GENERATOR LOAD BANK TESTING 60-42-60-4961**

Costs for bi-annual testing of the generators for performance. 50/50 split with sewer.

**2015 DEBT SERVICE 60-42-60-5019**

2015 debt services with original bond issued in 2006. Bond matures in 2026.

**2016 DEBT SERVICE 60-42-60-5019**

2016 IEPA Loan for water projects. 1.86% interest. Bond matures in 2036.

**2021 DEBT SERVICE 60-42-60-5019**

IEPA loan for the land bridge.

**NEW EQUIPMENT 60-42-60-5201**

Cost of enclosed trailer, 50/50 split with sewer.

**SOFTWARE LICENSES 01-10-60-5213**

75% Admin, 25% Water, 25% Sewer

**Software Licenses**

Anti-Spam	\$	800
Off-Site Back-up	\$	3,100
Website fee	\$	2,400
Remote Access	\$	1,350
Laserfiche	\$	1,300
SeeClickFix	\$	7,800
Adobe Creative Suite	\$	1,000
EDR	\$	3,500
Exchange Online Plan for GCC	\$	4,000
Firewall replacement	\$	3,500
Network Detective Pro License	\$	600
BS&A	\$	8,000
Paylocity	\$	8,000
<b>Total</b>	<b>\$</b>	<b>30,950</b>

## SEWER

	ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>PERSONNEL EXPENSES</b>				
60-43-10-4013 SALARY (Payroll Spread)	201,923	181,715	185,396	221,912
60-43-10-4015 PART-TIME SEWER (Payroll Spread)	22,328	15,375	11,964	14,805
60-43-10-4014 OVERTIME (Payroll Spread)	10,750	13,000	14,077	15,000
60-43-10-4017 BENEFIT TIME COMPENSATION (Payroll Spread)	1,199	1,500	1,965	2,000
60-43-10-4110 HEALTH & LIFE INSURANCE (Payroll Spread)	44,949	45,572	40,000	47,402
60-43-10-4130 IMRF	18,523	16,509	15,289	21,659
60-43-10-4140 SOCIAL SECURITY	17,241	15,804	14,677	18,349
<b>TOTAL PERSONNEL EXPENSES</b>	<b>316,914</b>	<b>289,475</b>	<b>283,367</b>	<b>341,127</b>
<b>CONTRACTOR EXPENSES</b>				
60-43-20-4231 EQUIPMENT MAINTENANCE (S-50%)	2,148	1,107	1,107	1,000
60-43-20-4310 AUDIT (S-15%)	4,013	4,050	4,305	5,025
60-43-60-4440 PRINTING/BILLING (S-50%)	4,338	4,600	3,800	6,500
60-43-20-4311 FINANCIAL MANAGEMENT CONTRACT (S-25%)	16,373	14,660	17,170	17,500
60-43-20-4230 CONTRACT VEHICLE MAINTENANCE (12.5%)	-	-	-	5,000
60-43-40-4250 SEWER SYSTEM MAINTENANCE	18,890	25,000	4,445	25,000
60-43-20-4320 ENGINEERING SEWER	-	25,000	8,000	35,000
60-43-20-4330 LEGAL FEES	2,130	500	1,678	5,000
60-43-40-4350 COUNTY SEWER	704,172	681,364	610,098	680,000
60-43-40-4351 COUNTY SURCHARGE	58,578	55,000	41,889	55,000
60-43-20-4213 MOWING	9,873	9,500	10,810	10,000
60-43-20-5215 IT SUPPORT (12.5%)	-	1,800	2,187	1,500
60-43-20-5216 MANAGED GIS SERVICES (40%)	-	-	-	12,000
<b>TOTAL CONTRACTOR EXPENSES</b>	<b>820,514</b>	<b>822,581</b>	<b>705,489</b>	<b>858,525</b>
<b>OTHER EXPENSES</b>				
60-43-60-4170 UNIFORM ALLOWANCE	793	1,500	1,000	1,500
60-43-60-4530 TRAINING/TRAVEL	452	1,500	766	2,000
60-43-60-4531 MEMBERSHIPS	-	-	-	450
60-43-40-4870 METERS/PARTS & REPAIRS (S-50%)	4,020	5,000	3,824	6,000
60-43-60-4810 OFFICE SUPPLIES (S-15%)	4,823	4,000	3,500	5,800
60-43-60-4680 LIABILITY INSURANCE (S-11%)	29,611	26,041	83,259	26,041
60-43-60-4812 CREDIT CARD FEES (S-45%)	6,477	13,500	6,654	8,000
60-43-60-4820 AUTOMOTIVE FUEL/OIL (12.5%)	-	-	-	13,750
60-43-60-4930 VEHICLE SUPPLIES (12.5%)	-	-	-	8,750
60-43-60-4931 MECHANIC TOOLS (12.5%)	-	-	-	125
60-43-40-4950 SUPPLIES-SEWER	19,387	25,000	22,466	30,000
60-43-40-4610 NATURAL GAS - SEWER	11,199	7,500	13,232	13,000
60-43-40-4660 ELECTRICITY	22,408	30,000	20,300	30,000
60-43-60-4420 TELEPHONE	2,753	3,083	2,509	3,000
60-43-60-4961 GENERATOR LOAD BANK TESTING & REPAIRS	-	-	-	10,000
60-43-60-5010 DEBT SERVICE - 2015, 2016, 2021	-	23,830	23,830	35,000
60-43-60-5205 FLEET REPLACEMENT CONTRIBUTION	-	51,600	51,600	-
60-43-60-5206 EQUIPMENT REPLACEMENT CONTRIBUTION	35,000	36,000	36,000	-
60-43-60-3897 FLEET REPAIR FUND CONTRIBUTION	35,000	35,000	35,000	-
60-43-60-5203 INFORMATION TECH. FUND CONTRIBUTION	15,000	20,000	20,000	-
60-43-60-5201 NEW EQUIPMENT	-	-	-	6,000
60-42-60-5213 SOFTWARE LICENSES (25%)	-	13,573	12,000	12,500
<b>TOTAL OTHER EXPENSES</b>	<b>186,921</b>	<b>297,127</b>	<b>335,940</b>	<b>211,916</b>
<b>TOTAL EXPENSES</b>	<b>1,324,349</b>	<b>1,409,183</b>	<b>1,324,796</b>	<b>1,411,568</b>

## **PERSONNEL EXPENSES**

### **SALARY-SEWER 60-43-10-4013**

Portion of salaries based on time spent on Sewer activities. Salary for Village Mechanic. Payroll spread 75% Fleet, 12.5% water, 12.5% sewer.

### **PART-TIME SEWER 60-43-10-4015**

Spread (25%) of expenses for two, 1,000 hour part-time positions, plus seasonal summer positions.

