PUBLIC NOTICE

IN ACCORDANCE WITH THE APPLICABLE STATUTES OF THE STATE OF ILLINOIS AND ORDINANCES OF THE CITY OF PROSPECT HEIGHTS, NOTICE IS HEREBY GIVEN THAT

THE REGULAR MEETING
OF THE MAYOR AND CITY COUNCIL OF THE CITY OF PROSPECT HEIGHTS
WILL BE HELD ON MONDAY, OCTOBER 26, 2015 AT 6:30 P.M.

IN THE COUNCIL CHAMBERS, PROSPECT HEIGHTS CITY HALL,
8 NORTH ELMHURST ROAD, PROSPECT HEIGHTS, ILLINOIS
MAYOR NICHOLAS J. HELMER PRESIDING

DURING WHICH MEETING IT IS ANTICIPATED THERE WILL BE DISCUSSION AND CONSIDERATION OF AND, IF SO DETERMINED, ACTION UPON THE MATTERS CONTAINED IN THE FOLLOWING:

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE** – Led by Assistant to the Administrator

3. **INVOCATION** – TBD

4. **ROLL CALL FOR QUORUM**

5. **APPROVAL OF MINUTES**

   A. October 12, 2015 City Council Workshop Meeting Minutes

6. **PROCLAMATIONS, CONGRATULATORY RESOLUTIONS AND AWARDS**

7. **APPOINTMENTS AND CONFIRMATIONS**

   A. Deferral of Scott DeGraf Appointment to Plan Commission/Zoning Board to Later Date

   B. Wendy Morgan-Adams to Plan Commission/Zoning Board

This meeting will be televised on the following Prospect Heights cable channels: Comcast and WOW Channel 17 and AT&T U-verse Channel 99

C. James Brophy, Reappointment to the Police Pension Board

8. CITIZEN CONCERNS AND COMMENTS (agenda matters)

9. STAFF AND ELECTED OFFICALS REPORTS

10. CONSENT AGENDA - All items listed on the Consent Agenda are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Council member or citizen so requests, in which event the item will be removed from the general order of business and considered after all other Agenda items.

A. Replacement of Police Watch Commander Vehicle Through the State Bid and Procurement Program

11. OLD BUSINESS

A. Hey Associates Report Regarding Hillcrest Lake

B. Hillcrest Lake Follow-up Information

C. Presentation by Mr. Tim Kupczyk Regarding Hillcrest Lake

12. NEW BUSINESS

A. Request from Ruffolo Fresh Market, Palwaukee Plaza, for Consideration of Sales Tax Sharing Agreement with City of Prospect Heights

B. Report Regarding Quincy Park Storm Sewer Project

C. Introduction of Proposed Redevelopment at 215 S. Elmhurst, Chase Bank

D. An Ordinance Authorizing an Amended and Restated Dedication Agreement Between Rob Roy Country Club Village Association and the City of Prospect Heights

E. Resolution Regarding City Assumption of Old Town Sanitary District

F. Authorization to Accept Agreement with CivicPlus for Website Redesign/Improvement

13. APPROVAL OF WARRANTS

A. Approval of Warrants

General Fund	$359,658.25
MFT Fund	$0.00
Palatine/Milwaukee TIF	$0.00
Tourism District	$66.00

This meeting will be televised on the following Prospect Heights cable channels: Comcast and WOW Channel 17 and AT&T U-verse Channel 99

Development Fund	$420.84
DEA Fund	$0.00
Solid Waste Fund	$0.00
SS Area #1	$0.00
SS Area #2	$0.00
SS Area #3	$0.00
SS Area #4	$0.00
SS Area #5	$11,830.70
SS Area #8 – Levee Wall #37	$0.00
SS Area-Constr #6 (Water Main)	$0.00
SS Area- Debt #6	$0.00
Road Construction	$0.00
Road Construction Debt	$0.00
Water Fund	$22,408.88
Parking Fund	$34.52
Road/Building Bond Escrow	$0.00
TOTAL	**$394,419.19**

Wire Payments

10/16/2015 PAYROLL	**$153,378.33**
10/20/15 POLICE PENSION PAYMENT	**$30,712.77**
TOTAL WARRANT	**$578,510.29**

14. **RESIDENT COMMENTS (non-agenda matters)**

15. **EXECUTIVE SESSION**

This meeting will be televised on the following Prospect Heights cable channels: Comcast and WOW Channel 17 and AT&T U-verse Channel 99

16. ACTION ON EXECUTIVE SESSION ITEMS, IF REQUIRED

17. ADJOURNMENT

Posted: by Karen Schultheis by 6 PM, October 22, 2015

This meeting will be televised on the following Prospect Heights cable channels:
Comcast and WOW Channel 17 and AT&T U-verse Channel 99

7B

WENDY MORGAN-ADAMS

TO: Mayor Helmer

DATE: October 19, 2015

SUBJECT: Appointment to Planning Commission/ Zoning Board (PZBA)

CC: Karen Schultheis

Dear Mayor Helmer:

As a concerned and interested citizen of Prospect Heights. I'm respectfully requesting and would greatly appreciate you appointing me to the Planning and Zoning Board (PZBA). In my 34 years of practice as an attorney with The Law Firm of Wendy R. Morgan, I have had occasions to become involved in zoning issues in the past. I have also worked on real estate transactions involving zoning issues. I believe my legal knowledge as an attorney as well as experience I have had in this field will make me an asset to this citizen commission.

Thank you for your consideration in this matter.

Sincerely,

Wendy R. Morgan-Adams

Karen Schultheis

From:	Nick Helmer
Sent:	Wednesday, October 14, 2015 2:28 PM
To:	Karen Schultheis
Subject:	Fwd: Reappointment to Police Pension Board
Attachments:	image001.png

7C

Nicholas J. Helmer
Mayor of Prospect Heights
847-398-6070 x231

Begin forwarded message:

> **From:** "Helmer, Nick" <helmer@iglrealestate.com>
> **Date:** October 14, 2015 at 2:27:03 PM CDT
> **To:** Nick Helmer <nhelmer@prospect-heights.org>
> **Subject: Re: Reappointment to Police Pension Board**
>
> Yes please
>
> Nicholas J. Helmer, CPM
> 630-816-2259
>
> On Oct 14, 2015, at 12:45 PM, Nick Helmer <nhelmer@prospect-heights.org<mailto:nhelmer@prospect-heights.org>> wrote:
>
> Dear Mayor Helmer:
> The attached is the request of Trustee Brophy to be re-appointed to the Police Pension Committee. Should I schedule his re-appointment for the October 26th Meeting?
>
> Karen
> <image001.png>
>
> From: James Brophy [mailto:jgb201@sbcglobal.net]
> Sent: Wednesday, October 14, 2015 11:16 AM
> To: Nick Helmer
> Subject: Reappointment to Police Pension Board
>
> Nick,
> I request reappointment to the Prospect Heights Police Pension Board. I have enjoyed my stay on the board and hope my service has been beneficial to our city.
> Respectfully,
> Jim Brophy

10 A

City Council Agenda Item No:

Meeting Date:	October 26, 2015
Item:	Purchase one replacement police vehicle – Watch Commander SUV
Motion:	**I move to accept the quote from Currie Motors Fleet to purchase one 2016 Chevrolet Tahoe Police Vehicle for $37,597.33.**
Staff Contact:	James J. Dunne, Chief of Police

Purpose:
The purpose of this memo is to request approval to purchase an SUV to replace the watch commanders SUV.

Background:
The Watch Commander's SUV, a 2011 Ford Expedition is approaching 100,000 miles and is scheduled to be replaced. This vehicle was budgeted for replacement during this current budget cycle. It was anticipated that we would have replaced this vehicle in the spring of 2015, however; because this is the costliest vehicle in our fleet, we pushed back the purchase seven months with a delivery date ten months out. This vehicle is not scheduled for delivery until the end of the first quarter of 2016 if we order it now.

The Tahoe is approximately the same cost as the Ford Expedition. Staff and PW have researched the two vehicles and for a myriad of reasons, there is a desire to shift to a Tahoe. Some of these reasons include design and handling, resale value, and that this unit is designed for police service while the Expedition is basically a civilian unit pressed into police service.

The current 603 (Watch Commanders vehicle) is a 2011 Ford Expedition. This vehicle will be remarked and designated for use as our volunteer vehicle, 694. The current 2007 Ford Expedition, 694, which is being currently used as our volunteer vehicle will have the markings stripped off of it and turned over to Public Works for their use. As you can see, these large SUV's are maintained well and kept in service for a long period of time.

Our watch commanders require a larger vehicle because they carry more equipment than our Ford Explorers. The additional equipment includes Evidence Technician supplies and road barrier equipment. This is in additional to the standard equipment that each patrol vehicle must carry.

Financial Impact:
The quotation is for $37,597.33 for this unit which is budgeted in the FY 2015-16 budget and part of the Reserve for Capital Replacement Plan. As an aside, we originally planned and budgeted for the purchase of two new patrol units this budget cycle. However; we determined that the Tourism District Officers take home vehicle has another year's worth of service life remaining and we are deferring that purchase for another budget cycle. This will be the only new patrol vehicle purchased in the current budget year.

Recommendation:
This is a scheduled fleet rotation. The unit being rotated out has exhausted the ability to properly function in a daily 24/7 365 capacity. Based on our predetermined plan, I would recommend that we purchase this new Tahoe.

Votes Required to Pass:
Majority Vote

Enclosures:
SPC 2016 Chevrolet Tahoe Police Patrol Package Contract #147

2016 Chevrolet Tahoe Police Patrol Package

Contract# 147

Currie Motors Fleet

"Nice People To Do Business With"

Your Full-Line Municipal Dealer
www.CurrieFleet.com

GOOD THRU: 4/10/2016

Due to high order volume, current orders will be scheduled 1st Quarter of 2016

find us on Facebook

YouTube

follow us on twitter

TENTATIVE ORDER BANK OPEN DATE: NOVEMBER 2015

Currie Motors Chevrolet
SPC Contract Winner
2016 Chevrolet Tahoe Police
Patrol Package
Contract #147
Call Tom Sullivan (708) 562-4500

Standard Package: $32,933.49

Warranty 3 Years 36, 000 miles Bumper to Bumper/ 5 Years 100,000 Power train

Audio system, AM/FM stereo with CD player and auxiliary input jack, includes 2 USB ports and 1SD card reader
Audio system feature, 6-speaker system
Audio system feature, single-slot CD/MP3 Player
Automatic Occupant Sensing System, sensor indicator inflatable restraint, front passenger
Assist handles, front passenger and second row outboard
Bluetooth for phone, personal cell phone connectivity to vehicle audio system
Climate control, dual-zone automatic
Defogger, rear-window electric
Door locks, power programmable with lockout protection. Auto Lockout is disabled on Driver door
Instrumentation, analog with certified 150 mph speedometer, odometer with trip odometer, engine hour meter, fuel level, voltmeter, engine temperature, oil pressure and tachometer
Key, 2-sided
LATCH system (Lower Anchors and Top tethers for Children), for child safety seats, lower anchors and top tethers located in all second row seating positions
Lighting, interior with dome light, cargo lights, door handle or Remote Keyless Entry-activated illuminated entry and map lights in front and second seat positions
Mirror, inside rearview manual day/night
OnStar, 6 months of Directions and Connections plan
1 Visit onstar.com for coverage map, details and system limitations. Services vary by model & conditions.
Power outlets, 3 auxiliary, 12-volt, includes 2 on the instrument panel and 1 in the cargo area
Power outlet, 110-volt, 1.1 Amp, 150 Watt
Rear Vision Camera
Safety belts, 3-point, driver and front passenger in all seating positions
Steering column, Tilt-Wheel
Steering wheel, vinyl
Theft-deterrent system, content, electrical, unauthorized entry
Theft-deterrent system, vehicle, PASS-Key III
Tire Pressure Monitor System, air pressure sensors in each tire with pressure display in Driver Information Center
Warning tones, headlamp on, key-in-ignition, driver and right-front passenger safety belt unfasten and turn signal on
Windows, power, with express down and express up front doors and lockout features
Daytime Running Lamps, with automatic exterior lamp control
Door handles, Black
Exterior ornamentation delete
Glass, deep-tinted (all windows, except light tinted glass on windshield and driver- and front passenger-side glass)
Liftgate, rear manual
Mirrors, outside heated power-adjustable, manual-folding
Mirror caps are Black
Tires, P265/60R17 all-season, police, V-rated
Tire, spare P265/60R17 all-season, police, Vrated
Tire carrier, lockable outside spare, winch-type

TENTATIVE ORDER BANK OPEN DATE: NOVEMBER 2015

mounted under frame at rear
Wheels, 17" x 8" (43.2 cm x 20.3 cm) steel, police
Wheel, 17" x 8" (43.2 cm x 20.3 cm) full-size, steel spare
Windshield, solar absorbing, shaded upper
Wiper, rear intermittent with washer
Wipers, front intermittent, Rainsense
Windshield style, acoustic laminated glass
Air cleaner, high capacity
Alternator, 170 amps, high output
Battery, 660 cold cranking amps with 80 amp hour rating
Power supply, 100-amp, auxiliary battery, rear electrical center
Power supply, 50-amp, power supply, auxiliary battery, passenger compartment wiring harness
Power supply, 120-amp, (4) 30-amp circuit, Primary battery, relay controlled, passenger compartment harness wiring
Cooling, auxiliary transmission oil cooler, heavy-duty air-to-oil
Cooling, external engine oil cooler, auxiliary, heavy-duty air-to-oil integral to driver side of radiator
Engine, 5.3L EcoTec3 V8, with Active Fuel Management, Direct Injection, Variable Valve Timing
and Flex Fuel, includes aluminum block construction
GVWR, 6800 lbs. (3084 kg)
Rear axle, 3.08 ratio
Steering, power, electric Z56
Suspension, heavy-duty, police-rated, front, independent torsion bar, and stabilizer bar and rear, multi-link with coil springs
Trailering equipment, heavy-duty
Transmission, 6-speed automatic, electronically controlled with overdrive and tow/haul mode
Air bags, frontal and side-impact for driver and front passenger and head curtain side-impact for all rows in outboard seating positions Note: Head curtain side-impact included for third row seating positions, even though seat has been deleted.
Requires (AZ3) 40/20/40 split-bench front seat. Always use safety belts and child restraints. Children are safer when properly secured in a rear seat in the appropriate child restraint. See the Owner's Manual for more information.
SiriusXM Satellite Radio, delete
Cruise control, electronic with set and resume speed
Floor covering, Black rubberized vinyl
Identifier for Police Patrol Vehicle
Remote Keyless Entry, extended-range
Seats, front 40/20/40 split-bench, 3-passenger,

	Model-Options	
☒	Police Patrol Vehicle 4-Wheel Drive	3790.00
☐	Special Service Package Vehicle 4-Wheel Drive	3180.00

	Options – Exterior	
☐	Exterior body colored parts-Blue	154.00
☐	Exterior body colored parts-Dark Blue Metallic	154.00
☐	Exterior body colored parts-Victory Red	176.00
☐	Special Paint Solid	264.00
☐	17" Polished Aluminum Wheels (SSV Only)	528.00
☐	Front and rear splash guards	136.40
☐	Painted body-side moldings	242.00
☐	Push bumpers	695.00
☐	Non Tinted Solar Glass	-259.60
☒	Recovery hooks	105.60

	Options – Interior	
☐	Driver Alert Package Includes Forward Collision Alert, Lane Departure Warning and Power adjustable pedals (requires front bucket seats)	678.00
☐	Inoperative rear doors	52.00
☐	Inoperative rear window switches	50.16
☐	Red/White Auxiliary dome light	149.60
☐	OnStar delete (Bluetooth delete included)	-74.80
☐	Adjustable power pedals	132.00
☒	Power Front passenger seat (required w/front buckets	176.00
☐	Carpeted floor covering	237.60
☐	Cargo net (SSV Only)	52.80
☐	Cargo shade	171.60
☐	Rear cargo mat (Requires carpeting)	74.80

	Options – Mechanical/Electrical	
☐	Auxiliary speaker wiring	52.80
☒	Grill lamp/siren speaker wiring	80.96
☒	Horn and siren circuit wiring	36.08
☐	Flasher System	435.60
☒	Daytime running light delete	8.80
☒	Spot Light-left hand	431.20
☐	Spot Light-dual	721.60
☐	City Brake Package- 4x2 PPV only	N/C
☐	Locking Differential (recommended on PPV 4x2)	259.60
☐	Block heater	66.00
☐	Ground studs	77.44
☐	Max Trailering Package (SSV Only)	572.00

Options – Additional

☑	6- Additional keys (requires key common - unprogrammed)	35.20
☐	Key Common- 6E2	22.00
☐	Key Common-6E8	22.00
☐	Remote Keyless Entry -6 additional unprogrammed transmitters	66.00
☐	Remote vehicle start	167.20
☐	Theft-deterrent system (N/A with DRL delete)	347.60
☐	Secure Idle Over-ride	285.00
☐	Rustproofing with sound shield	295.00
☐	Delivery-greater than 50 miles	145.00
☐	License and Title Fees	105.00

Exterior Colors

☐	Black	N/C
☐	Champagne Silver	N/C
☒	Summit White	N/C
☐	Silver Ice Metallic	N/C
☐	Brownstone Metallic	N/C
☐	Slate Grey Metallic	N/C
☐	Tungsten Metallic	N/C
☐	Siren Red Tint Coat	N/C
☐	Blue	154.00
☐	Victory Red	264.00
☐	Dark Blue Metallic	264.00
☐	Sable Metallic	359.45

Interior

☒	Jet Black 40/20/40 Bench	Standard
☐	Jet Black Front Buckets (w/ console & frontal side impact airbags)	220.00
☐	Front Center Seat Delete	N/C
☐	Vinyl Rear Seat	N/C

SPC
SUBURBAN PURCHASING
COOPERATIVE

Please enter the following:

Agency Name & Address	Prospect Heights P.D. 14 E. Camp McDonald Rd. Prospect Heights, IL 60070
Contact Name	James Dunne
Phone Number	847-398-5511 x101
Purchase Order Number	PO15-1101
Total Dollar Amount	37,597.33
Total Number of Units	One (1)
Delivery Address	SAA

Please submit P.O. & tax exempt letter with Vehicle Order:

Currie Motors
8401 W. Roosevelt Rd.
Forest Park, IL 60130
PHONE: (708)562-4500 FAX: (815) 464-7500
CurrieFleet@gmail.com
Contact Person: Tom Sullivan

IF WE HAVE MISSED AN OPTON, PLEASE CONTACT OUR OFFICE.
COMPLETE UNITS IN STOCK FOR IMMEDIATE DELIVERY, CAN BE VIEWED ON OUR WEBSITE WWW.CURRIEFLEET.COM

Hey and Associates, Inc.

Project #15-0320

ASSESSMENT AND MANAGEMENT RECOMMENDATIONS FOR THE SLOUGH AND HILLCREST LAKE

PROSPECT HEIGHTS, COOK COUNTY, ILLINOIS

PREPARED FOR:

City of Prospect Heights
8 N Elmhurst Road
Prospect Heights, Illinois 60070

OCTOBER 2015

26575 W. COMMERCE DRIVE, SUITE 601, VOLO, ILLINOIS 60073
OFFICE (847) 740-0888 FAX (847) 740-2888

Table of Contents

INTRODUCTION 3
Resident Concerns and Involvement 3
LAKE and SLOUGH OVERVIEW 4
Watershed 5
ASSESSMENT RESULTS – THE SLOUGH & HILLCREST LAKE 6
Aesthetic Features & Shoreline Condition 6
Fishery 7
Wildlife 8
Water Quality 9
Aquatic Plants 11
Observed Aquatic Plant Descriptions 12
Sago Pondweed 12
Coontail 13
Shoreline/Emergent Plants 14
Bathymetry and Sediment 26
Shoreline Condition 27
LAKE AND SLOUGH MANAGEMENT ALTERNATIVES AND RECOMMENDATIONS 28
Water Levels 28
Dredging 29
Oxidation and Digestion 29
Water Level Summary 30
Fish and Wildlife 30
Shoreline 31
Invasive Species – Aquatic/Submergent 31
No Management 32
Drawdown 32
Nutrient Inactivation 33
Dredging for Aquatic Plant Control 33
Screens 34
Aeration 34
Biomanipulation 35
Weed Rollers 35
Hand Controls 36

Chemical Treatment 36
Harvesting 39
Invasive Species – Emergent 39
Water Quality 40
Overall Aesthetic 40
SUMMARY AND RECOMMENDATIONS 41

List of Exhibits

Exhibit 1-- Project Location
Exhibit 2-- Aerial Time Series
Exhibit 3-- U.S.G.S. Topographic Map
Exhibit 4-- National Wetland Inventory
Exhibit 5-- Flood Insurance Rate Map
Exhibit 6-- U.S.G.S. Hydrologic Atlas
Exhibit 7-- NRCS Soil Survey
Exhibit 8-- Watershed Boundary
Exhibit 9-- Hillcrest Lake Shoreline Condition
Exhibit 10-- Slough Shoreline Condition
Exhibit 11-- Hillcrest Lake Bathymetric Survey Top of Sediment
Exhibit 12-- Slough Bathymetric Survey Top of Sediment
Exhibit 13-- Hillcrest Lake Depth to Top of Sediment
Exhibit 14-- Slough Depth to Top of Sediment
Exhibit 15-- Hillcrest Lake Sediment Depth (thickness)
Exhibit 16-- Slough Sediment Depth (thickness)
Exhibit 17-- Federal Township Plats of Illinois (1840)

List of Tables

Table 1-- Summary of fish surveys by IDOC/IDNR.
Table 2 --Avian species observed in and immediately around Hillcrest Lake and The Slough in September 2015.
Table 3-- Floristic Quality Information and Plant Species List for Perimeter of The Slough
Table 4-- Floristic Quality Information and Plant Species List for Perimeter of Hillcrest Lake.

Appendices

Appendix A-- Representative Photographs
Appendix B-- IDOC/IDNR Fishery Reports
Appendix C-- GEC report
Appendix D-- Water Quality Sampling Results.

INTRODUCTION

The study site encompasses two bodies of water divided by Willow Road in Prospect Heights, Illinois (Exhibit 1). Hillcrest Lake is an approximate 14-acre lake or pond located north of Willow Road. The area south of Willow Road is commonly known at The Slough, and was historically known as Hillcrest Slough or South Slough. Based on historic aerial photographs and the typical landscape ecology of the region, both The Slough and Hillcrest Lake were once a single large wetland "slough." Sometime in the 1950s it appears that these areas may have been excavated or dredged to create more open water features that are apparent by the 1962 aerial photograph (Exhibit 2). A July 1970 Lake Survey report from the then Illinois Department of Conservation (IDOC) indicated that it was a "dammed marsh, also supposedly deepened about 1955 for home fill."

Due to recent citizen concerns about water levels in both Hillcrest Lake and The Slough, along with concerns about aquatic "weed" growth, the City of Prospect Heights retained Hey and Associates, Inc. (Hey) to complete an ecological assessment of The Slough and Hillcrest Lake and provide management options and recommendations at the urging of the Prospect Heights Natural Resources Commission (NRC). The NRC has also provided historical information and data for these areas. In addition, Globetrotters Engineering Corporation (GEC) was hired by the City of Prospect Heights to examine the history of the outlet on Hillcrest Lake and conduct an analysis of possible options for increasing the depth of the lake by installation of a riser board weir structure on the outlet pipe. GEC has also completed a feasibility study and preliminary design report for the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) that focused on flooding of local roads around Hillcrest Lake.

Resident Concerns and Involvement

Recent City Council meetings have had very high attendance by members of the community concerned with Hillcrest Lake and The Slough. Citizens expressed a variety of concerns that are reflected in the considerations and options presented in this Plan. Much input has been received from Tim Kupczyk, President of the Hillcrest Lake Homeowners Association and Agnes Wojnarski, President of the Prospect Heights NRC. Management concerns included the water levels, aquatic plant growth, water quality and invasive species in both The Slough and Hillcrest Lake. The NRC also coordinates a group of volunteer stewards that have been controlling invasive species and planting native species around parts of The Slough.

LAKE and SLOUGH OVERVIEW

Hillcrest Lake is a man-made lake with a surface area of approximately 14 acres and is surrounded by residential development. The Slough is approximately 12.5 acres in size and has emergent wetland vegetation around a long narrow body of open water. The open water portion is approximately 6.9 acres based on estimates from April 2015 aerial imagery. Water levels in the Lake and the Slough are controlled by an existing 24-inch Polyvinyl Chloride (PVC) outlet pipe which carries the water under Hillcrest Avenue, through residential yards and to an open channel that in turn flows into McDonald Creek. At least 3 concrete culverts connect The Slough to Hillcrest Lake under Willow Road. These 3 concrete pipes are partially submerged and appear to be in poor condition (clogged and spalling concrete). Water flows into The Slough at the south end via McDonald Creek Tributary A from under Elmhurst Road/Illinois Route 83.

Based on a survey performed by GEC for the MWRDGC study in 2014, the invert elevation (bottom of pipe) of the outlet pipe from Hillcrest Lake is 647.1 at the upstream (lake) end and 646.3 at the downstream end. The pipe is approximately 350 feet long. Water flows from the lake into the culvert and discharges into a ditch which leads to McDonald Creek. The normal lake water level during dry weather is typically about 2 to 6 inches above the invert of the culvert. The inlet to the culvert is protected by several metal fence posts driven into the lake bed. These serve to prevent large debris from entering the culvert. Prospect Heights periodically inspects and removes debris accumulations. Based on GEC's report to Prospect Heights, as-built record construction drawings of the outlet culvert were destroyed in a fire, so the exact date of the installation of the culvert is unknown. Based on the Prospect Heights storm sewer utility atlas examined by GEC, a 24-inch pipe existed at this location since at least 1980. The atlas indicates a 24-inch diameter reinforced concrete pipe (RCP) at that location with a note that it is to be replaced by a 24-inch diameter PVC pipe. No information regarding elevation of the pipe is shown on the drawings.

Overall both the Slough and Hillcrest Lake are currently very shallow (maximum depth of 3.2 feet). The area around Hillcrest Lake is 100% developed with residential homes. The Slough shoreline is approximately 88% developed (residential) and 12% undeveloped or open space (park). Most of the surrounding

residential development was built in the 1950s and 1960s. A small park (Isaac Walton Park) with a picnic shelter and interpretive signs exists at the southwest end of The Slough along Illinois Route 83/Elmhurst Road.

Both Hillcrest Lake and The Slough appear as blue open water bodies on the U.S. Geological Survey (USGS) Quadragle map for the area (Exhibit 3). The National Wetland Inventory (NWI) mapping for the area depicts Hillcrest Lake as a single Palustrine, Unconsolidated Bottom, intermittently exposed, excavated (PUBGx) wetland (Exhibit 4). The NWI shows the northeastern part of The Slough (primarily the open water part) as the same designation while the southwest end includes areas of Palustrine Emergent Semipermanently Flooded (PEMF), and Palustrine Forested, Broad-leaved Deciduous, Seasonally Flooded (PFO1C) wetlands (Exhibit 4). The NWI mapping for this area was completed in 1981. The Flood Insurance Rate Map (FIRM) shows the entirety of Hillcrest Lake and The Slough as Zone AE floodplain (Exhibit 5). The floodplain mapping also includes surrounding streets and yards. The USGS Hydrologic Atlas depicts the flood of record as of 1963, which includes all of The Slough, Hillcrest Lake and extends north to McDonald Creek (Exhibit 6). The Soil Survey mapping for Cook County shows The Slough and Hillcrest Lake as "water" and does not provide information on the soils that may have been present (Exhibit 7).

Watershed

Hillcrest Lake/The Slough receives its water from its approximate 1.7 square-mile watershed (Exhibit 8). Approximately 1.10 square miles is tributary to The Slough, south of Willow Road. The majority of this watershed is in residential development built in the 1950s and 1960s. Commercial landuse exists along US Route 12/Rand Road, with lesser amounts along Elmhurst Road/Route 83. Two golf courses lie southwest of the Slough near the headwaters of McDonald Creek Tributary A. The Slough receives stormwater from culverts along the east side at School Street, East Olive Avenue, and East Marion Avenue and drainage from Hillside Avenue. Drainage from Maple Street and the south side of Willow Road also enter the west side of The Slough. These residential streets all have a rural cross-section without curb and gutter and drainage is via open ditch and culverts under driveways and roads. There are also multiple stormwater inlets to Hillcrest Lake carrying drainage from Hill Court, Owen Street, and Owen Court. The Hillcrest Lake and Slough immediate shoreline are within open space parcels held by the City of Prospect Heights and the Prospect Heights Park District.

ASSESSMENT RESULTS – THE SLOUGH & HILLCREST LAKE

Aesthetic Features & Shoreline Condition

The protection and restoration of aesthetic qualities on the slough and lake's shoreline not only provide more natural views from the water but may also improve the quality of the lake. For example, native, deep-rooted vegetation rather than manicured, fertilized lawns are a natural deterrent to geese from loitering as the taller vegetation is less attractive to the geese. A reduction in the goose population on and near the lake can reduce bacteria and nutrient levels in the lake which in turn can limit the excess growth of vegetation and algae. Native, perennial vegetation also provides refuge for fish and wildlife and can reduce the potential for shoreline erosion.

Approximately 95% of the shoreline of The Slough is vegetated by woody and emergent vegetation, providing good habitat, erosion control, and a natural aesthetic. Only one private lot on the northwest corner has mowed turf to the water's edge, and has likely contributed to a severely eroded shoreline condition (Exhibit 10). The shoreline along the south side of Willow Road is partially vegetated, littered with old concrete rubble and blocks, and the gravel shoulder/informal parking area.

Hillcrest Lake has 53% of its shoreline vegetated with woody or emergent vegetation and moderate erosion (Exhibit 9). In some areas, it appears that small plantings of native prairie species were installed. An estimated 1404 feet of shoreline have significant to severe erosion characterized by mowed turf or gravel up to eroded vertical banks (Exhibit 10).

Much of the aesthetic concern for residents has to do with the appearance of the open water. During September 2015 assessment for this study, an estimated 45% of the water surface of The Slough appeared solid bright green. Many people assume this is due to algae and is undesirable. However, the green appearance on the Slough was solely from a floating plant called duckweed (*Lemna minor*), not algae. This will be discussed further in the section on aquatic plants below.

Hillcrest Lake has dense beds of submerged growth of aquatic plants. In many areas, depending on the water depth, these plants reach the surface and are covered with filamentous algae. This gives the lake an aesthetic that is undesirable to most people.

Fishery

The fishery of Hillcrest Lake was assessed by the IDOC (now the Illinois Department of Natural Resources or IDNR) in July 1970. Both Hillcrest Lake and The Slough were assessed by IDOC in August 1972. And more recently the IDNR provided a quick assessment of the fishery of Hillcrest Lake in August 2015. These 3 assessments all included electroshocking by state fisheries personnel and provide an assessment of the fishery over time.

The 1970 Lake Survey report noted that Hillcrest Lake had an average depth of only 2.7 feet with a maximum depth of 7 feet based on echo soundings. The IDOC noted that the bottom was mucky and that the lake likely had water quality impairments. Filamentous algae was observed around the perimeter of the lake, along with some native emergent and submergent plants. IDOC indicated that the lake was very shallow and prone to winter fish kills and was not likely to support a sport fishery. In 1970, the observed fishery was dominated by common carp, a non-native fish species.

Similar observations were noted in the 1972 report from IDOC which assessed both The Slough and Hillcrest Lake. Again it was noted that the fishery was dominated by carp and other rough species and that the lake was very shallow and prone to winter and summer kills. They commented again that it would not likely support any kind of sport fishery due to shallow depths and water quality issues.

Finally, in 2015 the reassessment by IDNR confirmed that conditions had not changed substantially from the 1970 survey. Electrofishing was only possible for 15 minutes due to the depths being too shallow for the boat. IDNR recommended annual stocking if a sport fishery was desired, to overcome annual fish kills.

Table 1. Summary of fish surveys by IDOC/IDNR.

Fish Species	1970[1]	1972[2]	2015[3]
Largemouth Bass	5		4
Bluegill	5	7	1
Green Sunfish	33	5	
Black Crappie	8	2	
Black Bullhead	26	3	3
Common Carp	76	25	26
Goldfish		33	23
White Sucker			2

1= 1970 survey for 40 minutes with AC electroshocking.
2= 1972 survey for 35 minutes with AC electroshocking.
3= 2015 survey for 15 minutes with DC electroshocking.

Wildlife

The Slough and Hillcrest Lake together appear to provide significant wildlife habitat within the urban-suburban landscape. Fall observations for avian species in this study are during post-breeding dispersal (after birds leave their nests), and hence do not represent nesting observations. These observations provide a glimpse of the diversity of bird life that use the habitat in and around The Slough and Hillcrest Lake for foraging, loafing and migration support. Species in the table below marked with an asterisk are observed species that are associated with marsh or open water habitat. The remainder of the species listed are common terrestrial species that were observed in the trees and shrubs surrounding The Slough.

Table 2. Avian species observed in and immediately around Hillcrest Lake and The Slough in September 2015.

American Bittern (*Botaurus lentiginosus*)*
American Coot (*Fulica americana*)*
American Robin (*Turdus migratorius*)
Belted Kingfisher (*Megaceryle alcyon*)*
Blue Jay (*Cyanocitta cristata*)
Blue-winged Teal (*Anas discors*)*
Canada Goose (*Branta canadensis*)*
Common Grackle (*Quiscalus quiscula*)
Common Merganser (*Mergus merganser*)*
Double-crested Cormorant (*Phalacrocorax auritus*)*
Downy Woodpecker (*Picoides pubescens*)
Great Blue Heron (*Ardea herodias*)*
Great Egret (*Ardea alba*)*
Green Heron (*Butorides virescens*)*
Mallard (*Anas platyrhynchos*)*
Marsh Wren (*Cistothorus palustris*)*
Pied-billed Grebe (*Podilymbus podiceps*)*
Red-bellied Woodpecker (*Melanerpes carolinus*)
Ring-billed Gull (*Larus delawarensis*)
Solitary Sandpiper (*Tringa solitaria*)*
Song Sparrow (*Melospiza melodia*)
Wood Duck (*Aix sponsa*)*

Visual observations were also made during all field inspections for any reptile and amphibian species using the area. The fall season of this study is not ideal for confirming the presence of many amphibian and reptile species. However, multiple individuals of the following species were observed: Green Frog (*Lithobates clamitans*), American Toad (*Anaxyrus americanus*), and Painted Turtle (*Chrysemys picta*). Many other species are likely present and would likely be confirmed in spring surveys.

Similarly, visual surveys of dragonflies and damselflies is also not ideal during the fall. Most species are relatively short-lived as aerial adults, living more of their lives as aquatic nymph larvae. Species that were observed and positively identified include widow skimmer (*Libellula luctuosa*), common white tail (*Libellula lydia*) along with several species of small damselflies including the familiar bluet (*Enallagma civile*). Damselflies are usually smaller and more slender than dragonflies, exhibit a weaker flight, and forage and perch low in shoreline vegetation. Positive identifications of other species present were not made.

Water Quality

In general, the water quality of Hillcrest Lake and The Slough is within the expected range for similar water bodies within the suburban context of Cook County. Single water quality grab samples were collected in each water body by Hey on October 1, 2015 and submitted to McHenry Analytical Water Laboratory Inc. for analysis of constituents for analytes including total phosphorus, ammonia nitrogen, chlorides, and total suspended solids/volatile total suspended solids. Field parameters measured included pH and conductivity.

The pH of Hillcrest Lake was measured as 8.22 while the pH of The Slough was measured at 8.18. The water's pH is a measure of its hydrogen ion (H+) concentration and reflects the water's acid/base characteristics. The lower the pH the more acidic it is (more H ions in the water) and the higher the pH the more basic or alkaline the water is. A pH of 7 is neutral and Illinois lakes are typically circum-neutral or 6.5 to 9.0. In northeastern Illinois, the underlying geology is generally calcareous (containing calcium) and alkaline. Thus these values of around 8.2 are within a normal, healthy range. It should also be noted that a lake's pH will fluctuate somewhat each day and from season to season in response to photosynthesis by algae and plants, watershed runoff, and other factors. And like dissolved oxygen, pH values may change with depth as well.

Conductivity is a measure of the water's ability to conduct an electric current. It is useful for estimating the concentration of dissolved solids (TDS) in the water – TDS generally equals about 60% of the conductivity reading. Lakes with high alkalinity often have high conductivity. Illinois' standard of 1000 mg/l TDS equates to a 1700 conductivity reading. Hillcrest Lake was measured at 840 while The Slough was at 1151.

Surface water samples were collected that were analyzed for total phosphorus, ammonia-nitrogen, chlorides, and total suspended solids/volatile total suspended solids (TSS/VTSS). Total phosphorus and ammonia are general measures of the nutrients in the water. It is these nutrients that can fuel excessive growth of aquatic plants or cause nuisance algae blooms. Chlorides present in the water in this region are generally residual from

de-icing salts applied to area roadways during the winter. The TSS/VTSS give an indication of the nature of the solids in the water from the contributing watershed and any agitation of bottom sediments.

While secchi disk readings were not taken, the water in both Hillcrest Lake and The Slough appeared relatively clear and the bottom or submergent vegetation was generally fully visible.

Lab results indicate total phosphorus measurements in The Slough as 0.140 mg/L while Hillcrest Lake was at 0.103 mg/L. If either water body were greater than 20 acres in size, it would be considered impaired for phosphorus by the Illinois Environmental Protection Agency (IEPA) as their water quality standard for total phosphorus standard is 0.05 mg/L that is applied to lakes whose surface area is greater than 20 acres. There are many potential sources of phosphorus available in The Slough and Hillcrest Lake. Internal cycling of phosphorus occurs when DO concentrations become low, ≤2.0 mg/L near the lake bottom allowing for the release of phosphorus from anoxic sediments. Eroding shorelines can also introduce phosphorus rich sediments into the water column, which may be particularly possible for Hillcrest Lake (see section on shoreline condition). Activities taking place in the watershed such as turf fertilization and usage of the marsh by waterfowl can additionally cause increased TP concentrations. Reminding residents and golf course maintenance personnel to use phosphorus-free fertilizers and to take actions to minimize goose populations can go a long way in reducing phosphorus inputs into Hillcrest Lake and The Slough. There were filamentous algal blooms observed in both bodies during the fall 2015 assessment. Elevated phosphorus promotes algal growth, and high chloride levels are known to shift algal populations towards blue green algae.