### **OVERTIME 60-43-10-4014**

Overtime is spread to Streets/Water/Sewer/Metra/Mansion based on the percentage of public works salaries in each fund. Costs for overtime are broken down below.

On call compensation	\$ 6,000
On call pay	\$16,000
Other overtime	\$31,000

### **SICK TIME COMPENSATION 60-43-10-4017**

Cost for payment of sick time compensation program based on the percentage of salaries in this fund.

### **HEALTH & LIFE INSURANCE 60-43-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per new health insurance agreement.

### **IMRF 60-43-10-4130**

The value is calculated at the Village's projected contribution rate for eligible payroll in this fund.

### **SOCIAL SECURITY 60-43-10-4140**

Social Security and Medicare contributions for Sewer employees.

## **CONTRACTOR EXPENSES**

### **METER READING SERVICES 60-43-20-4231 (SPREAD)**

50% of meter reading support (\$860).

### **AUDIT 60-43-20-4310 (SPREAD)**

Portion of contractual costs for annual Village audit. 15% of expenses.

### **PRINTING/BILLING 60-43-60-4440 (SPREAD)**

Postage	\$3,585	(50%)	(2,825 bi-monthly bills)
Contract Billing/Billing Stock	\$1,500	(50%)	
	<b>\$5,085</b>		



**FINANCIAL MANAGEMENT CONTRACT (SPREAD) 60-42-20-4311**

Costs for financial management support contract. 25% of total cost.

**CONTRACT VEHICLE MAINTENANCE 60-42-20-4230**

Contractor costs (12.5%)for vehicle maintenance.

**SEWER SYSTEM MAINTENANCE 60-43-40-4250**

Contract repairs for lift stations, and sewer mains. Includes \$9,380 for preventative maintenance of the lift station pumps.

**ENGINEERING SEWER 60-43-20-4320**

Miscellaneous engineering services for sewer work.

**LEGAL FEES 60-43-20-4330**

Legal expenses related to the sewer system.

**COUNTY SEWER 60-43-40-4350**

Contract with Fox Lake and County for wastewater treatment. Prairie Trail being in the Lake's Region Sanitary District.

**COUNTY SURCHARGE 60-43-40-4351**

Expenses from County sewer surcharge fee collected through the Village's water/sewer utility bills on residential and commercial buildings.

**MOWING 60-43-20-4213**

Contractual costs for mowing sanitary sewer lift stations. \$280 per rotation and assumes 30 rotations.

**IT SUPPORT 60-42-20-5215**

Assumes (12.5%) 80 per hour at 150 hours per year per the Village current agreement for these services.

**MANAGED GIS SERVICES 60-43-20-5216**

Assumes 40%, split with Admin and water.

**OTHER EXPENSES**

**UNIFORM ALLOWANCE 60-43-60-4170 (SPREAD)**

Cost split between Water (25%), Sewer (25%) and Streets (50%).

**TRAINING/TRAVEL 60-43-60-4530**

Various training costs for Water activities such as training materials, classes and workshops.

**MEMBERSHIPS 60-43-60-4531**

Cost for annual memberships.

IRWA	\$321
AWWA	\$372
APWA	\$93
NSWWA	\$100

**METERS/PARTS & REPAIRS 60-43-40-4870**

Cost for new meters and replacement meters (split with Water). Replacement meters are typically the responsibility of the Village. New meters are reimbursed.

**SUPPLIES-SEWER 60-43-40-4950**

Supplies for lift stations, sewer mains and SCADA system.

**NATURAL GAS - SEWER 60-43-40-4610**

Natural gas for lift stations.

**ELECTRIC-SEWER 60-43-40-4660**

Electricity for sewer lift stations.

**TELEPHONE 60-43-60-4420**

Well house phone costs and cellphone costs for water related personnel.

**GENERATOR LOAD BANK TESTING & REPAIRS 60-43-60-4961**

50/50 split with water. Cost for the repairs and testing of the generators.

**LIABILITY INSURANCE 60-43-60-4680**

Portion of costs for liability and workman's compensation insurance related to Sewer.

**OFFICE SUPPLIES 60-43-60-4810**

15% of office supplies. Remaining costs in Administration (35%), Police (35%) and Water (15%).

**2021 DEBT SERVICE 60-42-60-5019**

IEPA loan for the land bridge.

**CREDIT CARD FEES 60-43-60-4812**

45% of costs. Remaining in Water (45%) and Administration (10%).

**AUTOMOTIVE FUEL/OIL 60-43-60-4820**

12.5% of costs for fuel and oil.

**SUPPLIES-VEHICLE 60-43-60-4930**

12.5% of the costs for parts for fleet maintenance.

**MECHANIC TOOLS 60-43-60-4931**

12.5% of costs for any tools that the Mechanic may need

**NEW EQUIPMENT 60-42-60-5201**

Cost of enclosed trailer, 50/50 split with water.

**SOFTWARE LICENSES 01-10-60-5213**

75% Admin, 25% Water, 25% Sewer

**Software Licenses**

Anti-Spam	\$	800
Off-Site Back-up	\$	3,100
Website fee	\$	2,400
Remote Access	\$	1,350
Laserfiche	\$	1,300
SeeClickFix	\$	7,800
Adobe Creative Suite	\$	1,000
EDR	\$	3,500
Exchange Online Plan for GCC	\$	4,000
Firewall replacement	\$	3,500
Network Detective Pro License	\$	600
BS&A	\$	8,000
Paylocity	\$	8,000
<b>Total</b>	<b>\$</b>	<b>45,350.</b>

**METRA FUND**

		<b>ACTUAL</b>	<b>BUDGET</b>	<b>EST. YR. END</b>	<b>BUDGET</b>
		<b>2021/2022</b>	<b>2022/2023</b>	<b>2022/2023</b>	<b>2023/2024</b>
<b>REVENUE</b>					
02-00-00-3809	VERIZON LEASE PAYMENTS	33,354	33,888	33,725	33,725
02-00-00-3840	METRA PARKING FEES	7,803	8,750	10,060	9,000
02-00-00-3810	INTEREST EARNED	240	500	75	100
<b>TOTAL REVENUE</b>		<b>41,397</b>	<b>43,138</b>	<b>43,860</b>	<b>42,825</b>
<b>PERSONNEL EXPENSES</b>					
02-00-10-4013	SALARY (Payroll Spread)	11,651	14,319	9,570	10,141
02-00-10-4014	OVERTIME (Payroll Spread)	854	1,000	876	1,000
02-00-10-4017	BENEFIT TIME COMPENSATION (Payroll Spread)	135	200	52	200
02-00-10-4110	HEALTH & LIFE INSURANCE (Payroll Spread)	2,920	2,867	2,622	2,478
02-00-10-4130	IMRF	1,079	1,270	866	990
02-00-10-4140	SOCIAL SECURITY	876	1,123	678	776
<b>TOTAL PERSONNEL EXPENSES</b>		<b>17,516</b>	<b>20,779</b>	<b>14,664</b>	<b>15,584</b>
<b>CONTRACTUAL EXPENSES</b>					
02-00-20-4211	OPERATING EXPENSE	682	1,500	327	1,500
02-00-20-4213	MOWING	1,193	1,200	2,969	3,000
<b>TOTAL CONTRACTUAL</b>		<b>1,875</b>	<b>2,700</b>	<b>3,296</b>	<b>4,500</b>
<b>OTHER EXPENSES</b>					
02-00-60-4680	LIABILITY INSURANCE (S-2.2%)	5,205	5,208	5,208	5,208
02-00-30-4660	ELECTRICITY	1,800	2,500	136	2,500
02-00-30-4210	MAINTENANCE-BUILDING	2,199	4,000	2,592	4,000
<b>TOTAL OTHER EXPENDITURES</b>		<b>9,204</b>	<b>11,708</b>	<b>7,936</b>	<b>11,708</b>
<b>TOTAL EXPENSES</b>		<b>28,595</b>	<b>35,187</b>	<b>25,896</b>	<b>31,792</b>