The chloride concentration was 139 mg/L in Hillcrest Lake and 211 mg/L for The Slough which is below the critical concentration defined by the U.S. Environmental Protection Agency for general use of 230 mg/L, and well below the IEPA state water quality standard of 500 mg/L. The main contributing factor of increased chlorides has been linked to deicing products such as rock salt; however, water softener system discharges have also been identified as another source of chlorides and may have contributed to the elevated chloride concentrations measured. It only requires 1 teaspoon of salt to pollute 5 gallons of water to the critical concentration, and the ecosystem within a lake can be impacted if concentrations remain at the critical level 230 mg/L for extended periods of time.

Ammonia or ammonia nitrogen (N) is a nutrient that contains nitrogen and hydrogen. Its chemical formula is NH3 in the un-ionized state and NH4 + in the ionized form. Total ammonia is the sum of both NH3 and NH4 + and is what is measured analytically in water. Ammonia is the preferred nitrogen-containing nutrient

for plant growth. Ammonia can be converted to nitrite (NO_2) and nitrate (NO_3) by bacteria, and then used by plants. Nitrate and ammonia are the most common forms of nitrogen in aquatic systems. Nitrate predominates in unpolluted waters. Nitrogen can be an important factor controlling algal growth when other nutrients, such as phosphate, are abundant. Ammonia is excreted by animals and produced during decomposition of plants and animals, thus returning nitrogen to the aquatic system. Ammonia is also one of the most important pollutants because it is relatively common but can be toxic, causing lower reproduction and growth, or death of aquatic organisms. The neutral, unionized form (NH_3) is highly toxic to fish and other aquatic life. The total ammonia nitrogen in a water body in Illinois must in no case exceed 15 mg/L. The ammonia nitrogen acute toxicity limits for Illinois surface waters is pH dependant. For Hillcrest Lake and The Slough the acute toxicity limit is 5.73 mg/L. The lab results indicate ammonia nitrogen concentrations of 0.07 mg/L in Hillcrest Lake and 0.22 mg/L in The Slough. This indicates that there is not an excess of ammonia nitrogen in this system. A more detailed analysis of the nitrogen to phosphorus ratios, and the various forms of nitrogen discussed above could be conducted to more completely understand the nutrient balance in Hillcrest Lake and The Slough.

Total Suspended Solids (TSS) are made up of both volatile solids (VTSS), which come from organic sources such as plankton and algae; and nonvolatile solids or sediments. Both adversely affect water clarity. The TSS in The Slough was 7.0 mg/L and 40 mg/L in Hillcrest Lake. The TSS concentration in The Slough was low during our sampling in fall 2015 and supports out observations of good water clarity. Hillcrest Lake had higher TSS concentrations likely due to eroding shoreline, wave action, and perhaps planktonic algae in the water column. Similarly, VTSS was low in The Slough with a concentration of 3.0 mg/L and a higher level in Hillcrest Lake with a concentration of 11.0 mg/L. Overall, these values are relatively low compared with other small lakes in the region and reflect the water clarity which is enhanced by the amount of emergent and submergent vegetation that serves to keep sediments stabilized.

Aquatic Plants

Aquatic plants can be very important to the ecosystem health of an area such as The Slough. Aquatic plants provide food and habitat for fish and wildlife. Invertebrates which fish depend on for food spend most of their life in or near aquatic plants. Young fish and wildlife use the plants for shelter and protection from predators. Plants are spawning areas for fish and amphibians. Plants also stabilize sediments and reduce the potential for shoreline and bottom erosion. Without nutrient uptake by plants, nutrients are readily available in the water column and can lead to harmful and unsightly algal blooms.

Exotic (non-native) aquatic plants do not provide all of these fish and wildlife benefits as well as the native plant species. Invasive plants tend to grow more densely and often grow to the surface where they also can interfere with recreational activities. Some non-native or invasive plant species will also create "canopies" that prevent light from reaching the native plants underneath causing stress to the native plants. Protection of native species is an important consideration in the management of invasive species.

The area in which plants grow within a lake or pond is referred to as the littoral zone. There are four types of aquatic plants: emergent, floating-leaved, submergents, and freely-floating.

Emergent: Emergent plants are rooted in the lakebed or shoreline with the tops of the plant potentially extending out of the water. The roots of the emergent plants are submersed or partially inundated with water. Common emergent species include bulrushes, cattails, and reeds.

Floating-leaved: Floating-leaved plants are rooted in the lakebed and their leaves float on the water surface. These plants usually have larger rhizomes (rootstalks) than the emergent plants. The floating-leaved plants are typically found in quieter, protected areas of the lake. Common floating-leaved species include waterlilies.

Submergent: Submergent plants grow completely under the water, although, flowering or seed portions may extend just above the water surface. The growth of these plants is related to the amount/depth of light penetration in the lake. Common submergent plants include pondweeds, Eurasian watermilfoil, coontail, and Elodea.

Freely floating: Freely floating plants are entirely dependent on the water movements in the lake. These plants are found wherever the wind and water takes them. Common freely floating species include duckweed and water meal.

Observed Aquatic Plant Descriptions

Sago Pondweed

Sago Pondweed (*Potamogeton pectinatus*) was observed in The Slough in several places and is a native aquatic plant that is generally a submergent except for its reproductive stalks that peak above the water. These stalks flower in June to September. Sago pondweed has narrow leaves that create an open structure which reduces their potential to become a nuisance plant. The plant is used extensively as a food source for various waterfowl and can also help reduce the potential for algae blooms through its uptake of phosphorus.

Coontail

Coontail or hornwort (*Ceratophyllum demersum*) is a submerged, native, bushy plant that lacks true roots. It is often anchored to the bottom by modified leaves, but sometimes forms large, tangled masses that float freely in the water. Both the seeds and foliage of the coontail are used by waterfowl and fish as a source of food and also provides good spawning habitat and cover for juvenile fish. Coontail can also help reduce the potential for algae blooms through its uptake of nutrients. Coontail was observed in both Hillcrest Lake and The Slough.

Elodea

Elodea or American waterweed (*Elodea canadensis*) is a submergent, aquatic plant, native to North America that has spread rapidly and easily throughout the world. Particularly in Europe, this species is very invasive and is considered a weed due to its ability to grow and multiply fairly rapidly in many diverse habitats and conditions. This species produces flowers, either white or pale purple, that appear at the surface of the water. This plant has been reported from sites in lakes of a very wide range of depths, and it is generally considered relatively highly tolerant to low light conditions. In the fall leafy stalks will detach from the parent plant, float away, root, and start new plants. This is American waterweed's most important method of spreading, with seed production playing a relatively minor role. Elodea was observed to form dense submergent beds over 95% of Hillcrest Lake, but was not observed in The Slough. Careful examination of the plant material in Hillcrest Lake was used to confirm that it was not the look-alike invasive species Hydrilla or Brazilian Elodea. Elodea is a native plant, but in Hillcrest Lake is behaving more like an invasive species.

Duckweed

Common duckweed is a free-floating plant that has tiny roots that hang down from floating leaves into the water. The duckweeds (genus *Lemna*) and related genera of the duckweed family are the smallest flowering plants known. Individual plants consist of a single, flat oval leaf (technically a modified stem) no more than ¼ of an inch long that floats on the surface of still-moving ponds, lakes, and sloughs. Despite their diminutive size, the flowers of duckweeds can attract flies, mites, small spiders, and even bees that can spread the plant's pollen after being attracted by sticky secretions from the stigma. Duckweeds grow quickly and produce new offshoots rapidly.

Dense populations are an important food source for aquatic waterfowl and fish, but can become a nuisance to humans.

Shoreline/Emergent Plants

The shorelines of both The Slough and Hillcrest Lake were assessed in terms of vegetation and bank erosion.

The Slough is a long-narrow feature that has a central open water body surrounded by wetland of varying width. Most of the shoreline is not mowed which allows more native vegetation, better erosion control and provided good wildlife habitat. In the fall 2015 vegetation survey, 113 species of plants were identified in and around The Slough; 81 species or 72 % of them were native to the Chicago region. This also means that 32 species observed are non-native species – or introduced to the region from other parts of the world.

Overall, The Slough is less dominated by invasive species than many wetlands across the region and showed good signs of the active management by the volunteer stewards. Table 3 provides the full list of species observed with information about their nativity and form. It also provides floristic quality information based on the Floristic Quality Assessment (FQA) method of Swink and Wilhelm (1994 – *Plants of the Chicago Region*) that is widely used in the Chicago region.

The FQA method assigns a numeric rating to each plant species that reflects the fundamental conservatism that the species exhibits for a particular natural habitat. A native species that exhibits specific adaptations to a narrow spectrum of the environment is given a high rating. Conversely, a ubiquitous species that exhibits adaptations to a broad spectrum of environmental variables is given a low rating. This value for each species is called its coefficient of conservatism and is shown in the "C" column in Table 3. The Mean C value indicates the average coefficient of conservatism and is another value used to assess and compare the quality of the vegetation. A mean C value of greater than 3.5 generally indicates that high quality, conservative native species are present. This value does not include, however, any measure of the quantity of the conservative species versus weedy or invasive species. The FQI is derived by multiplying the Mean C by the square root of the number of species. Thus, the FQI is an indication of the relative, native floristic quality for an area: generally 1-19 indicates low vegetative quality, 20-35 indicates high vegetative quality and above 35 indicates "Natural Area" quality or a High Quality area. Other metrics above the species list provides additional analysis of the vegetation. Table 3 provides the total number of species present (species richness), the mean coefficient of conservatism (Mean C), the floristic quality index (FQI), and mean wetness; calculated

separately for native species only and then including the non-native species. The wet indicator value indicates the mean or average national wetland plant indicator category for all species present, natives only and then with adventives – numbers less than 0 indicate hydrophytic or wetland vegetation, while numbers greater than 0 correspond to the upland vegetation categories. The table also provides the number of species in each physiognomic or habit class, native versus adventive along with their percentage of the total inventory.

This data shows that the vegetation in and around The Slough from a single fall assessment is of moderate floristic quality. It was also evident that there were a few areas along the east side of The Slough that had been planted with native prairie and wetland species by the NRC and it volunteer stewards. The presence of these native species was included in the floristic analysis and undoubtedly increased the FQA scores. The volunteer stewards have also been working on control of selected invasive species such as buckthorn and this has also served to improve the quality of the vegetation.

Hillcrest Lake has a significant area of the shoreline that is mowed turf. Other areas have been left more natural, and in a few places appeared to have been planted with native prairie and wetland species. The inventory of the unmowed shoreline areas around Hillcrest Lake revealed 52 total species, 33 of which are considered native (Table 4). The floristic quality analysis showed that the vegetation around Hillcrest Lake is of lower quality.

Table 3. Floristic Quality Information and Plant Species List for Perimeter of The Slough.
SITE: The Slough
DATE: September 15 & 22, 2015
LOCALITY: Prospect Heights, Cook County, Illinois
Practitioner: J Mengler

Conservatism-Based Metrics:
Total Mean C: 2.3
Native Mean C: 3.2
Total FQI: 24.4
Native FQI: 28.8

Species Richness:
Total Species: 113
Native Species: 81 71.70%
Non-native Species: 32 28.30%

Species Wetness:
Mean Wetness: -0.3
Native Mean Wetness: -1.2

Physiognomy Metrics:
Tree: 6.20%
Shrub: 6.20%
Vine: 3.50%
Forb: 69.90%
Grass: 9.70%
Sedge: 4.40%
Rush: 0%
Fern: 0%
Bryophyte: 0%

Duration Metrics:
Annual: 21.20%
Perennial: 71.70%
Biennial: 7.10%
Native Annual: 12.40%
Native Perennial: 57.50%
Native Biennial: 1.80%

Scientific Name	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Abutilon theophrasti	ABUTHE	non-native	0	4	forb	annual	velvetleaf
Acalypha rhomboidea	ACARHO	native	0	3	forb	annual	three-seeded mercury
Acer saccharinum	ACESAI	native	0	-3	tree	perennial	silver maple
Amaranthus retroflexus	AMARET	non-native	0	2	forb	annual	rough amaranth
Ambrosia artemisiifolia elatior	AMBARE	native	0	3	forb	annual	common ragweed
Ambrosia trifida	AMBTRI	native	0	-1	forb	annual	giant ragweed
Apocynum sibiricum	APOSIB	native	2	-1	forb	perennial	prairie indian hemp
Arctium minus	ARCMIN	non-native	0	5	forb	biennial	common burdock
Asclepias incarnata	ASCINC	native	4	-5	forb	perennial	swamp milkweed
Asclepias sullivantii	ASCSUL	native	8	5	forb	perennial	prairie milkweed
Asclepias syriaca	ASCSYR	native	0	5	forb	perennial	common milkweed
Aster ericoides	ASTERI	native	5	4	forb	perennial	heath aster
Aster novae-angliae	ASTNOV	native	4	-3	forb	perennial	new england aster
Aster pilosus	ASTPIL	native	0	2	forb	perennial	hairy aster
Aster sagittifolius drummondii	ASTSAD	native	2	3	forb	perennial	drummonds aster
Aster simplex	ASTSIS	native	3	-5	forb	perennial	panicled aster
Aster subulatus	ASTSUB	non-native	0	3	forb	annual	expressway aster
Atriplex patula	ATRPAT	non-native	0	-2	forb	annual	common orach
Bidens cernua	BIDCER	native	5	-5	forb	annual	nodding bur marigold
Bidens frondosa	BIDFRO	native	1	-3	forb	annual	common beggars ticks
Boehmeria cylindrica	BOECYC	native	2	-5	forb	perennial	false nettle
Boltonia latisquama recognita	BOLLAR	native	9	-5	forb	perennial	false aster
Carex lacustris	CXLACU	native	6	-5	sedge	perennial	common lake sedge
Chenopodium album	CHEALB	non-native	0	1	forb	annual	lambs quarters
Cichorium intybus	CICINT	non-native	0	5	forb	perennial	chicory
Cirsium arvense	CIRARV	non-native	0	5	forb	perennial	field thistle
Cirsium vulgare	CIRVUL	non-native	0	4	forb	biennial	bull thistle
Convolvulus sepium	CONSEP	native	1	0	forb	perennial	hedge bindweed
Cornus stolonifera	CORSTO	native	6	-3	shrub	perennial	red-osier dogwood
Cuscuta gronovii	CUSGRO	native	4	-5	forb	annual	common dodder
Cyperus esculentus	CYPESC	native	0	-1	sedge	perennial	field nut sedge
Daucus carota	DAUCAR	non-native	0	5	forb	biennial	queen annes lace
Dipsacus laciniatus	DIPLAC	non-native	0	5	forb	biennial	cut-leaved teasel
Echinacea pallida	ECHPAL	native	8	5	forb	perennial	purple coneflower
Echinochloa crusgalli	ECHCRU	native	0	-3	grass	annual	barnyard grass
Eleocharis acicularis	ELEACI	native	2	-5	sedge	perennial	needle spike rush
Epilobium coloratum	EPICOL	native	3	-5	forb	perennial	cinnamon willow herb

Scientific Name	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Erigeron canadensis	ERICAN	native	0	1	forb	annual	horseweed
Eupatorium altissimum	EUPALT	native	0	3	forb	perennial	tall boneset
Eupatorium perfoliatum	EUPPER	native	4	-4	forb	perennial	common boneset
Fraxinus pennsylvanica subintegerrima	FRAPES	native	1	0	tree	perennial	green ash
Geranium maculatum	GERMAC	native	4	5	forb	perennial	wild geranium
Geum laciniatum trichocarpum	GEULAT	native	2	-3	forb	perennial	rough avens
Glechoma hederacea	GLEHED	non-native	0	3	forb	perennial	creeping charlie
Hackelia virginiana	HACVIR	native	0	1	forb	biennial	stickseed
Helenium autumnale	HELAUT	native	5	-4	forb	perennial	sneezeweed
Hordeum jubatum	HORJUB	non-native	0	-1	grass	perennial	squirrel-tail grass
Hystrix patula	HYSPAT	native	5	5	grass	perennial	bottlebrush grass
Iris virginica shrevei	IRIVIS	native	5	-5	forb	perennial	blue flag
Juniperus virginiana crebra	JUNVIC	native	2	3	tree	perennial	red cedar
Leersia oryzoides	LEEORY	native	4	-5	grass	perennial	rice cut grass
Lemna minor	LEMMIO	native	5	-5	forb	annual	small duckweed
Liatris aspera	LIAASP	native	6	5	forb	perennial	rough blazing star
Lippia lanceolata	LIPLAN	native	6	-5	forb	perennial	fog fruit
Lobelia cardinalis	LOBCAR	native	7	-5	forb	perennial	cardinal flower
Lobelia siphilitica	LOBSIP	native	6	-4	forb	perennial	great blue lobelia
Lysimachia nummularia	LYSNUM	non-native	0	-4	forb	perennial	moneywort
Medicago lupulina	MEDLUP	non-native	0	1	forb	annual	black medick
Melilotus alba	MELALB	non-native	0	3	forb	biennial	white sweet clover
Melilotus officinalis	MELLOF	non-native	0	3	forb	biennial	yellow sweet clover
Mentha arvensis villosa	MENARV	native	5	-5	forb	perennial	wild mint
Mimulus ringens	MIMRIN	native	6	-5	forb	perennial	monkey flower
Morus alba	MORALB	non-native	0	0	tree	perennial	white mulberry
Oenothera biennis	OENBIE	native	0	3	forb	biennial	common evening primrose
Oxalis europaea	OXAEUR	native	0	3	forb	perennial	tall wood sorrel
Panicum dichotomiflorum	PANDII	native	0	-2	grass	annual	knee grass
Parthenium integrifolium	PARINT	native	8	5	forb	perennial	wild quinine
Parthenocissus quinquefolia	PARQUI	native	2	1	vine	perennial	virginia creeper
Peltandra virginica	PELVIR	native	10	-5	forb	perennial	arrow arum
Petalostemum purpureum	PETPUR	native	9	5	forb	perennial	purple prairie clover
Phalaris arundinacea	PHAARU	non-native	0	-4	grass	perennial	reed canary grass
Phragmites australis	PHRAUS	native	1	-4	grass	perennial	common reed
Physostegia virginiana	PHYVIV	native	6	-5	forb	perennial	obedient plant
Phytolacca americana	PHYAME	native	1	1	forb	perennial	pokeweed
Plantago lanceolata	PLALAN	non-native	0	0	forb	perennial	english plantain

Scientific Name	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Plantago rugelii	PLARUG	native	0	0	forb	annual	red-stalked plantain
Polygonum coccineum	POLCOC	native	4	-5	forb	perennial	water heartsease
Polygonum hydropiper	POLHYR	native	2	-3	forb	annual	water pepper
Polygonum lapathifolium	POLLAP	native	0	-4	forb	annual	heartsease
Polygonum pensylvanicum	POLPEN	native	0	-4	forb	annual	pinkweed
Polygonum persicaria	POLPER	non-native	0	1	forb	annual	ladys thumb
Populus deltoides	POPDEL	native	2	-1	tree	perennial	eastern cottonwood
Rhamnus cathartica	RHACAT	non-native	0	3	shrub	perennial	common buckthorn
Rhus radicans	RHURAD	native	2	-1	vine	perennial	poison ivy
Rosa multiflora	ROSMUL	non-native	0	3	shrub	perennial	multiflora rose
Rubus occidentalis	RUBOCC	native	2	5	shrub	perennial	black raspberry
Rudbeckia hirta	RUDHIR	native	1	3	forb	perennial	black-eyed susan
Sagittaria latifolia	SAGLAT	native	4	-5	forb	perennial	common arrowhead
Salix interior	SALINT	native	1	-5	shrub	perennial	sandbar willow
Scirpus fluviatilis	SCIFLU	native	4	-5	sedge	perennial	river bulrush
Scirpus validus creber	SCIVAC	native	5	-5	sedge	perennial	great bulrush
Setaria faberi	SETFAB	non-native	0	2	grass	annual	giant foxtail
Setaria glauca	SETGLA	non-native	0	0	grass	annual	yellow foxtail
Smilacina racemosa	SMIRAC	native	3	3	forb	perennial	feathery false solomons seal
Solanum dulcamara	SOLDUL	non-native	0	0	vine	perennial	bittersweet nightshade
Solidago altissima	SOLALT	native	1	3	forb	perennial	tall goldenrod
Solidago speciosa	SOLSPE	native	7	5	forb	perennial	showy goldenrod
Sonchus oleraceus	SONOLE	non-native	0	5	forb	annual	store-front sow thistle
Sonchus uliginosus	SONULI	non-native	0	1	forb	perennial	common sow thistle
Spartina pectinata	SPAPEC	native	4	-4	grass	perennial	prairie cord grass
Sporobolus heterolepis	SPOHET	native	10	4	grass	perennial	prairie dropseed
Taraxacum officinale	TAROFF	non-native	0	3	forb	perennial	common dandelion
Typha angustifolia	TYPANG	native	1	-5	forb	perennial	narrow-leaved cattail
Typha latifolia	TYPLAT	native	1	-5	forb	perennial	broad-leaved cattail
Typha x glauca	TYPGLA	native	1	-5	forb	perennial	hybrid cattail
Ulmus americana	ULMAME	native	3	-2	tree	perennial	american elm
Ulmus pumila	ULMPUM	non-native	0	5	tree	perennial	siberian elm
Verbena hastata	VERHAS	native	4	-4	forb	perennial	blue vervain
Viburnum dentatum	VIBDEN	non-native	0	5	shrub	perennial	arrow-wood
Viburnum opulus	VIBOPU	non-native	0	3	shrub	perennial	european highbush cranberry
Viola sororia	VIOSOR	native	3	1	forb	perennial	common blue violet
Vitis riparia	VITRIP	native	2	-2	vine	perennial	riverbank grape
Zizia aurea	ZIZAUR	native	7	-1	forb	perennial	golden alexanders

Table 4. Floristic Quality Information and Plant Species List for Perimeter of Hillcrest Lake.
SITE: Hillcrest Lake
DATE: September 15 & 22, 2015
LOCALITY: Prospect Heights, Cook County, Illinois
Practitioner: J Mengler

Conservatism-Based Metrics:
Total Mean C: 1.8
Native Mean C: 2.8
Total FQI: 13
Native FQI: 16.1

Species Richness:

Total Species: 52	
Native Species: 33	63.50%
Non-native Species: 19	36.50%

Species Wetness:
Mean Wetness: 0.1
Native Mean Wetness: -0.8

Physiognomy Metrics:

Tree:	21.20%
Shrub:	7.70%
Vine:	3.80%
Forb:	51.90%
Grass:	11.50%
Sedge:	1.90%
Rush:	1.90%
Fern:	0%
Bryophyte:	0%

Duration Metrics:

Annual:	7.70%
Perennial:	84.60%
Biennial:	7.70%
Native Annual:	5.80%
Native Perennial:	55.80%
Native Biennial:	1.90%

Scientific Name	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Acer negundo	ACENEG	native	0	-2	tree	perennial	box elder
Acer saccharinum	ACESAI	native	0	-3	tree	perennial	silver maple
Ailanthus altissima	AILALT	non-native	0	5	tree	perennial	tree of heaven
Ambrosia artemisiifolia elatior	AMBARE	native	0	3	forb	annual	common ragweed
Ambrosia trifida	AMBTRI	native	0	-1	forb	annual	giant ragweed
Andropogon gerardii	ANDGER	native	5	1	grass	perennial	big bluestem grass
Apocynum sibiricum	APOSIB	native	2	-1	forb	perennial	prairie indian hemp
Asclepias incarnata	ASCINC	native	4	-5	forb	perennial	swamp milkweed
Asclepias syriaca	ASCSYR	native	0	5	forb	perennial	common milkweed
Aster pilosus	ASTPIL	native	0	2	forb	perennial	hairy aster
Aster simplex	ASTSIS	native	3	-5	forb	perennial	panicled aster
Cirsium arvense	CIRARV	non-native	0	5	forb	perennial	field thistle
Cirsium vulgare	CIRVUL	non-native	0	4	forb	biennial	bull thistle
Convolvulus sepium	CONSEP	native	1	0	forb	perennial	hedge bindweed
Daucus carota	DAUCAR	non-native	0	5	forb	biennial	queen annes lace
Eupatorium rugosum	EUPRUG	native	4	5	forb	perennial	white snakeroot
Fraxinus pennsylvanica subintegerrima	FRAPES	native	1	0	tree	perennial	green ash
Geum laciniatum trichocarpum	GEULAT	native	2	-3	forb	perennial	rough avens
Glechoma hederacea	GLEHED	non-native	0	3	forb	perennial	creeping charlie
Hemerocallis fulva	HEMFUL	non-native	0	5	forb	perennial	orange day lily
Iris virginica shrevei	IRIVIS	native	5	-5	forb	perennial	blue flag
Juncus dudleyi	JUNDUD	native	4	0	rush	perennial	dudleys rush
Juniperus communis	JUNCON	native	10	5	shrub	perennial	common juniper
Juniperus virginiana crebra	JUNVIC	native	2	3	tree	perennial	red cedar
Lippia lanceolata	LIPLAN	native	6	-5	forb	perennial	fog fruit
Lythrum salicaria	LYTSAL	non-native	0	-5	forb	perennial	purple loosestrife
Melilotus alba	MELALB	non-native	0	3	forb	biennial	white sweet clover
Morus alba	MORALB	non-native	0	0	tree	perennial	white mulberry
Oenothera biennis	OENBIE	native	0	3	forb	biennial	common evening primrose
Panicum virgatum	PANVIR	native	5	-1	grass	perennial	switch grass
Phalaris arundinacea	PHAARU	non-native	0	-4	grass	perennial	reed canary grass
Plantago lanceolata	PLALAN	non-native	0	0	forb	perennial	english plantain
Plantago rugelii	PLARUG	native	0	0	forb	annual	red-stalked plantain
Poa pratensis	POAPRA	non-native	0	1	grass	perennial	kentucky blue grass
Polygonum coccineum	POLCOC	native	4	-5	forb	perennial	water heartsease
Populus deltoides	POPDEL	native	2	-1	tree	perennial	eastern cottonwood
Rhamnus cathartica	RHACAT	non-native	0	3	shrub	perennial	common buckthorn

Scientific Name	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Rhus aromatica arenaria	RHUAAR	native	9	5	shrub	perennial	dwarf fragrant sumac
Robinia pseudoacacia	ROBPSE	non-native	0	4	tree	perennial	black locust
Rumex crispus	RUMCRI	non-native	0	-1	forb	perennial	curly dock
Salix babylonica	SALBAB	non-native	0	-3	tree	perennial	weeping willow
Salix interior	SALINT	native	1	-5	shrub	perennial	sandbar willow
Scirpus validus creber	SCIVAC	native	5	-5	sedge	perennial	great bulrush
Setaria faberi	SETFAB	non-native	0	2	grass	annual	giant foxtail
Silphium perfoliatum	SILPER	native	5	-2	forb	perennial	cup plant
Solanum dulcamara	SOLDUL	non-native	0	0	vine	perennial	bittersweet nightshade
Solidago altissima	SOLALT	native	1	3	forb	perennial	tall goldenrod
Spartina pectinata	SPAPEC	native	4	-4	grass	perennial	prairie cord grass
Typha angustifolia	TYPANG	native	1	-5	forb	perennial	narrow-leaved cattail
Ulmus americana	ULMAME	native	3	-2	tree	perennial	american elm
Ulmus pumila	ULMPUM	non-native	0	5	tree	perennial	siberian elm
Vitis riparia	VITRIP	native	2	-2	vine	perennial	riverbank grape

Invasive Species

Non-native or exotic species are those organisms introduced into habitats from other parts of the world by humans. Invasive species are organisms that are not native to a region and which cause ecological harm. In their natural habitats, these species are part of stable population and form complex relationships with other species. When they are removed from predators, parasites, diseases, and other competitors that have kept the populations in check, species introduced into new habitats can overrun their new home and crowd out native species. Once established, these species can be very hard to control and eradicate. Natural areas managers such as the local Forest Preserve Districts spend a very large part of their resources controlling invasive species. Not all non-native or exotic species are considered invasive.

Invasive species can be spread in a number of ways, but further spread by humans is one method that can easily be prevented. Ways to reduce the potential for the spread of invasive species include:

- Learn to identify invasive species.
- Know who should be contacted if an invasive species is observed.
- Control invasive species on your property.
- Do not release plants or animals into the environment.
- Inspect and wash all boat surfaces including the boat, motor, and trailer with hot water after use in other bodies of water.

Organizations such as the Northeastern Illinois Invasive Plant Partnership (NIIPP) can provide further information and resources regarding invasive species identification, new invaders to be aware of, and control methods (see www.niipp.net)

Reed canary grass (*Phalaris arundinacea*) is an exotic species that is already present throughout the McDonald Creek watershed. Reed canary grass is a highly aggressive plant that forms dense stands with thick thatch, crowding out more valuable native plants. Reed canary grass should be controlled with appropriate herbicides whenever it is found. It was observed mainly at the south or inlet end of The Slough and in a few small areas around Hillcrest Lake.

Common Reed (*Phragmites australis*) is a highly invasive species that grows to 12 feet tall. It spreads by vegetative runners and forms dense stands that crowd out all native vegetation. It is generally recognized as an invasive species throughout the Great Lakes, except that there is a native strain of the species known to occur in the

Midwest. The invasive common reed is the tall grass with feather-like flowers on top that is seen along road and expressway ditches throughout the region. It should be controlled wherever it is found. It was observed only in a small clump on the north end of The Slough along Willow Road. This should be eradicated with herbicide before it spreads.

Purple Loosestrife (*Lythrum salicaria*) is another very common and widespread invasive species found in marshes. It has attractive pink flowers that are sometimes difficult to tell from valuable native species from a distance. It spreads both by seed and vegetatively. Each plant can produce over a million seeds each year. It is very difficult to control once established, except where it occurs in small localized stands that can be intensively managed. In such isolated areas, it can be controlled by herbicide application, though most chemicals that are effective in controlling it also damage other desirable plants that may be growing with it. Careful hand-spraying can reduce this "collateral" damage. Biocontol is a method of using natural enemies, as well as competition with other plants, to reduce and control the growth and spread of an invasive species. Four host-specific insect species approved by USDA-APHIS have been released in the US to control purple loosestrife including a root-mining weevil, two leaf-eating beetles, and a flower-feeding weevil. The two leaf-eating beetles have been widely released in the Midwest to control purple loosestrife and where large populations of the loosestrife is present, using beetles for control has been effective. Unfortunately, where populations of purple loosestrife are smaller, it isn't enough to sustain the population of the beetles and control is incomplete. Purple loosestrife has not reached a level at The Slough or Hillcrest lake that would warrant introduction of the beetles. The smaller infestations around the shorelines of both bodies of water should be chemically controlled.

Buckthorn (*Rhamnus cathartica*) is an invasive shrub species that infests woodlands and other habitats throughout the region. It often forms a very dense shrub layer under the canopy of larger trees and can be easily distinguished in the fall when it remains green after the native trees and shrubs have turned or dropped their leaves. Buckthorn shades out other native vegetation and its leaves ultimately lead to changes in the soil chemistry and microorganisms, causing a collapse of the natural ecosystem. It occurs in several places around both The Slough and Hillcrest Lake. It is best controlled by cutting flush with the ground and then treating all cut stumps with appropriate herbicide. The volunteer stewards have already been managing the buckthorn at the south end of The Slough in this manner, and this should continue and progress to all areas infested with this invasive shrub. In areas such as the southeast shoreline of Hillcrest Lake where buckthorn is providing visual screening, it can be replaced with other native, more desirable shrubs that will provide better wildlife habitat.

Thistles (*Cirsium* spp) include some native and some non-native species. Some are common agricultural weeds and some are invasive species. None of the desirable native thistle species were observed around The Slough or Hillcrest Lake, but the non-native, weedy field or Canada thistle and bull thistle were noted. While these are not generally as aggressive as other invasive species described in this report, especially in wet ground, they should be controlled where possible. Bull thistle is a biennial while field thistle is a perennial spreading by underground stems (rhizomes).

Teasel (*Dipsacus* spp) is an invasive species becoming very common along the roadsides of our region. There are two species known as cut-leaved teasel and common teasel in the region. In both species, the plant grows as a basal rosette for a minimum of one year (this rosette period frequently is longer) then sends up a tall flowering stalk and dies after flowering. The period of time in the rosette stage apparently varies depending on the amount of time needed to acquire enough resources for flowering to occur. During the rosette stage leaves vary from somewhat ovoid in young plants to large and oblong leaves that are quite hairy in older rosettes. During the rosette phase teasel develops a large tap root. The tap root may be over 2 feet in length and 1 inch in diameter at the crown (top). Cut-leaved teasel blooms from July through September and has white flowers while common teasel blooms from June through October and has light purple flowers. Flowering stems may reach 6-7 feet in height. A single teasel plant can produce over 2,000 seeds. Depending on conditions, up to 30-80% of the seeds will germinate, so each plant can produce many offspring. Seeds also can remain viable for at least 2 years. Seeds typically don't disperse far; most seedlings will be located around the parent plant. Teasel is an aggressive invasive species that has the capacity to take over prairies and savannas if it is allowed to become established. Lack of natural enemies allows teasel to proliferate. Cut-leaved teasel was observed around The Slough and should be controlled with herbicide.

Cattails (*Typha* spp) are very common in marshes throughout the region. There are two species of cattails locally: broad-leaved cattail (*Typha latifolia*) and narrow-leaved cattail (*Typha angustifolia*). Broad-leaved cattail is a native species and is not aggressive or invasive. Narrow-leaved cattail is somewhat in dispute as to whether it is native to the Chicago region or not. The problem is that the narrow-leaved and broad-leaved cattails naturally hybridize or cross. The hybrid cattail (*Typha* X *glauca*) is very aggressive and is recognized as a major invasive species throughout the Great Lakes. It forms dense monotypic stands (only one species present) that crowd out all other native marsh plants. It is very difficult to determine whether a given stand of cattails in the field is the hybrid, narrow-leaved, or even broad-leaved since the hybrid displays a range of intermediate characteristics. Cattails also provide essential habitat and water quality benefits in many of our marshes and thus is considered more desirable in certain circumstances than other invasive species. Cattails are obviously present along the

shores of both The Slough and Hillcrest Lake, most notably along the western side of The Slough. Long-term management measures might be considered to keep the cattails from filling in across The Slough over time by thinning with selectively applied herbicide. Hand-wicking a glyphosate-based herbicide is often used by managers to thin and reduce cattail cover without affecting other desirable native marsh vegetation.

Bathymetry and Sediment

Depth of water and depth of soft sediment were measured in 7 transects across The Slough to provide a basic understanding of the current condition based on quantitative data. The water surface elevation was established using survey-grade GPS, and then a surveyor's rod was used to measure the water and sediment depth across The Slough. Exhibits 12, 14, and 16 show the results of these measurements graphically. Exhibit 12 provides the elevation of the top of the soft sediment, while Exhibit 14 depicts this data as water depth. Exhibit 16 represents the thickness of the soft sediment. The average depth of water in The Slough at the time of the measurements was 0.93 feet (about 11 inches) with a maximum depth measured of 1.4 feet and a minimum depth near the shoreline measured of 0.30 feet (3.5 inches). Soft sediment was present on the bottom throughout The Slough. Pushing the rod until it hit a firm bottom allowed measurement of the relative depth of the soft sediments. The average depth of the soft material was 0.88 feet with a maximum of 2.2 feet and a minimum of 0.10 feet (near the shore). All of the soft sediment appeared to be a natural muck material. Muck is defined in this usage as unconsolidated soil material consisting primarily of highly decomposed organic material in which the original plant parts are not recognizable (*i.e.* "sapric" in Soil Taxonomy). It generally contains more mineral matter and is usually darker in color than peat. Muck is a naturally occurring type of organic soil often found in large marshy areas. Unfortunately, both The Slough and Hillcrest Lake were mapped as "water" on the Cook County Soil Survey (see Exhibit 7) and they did not determine what soil type was present in The Slough.

Similarly, 5 east-west transects were evaluated across Hillcrest Lake for water depth and soft sediment depth (Exhibits 11, 13, and 15). Similar to the exhibits for The Slough, these exhibits for Hillcrest Lake depict the elevation of the soft bottom, the water depth, and the soft sediment thickness respectively. The submergent vegetation present was also noted at each measurement point. The average water depth of Hillcrest Lake at the time of the measurements was 1.76 feet with a maximum depth of 3.20 feet and a minimum depth near the shore of 0.30 feet. The soft sediment averaged 1.06 feet deep with a maximum of 4.30 feet thick and a minimum of 0 feet thick near the western shoreline where there was hard substrate including concrete

rubble. As in The Slough all of the soft sediment was mucky material as described above. Near the western shore there were places with firm sandy material, along with the concrete rubble mentioned.

The water level in Hillcrest Lake is determined by the outlet pipe along the north shore of the lake. The outlet is a 24-inch PVC pipe that connects to an open ditch farther north which eventually flows into McDonald Creek. At the time of the measurements and observations there was a small amount of rock in front of the pipe effectively creating a small weir. The elevation of any material in front of or inside the outlet pipe controls the normal water elevation of Hillcrest Lake. Flow from The Slough to Hillcrest Lake is via 3 concrete culvert pipes beneath Willow Road. All three of these pipes appeared partially submerged during field observations and were partially filled with sediment.

Shoreline Condition

The shoreline condition of Hillcrest Lake and The Slough were assessed in terms of erosion and stability. Eroding shorelines can contribute significantly to sediment issues in a body of water degrading water quality and available habitat. The following categories were used to rate each reach of shoreline.

- Minimal erosion – 0-6 inch bank height, good stabilizing vegetation.
- Moderate erosion – 6-24 inch bank height, good stabilizing vegetation.
- Significant erosion – 18-30 inch bank height, minimal stabilizing vegetation or mowed turf.
- Severe erosion – 30-42 inch bank height, no stabilizing vegetation.
- Extreme erosion - >42 inch bank height, no stabilizing vegetation.

Related shoreline attributes were also noted including dominant vegetation and general soil conditions. Representative photographs were taken and are provided in Appendix A.