## **REVENUE**

### **VERIZON LEASE PAYMENTS 02-00-00-3809**

This revenue is derived from the lease payments from Verizon for use of the Water Tower. Annual lease is \$33,888.

### **METRA PARKING FEES 02-00-00-3840**

This revenue is derived from commuters parking in the Metra lots. Includes revenue projections for daily parking fee of \$1.75 per day and \$34 per month parking pass. Assumes 5,000 cars parked per year.

### **INTEREST EARNED 02-00-00-6840**

This is revenue from interest.

## **EXPENSES**

### **PERSONNEL EXPENSES**

#### **SALARY 02-00-10-4013**

Portion of salaries based on time spent on Metra activities.

#### **OVERTIME 02-00-10-4014**

Overtime is spread to Streets/Water/Sewer/Metra/Mansion based on the percentage of public works salaries in each fund. Costs for overtime are broken down below.

On call compensation	\$5,200
On call pay	\$15,750
Other overtime	\$10,000

#### **SICK TIME COMPENSATION 02-00-10-4017**

Cost for payment of sick time compensation program based on the percentage of salaries in this fund.

#### **HEALTH & LIFE INSURANCE 02-00-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per new health insurance agreement.

#### **IMRF-EMPLOYER CONTRIBUTION 02-00-10-4130**

The proposed value is calculated at the Village's projected contribution rate for eligible payroll in this fund

**SOCIAL SECURITY 02-00-10-4140**

Contribution to Retirement Fund for Social Security and Medicare costs related to eligible payroll in this fund.

**CONTRACTUAL EXPENSES****OPERATING EXPENSE 02-00-20-4211**

Contract expenses as needed for repairs.

**MOWING 02-00-20-4213**

Contract expense for mowing at Metra Station and assumes 30 rotations.

**OTHER EXPENSES****LIABILITY INSURANCE 02-00-60-4680 (SPREAD)**

Cost for Metra's portion of liability/workman's compensation insurance.

**ELECTRIC 02-00-30-4660**

Electricity costs for Metra Station and parking lot.

**MAINTENANCE-BUILDING 02-00-30-4210**

Contract repairs, as needed, for the Metra facility.



**MANSION FUND**

	ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>REVENUE</b>				
08-00-00-3820 RENT-MANSION	46,849	75,000	4,931	50,000
08-00-30-3890 OTHER REVENUE	-	-	31,400	31,400
<b>TOTAL MANSION REVENUE</b>	<b>46,849</b>	<b>75,000</b>	<b>36,331</b>	<b>81,400</b>
<b>PERSONNEL EXPENSES</b>				
08-00-10-4013 SALARY (Payroll Spread)	25,213	12,428	15,000	4,014
08-00-10-4014 OVERTIME (Payroll Spread)	1,716	500	1,300	200
08-00-10-4017 BENEFIT TIME COMPENSATION (Payroll Spread)	307	50	103	50
08-00-10-4110 HEALTH & LIFE INSURANCE (Payroll Spread)	5,527	2,867	5,290	925
08-00-10-4130 IMRF	2,324	1,029	1,758	380
08-00-10-4140 SOCIAL SECURITY	1,884	910	1,400	298
<b>TOTAL PERSONNEL EXPENSES</b>	<b>36,972</b>	<b>17,784</b>	<b>24,851</b>	<b>5,867</b>
<b>CONTRACTOR EXPENSES</b>				
08-00-00-4212 PREVENTATIVE MAINTENANCE-MANSION	7,453	11,000	19,877	16,000
08-00-00-4210 MAINTENANCE & REPAIRS -MANSION	25,746	7,000	10,873	-
08-00-00-4211 MAINTENANCE-GROUNDS	1,366	4,000	-	-
08-00-20-4213 MOWING	5,398	-	-	-
<b>TOTAL CONTRACTOR EXPENSES</b>	<b>39,962</b>	<b>22,000</b>	<b>30,750</b>	<b>16,000</b>
<b>OTHER EXPENSES</b>				
08-00-60-4680 LIABILITY INSURANCE (S-2.2%)	5,208	5,208	5,208	5,208
08-00-00-4610 NATURAL GAS	19,285	20,000	23,400	23,400
08-00-00-4660 ELECTRICITY	17,145	10,000	8,000	8,000
08-00-00-4910 SUPPLIES-MANSION	911	5,000	119	-
08-00-00-4443 MARKETING	710	710	710	710
08-00-00-5200 NEW EQUIPMENT	-	-	-	-
08-00-00-8063 TENT REPAIRS AND MAINTENANCE	6,845	11,000	11,000	-
<b>TOTAL OPERATING EXPENSES</b>	<b>50,104</b>	<b>51,918</b>	<b>48,437</b>	<b>37,318</b>
<b>TOTAL EXPENSES</b>	<b>127,038</b>	<b>91,702</b>	<b>104,039</b>	<b>59,185</b>

## **REVENUE**

### **RENT-MANSION 08-00-30-3820**

For 2023/24, \$50,000 rental payment, plus 3% of all sales in excess of \$1,00,000.

### **OTHER REVENUE 08-00-30-3890**

Reimbursement from contractor for gas and/or electricity costs.

## **EXPENSES**

### **PERSONNEL EXPENSES**

#### **SALARY 08-00-10-4013**

Portion of salaries based on time spent on Mansion activities. Reduced in 2023/24 to reflect new agreement.

#### **OVERTIME 08-00-10-4014**

Overtime is spread to Streets/Water/Sewer/Metra/Mansion based on the percentage of public works salaries in each fund. Costs for overtime are broken down below. Reduced in 2023/24 to reflect new agreement.

#### **SICK TIME COMPENSATION 08-00-10-4017**

Cost for payment of sick time compensation program based on the percentage of salaries in this fund. Reduced in 2023/24 to reflect new agreement.

#### **HEALTH & LIFE INSURANCE 08-00-10-4110**

Health, life and dental insurance costs minus employee contributions. Assumes same cost spread as salaries and cost per new health insurance agreement. Reduced in 2023/24 to reflect new agreement.

#### **IMRF 08-00-10-4130**

The proposed value is calculated at the Village's projected contribution rate. Reduced in 2023/24 to reflect new agreement.

#### **SOCIAL SECURITY 08-00-10-4140**

Contribution to Retirement Fund for Social Security and Medicare costs related to salaries in this fund. Reduced in 2023/24 to reflect new agreement.

## **CONTRACTOR EXPENSES**

### **PREVENTATIVE MAINTENANCE-MANSION 08-00-00-4210**

Monthly elevator maintenance	\$2,400
Elevator pressure test	\$700
Radio/Alarm/Security	\$1,700
Sprinkler/Extinguishers/Annulex	\$600
Boiler Inspection	\$ 1,600
HV/HC Protection Plan	\$ 3,500
Unanticipated	\$500
<b>TOTAL</b>	<b>\$11,000</b>

### **MAINTENANCE AND REPAIRS-MANSION**

Contractual costs for all other mansion repairs and maintenance.

### **MAINTENANCE-MANSION GROUNDS 08-00-00-4211**

Contractual services for landscaping improvements.

## **OTHER EXPENSES**

### **LIABILITY INSURANCE 08-00-00-4680**

Cost for the Mansion's portion of liability/workman's compensation insurance.

### **NATURAL GAS 08-00-00-4610**

Costs paid by contractor in 2023/24

### **ELECTRIC 08-00-00-4660**

Costs paid by contractor in 2023/24

### **MARKETING 08-00-00-4443**

Costs for LED sign data plan.

# GARBAGE FUND

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>REVENUE</b>					
68-00-68-3510	REFUSE/RECYCLING COLLECTIONS	645,189	672,244	670,000	687,369
68-00-00-3800	MISCELLANEOUS REVENUE	7,708	2,000	8,826	7,000
68-00-00-3810	INTEREST EARNED	12,476	5,000	3,536	5,000
68-00-00-4450	SWALCO FEES	-	-	-	3,600
<b>TOTAL REVENUE</b>		<b>665,373</b>	<b>679,244</b>	<b>682,361</b>	<b>702,969</b>
<b>EXPENSES</b>					
68-00-60-4450	SWALCO FEE	4,068	3,746	3,746	3,800
68-00-20-4470	WASTE MANAGEMENT FEES	620,152	616,977	649,640	644,741
68-00-20-4240	ROAD RESURFACING TRANSFER TO GC	-	-	22,500	22,500
68-00-20-4241	TRANSFER TO GENERAL FUND			6,000	6,000
<b>TOTAL EXPENSES</b>		<b>624,219</b>	<b>620,723</b>	<b>681,886</b>	<b>677,041</b>

# MOTOR FUEL TAX FUND

		ACTUAL	BUDGET	EST. YR. END	BUDGET
		2021/2022	2022/2023	2022/2023	2023/2024
<b>REVENUE</b>					
75-00-00-3340	MOTOR FUEL TAX	370,130	201,043	428,542	210,303
75-00-00-3010	MISCELLANEOUS REVENUE	192,002	-	-	-
75-00-00-3810	INTEREST EARNED	535	1,000	13,681	8,000
<b>TOTAL MFT REVENUE</b>		<b>562,668</b>	<b>202,043</b>	<b>442,223</b>	<b>218,303</b>
<b>EXPENSES</b>					
75-00-00-4320	DESIGN & CONSTRUCTION ENGINEERING	15,000	50,000	45,000	25,000
75-00-00-4240	ROAD RESURFACING	-	689,755	610,849	-
75-00-00-4241	PAVEMENT MANAGEMENT	-	-	-	8,000
75-00-40-4260	SALT	-	-	-	87,000
<b>TOTAL EXPENSES</b>		<b>15,000</b>	<b>739,755</b>	<b>655,849</b>	<b>120,000</b>

## **REVENUES**

### **MOTOR FUEL TAX 75-00-00-3340**

Revenue per Illinois Municipal League estimates.

## **EXPENSES**

### **DESIGN AND CONSTRUCTION ENGINEERING 75-00-00-4320**

2023/24, costs for construction engineering.

### **ROAD RESURFACING 75-00-00-4240**

Costs for 2023/24 road resurfacing program as approved by Village Board.

### **PAVEMENT MANAGEMENT 75-00-00-424**

Any additional costs need for the CMAP grant that the Village of Lake Villa Received.



## SPECIAL EVENTS FUND

		ACTUAL	BUDGET	EST. YR. END	BUDGET
		2021/2022	2022/2023	2022/2023	2023/2024
<b>REVENUE</b>					
81-00-30-1144	GENERAL FUND CONTRIBUTIONS	-	25,000	28,750	40,000
81-00-30-1146	CELEBRATION OF FALL DONATIONS	12,037	18,000	19,700	25,000
81-00-30-3414	OTHER EVENT REVENUE	3,051	5,000	1,522	1,750
81-00-00-3019	TRANSFERS FROM OTHER FUNDS	-	0	3,428	0
<b>TOTAL REVENUE</b>		<b>15,088</b>	<b>48,000</b>	<b>53,399</b>	<b>66,750</b>
<b>EXPENSES</b>					
81-00-60-8030	FIREWORKS	19,000	19,000	19,000	19,000
81-00-00-4368	CELEBRATION OF FALL	-	23,000	36,976	25,000
81-00-60-4441	PUBLIC RELATIONS	6,004	1,000	-	1,000
81-00-00-4367	PAGEANT	-	1,500	3,277	1,500
81-00-00-4365	INTERGOVENMENTAL CONTRIBUTION	5,000	5,000	5,000	5,000
81-00-00-4366	OTHER EVENT EXPENSES	9,003	11,000	4,000	10,000
<b>TOTAL EXPENSES</b>		<b>39,008</b>	<b>60,500</b>	<b>68,252</b>	<b>61,500</b>

## **REVENUE**

### **GENERAL FUND CONTRIBUTION**

Transfer from General fund to cover the cost of Special Events.

### **CELEBRATION OF FALL**

Assumes \$25,000 in donations.

### **OTHER EVENT REVENUE**

Revenue from other events, not anticipated at this time.

## **EXPENSES**

### **FIREWORKS 81-00-60-8030**

Assumes \$19,000 in expenses for fireworks and other event expenses for supplies.

### **CELEBRATION OF FALL 81-00-00-4368**

Costs for annual Celebration of Fall event.

### **PUBLIC RELATIONS 81-00-60-4441**

Costs for advertising special events.

### **PAGEANT 81-00-00-4367**

Costs for the Miss Lake Villa Pageant.