The shoreline of The Slough is generally well vegetated and thus fairly stable. Only one shoreline reach at the northwest end is mowed turf to the water's edge, and then the shoreline condition along Willow Road is in fairly poor condition (328 feet) (Exhibit 10). Approximately 91 % was rated as minimal or moderate erosion. Shoreline vegetation was mostly cattails and willows, with some more diverse wetland plantings along the eastern edge. The shoreline also includes many trees, mostly eastern cottonwood. Soils appeared stable and no areas of significant erosion or seepage were noted.

The shoreline of Hillcrest Lake is in a more eroded condition, primarily due to the many reaches where it is mowed turf to the water's edge. Approximately 53 % of the shoreline was rated as moderate erosion, 28 % was rated as significant erosion, and 18 % was rated as severe erosion (Exhibit 9). The moderate erosion reaches corresponded with the presence of un-mowed vegetation above the waterline, and some emergent vegetation below the waterline. The significant and severe erosion reaches were characterized by mowed turf to the water's edge and then a vertical eroded bank of 18-36 inches. Soils in the most severely eroded sections appeared gravelly, compared to the other more silty soils.

LAKE AND SLOUGH MANAGEMENT ALTERNATIVES AND RECOMMENDATIONS

Water Levels

There has been much speculation about the water levels in both The Slough and Hillcrest Lake. The water levels in both bodies can affect the aesthetic, fish survival, and local flooding. Review of historic aerial photographs (see Exhibit 2) indicates that the general extent of open water in both The Slough and Hillcrest Lake have not changed significantly since 1967. In 1967 and earlier photographs The Slough appeared to be more vegetated and less open water. In 1955 and earlier Hillcrest Lake was also vegetated and much less open water. The settlement era federal plat maps from 1840 depict a large "slough" or marsh in the vicinity of Hillcrest Lake and The Slough (Exhibit 15). It is likely that prior to European settlement of the area, both bodies were one large wetland slough with no defined creek channel and no significant open water. The historic aerial photographs show that there were already some houses in the area in 1938, with much of the surrounding residential development occurring in the 1950s and 1960s.

The July 1970 fishery report from the IDOC indicated that Hillcrest Lake was a "dammed marsh" that was "supposedly deepened about 1955 for home fill." That same report notes the average water depth as only 2.7 feet with a maximum depth of 7 feet. Similarly, the 1972 fishery report from IDOC also notes an average depth of 2.5 feet, but with a maximum depth of 3 feet in The Slough.

Thus it is clear that neither of these bodies were ever a deep, open water feature. Despite local perceptions, depths were never much more than 3 feet save a few deep pockets that may have been present.

The water level in both areas is currently controlled by the outlet pipe at the north end of Hillcrest Lake, assuming the connecting culverts under Willow Road remain functional. The condition of the outlet pipe, and the downstream channel it discharges to will have an effect on the water levels.

From conversations with the City staff, the President of the Hillcrest Lake Homeowners Association, and President of the Prospect Heights Natural Resource Commission, it appears that the issue may be less the water depths *per se*, than it is the overall aesthetic of the water bodies. Hillcrest Lake currently supports dense growth of the submergent Elodea across most of the lake. The Elodea plants generally reach just below the water surface, but the flowers and fruits break the surface. In addition, in places filamentous algal mats have grown and float on top of the Elodea giving the water surface an undesirable appearance. Thus, the management goal may be to maintain an open water aesthetic on Hillcrest Lake that is not impaired by surface growth of algae and aquatic plants (see also the discussion on aquatic plants).

As noted above, GEC was retained to investigate raising the water level in Hillcrest Lake, by adding a riser board weir structure to the outlet pipe. The primary obstacle to this approach is the compensatory flood storage requirements under state regulations, Cook County ordinance requirements, and local ordinance requirements. Raising the normal water elevation reduces the total amount of flood storage available in these water bodies, and hence that lost volume must be replaced within the local watershed. The GEC reports provided to the City of Prospect Heights contains further information on this subject.

Dredging

Dredging has also been discussed as an approach to deepen Hillcrest Lake, which may increase fish survival and reduce the aquatic plant and algae growth visible on the surface. It would also potentially reduce low water time periods where the bottom sediments are visible. Dredging would require, however, extensive permitting, dewatering, and disposal of the dredged material. Space limitations around Hillcrest Lake would make dewatering the sediments very challenging, whether it is done by mechanical or hydraulic dredging. Hauling and disposal is also very expensive. Rough cost estimates from an area contractor specializing in lake and river work put the dredging at approximately $675,000 with the dredge spoil material adding another $900,000.

Recommendation: Dredging of Hillcrest Lake is not recommended as it would be very cost-prohibitive primarily due to a lack of ability/place to dewater the dredge spoil before disposal.

Oxidation and Digestion

There are products available for purchase that claim to use bacteria or other micro-organisms often in combination with oxidation to "digest" the accumulated muck or organic sediment. Based in part on input from the Lake County Health Department Lakes Management Unit professional staff, instances where this has

been successfully implemented could not be verified with documented positive results, or any scientific literature to corroborate product claims.

Recommendation: Oxidation or microbes are not recommended for Hillcrest Lake unless scientifically verifiable examples of success can be demonstrated locally.

Water Level Summary

Water levels in The Slough have always been very shallow as noted above, though the central body of open water has been maintained for decades. The extent of emergent vegetation has remained fairly constant over the decades as it appears on the historic aerial photographs. Floating vegetation, such as the duckweed currently present, is not affected by water level changes.

The water levels in The Slough are essentially controlled by the condition of the 3 culverts under Willow Road and at high water levels by the flow overtopping Willow Road. The 3 concrete culvert pipes appear to be partially filled with gravel and sediment, and the pipes are often partially submerged. If the flood control project to raise Willow Road and replace those culverts moves forward, very careful consideration will need to be given to the new connecting structures that would carry flow from The Slough into Hillcrest Lake. If the elevation or capacity is changed, it could change the water levels in The Slough and would likely change the vegetation dynamics.

Fish and Wildlife

As noted above, Hillcrest Lake has supported "rough" fish and has been dominated by the non-native common carp since the 1970 assessment. At that time, the IDOC noted that the lake was highly prone to summer and/or winter kill due to the shallow depths, and thus the lake was not conducive to management of a sport fishery. Nothing has changed in that regard. The lake will continue to support rough fish species with frequent winter and summer kills. If a sport fishery is desired, it would require annual stocking of sport fish such as bass. As noted in their 2015 report, the IDNR can assist in this regard.

For other wildlife, particularly birds, The Slough is currently providing excellent foraging and loafing habitat for many marsh and water birds. Maintaining the habitat structure that includes floating, submergent, and emergent vegetation along with the surrounding trees, shrubs, and wetland/prairie plantings will continue to provide good habitat. A more thorough spring survey would be required to determine what species are nesting at The Slough. The Slough likely provides habitat for more species of reptiles and amphibians than were

observed during this fall survey and maintaining the vegetated shorelines and diversity of vegetation will continue to support frogs, turtles, and snakes. Allowing downed trees to remain protruding from the water will provide good basking sites for turtles and snakes.

Hillcrest Lake appears to provide good open water habitat for waterfowl. Hundreds of mallards were observed during the study timeframe which corresponds with early fall migration. Other duck and water bird species were also observed. Geese can become problematic since they congregate in large numbers and are no longer migratory, remaining in our suburban landscape all year. If the surrounding land and shorelines around the lake are kept un-mowed and in prairie and wetland vegetation this make will it much less attractive for the geese to congregate and leave their droppings in the lawn areas. The lake is large enough that there are not any reasonable measures to exclude geese, while allowing other water fowl to use the habitat.

Shoreline

As described, the vast majority of the shoreline of The Slough is adequately vegetated and exhibiting minimal erosion. A single residential lot at the northwest corner maintains mowed turf to the water's edge and hence has significant erosion. The shoreline along Willow Road is also in poor condition though gravel and concrete rubble provide some hard surface to reduce erosion. If the Willow Road flood reduction project provides an opportunity, it is recommended that a shoreline with as gentle slope as possible be established that can be vegetated with emergent species to dissipate wave energy, stabilize the shoreline, and reduce erosion. If fishing access is desired along this shoreline, rock or concrete outcrops could be installed to provide fishing access points while reducing erosion. In general, it is recommended that all shoreline be unmowed and maintained in taller prairie and wetland vegetation.

Invasive Species – Aquatic/Submergent

The control of invasive aquatic plants can be an uphill battle. In order to survive, it is the nature of aquatic plants to spread. And for invasive aquatic plants, this spreading and growth is more prolific. As such, realistic expectations are very important to the management of both native and invasive plants. It is impractical to think

that all aquatic plants can be completely removed from a lake. A properly designed aquatic management plan will use a variety of lake management techniques, along with public education, to minimize the long-term impacts of invasive plants and encourage a growth of healthy native plants.

A dense growth of Elodea or American waterweed is present in Hillcrest Lake. While this is actually a native species and is not typically invasive, reduction of its dense growth across most of the lake may be a desirable goal for aesthetic purposes. Fortunately, none of the more insidious invasive aquatic plants were observed in Hillcrest Lake.

The Slough was partially covered with a green "scum" that may appear as undesirable to many people. But in this case it was not algae, but a floating aquatic plant called duckweed. Duckweed is a native species that is very beneficial for fish and wildlife. So from a purely ecological point of view, the presence of the duckweed across the open water is not problematic and is even considered desirable. If the aesthetic it creates is untenable for the community, limited control of the duckweed could be used to reduce its cover of the open water area.

A discussion on various plant management alternatives follows. Most are focused on the control of the dense Elodea growth in Hillcrest Lake, and the associated algae growth.

No Management

The "no management" alternative is just as it sounds: the aquatic plants will be left alone to do what they will naturally do with no active management from people. Using this technique, it should be expected that Elodea populations will continue grow and flourish within Hillcrest Lake.

Recommendation: Although no management is a feasible option for Hillcrest Lake, it is not likely to be seriously considered given citizen interest in the lake's aesthetic. Aggressively keeping any invasive species under control will protect the native plants, water quality, recreational uses, and aesthetics within the lake. It is also likely desirable to control the dense growth of Elodea and any algal blooms.

Drawdown

Drawdown of the lake's water level can sometimes be used to control some plant growth. Drawdown includes dropping the lake level a certain number of feet for a period of time. The exposure of the plants to extreme temperatures and dry and freezing conditions causes plant death. Drawdown may also kill native and desirable

plants, fish, and wildlife and negatively impact the use of the lake for recreation and its appearance during the drawdown.

Costs associated with drawdown depend on the outlet control structure. For example, pumping to lower the lake can be expensive as it requires the cost of equipment, electricity and labor. The current outlet structure does not have any capacity to lower the lake levels by gravity. It does not appear that another gravity outlet to lower lake levels is possible given the surrounding topography.

Recommendation: Because of the desired aesthetic of Hillcrest Lake and the physical limitations of the control structure, a drawdown is not recommended for Hillcrest Lake for the purposes of aquatic plant management.

Nutrient Inactivation

Nutrient inactivation is the use of a substance to control the release of nutrients, primarily phosphorus, from bottom sediments. The substance commonly used for nutrient inactivation is aluminum sulfate or alum. The alum treatment creates a flocculent that covers the bottom sediments and prevents them from releasing phosphorus. It is important to note that upstream sources of phosphorus in the watershed need to be controlled prior to the placement of the flocculent.

The use of nutrient inactivation will not prevent plant growth but will reduce the potential for algae blooms. In fact, the improved water quality and clarity from the control of algae could potentially increase the growth of both desirable and nuisance plants.

Cost of an alum treatment would be approximately $3,000-$4,000 per acre of treatment area.

Recommendation: Nutrient inactivation is not a desired option for controlling aquatic plants in Hillcrest Lake but may help with occasional problematic algal blooms, if nutrient inputs are also addressed.

Dredging for Aquatic Plant Control

Dredging is typically utilized in rivers and streams to increase the depth for navigation in shallow waters. It can also be used in detention basins and lakes to increase storage volumes. The use of dredging to control nuisance aquatic plants has historically resulted in mix success. For dredging to be used successfully to control aquatic plants, the lake would need to be dredged to depths of greater than 10 feet and to a hard layer of bottom

sediments. Dredging causes a significant impact to the aquatic ecosystem and will negatively impact wildlife and fish habitat.

Dredging is the most expensive of the aquatic plant management options and can range from $15-$30 per cubic yard of removed material or higher, depending on sediment quality and disposal options.

Recommendation: Dredging is not a viable option for controlling aquatic plants on Hillcrest Lake. See also the consideration of dredging for addressing water depths.

Screens

Screens are similar to window screens that are placed on the lake bottom to limit aquatic plant growth. Screens are beneficial for controlling aquatic plants in small areas that are not important to fish or wildlife habitat such as near individual homeowners shorelines or piers to create swimming areas. Screen are typically installed in the spring and removed in the fall. As the screens will prohibit the growth of both beneficial and nuisance plant species, they are not typically recommended for installation throughout a lake.

Screens cost approximately $350 for a 700 square foot roll. Any installation and removal costs would be additional.

Recommendation: As screens will limit the growth of beneficial aquatic species and would be limited to relatively small areas, screens are not a viable option for controlling aquatic plants in Hillcrest Lake. Screens would have no effect on floating duckweed in The Slough, since duckweed floats and is very susceptible to wind.

Aeration

Aeration includes the installation, operation, and maintenance of a system that will artificially pump oxygen into the lake. Historically, aeration has been successful in correcting oxygen deficiency problems in lakes that have numerous algae blooms and fish kills due to elevated in-lake nutrient levels. There is limited research available on the success of aeration on invasive aquatic plant growth.

Initial costs for an aeration unit for Hillcrest Lake would be approximately $26,000.00 plus annual maintenance and operations costs. This assumes electrical power is available nearby and that one aeration unit is sufficient.

Recommendation: Aeration on Hillcrest Lake should not be considered at this time as it will not address aquatic plant growth problems.

Biomanipulation

Biomanipulation or the use of biological controls for aquatic plant management is currently limited to grass carp and a few insects. While the use of biomanipulation is theoretically possible, it has very limited applications and limited success in many situations. Non-native biological control agents are risky as they introduce a species into an new environment where predators many not be present, which can in turn easily create a new problem rather than a solution. They also often produce slower, less reliable, and less complete control of aquatic plants that other established control methods.

Grass carp is an exotic species originally imported from Malaysia and is considered a voracious eater of aquatic plants. Grass carp can reduce or eliminate all vegetation at low densities. However, the grass carp will also eat beneficial plants. In addition, Hillcrest Lake is too shallow to allow overwintering of grass carp and hence there would be an annual cost for stocking them. As such, the use of grass carp is not recommended in Hillcrest Lake.

Recommendation: The use of grass carp is not a viable alternative and is not recommended for Hillcrest Lake at this time.

Weed Rollers

Weed rollers are a mechanical device that can control weed growth in small, shallow areas. A weed roller includes a post that is attached to a dock. At the end of the post is a roller than moves in a slow arc detaching existing weeds and agitating the lake bed. . This prevents continued weed growth, for a clean lake bottom and a pleasant swimming area. However, since the bottom sediments consist primarily of soft muck in Hillcrest Lake, and swimming and boating are not contemplated for Hillcrest Lake, this does not represent a useful option.

Recommendation: The weed roller is not recommended for Hillcrest Lake at this time.

Hand Controls

Hand controls are methods of aquatic plant removal on a small-scale. Typically, hand controls include the hand pulling and/or raking of plants. A rake with a rope attached is thrown into the water and dragged back to the shore or boat. The collected plants are removed and disposed of properly. Skimmers or nets are also hand control methods used to scrape algae and duckweed off of a lake surface. As these methods are labor intensive, they are commonly utilized by residents to control aquatic weeds in small, localized areas such as around piers and swimming areas.

Hand controls can be cost effective as many rakes can be purchased for less than $100. Labor costs would be an additional cost or the work could be done with volunteers. Since the aquatic vegetation would regrow after each raking or pulling event, however, this would need to be done at least annually in areas where control is desired.

Recommendation: Hand controls may be utilized to clear selected areas of Elodea in Hillcrest Lake and of duckweed in The Slough if desired. The clearing should be selective focusing on areas of dense growth. Landowners should also be encouraged to maintain an area of native vegetation along the shoreline both on land and in the water.

Chemical Treatment

The effective use of chemical treatments for aquatic management has greatly improved in the recent years. Instead of broadcast spraying, treatments now target specific areas or species. The half-life of the herbicides has also decreased from months and years to days and weeks. Additionally, the herbicides used for chemical treatments have been tested extensively to confirm that the herbicides are not toxic to humans, animals and fish, that the chemicals do not bioaccumulate in fish or other organism and that their persistence in the environment is low. The Illinois Environmental Protection Agency (IEPA) governs the application of herbicide in lakes and requires a permit for all herbicide application over waters. The herbicide permit requires that all herbicides to be used are approved by the IEPA, applied within the concentrations and applications included on the label, and applied by a licensed applicator.

The selection of the proper herbicide and the timing of the herbicide application are extremely important in the management of aquatic vegetation. For example, when plants are treated, the decaying process of the plants uses oxygen. If the plants are treated when oxygen levels in the lake are already low, such as during the warm

summer months, the additional oxygen depletion by the decaying plants can lead to stress on fish and other aquatic life. Another concern is that if the herbicide kills all of the plants in the lake, the lake can shift from being dominated by aquatic plants to a lake that is dominated by algae. The killing of both native and invasive vegetation could also give opportunities for new invaders to establish and cause additional problems. As such, it is important for the target species for treatment to be identified and the proper dosage for the selected herbicide be utilized for treatment. Care should also be taken to alternate the chemicals used whenever possible. This will help minimize the chance of a nuisance species from developing a resistance to the chemical.

Typically shoreline treatments for aquatic vegetation need to be repeated annually. Shoreline treatments will also likely not eliminate the nuisance species completely, especially when deep water areas are left untreated. Shoreline treatments are typically viewed as "spot" treatments to alleviate a small nuisance condition. In order for comprehensive management of the nuisance species, a shoreline treatment program must be combined with a large area (deep water) or whole lake treatment. Large area or deep water treatments can be an effective management tool for the reduction of nuisance aquatic vegetation. These treatments should be conducted early in the season, just as the plants begin to grow, usually in late-April through late June.

Types of Herbicide

Systemic Herbicides – Systemic herbicides are translocated through the entire plant, including the roots. These include 2,4-D, Fluridone, and trichlopyr. Fluridone is known to be effective to control Elodea in whole-lake or large area applications.

Contact Herbicides – Contact herbicides kill the exposed portions of the plant they come in contact with. They are not translocated into the roots and will only rarely kill the entire plant. These typically provide short-term nuisance relief. Herbicides with the active ingredients of diquat and endothall are contact herbicides.

Copper Compounds – Copper sulfate is used for the control of algae, most commonly filamentous green and blue-green algae. It is also documented to provide some control of Elodea.

Commercially Available Herbicides

Aquathol – Super K is a formulation containing the active ingredient endothall. This is a contact herbicide that prevents certain plants from producing the needed proteins for growth. This herbicide can be used to control the growth of certain pondweeds, coontail, and Eurasian watermilfoil. The timing of its application will greatly

affect what plants are affected. The restrictions for treatment with Aquathol are as follows: 1 day for swimming; 3 days for fish consumption; and 7 to 25 days for irrigation and potable use.