### **CONCERT SERIES CONTRIBUTION 81-00-00-4365**

Contribution to members of the intergovernmental agreement for Concert Series.

### **OTHER EVENT EXPENSES 81-00-00-4366**

Costs for supplies, and other expenses community events such as Easter Egg Hunt, and Parades.

**GENERAL CAPITAL FUND**

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>REVENUE</b>					
90-00-00-3030	SALES TAX (S-5%)	34,210	48,035	52,250	59,742
90-00-00-3040	INCOME TAX (S-5%)	48,469	54,719	55,221	61,187
90-00-00-3070	LOCAL USE TAX (S-5%)	18,793	17,549	15,587	18,016
90-00-00-3080	VIDEO GAMING	188,074	160,000	198,580	205,000
90-00-00-3820	WATER TOWER RENT	35,625	36,660	37,210	37,000
90-00-00-3360	FEDERAL GRANTS	61,293	-	-	-
90-00-30-3896	CARES ACT/ARPA REVENUE	583,327	1,000	583,327	-
90-00-30-3890	OTHER REVENUE	14,062	100	-	-
90-00-30-3893	SURPLUS SALES PROCEEDS	60,178	-	16,157	-
90-00-00-3990	TRANSFER FROM GENERAL FUND	333,159	-	-	-
90-00-00-3019	TRANSFERS FROM OTHER FUNDS	-	-	410,013	22,500
<b>TOTAL REVENUE</b>		<b>1,377,190</b>	<b>318,063</b>	<b>1,368,344</b>	<b>403,445</b>
<b>EXPENSES</b>					
90-00-00-8072	DOWNTOWN SIDEWALK	120,240	-	-	-
90-00-00-8116	PUBLIC WORKS PAVING (50%)	39,340	-	-	-
90-00-00-8093	ENTRYWAY/PARK SIGNS	10,138	-	-	-
90-00-00-8125	DESIGN ENG. SIDEWALK: GRAND AVENUE	130	135,000	-	135,000
90-00-00-8126	DESIGN ENG. SIDEWALK: GRASS LAKE ROAD	8,200	22,000	22,000	-
90-00-00-8128	SERVICE REQUEST SOFTWARE	7,575	-	-	-
90-00-00-8114	COMPREHENSIVE PLAN	24,625	4,302	5,000	-
90-00-00-8117	SALT STORAGE	-	375,000	313,049	-
90-00-00-8124	ROAD RESURFACING RESERVE	-	300,000	-	-
90-00-00-8092	REPAIRS & IMPROVEMENTS	64,621	50,000	50,000	50,000
90-00-00-8007	ECONOMIC INCENTIVE	25,000	20,000	10,000	25,000
90-00-00-8095	OFFICE FURNITURE	29,987	-	-	-
90-00-00-8127	SIDEWALK REPLACEMENTS	41,232	-	-	-
90-00-00-8119	COVID EXPENSES	4,960	-	-	-
90-00-00-8129	RETAIL RECRUITMENT	24,000	25,000	10,000	10,000
90-00-00-8130	POLICE RECORDS & EVIDENCE UPGRADES	-	11,029	9,676	-
90-00-00-8131	LOCAL SHARE STATE/COUNTY PROJECTS	5,227	32,200	-	32,200
90-00-00-8132	GRANT APPLICATIONS	8,285	7,500	-	-
90-00-00-8133	LEHMANN PARK - OSLAD	-	306,901	-	-
90-00-00-8134	REBUILD ILLINOIS GRANT (FIRE STATION ONE)	-	518,847	-	-
90-00-00-8135	QUIET ZONE IMPROVEMENTS (GRASS LAKE RD)	-	16,500	-	18,500
90-00-00-8147	SEALCOATING/STRIPING PD/HALL PARKING LOT	-	5,000	6,402	-
90-00-00-8148	ROAD RESURFACING WINDDANCE SUBDIVISION	-	250,000	185,585	-
90-00-00-8089	BUILDING REPAIRS	23,357	42,000	33,440	50,000
90-00-00-8149	FLEET VEHICLES	-	166,717	122,000	310,000
90-00-00-8150	INFORMATION TECHNOLOGY	-	-	-	40,000
90-00-00-8151	DESIGN STORM SEWER IMPROVEMENTS	-	-	-	85,000
90-00-00-8152	CEDAR AVE CROSSWALK	-	-	-	36,000
90-00-00-8153	BS&A SOFTWARE HR MODULES	-	-	-	45,435
90-00-00-8154	CAPITAL EQUIPMENT	-	-	-	22,500
90-00-00-8155	STRATEGIC PLANNING	-	-	-	18,000
90-00-00-8156	GRASS LAKE ROAD PEDESTRIAN PATH	-	-	-	185,000
90-00-00-8157	PLANNING STUDIES/CONTINGENCY	-	-	-	75,000
90-00-00-8158	REHABILITATION AND PAINT TOWER A	-	-	-	250,000
90-00-00-8139	WATER METER PROGRAM TRANSFER	-	-	-	250,000
<b>TOTAL EXPENSES</b>		<b>436,916</b>	<b>2,287,996</b>	<b>767,153</b>	<b>1,637,635</b>

## **REVENUE**

### **SALES TAX 90-00-00-3030**

First 95% of Sales Tax generated is pledged towards the General Operating Fund. Revenue in excess of the budget is dedicated towards the General Capital Fund.

### **STATE INCOME TAX 90-00-00-3040**

First 95% of Income Tax generated is pledged towards the General Operating Fund. Revenue in excess of the budget is dedicated towards the General Capital Fund.

### **LOCAL USE TAX 90-00-00-3070**

First 95% of Local Use Tax generated is pledged towards the General Operating Fund. Revenue in excess of the budget is dedicated towards the General Capital Fund.

### **VIDEO GAMING TAX 01-00-10-3080**

The Village receives 5% of the net terminal income from all licensed video gaming terminals located in the Village. This revenue is collected by and distributed to the Village from the Illinois Department of Revenue on a monthly basis. Assumes 66 gaming machines.

### **RENT-TOWER 90-00-00-3820**

Revenue from T-Mobile rent of the water tower for antennas. Per agreement, fee increases by 3% annually.

### **OTHER REVENUE 90-00-30-3890**

Unanticipated General Fund Revenue.

## **EXPENSES**

### **DESIGN & ENGINEERING GRAND AVE SIDEWALK 90-00-00-8125**

Cost for design and engineering for a sidewalk on Grand Avenue.

### **REPAIRS & IMPROVEMENTS 90-00-00-8092**

Unanticipated costs for capital improvements

### **ECONOMIC INCENTIVE 90-00-00-8007**

Cost for the current year's economic incentive program.

### **LOCAL SHARE STATE/COUNTY PROJECTS 90-00-00-8131**

Costs for the Village's local share contribution for projects that require a local share. 2023/24 – local share of \$32,200 for Grand Avenue from Cleveland to Central, IDOT Project.

### **QUIET ZONE IMPROVEMENTS 90-00-00-8135**

Costs to make improvements to the Grass Lake Road median to maintain the existing railroad quiet zone. Multi-jurisdictions involved in these improvements.

### **BUILDING REPAIRS 90-00-00-8089**

Costs for various building repairs.

### **FLEET VEHICLES**

Cost to purchase a 5-ton dump truck with a hook lift system and required accessories.

### **INFORMATION TECHNOLOGY**

Costs for various information system upgrades and implementation. Will include itemized list at time of budget workshop.

### **DESIGN STORM SEWER IMPROVEMENTS**

Cost for a master storm water management drainage and hydraulic study (\$35,000) along with design and engineering cost for storm water pond improvement at Steven Sherwood Park (\$50,000).

### **CEDAR AVE CROSSWALK**

Costs for installation of crosswalk connection a Village parking lot to the north side of Cedar Ave in the Central Business District.

### **BS&A SOFTWARE HR MODULES**

Cost to purchase human resources, timesheets and payroll modules from BS&A, the Village's ERP software provider.

### **CAPITAL EQUIPMENT**

Tiller	\$7,500
14' Trailer	\$15,000

### **REDEVELOPMENT PLANNING & DESIGN SERVICES**

Costs for Community engagement, planning, and marketing services relative to redevelopment sites in the Central Business District.

### **STRATEGIC PLANNING**

Costs for consulting services to facilitate strategic planning for the Village of Lake Villa with Village staff, the Village Board and residents.

### **GRASS LAKE ROAD PEDESTRIAN PATH**

The construction phase of the pedestrian path proposed at Grass Lake Rd at Painted Lakes Blvd to the Lake Villa Township Baseball Complex.

### **PLANNING STUDIES/CONTINGENCY**

This would be roughly a ten percent contingency for capital related projects, or cost overages for projects that the Village Board may wish to complete during the fiscal year.

# **WATER & SEWER CAPITAL FUND**

		<b>ACTUAL</b>	<b>BUDGET</b>	<b>EST. YR END</b>	<b>BUDGET</b>
		<b>2021/2022</b>	<b>2022/2023</b>	<b>2022/2023</b>	<b>2023/2024</b>
<b>REVENUE</b>					
91-00-00-3580	WATER CONNECTION FEES	67,510	68,585	5,615	8,600
91-00-00-3590	SEWER CONNECTION FEES	77,876	78,426	2,750	4,400
91-00-00-3890	OTHER REVENUE	-	100	-	-
91-00-00-3892	IEPA GRAND AVE WATERMAIN RELOCATION REVENUE		656,735	697,072	-
91-00-00-3893	IEPA GRAND AVE SANITARY SEWER REHABILITATION		431,142	511,502	-
91-00-00-3894	GRAND AVE. UTILITY RELOCATION DESIGN ENG.		150,000	-	-
91-00-30-3893	SURPLUS SALES PROCEEDS		-	-	-
91-00-00-3960	TRANSFER FROM W/S FUND	350,334	-	189,979	-
91-00-00-3019	TRANSFERS FROM OTHER FUNDS			811,478	250,000
<b>TOTAL REVENUE</b>		<b>495,720</b>	<b>1,384,988</b>	<b>2,218,396</b>	<b>263,000</b>
<b>EXPENSES</b>					
91-00-00-8099	WELL HOUSE CHEMICAL CONVERSION	18,500	30,000	8,477	-
91-00-00-8109	WELL 5 & 11 SCADA UPGRADES	21,000	-	-	-
91-00-00-8110	GRAND AVE. UTILITY RELOCATION DESIGN ENG.	38,971	32,237	54,871	-
91-00-00-8145	LAKE COUNTY CONNECTION FEE PAYMENTS	-	10,000	-	-
91-00-00-8098	SANITARY SEWER MANHOLE REPAIRS	8,515	40,000	-	80,000
91-00-00-8107	PUBLIC WORKS PAVING (50%)	39,340	-	-	-
91-00-00-8108	WATER SYSTEM HYDRAULIC STUDY	60,000	-	-	-
91-00-00-8120	WATER SYSTEM LEAK SURVEY	12,334	-	-	-
91-00-00-8121	WATER TOWER INSPECTIONS	6,400	-	-	-
91-00-00-8122	MILWAUKEE AVE. INSERTION VALVE	-	10,000	-	15,000
91-00-00-8136	LIFT STATION 4 GENERATOR REPLACEMENT	-	20,000	19,622	-
91-00-00-8137	GENERATOR LOAD BANK TESTING	-	9,000	-	-
91-00-00-8138	DESIGN ENGINEERING FOR WATER TOWER A	-	30,000	-	35,000
91-00-00-8139	WATER METER PROGRAM	-	250,000	-	500,000
91-00-00-8140	DESIGN & ENGINEERING WELL 7 BOOSTER STATION	-	40,000	24,033	35,000
91-00-00-8159	WELL 7 BOOSTER STATION CONSTRUCTION				550,000
91-00-00-8141	DESIGN & ENG. GRAND AVE WATER MAIN/INTERCONNECTION	-	110,000	-	135,000
91-00-00-8142	CEDAR LAKE RD INSERTION VALVE	-	15,000	-	20,000
91-00-00-8143	IEPA GRAND AVE WATERMAIN RELOCATION	-	656,735	511,502	-
91-00-00-8144	IEPA GRAND AVE SANITARY SEWER REHABILITATION	-	431,142	263,725	-
91-00-00-8025	PUMP REPAIR/REPLACEMENTS	-	40,000	-	50,000
91-00-00-8160	DESIGN ENGINEERING BURNETT/WALDEN WATER MAIN	-	-	-	84,000
91-00-00-8096	REPAIRS & IMPROVEMENTS	73,055	50,000	82,818	50,000
91-00-00-8161	SCADA SYSTEM IMPROVEMENTS	-	-	-	16,000
<b>TOTAL EXPENSES</b>		<b>278,115</b>	<b>1,774,114</b>	<b>965,047</b>	<b>1,570,000</b>



## **REVENUE**

### **CONNECTION CHARGES**

Water and Sewer connection charges.

### **OTHER REVENUE**

Unanticipated revenue

## **EXPENSES**

### **SANITARY SEWER MANHOLE REPAIRS 91-00-00-8098**

Cost to repair various sanitary sewer manholes that are leaking.

### **REPAIRS & IMPROVEMENTS 91-00-00-8096**

Costs for unanticipated repairs to the water & sewer system.

### **MILWAUKEE AVE. INSERTION VALVE**

Costs to install insertion valve to allow isolation of 103 N. Milwaukee Ave. from water system for maintenance. It currently takes 3 to 4 valves to shut down the 6-inch service feed to this property affecting Pleviak School. Location would be on private property due to utilities. Village would excavate and back fill. Contractor would install the insertion valve.