Reward – Reward, previously known as Diquat, is a non-selective contact herbicide that is used to control a wide variety of plants. It is absorbed by plants and damages cell tissues. Reward will kill all the parts of the plant that it comes in direct contact with and works very quickly with results typically seen within 6 to 10 days. The restrictions for treatment with Reward are as follows: 1 day for swimming and 14 days for irrigation and potable use.

2,4-D (2,4-dichlorophenoxyacetic acid) – 2,4-D is a systemic herbicide which interferes with normal cell growth and division in broad-leaved plants and not grasses. Plants will begin to die within a few days of being treated with the liquid form and within 7 to 10 days from treatment with a granular form. The aquatic formulations of 2,4-D are only effective on certain species of aquatic plants and is most commonly used for the treatment of Eurasian watermilfoil. The timing and application rate of 2,4-D is extremely important so that the native plants are not negatively impacted by the herbicide. Because 2,4-D will also impact desirable native species such as bladderwort, water lilies and watershield, care should be taken to ensure that only the targeted nuisance species are present before the application or that the dosage is low enough to protect native species. The restrictions for treatment with 2,4-D are as follows: 1 day for swimming; no restriction for fish consumption; and concentrations must reach 1 part per million (ppm) before use for irrigation and drinking.

Fluridone – Fluridone is an herbicide that inhibits the plant's ability to make food (sugar) for itself. Without that ability, the plant dies. It takes approximately 30 to 45 days for Fluridone to kill the plant. The herbicide is rapidly diluted and is best used for whole lake or large treatment areas, greater than 5 acres in size. Fluridone can be used to control a variety of plants as the timing of the application and the dosage rate will help select which plants are impacted by the application. The restrictions for treatment with Fluridone are as follows: no restriction for swimming and fish consumption; and 7 to 30 days for irrigation.

Trichlopyr – Trichlopyr is a newly-approved herbicide which kills the entire plant. The restrictions for treatment with Trichlopyr are as follows: 120 days for irrigation.

Recommendation: Herbicide application is a recommended treatment for Hillcrest Lake to reduce the dense growth of Elodea. Treatments should be conducted in accordance with the requirements of the IEPA. Chemical applications can be utilized to treat nuisance aquatic beds of the native Elodea in Hillcrest Lake to

reduce the dense growth, improve the aesthetic, provide better fish habitat, and fishing opportunities. Areas could be selected in consultation with community stakeholders based on water depth information.

Similarly, if desired limited control of duckweed in The Slough could be done through manual (hand) controls and herbicide application.

Any herbicide treatments should be planned early enough in the season to eliminate the nuisance with the least amount of herbicide and before the native plants have been negatively impacted by dense growths of nuisance plants. Large scale, open water treatments may be considered to treat larger areas of Elodea in the spring only. However, the level of control and results should be realistic given the current and expected future condition of Hillcrest Lake.

Harvesting

Harvesting is another lake management tool that is frequently used to control aquatic plants. With harvesting the vegetation is cut off about 5 feet below the water surface and is conveyed to the shore where they are then trucked to a disposal site. The remaining plant materials below the cutting depth will continue its normal life cycle. Harvesting should only be conducted in waters that are deeper than 3 feet as harvesting in shallower areas can increase the damage to equipment, will disrupt bottom sediments and plants, and will open the lake bottom up to the invasion of other exotic species. Skimming may be conducted in shallower areas if care is taken to minimize the disturbance. Skimming is a variation of harvesting where the plant is removed at the surface, leaving the bulk of the submerged material in place. Obviously, Hillcrest Lake is generally much shallower than 5 feet, and hence this is not a viable option.

Recommendation: Harvesting has been shown to be effective at improving recreational use and aquatic plant diversity by controlling nuisance species, however, it is not recommended or practical in such a shallow water body.

<u>Invasive Species – Emergent</u>

Invasive species in the emergent zone along the shoreline of Hillcrest Lake and The Slough should also be controlled. In its current condition, there is minimal colonization by invasives around these areas, which should at a minimum be maintained. Purple loosestrife, common reed, buckthorn, thistles, teasel, and cattails should be addressed as described above. Selective herbicide control is recommended for all of these species.

Species	Recommended Herbicide
Purple Loosestrife	Aquatic-approved glyphosate, triclopyr
Reed Canary Grass	Aquatic-approved glyphosate Grass-specific sethoxydim/clethodim
Common Reed	Aquatic-approved glyphosate for small patches
Common Buckthorn	Triclopyr
Thistles	Clopyralid or aminopyralid
Teasel	Clopyralid
Cattails	Aquatic-approved glyphosate

It should also be noted that some, such as the larger stands of reed canary grass at the south end of The Slough will require repeated applications over 3-5 years to get complete control.

Water Quality

Somewhat elevated nutrient levels and chlorides are to be expected in any suburban/urban water body in this region. Nutrient sources are from lawn fertilizer runoff and leaky septic systems. These are best addressed at a watershed level by reduced and judicious use of fertilizers, and conversion of septics to municipal sewer systems. At the site, nutrient impacts to the slough and lake can be reduced by including more un-mowed, vegetated buffers that will help filter nutrients from runoff.

Chlorides are more difficult to address as the chloride ion from de-icing salt remains in solution, and does not adsorb to sediment and settle out. Throughout the Chicago region, elevated chloride levels are being detected in surface waters and groundwater throughout the year now, in addition to the spikes in later winter and early spring when the salt gets washed off the hardscape and into receiving waters. Thus chloride inputs can really only be reduced by reducing the amount of road salt used through more judicious application and use of other additives and substitute compounds.

Overall Aesthetic

The overall aesthetic or appearance of a water body is often very important for the community. Everyone's idea of a good aesthetic is somewhat unique. A good education and outreach program can help with perceptions, once people have a better understanding of a particular body of water or natural feature. In this case, it seems best to keep a separate aesthetic goal for Hillcrest Lake versus The Slough. As their names imply, Hillcrest Lake is perceived as a lake – an open water body, as it has been for decades. The Slough is aptly named as it is a remnant of the marsh or wetland slough that was historically present. Given the community input that we have been made aware of, the current and historic condition of both – we recommend that

Hillcrest Lake be managed as a small lake, while The Slough be managed as a wetland ecosystem. This also provides contrasting management and recreational activities for differing interests within the local community. At least partial control of the dense Elodea beds with herbicides in Hillcrest Lake will help maintain a more open water lake appearance. Whereas, The Slough can be expected to have areas of aquatic and emergent plants. If a reduction in the cover by duckweed is desired, limited control of that free-floating species can be achieved with chemical control or hand removal.

SUMMARY AND RECOMMENDATIONS

In summary, neither Hillcrest Lake nor The Slough appear to have any significant issues or impairments given their suburban landscape context, and have not substantially changed in size or water depth in recent years. Wet years and dry years may affect local perceptions of water levels. Changes in the condition of the outlet pipe may also have changed local conditions slightly in recent years. Water quality appears typical for such an urban setting. Wildlife usage, especially birds, is very good and reflective of moderate to good habitat quality. The fishery has always been poor since first measured in 1970 and a "put and take" sport fishery would be possible only through annual stocking due to the shallow depths. Fortunately, neither water body is infested with Eurasian watermilfoil or curly-leaf pondweed. No non-native invasive aquatic plant species were detected. A few of the widespread emergent invasive species are present around the perimeter but not in major infestations yet.

The bottom sediments of both bodies appears to be natural muck soils probably from the original marsh slough, from the contributing watershed, and from decaying plant material within the system. It does not appear likely that there has been recent, significant deposition of new sediments based on the sediment depths, the historic aerial photographs, and the built-out condition of the watershed other than gradual accumulations from shoreline erosion on Hillcrest Lake. The sediments present in The Slough are natural and typical of a marsh or slough habitat in northeastern Illinois. For Hillcrest Lake the same sediments are generally present, except where historic deposition of sandy material and concrete chunks were observed. If it is desired to increase the water depths in Hillcrest Lake, without raising normal water level due to compensatory storage requirements, the sediments could be removed by dredging, though this would be very costly.

The dense beds of the submerged aquatic plant Elodea in Hillcrest Lake are interesting in that Elodea is a native species and not typically considered invasive in North America (it has been introduced to Europe and is highly invasive there). However, dense beds are known for this aquatic plant species and it can impact fish habitat due

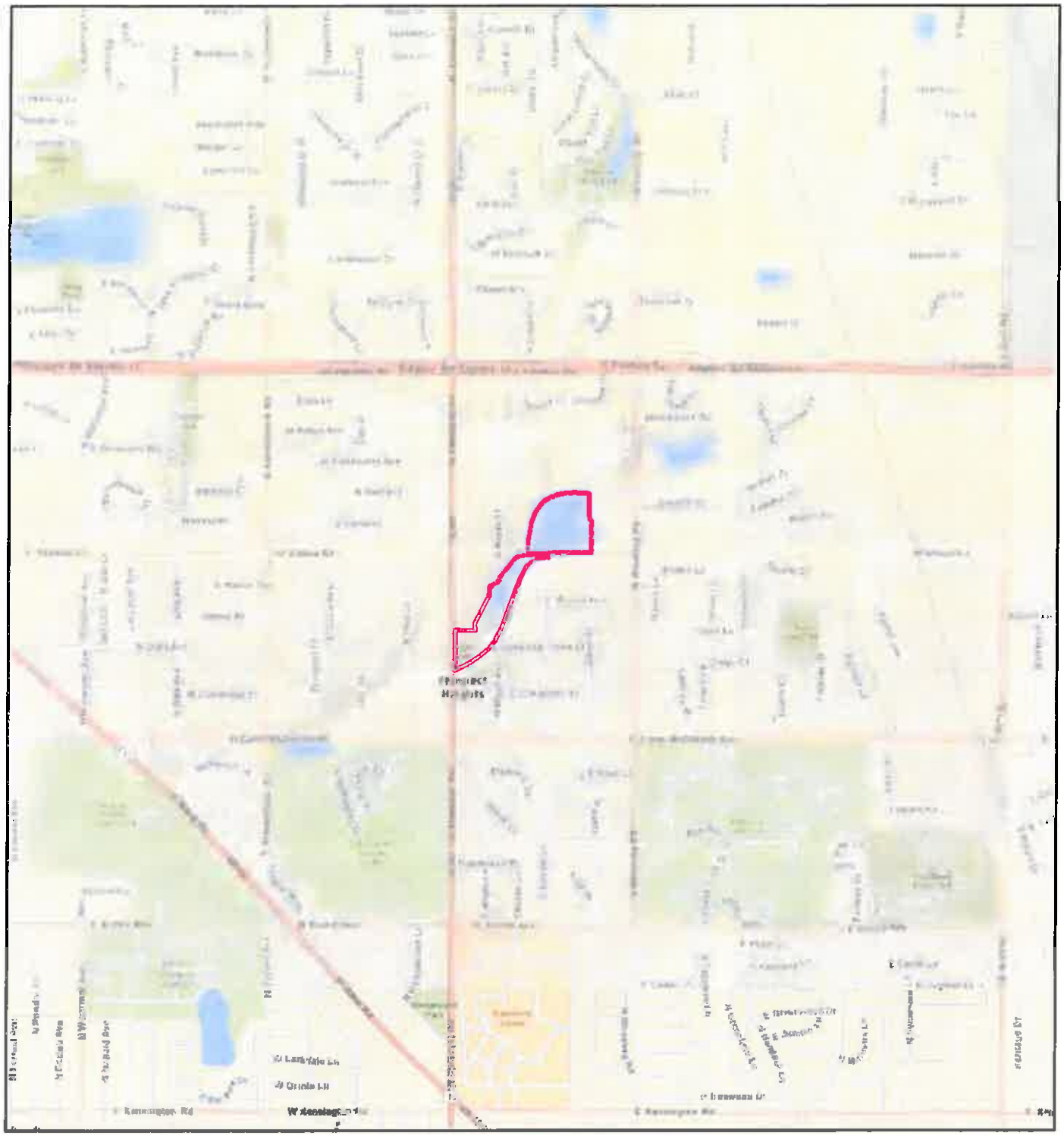
to its dense bushy nature. It can also impair any small boat or paddlecraft recreational options. It is contributing to negative aesthetics by reaching the surface and providing a platform for filamentous algae growth. Thus, it is recommended that some targeted chemical and/or hand control of the Elodea be carried out. This can be used to reduce the coverage of the Elodea on an annual basis and maintain a better aesthetic for the lake, which may alleviate the need for increased water depths.

The duckweed covering a portion of The Slough is perceived by some as a negative aesthetic. Duckweed is very beneficial for fish and wildlife and is a native species. From an ecological perspective it is considered desirable. However, if a reduction in cover by duckweed is desired from an aesthetic perspective, limited hand or chemical control is recommended. Targeted applications of an appropriate aquatic herbicide such as Flouridone is recommended for limited control of both the duckweed and Elodea.

As much un-mowed buffer with native vegetation around the perimeter of both The Slough and Hillcrest Lake as possible is recommended for shoreline stabilization, improved habitat and water quality, and reducing nuisance Canada geese. There are many existing shoreline areas with appropriate un-mowed vegetation as examples. Controlled burns or annual mowing could then be used to maintain these native plant communities around the perimeter. Floating leaved aquatic plants such as water lilies could also be introduced to either The Slough or Hillcrest Lake for aquatic plant diversity and an improved aesthetic. Maintaining submergent and floating-leaved aquatic vegetation helps keep sediments down and limits the turbidity that carp can cause.

The watershed condition is the other factor affecting The Slough and Hillcrest Lake where actions can be taken to improve conditions. It appears that the watershed contributing to these water bodies extends into other communities such as Arlington Heights. But enforcing good soil erosion and sediment control practices on any soil disturbing projects within the watershed will reduce the amount of sediment reaching The Slough or Hillcrest Lake. In addition, using only no phosphorus and slow-release nitrogen fertilizers in the watershed will reduce nutrients entering the ecosystem. Generally, following good watershed stewardship and best management practices will help with the management of both The Slough and Hillcrest Lake.

The continued stewardship by the volunteers of the NRC is also very valuable in reducing the cover by invasive emergent and terrestrial species and improving the general habitat conditions. It also helps to educate community members and enhance local "ownership" of Hillcrest Lake and The Slough.



Scale:

0 2,000 Feet

Orientation:

Legend:

Project Boundary

Project Number: 15-0320

Latest Revision: 10/8/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Project Name:

Hillcrest Lake and Slough Assessment

Prepared for:

City of Prospect Heights

Location Information:

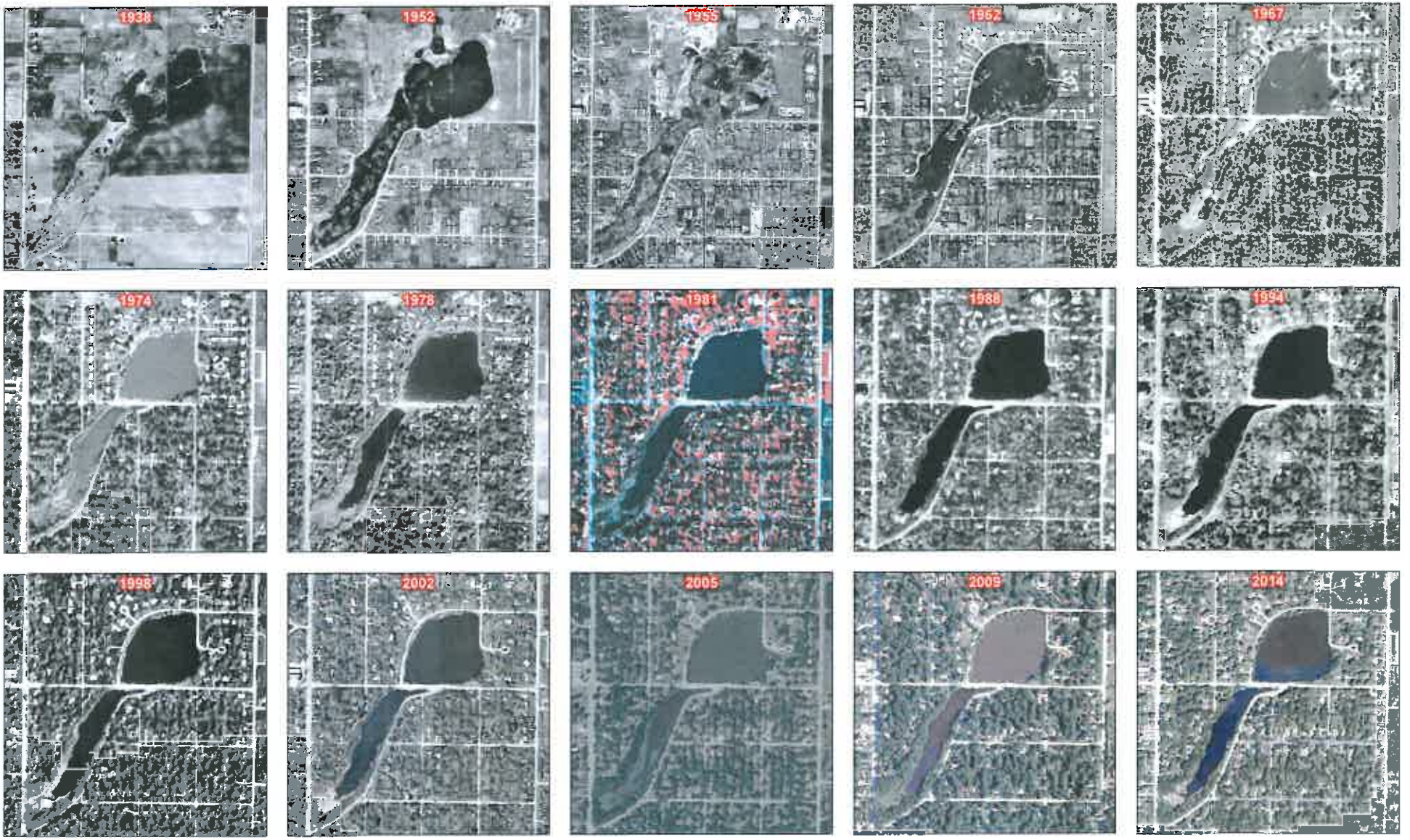
T.42N.-R.11E. Section 22

Exhibit Title:

Project Location

Exhibit:

1



Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 500 Feet

Project Number: 15-0320

Orientation:

Latest Revision: 10/9/2015

Project Name:
Hillcrest Lake and Slough Assessment

Image Sources:
Historical Information Gatherers

Prepared For:
City of Prospect Heights

Exhibit Title:
Aerial Time Series

Exhibit:
2

Scale:

0 1,000 Feet

Orientation:

Legend:

Project Number: 15-0320

Latest Revision: 10/8/2015

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

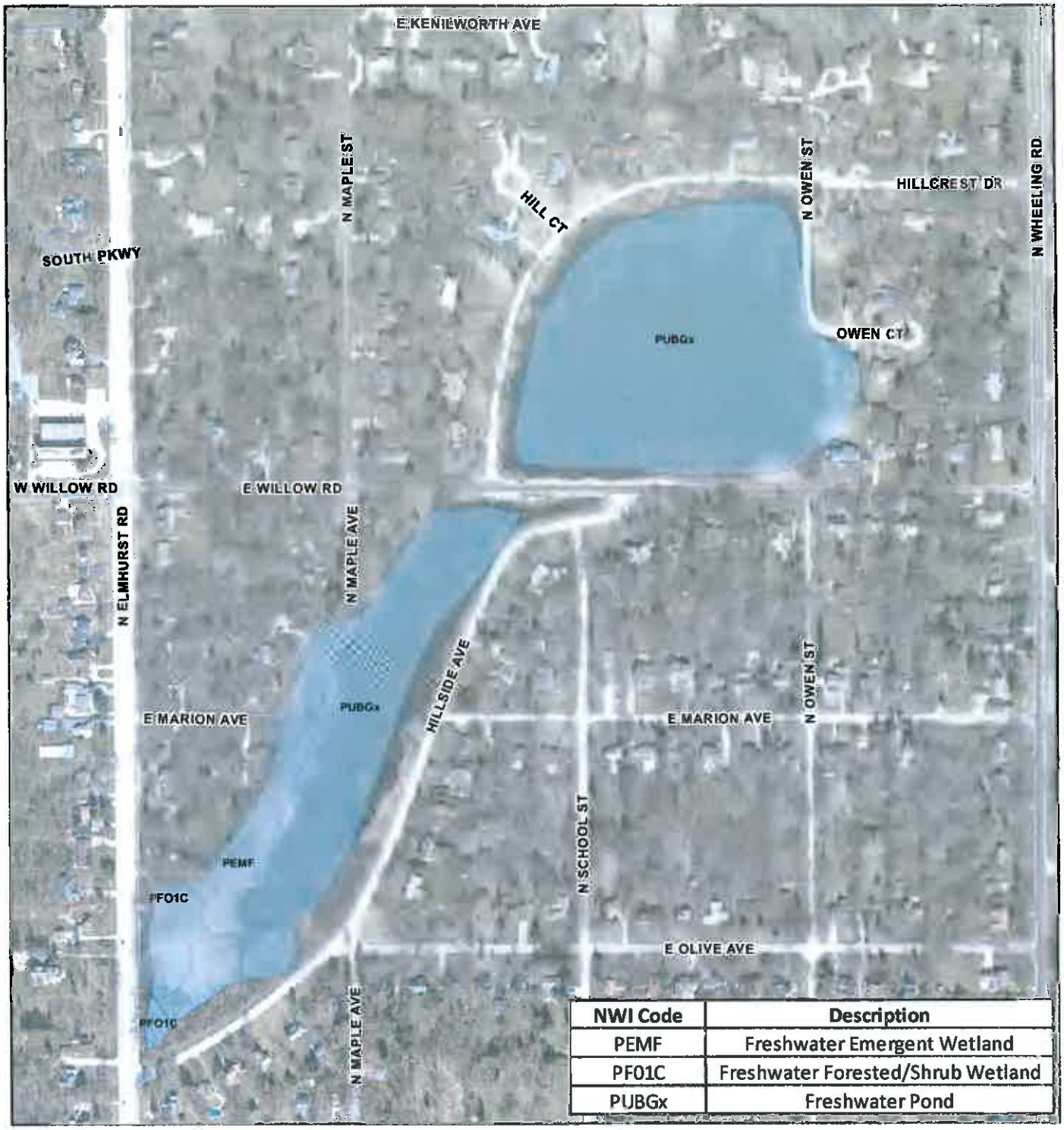
Project Name:
Hillcrest Lake and Slough Assessment

Prepared for:
City of Prospect Heights

Location Information:
Arlington Heights Quadrangle

Exhibit Title:
U.S.G.S. Topographic Map

Exhibit:
3



NWI Code	Description
PEMF	Freshwater Emergent Wetland
PF01C	Freshwater Forested/Shrub Wetland
PUBGx	Freshwater Pond

Scale:

0 400 Feet

Orientation:

Legend:

National Wetland Inventory

Project Name:

Hillcrest Lake and Slough Assessment

Prepared for:

City of Prospect Heights

Project Number: 15-0320

Latest Revision: 10/8/2015

NWI Date:

1981

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Exhibit Title:

National Wetland Inventory

Exhibit:

4

Scale:

0 400 Feet

Orientation:

Legend:

100 Year Flood Zone

Project Number: 15-0320

Latest Revision: 10/8/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Project Name:

Hillcrest Lake and Slough Assessment

Prepared for:

City of Prospect Heights

Panel #:

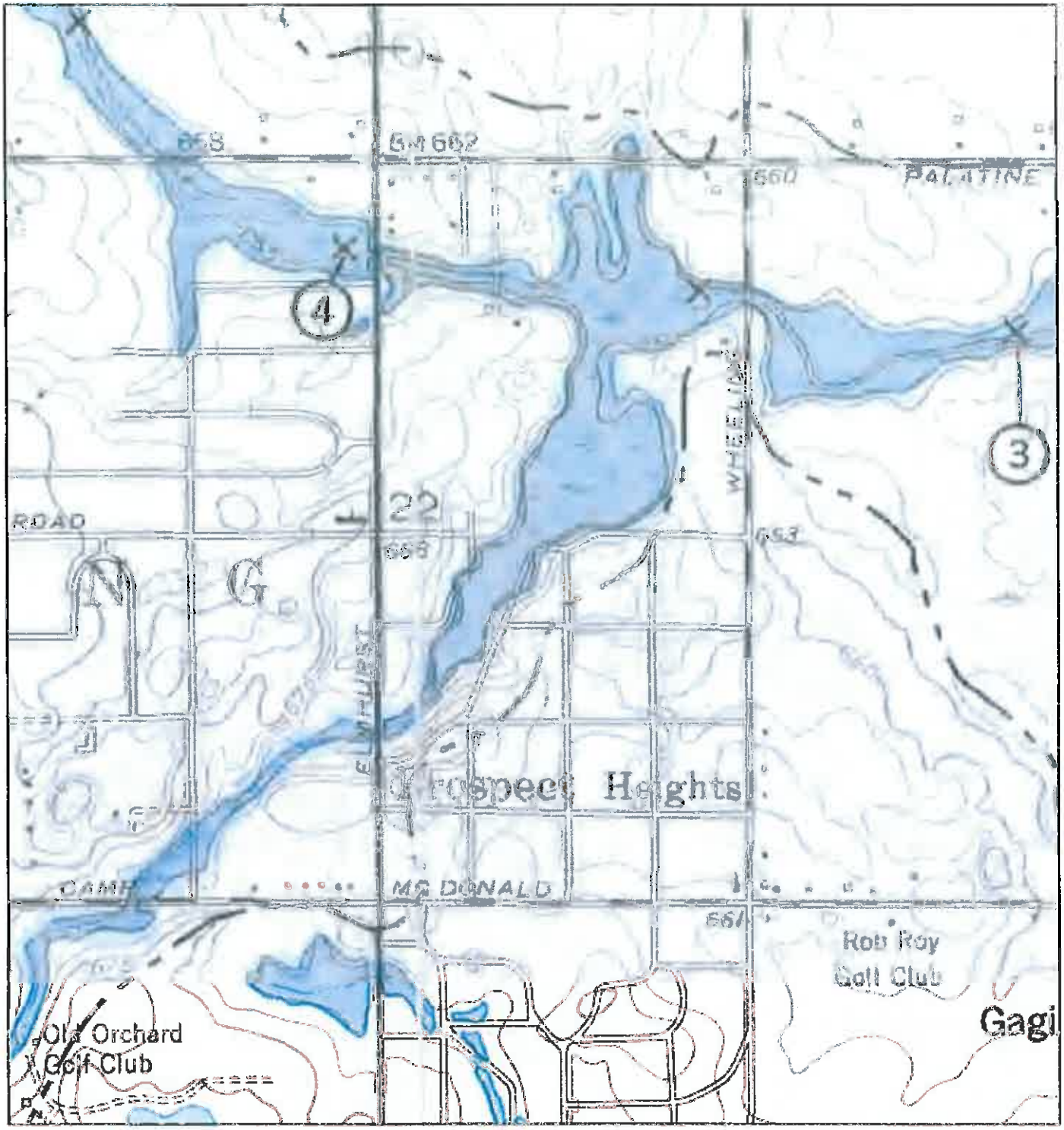
17031C0206J

Exhibit Title:

Flood Insurance Rate Map

Exhibit:

5



Scale:

0 1,000 Feet

Orientation:

Legend:

Project Number: 15 0320

Latest Revision: 10/8/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Project Name:

Hillcrest Lake and Slough Assessment

Prepared for:

City of Prospect Heights

Hydro Atlas Date:

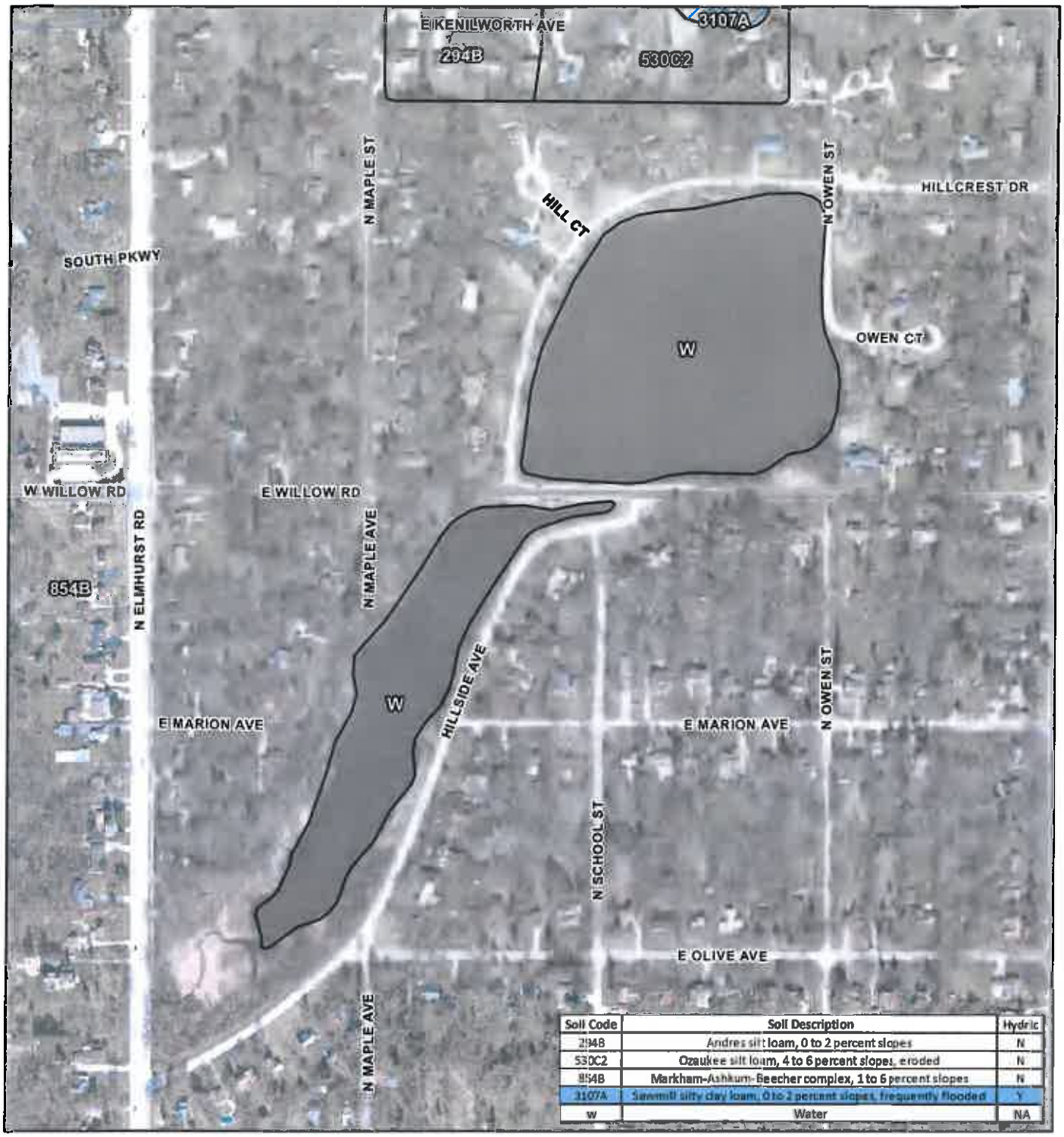
1963

Exhibit Title:

U.S.G.S. Hydrologic Atlas

Exhibit:

6



Soil Code	Soil Description	Hydric
294B	Andres silt loam, 0 to 2 percent slopes	N
530C2	Ozaukee silt loam, 4 to 6 percent slopes, eroded	N
854B	Markham-Ashkum-Beecher complex, 1 to 6 percent slopes	N
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded	Y
W	Water	NA

Scale: 0 400 Feet

Orientation:

Legend: Hydric Soils, Soil Units

Project Number: 15-0320

Latest Revision: 10/8/2015

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Project Name:
Hillcrest Lake and Slough Assessment

Prepared for:
City of Prospect Heights

Soil Survey Date:
2012

Exhibit Title:
NRCS Soil Survey

Exhibit:
7

Scale:

0 2,000 Feet

Orientation:

Legend:

FEMA Water Line

Watershed Boundary

Project Number: 15-0320

Latest Revision: 10/8/2015

Data Sources: Globetrotters & FluidClarity, Ltd.

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Project Name:

Hillcrest Lake and Slough Assessment

Prepared for:

City of Prospect Heights

Aerial Date:

2014

Exhibit Title:

Watershed Boundary

Exhibit:

8

Condition	Feet	Percent
Concrete	45	1%
Minimal Erosion	0	0%
Moderate Erosion	1620	53%
Significant Erosion	860	28%
Severe Erosion	544	18%

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 150 Feet

Project Number: 15-0820

Orientation:

Latest Revision: 10/9/2015

Legend:
- Concrete
- Minimal Erosion
- Moderate Erosion
- Significant Erosion
- Severe Erosion

Project Name: Hillcrest Lake and Slough Assessment

Survey Date: Sept. 23, 2015

Prepared For: City of Prospect Heights

Exhibit Title: **Hillcrest Lake Shoreline Condition**

Exhibit: 9

Condition	Feet	Percent
Concrete	0	0%
Minimal Erosion	3455	91%
Moderate Erosion	0	0%
Significant Erosion	328	9%
Severe Erosion	0	0%

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 150 Feet

Project Number: 15-0320

Orientation:

Latest Revision: 10/9/2015

Legend:
- Concrete
- Minimal Erosion
- Moderate Erosion
- Significant Erosion
- Severe Erosion

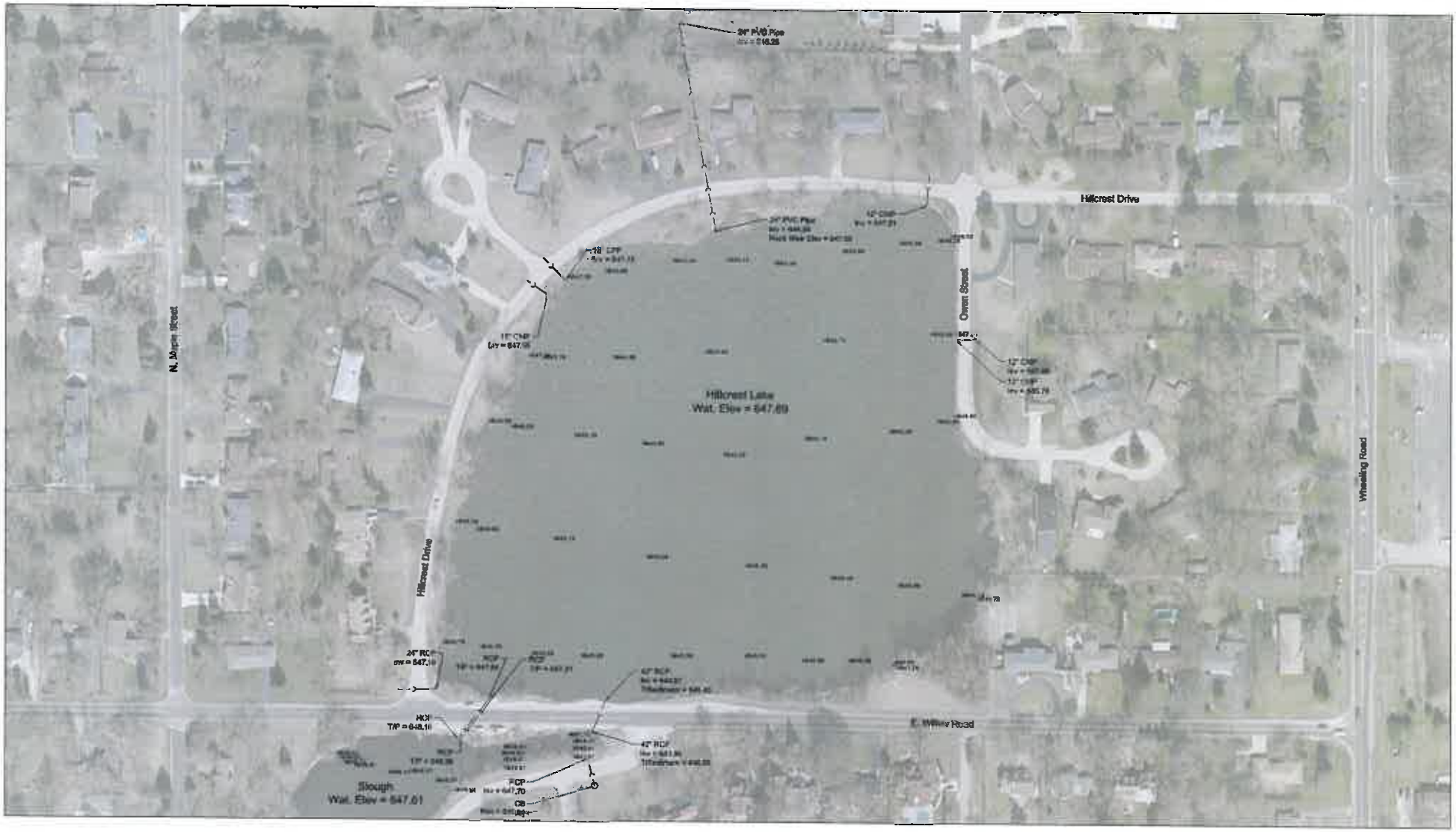
Project Name: Hillcrest Lake and Slough Assessment

Survey Date: Sept. 23, 2015

Prepared For: City of Prospect Heights

Exhibit Title: Slough Shoreline Condition

Exhibit: 10



Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 — 160 Feet

Project Number: 15-0320

Orientation:

Last Revision: 10/29/2015

Legend:
- Storm Sewer
- Top of Sediment Elevation

Project Name:
Hillcrest Lake & Slough Assessment

Survey Date:
Sept. 23, 2015

Prepared for:
City of Prospect Heights

Exhibit Title:
Hillcrest Lake
Bathymetric Survey
Top of Sediment

Exhibit:
11

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 150 Feet

Project Number: 15-0320

Orientation

Legend:
Storm Sewer
Top of Sediment Elevation

Last Revision: 10/09/2015

Project Name:
Hillcrest Lake & Slough Assessment

Prepared for:
City of Prospect Heights

Survey Date:
Sept. 23, 2015

Exhibit Title:
Slough
Bathymetric Survey
Top of Sediment

Exhibit:
12

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 150 Feet

Project Number: 13-0820

Orientation:

Latest Revision: 10/5/2015

Legend:
0 to 0.5 Feet
0.5 to 1 Feet
1 to 1.5 Feet
1.5 to 2 Feet
2 to 2.5 Feet
2.5 to 3 Feet
3 to 3.2 Feet

Project Name: Hillcrest Lake and Slough Assessment

Survey Date: Sept. 23, 2015

Prepared For: City of Prospect Heights

Exhibit Title: **Hillcrest Lake - Depth to Top of Sediment**

Exhibit: 13

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 150 Feet

Project Number: 15-0320

Orientation:

Latest Revision: 10/9/2015

Legend:
0 to 0.5 Feet | 0.5 to 1 Feet | 1 to 1.5 Feet | 1.5 to 2 Feet | 2 to 2.5 Feet | 2.5 to 3 Feet | 3 to 3.2 Feet

Project Name:
Hillcrest Lake and Slough Assessment

Prepared For:
City of Prospect Heights

Survey Date:
Sept. 23, 2015

Exhibit Title:
Slough - Depth to Top of Sediment

Exhibit:
14

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 — 150 Feet

Project Number: 15-0528

Orientation:

Latest Revision: 10/9/2015

Legend:

0 to 1 Feet | 1 to 2 Feet | 2 to 3 Feet | 3 to 4 Feet | 4 to 4.3 Feet

Note: The above symbology represents the depth of sediment from the top of sediment elevation to the top of hard bottom elevation.