### **DESIGN & ENGINEERING FOR WATER TOWER A**

Costs for the design and engineering for water tower A. Antenna removal coordination and bidding and contracting documentation.

### **WATER METER EXCHANGE PROGRAM**

Replacing approx. 2,600 water meters within the Village (using ARPA Funds). \$250,000 from FY22/23 and \$250,000 from FY23/24.

### **DESIGN & ENGINEERING WELL 7 BOOSTER STATION**

Costs for old well #7 building for transient's elimination.

### **DESIGN & ENGINEERING LINDENHURST INTERCONNECTION**

Costs for design and engineering for the Lindenhurst interconnection on the north side of Grand Ave.

### **CEDAR LAKE ROAD. INSERTION VALVE**

Costs to install insertion valve Cedar Lake Rd and Winddance Dr.

### **DESIGN ENGINEERING BURNETT**

Design Engineering for water main replacement at Burnett Ave, Wesley, Walden, Laurie Ct.

**SEWER CAMERA REPLACEMENT**

To replace 18-year-old sewer televising equipment.

**SCADA SYSTEM IMPROVEMENTS**

Upgrades to Scada computer system licenses and programing.

# PARKS CAPITAL FUND

		ACTUAL	BUDGET	EST. YR. END	BUDGET
		2021/2022	2022/2023	2022/2023	2023/2024
<b>REVENUE</b>					
97-00-30-3810	INTEREST INCOME	-	-	-	-
97-00-30-3830	IMPACT FEES	-	-	-	3,000
<b>TOTAL REVENUE</b>		-	-	-	<b>3,000</b>
<b>EXPENSES</b>					
97-00-00-8085	LEHMANN PARK REPAIRS	8,188	-	-	-
97-00-00-8101	PARK IMPROVEMENTS	32,394	84,200	20,250	75,000
<b>TOTAL EXPENSES</b>		<b>40,582</b>	<b>84,200</b>	<b>20,250</b>	<b>75,000</b>

**PARKS IMPROVEMENTS 97-00-00-8101**

Steven Sherwood Park Pavilion floor repairs	\$50,000
Bike Racks	\$5,000
Cedar Crossing 2 tot lot playground repairs	\$15,000
Cedar Crossing Pollinator Garden Grant Commitment	\$5,000

# DOWNTOWN TIF FUND

		ACTUAL 2021/2022	BUDGET 2022/2023	EST. YR. END 2022/2023	BUDGET 2023/2024
<b>REVENUE</b>					
98-00-10-3010	TIF REVENUE	221,003	255,000	253,936	255,000
98-00-00-3810	INTEREST	99	400	12,864	5,000
<b>TOTAL REVENUE</b>		<b>221,101</b>	<b>255,400</b>	<b>266,800</b>	<b>260,000</b>
<b>EXPENSES</b>					
98-00-00-8065	PURCHASE OF PROPERTY	-	1,000	-	450,000
98-00-20-4330	TIF LEGAL FEES	-	5,000	1,348	10,000
98-00-98-4500	GENERAL FUND PAY BACK	-	5,000	-	
98-00-98-4501	NORLAND 1ST REDEVELOPMENT	13,112	9,000	8,179	9,000
98-00-98-5202	30 CEDAR AVENUE	-	4,500	4,089	5,000
98-00-98-9503	89 CEDAR AVENUE	-	3,000	3,471	3,500
98-00-60-4810	POSTAGE	-	50	-	50
98-00-00-4800	ADMINISTRATIVE EXPENSES	-	2,000	-	55,000
98-00-00-4801	ELIGIBLE PROJECT EXPENSES	135,994	20,000	10,500	71,000
<b>TOTAL EXPENSES</b>		<b>149,107</b>	<b>49,550</b>	<b>27,587</b>	<b>603,550</b>

## **REVENUE**

### **TIF REVENUE 98-00-10-3010**

Assumes funds from the incremental increase in property taxes within the Village's downtown TIF district.

### **INTEREST 98-00-00-3810**

Funds from interest from the TIF Fund.

## **EXPENSES**

### **PURCHASE OF PROPERTY 98-00-00-8065**

Costs to purchase property within the TIF District.

### **TIF LEGAL EXPENSES 98-00-20-4330**

Legal expenses associated with the TIF District

### **GENERAL FUND PAYBACK 98-00-98-4500**

Costs to repay the General Fund for the upfront contribution for the Norland Holdings TIF agreement and Harbor Brewing Company Agreement

### **NORLAND<sup>1st</sup> REDEVELOPMENT 98-00-98-4501**

TIF note of \$850,000 with \$250,000 paid upfront from the General Capital Fund. 60% of incremental taxes from this project dedicated.

### **30 CEDAR AVENUE**

Portion of TIF Note from Norland Holdings dedicated to 30 Cedar Avenue in Redevelopment Agreement.

### **89 CEDAR AVENUE**

TIF Note for improvements to 89 Cedar Avenue, the Therapy Tree building.

### **POSTAGE 98-00-60-4810**

Costs for postage related to the TIF District.

### **ADMINISTRATIVE EXPENSES 98-00-00-4800**

Administrative costs related to the TIF District.

### **ELIGIBLE PROJECT EXPENSES 98-00-00-4801**

Costs for TIF Eligible expenses for Creevy and other possible Redevelopment Agreements.



**PARK AVE TIF FUND**

		<b>ACTUAL</b>	<b>BUDGET</b>	<b>EST. YR. END</b>	<b>BUDGET</b>
		<b>2021/2022</b>	<b>2022/2023</b>	<b>2022/2023</b>	<b>2023/2024</b>
<b>REVENUE</b>					
89-00-10-3010	TIF REVENUE	31,888	35,000	34,043	35,000
89-00-00-3810	INTEREST	3	10	144	200
<b>TOTAL REVENUE</b>		<b>31,891</b>	<b>35,010</b>	<b>34,187</b>	<b>35,200</b>
<b>EXPENSES</b>					
89-00-20-4330	TIF LEGAL FEES	-	2,000	-	4,000
89-00-00-4500	GENERAL FUND PAYBACK	-	1,000	-	-
89-00-60-4810	POSTAGE	-	50	-	-
89-00-00-4800	ADMINISTRATIVE EXPENSES	-	1,000	-	1,500
89-00-00-4802	TAXING DISTRICT SURPLUS PAYMENTS	13,095	9,000	-	-
89-00-00-4801	ELIGIBLE PROJECT EXPENSES	15,879	10,000	-	10,000
89-00-00-4803	CREAVY REAL ESTATE	-	-	16,883	18,000
<b>TOTAL EXPENSES</b>		<b>28,975</b>	<b>23,050</b>	<b>16,883</b>	<b>33,500</b>

## **REVENUE**

### **TIF REVENUE 98-00-10-3010**

Assumes funds from the incremental increase in property taxes within the Village's Park Avenue TIF district.

### **INTEREST 98-00-00-3810**

Funds from interest from the TIF Fund.

## **EXPENSES**

### **TIF LEGAL EXPENSES 98-00-20-4330**

Legal expenses associated with the TIF District

### **GENERAL FUND PAYBACK 98-00-98-4500**

Costs to repay the General Fund for the upfront contribution for the creation of the TIF.

### **POSTAGE 98-00-60-4810**

Costs for postage related to the TIF District.

### **ADMINISTRATIVE EXPENSES 98-00-00-4800**

Administrative costs related to the TIF District.

### **TAXING DISTRICT SURPLUS PAYMENTS**

Payments to the taxing districts within the TIF for 50% of the annual surplus.

### **ELIGIBLE PROJECT EXPENSES 98-00-00-4801**

Costs for TIF Eligible expenses not defined elsewhere.

### **CREAVY REAL ESTATE 89-00-00-4803**

Reimbursement to Creavy Real Estate for 436 Park Ave TIF.

# BUSINESS DISTRICT FUND

		ACTUAL	BUDGET	EST. YR. END	BUDGET
		2021/2022	2022/2023	2022/2023	2023/2024
<b>REVENUE</b>					
99-00-10-3030	BUSINESS DISTRICT	179,544	200,000	200,884	210,000
99-00-30-3810	INTEREST	3,778	1,000	1,345	1,400
<b>TOTAL REVENUE</b>		<b>183,322</b>	<b>201,000</b>	<b>202,228</b>	<b>211,400</b>
<b>EXPENSES</b>					
99-00-00-8065	PURCHASE OF PROPERTY	3,600	5,000	-	5,000
99-00-00-8103	STREETSCAPE LOAN REPAYMENT	107,672	107,672	107,672	107,672
99-00-20-4330	BUSINESS DISTRICT LEGAL FEES	-	1,000	-	1,000
99-00-60-4810	POSTAGE	-	50	-	50
99-00-99-4501	NORLAND HOLDINGS, LLC 2ND REDEVELOPMENT	-	5,000	-	5,000
99-00-00-4800	ADMINISTRATIVE EXPENSES	-	2,000	-	5,000
99-00-00-4801	PROJECT EXPENSES	9,640	5,000	-	177,875
<b>TOTAL EXPENSES</b>		<b>120,912</b>	<b>125,722</b>	<b>107,672</b>	<b>301,597</b>

## **BUSINESS DISTRICT REVENUE**

### **BUSINESS DISTRICT 99-00-10-3030**

Revenue from 1% Business District sales tax revenue.

### **INTEREST 99-00-30-3810**

Interest from balance of Business District.

## **BUSINESS DISTRICT EXPENSES**

### **PURCHASE OF PROPERTY 99-00-00-8065**

Costs to purchase property within the Business District.

### **STREETSCAPE PROJECT**

Possible costs for additional streetscape work uncompleted.

### **LEGAL FEES 99-00-20-4330**

Legal expenses associated with the Business District.

### **POSTAGE 99-00-60-4810**

Costs for postage related to the Business District.

### **NORLAND HOLDINGS, LLC 2<sup>ND</sup> REDEVELOPMENT 99-00-99-4501**

Costs for the Norland Holdings, LLC. second redevelopment agreement for the construction of the O'Tooles Parking Lot.

### **ADMINISTRATIVE EXPENSES 99-00-00-4800**

Administrative costs related to the Business District.

### **PROJECT EXPENSES 99-00-00-4801**

Costs for Business District Eligible expenses not defined elsewhere.

**POLICE PENSION FUND**

		<b>ACTUAL</b>	<b>BUDGET</b>	<b>EST. YR. END</b>	<b>BUDGET</b>
		<b>2021/2022</b>	<b>2022/2023</b>	<b>2022/2023</b>	<b>2023/2024</b>
<b>REVENUE</b>					
20-00-00-3010	REAL ESTATE TAXES	804,464	813,362	813,362	835,122
20-00-00-3030	EMPLOYEE CONTRIBUTIONS	205,495	155,211	148,705	168,459
20-00-00-3810	INTEREST EARNED	1,236	100,000	-	-
20-00-00-3811	GAIN/LOSS ON SCHWAB ACCTS	-	100,000	-	-
<b>TOTAL REVENUE</b>		<b>1,011,195</b>	<b>1,168,573</b>	<b>962,067</b>	<b>1,003,581</b>
<b>EXPENSES</b>					
20-00-10-4010	POLICE PENSION	823,083	671,271	701,311	705,000
20-00-60-4810	ADMINISTRATIVE EXPENSES	-	4,000	-	-
20-00-60-4812	BROKERAGE FEES	-	12,000	-	-
20-00-10-4530	TRAINING	-	6,000	-	-
20-00-20-4330	LEGAL FEES	-	7,500	-	-
20-00-20-4310	AUDIT-ACTUARY REPORTS	4,456	6,500	4,653	6,500
<b>TOTAL EXPENSES</b>		<b>827,539</b>	<b>707,271</b>	<b>705,963</b>	<b>711,500</b>

# DUI FUND

		ACTUAL	BUDGET	Appropriation	EST. YR. END	BUDGET
		2021/2022	2022/2023	2022/2023	2022/2023	2023/2024
<b>REVENUE</b>						
93-00-00-3890	DUI FINES	3,294	5,000		6,063	
93-00-00-3900	OTHER REVENUE	248	-		-	-
93-00-30-3810	INTEREST INCOME	-	-		-	-
<b>TOTAL REVENUE</b>		<b>3,542</b>	<b>5,000</b>		<b>6,063</b>	<b>-</b>
<b>EXPENSES</b>						
93-00-00-5202	SQUAD CAMERA REPLACE	5,200	15,600	17,940	2,487	15,600
93-00-00-8094	POLICE BODY CAMERA	-	3,000	3,450	4,310	4,500
<b>TOTAL EXPENSES</b>		<b>5,200</b>	<b>18,600</b>	<b>21,390</b>	<b>6,797</b>	<b>20,100</b>

# DRUG FORFEITURE FUND

		ACTUAL	BUDGET	EST. YR. END	BUDGET
		2021/2022	2022/2023	2022/2023	2023/2024
<b>REVENUE</b>					
92-00-00-3890	DRUG SEIZURE	742	1,500	2,976	2,000
<b>TOTAL REVENUE</b>		<b>742</b>	<b>1,500</b>	<b>2,976</b>	<b>2,000</b>
<b>EXPENSES</b>					
92-00-00-8027	TASER REPLACEMENT	2,640	2,640	2,640	-
<b>TOTAL EXPENSES</b>		<b>2,640</b>	<b>2,640</b>	<b>2,640</b>	<b>-</b>