Project Name: Hillcrest Lake and Slough Assessment

Survey Data: Sept. 23, 2015

Prepared For: City of Prospect Heights

Exhibit Title: Hillcrest Lake Sediment Depth

Exhibit: 15

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 150 Feet

Project Number: 15-9980

Orientation:

Latest Revision: 10/5/2015

Legend:
0 to 1 Feet
1 to 2 Feet
2 to 3 Feet
3 to 4 Feet
4 to 4.3 Feet

Note: The above symbology represents the depth of sediment from the top of sediment layer on to the top of hard bottom horizon.

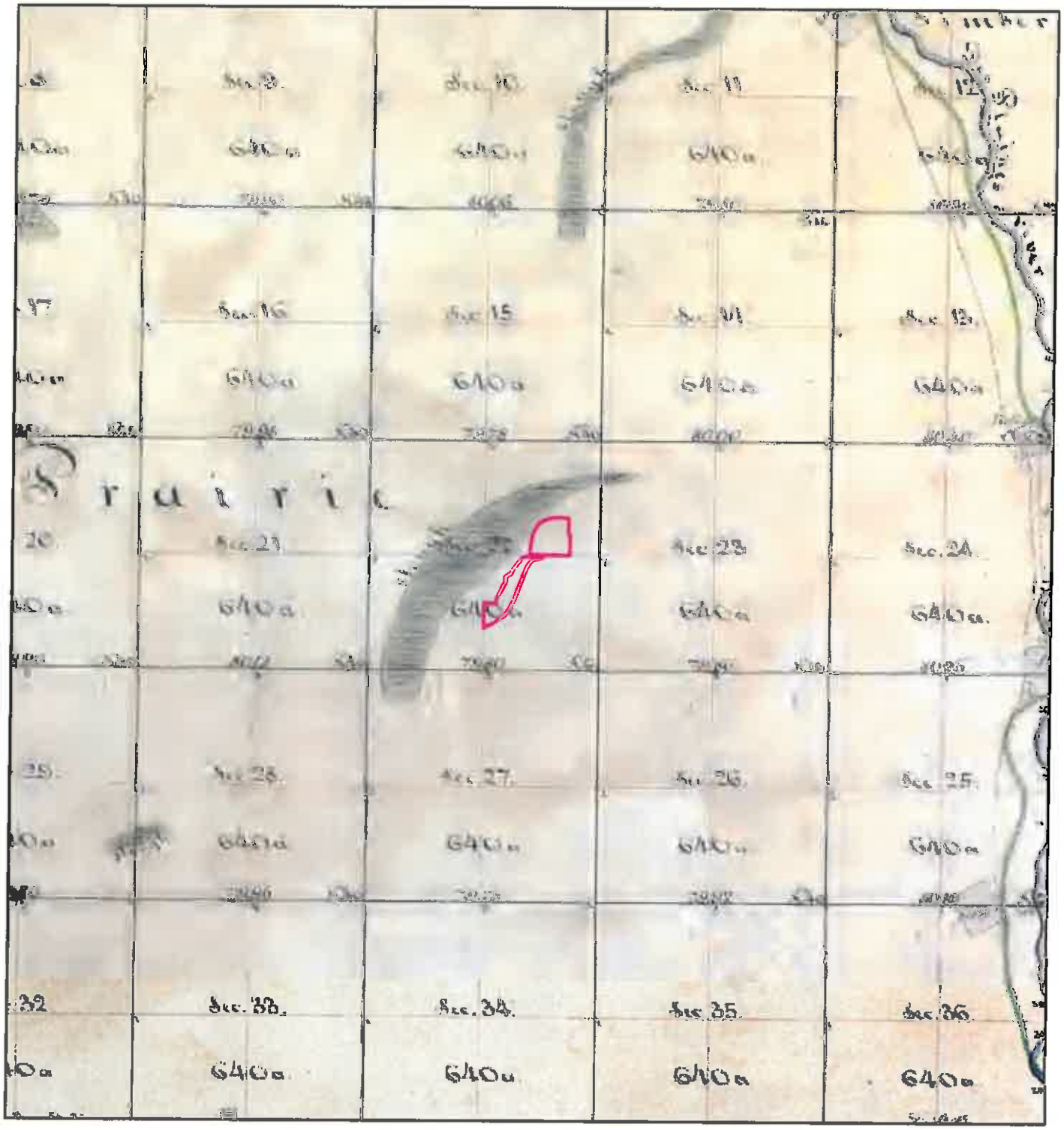
Project Name:
Hillcrest Lake and Slough Assessment

Survey Date:
Sept. 23, 2015

Prepared For:
City of Prospect Heights

Exhibit Title:
Slough Sediment Depth

Exhibit:
16



Scale:

0 3,000 Feet

Orientation:

Legend:

Project Boundary

Project Name:

Hillcrest Lake and Slough Assessment

Prepared for:

City of Prospect Heights

Location Information:

T.42N.-R.11E., Section 22

Project Number: 15-0320

Latest Revision: 10/8/2015

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Exhibit Title:

Federal Township Plats of Illinois (1840)

Exhibit:

17

Photograph 1:

Overview of The Slough with duckweed cover and great egret foraging.

Photograph 2:

Looking across The Slough to vegetated east shoreline.

Photograph 3:

Northeast shoreline of The Slough vegetated with willows.

Photograph 4:

East shoreline of The Slough with wetland/prairie plantings.

Photograph 5:

Emergent vegetation along east shoreline of The Slough.

Photograph 6:

Reed canary grass and cattail marsh at south end of The Slough.

Photograph 7:

In-flow channel at south end of The Slough.

Photograph 8:

Headwall with submerged culvert at upstream end of The Slough (Elmhurst Road).

Photograph 9:

Dense duckweed matt on water at north end of The Slough.

Photograph 10:

View across Hillcrest Lake looking east.

Photograph 11:

Mowed turf to water's edge with significantly eroded shoreline on west side of Hillcrest Lake with double-crested cormorant in tree.

Photograph 12:

West shoreline with severe erosion Hillcrest Lake.

Photograph 13:

Mowed shoreline with significant erosion contrasted with vegetated shoreline with minimal to moderate erosion – northwest side Hillcrest Lake.

Photograph 14:

Well-vegetated shoreline with minimal erosion – northwest side Hillcrest Lake.

Photograph 15:

CMP culvert inlet from Hill Court – west side Hillcrest lake.

Photograph 16:

Plastic culvert inlet at Hill Court with vegetated shoreline – unmowed with prairie plants.

Photograph 17:

Vegetation shoreline with moderate erosion northwest side of Hillcrest Lake.

Photograph 18:

Vegetated shoreline with minimal to moderate erosion along Owen Court – Hillcrest Lake.

Photograph 19:

Gravel shoreline of Hillcrest Lake along Willow Road looking east.

Photograph 20:

Wooded shoreline along southeast side of Hillcrest Lake.

Project Number: 15-0320

Project Name:
Hillcrest Lake and Slough Assessment

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Appendix Title:
Fishery Reports

Appendix:
B

DEPARTMENT OF NATURAL RESOURCES Division of Fisheries SUPPLEMENTAL SURVEY	County: Cook		
	T 42N	R 11E	S 22
	Directions from nearest town: East of Rt 83 on Willow Road		
	Date of Inspection: 7/22/2015		

Water (Name): Hillcrest Lake	Owner: Village of Prospect Heights
Address of Owner:	Phone of Owner:
Lessee: ---	
Person(s) Contacted: --- Agnes Wojnarski	Identification: Prospect Heights Conservation Committee
Address of Contact: ---	Phone of Contact: ---
Water Classification: Public Other	

1. **Survey initiated by:** Frank Jakubicek

2. **Water Size:** 13 acres

3. **Date of last inspection or work on water:** 1971

4. **Purpose of Survey:** Evaluate the fishery present

5. **Observation, comment, recommendations:** On 7/22/2015 a 15 minute DC electrofishing survey was conducted in the deeper parts of Hillcrest Lake. Most of the lake was too shallow to motor our boat. We collected 39 fish from 6 species during our 15 minutes. Those data are shown in Table 1, minimum, maximum and average sizes are shown along with the number of fish collected per species. Fish species that can tolerate poor water quality dominated the catch suggesting the conditions within the lake regularly drop to a point where fish requiring good water quality die off. Difficult conditions for fish occur in winter when thick ice and/or snow cover reduce light penetration so oxygen levels drop because plankton cannot produce enough oxygen to offset respiration needs of the decaying organic material and animals living in the lake. Ice also acts as a cap which doesn't allow "bad" gases to escape and fish can die from high concentrations of some of those "bad"gases. In summer, warm water and high nutrient levels create conditions where algae grows quickly. When algae dies off quickly (running through a normal lifecycle), oxygen levels can drop low enough (usually just before sunrise) to impact sportfish (especially the larger ones) from the stress associated with low oxygen (not necessarily- no oxygen).

This brings us to the point of lake volume. The State recommends that a lake be at least 10 foot deep over at least 25% of it's surface area so the lake has enough volume to "store" enough water (and thus oxygen) so fish can survive the difficult times of the year. Shallow lakes often experience period die-offs associated with low oxygen levels from natural events (temperatures, water levels, snow/ice, etc) and when these events are underway and taking place, there's no way of quickly reversing the cycle; it has to run it's course which is usually a short term event but the effects often significantly impact the lakes fishery. Removing fish carcuses can help reduce recycling of the nutrients tied up in fish flesh, this will help reduce algae problems several weeks following ice out or the die-off event. Die-offs are a good time to stock predators so they can contain any reproduction surviving fish have and would help balance the fishery.

6. **Biologist:** Frank Jakubicek	**Date of Report:** 8/21/2015

Distribution: If classification of State, Public, or Stream: District, Area, Central
All others: District

FM 5.0

Hillcrest Lake essentially has the same fishery in 2015 that was present in 1970. Table 2 shows the species present during that survey along with their minimum, maximum and average sizes.

Table 1. Catch Summary Hillcrest Lake in Prospect Heights, 7/22/2015

(15 minutes DC electrofishing)

Species	Number	Relative Abundance (%)	Minimum (inches)	Average (inches)	Maximum (inches)
LARGEMOUTH BASS	4	10.3	7.2	9.9	11.2
BLUEGILL	1	2.6	2.7	2.7	2.7
BLACK BULLHEAD	3	7.7	4.4	4.6	4.6
CARP*	6	15.4	15.2	18.3	21.4
GOLDFISH	23	59.0	4.3	5.9	11.3
WHITE SUCKER	2	5.1	5.5	7.1	8.7
SPECIES= 6 TOTAL=	39	100.0			

* plus 20 other carp observed while electrofishing

The difference between the two surveys are the presence or absence of green sunfish and white suckers. Both are native species that are found throughout the region and common to wetlands, marshes and sloughs. White suckers in particular are common in flowing wetland situations.

Table 2. Catch Summary Hillcrest Lake in Prospect Heights, 7/7/1970

(40 minutes AC electrofishing)

Species	Number	Relative Abundance (%)	Minimum (inches)	Average (inches)	Maximum (inches)
LARGEMOUTH BASS	5	3.2	6	7.9	11
BLUEGILL	5	3.2	4	4.5	5
BLACK BULLHEAD	22	13.9	2	3.9	9.5
CARP*	76	48.1	2	4.3	15
GOLDFISH	17	10.8	12	12.7	13.5
WHITE SUCKER	0				
GREEN SUNFISH	33	20.9	1.5	3.1	6
SPECIES= 6 TOTAL=	158	100.0			

The original reason for our survey was to evaluate the abundance of common carp with the thinking that an abundant common carp presence was creating turbid water conditions and inhibiting some shoreline and near shore plants from growing. The direction of early discussions was geared toward there being too many carp in the system and the options to reduce abundance. When we arrived at Hillcrest Lake, discussions with local resident's indicated a severe winter kill in 2014 that significantly reduced the carp population so while some resident's believed common carp were "common", the reality was that common carp were significantly reduced from their "typical" levels. At their typical levels, turbid water kept aquatic vegetation in check because plants need light to grow and if light cannot penetrate the water column, plants cannot grow. This new, lower abundance of carp means that fewer fish are rooting around in the soft sediments, stirring up the bottom so more light is penetrating the water column and plants grew. As a rough gauge of how deep plants can grow, its roughly twice as deep as you can see into it. If you can see down 2 feet, plants can grow in 4 feet deep (this is a rough guide and not an official statement).

From our files, the fishery history of Hillcrest Lake indicates the system periodically experiences poor water quality due to it's shallow bathymetry and organic bottom. Poor water quality kills off sportfish first (largemouth bass and bluegill) yet some fish are capable of surviving poor water quality because it where they normally live and thrive. Fish tolerant of poor water quality include goldfish, common carp, green sunfish and black bullheads. Now review the catch data from 1970 and 2015. There are times when water quality stays high enough for sportfish to survive and thrive but history has shown that every 3 or 4 or 10 or 20 years a tough winter comes along and re-structures the fishery so that only the "tolerant" survive!

A common recommendation with lakes similar to Hillcrest is to annually stock largemouth bass (in spring) so that if a tough winter comes along, a new batch of predators are added to help contain species like goldfish, black bullhead, carp, frogs, etc. so they don't become too over abundant. If several years go by and no tough winters occur, fish will survive and bass fishermen will be very happy because they'll be "catching" and everything will appear to be going well.

Stocking rates:

Largemouth bass – 25 fingerlings per acre - annually (4" to 6" long)
Northern pike – 2 per acre (these fish tend to move downstream so if a barrier is installed to keep fish from moving during high water events, northern pike would be a good choice) – 10" long

No need to stock crappie, minnows to feed bass, or bluegills, at present there are a lot of smaller, forage size fish in the system.

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISHERIES

LAKE SURVEY

County Cook

Twp. 42N R 11E S 22 SE¼

Directions from nearest town:

in Prospect Hts on Maple and Willow Sts.

Date of inspection: August 24, 1972

Water (Name) Hillcrest Slough (known locally as South Slough)

Owner in 1973 Prospect Hts Park Dist Address Prospect Heights Park District 98 N. Elmhurst Rd., Prospect Heights, Ill. 60070

Lessee Address

Person Contacted Ron Greenburg Identification Park Dist. Supervisor

Address of person contacted see above Phone 312-394-2848

Classification of ownership: State Public XXX Organization Private

---

1. Survey initiated by: Ron Greenburg

2. Type of water area natural slough

(All figures should be adjusted to spillway level):

3. Area (Acres) 6.3 Source USGS topo 1963 Max depth (ft.) 3 Source 1972 soundings
Avr. depth (ft.) 2.5 Source 1972 soundings Acre feet 15.8 Gallons 5,148,400
Shoreline Length: Feet 3168 Miles 0.6

4. Watershed size: (Acres) approx. 450 Source 1963 USGS topo estimate
Topography and soils flat to gently rolling, silty clay loam
Other waters in watershed (list) Hillcrest Lake, trib. to McDonald Creek, 2-Old Orchard Golf Club ponds
Ownership of watershed 90% private, 10% public (streets)

5. Type of dam none Height (ft.) Year constructed
Condition of dam

6. Type and size of drain unknown number of tubes under Willow Rd. Condition good
Type and size of spillway none Condition
Present water level: 1 ft. above normal due to recent rains

7. Primary usage aesthetics, kid fishing

8. History of past water levels acts as natural water retention reservior, fluctuates up to 3 ft.

9. Use of shoreline: No. Boat liveries none No. Resorts none No. Homes approx. 10
Swimming permitted: Yes No XX Waterfowl hunting permitted: Yes No XX
Resident boats (Number none) Motors allowed: Yes No XX Size Speed.

10. Fish stocking record:

Species	Number	Size	Date	Source (list agency or as private)
unknown-probably none				

(Draw Impoundment Map on Reverse Side)

(30173—5M Sets—6-66)

F.M. 3.0 - 1/66

11. Pollution (type and kind) normal street runoff, lawn fertilizer, septic outfalls (urban watershed)

12. Erosion (extent) little except near Willow Road (moderate)

13. Biological characteristics: Winter and/or summer kill winter and summerkill very probable, at least partail winterkill must likely annually

Common species of aquatic plants (list) no submerged observed, algae, cattails (both T. latifolia and T. augustifolia present)

Extent and coverage of aquatic plants cattails almost completely ring this water area

14. Fish spawning conditions good for species present, extremely mucky

15. Species composition now known present (list) carp, goldfish, black bullhead, green sunfish, bluegill

16. Natural reproduction and survival success of major species good for goldfish and carp, although no large ones collected (recontamination after winterkill is probable)

17. History of past management recommendations unknown

18. Special conditions and problems too shallow to support game fish, contamination from McDonald Creek and Hillcrest Lake

19. Angling success carp fishing good

20. REMARKS AND RECOMMENDATIONS:

This water area is too shallow to support game fish over the winter. Dredging would probably be too expensive for the benefits derived, since much material would ~~M~~ have to be removed. Connection to Hillcrest Lake would probably be no benefit for the water quality of the lake.

Area should remain as is for natural water retention and nature study.

(Continue Remarks on Reverse Side)

21. Inspecting Biologist Harry Wight Date of Report September 1, 1972
Man hours involved 2.5 Weather warm, overcast Temp: Air 78 F Water 71 F
Secchi= 5 in.

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISHERIES

FISH POPULATION ANALYSIS

(Condition Factor & Length-Frequency Summary)

COUNTY Cook

WATER (NAME) Hillcrest Slough

DATE OF COLLECTION August 24, 1972

Species	½" Group	Number	Percent of Total	Weight	Condition Factor	Rating
Bluegill	4.5	2		0.08	8.64	Good
	5.0	1		0.09	6.63	Ave
	5.5	4		0.11	6.62	Ave
Black Crappie	4.0	1		0.03	4.81	Ave
	4.5	1		0.05	3.28	Ave
Green Sunfish	3.0	2		---	---	---
	3.5	1		0.03	7.13	Ave
	4.0	2		0.05	7.72	Ave
Black Bullhead	4.0	2		0.035	5.50	Ave
	4.5	1		0.05	5.42	Ave
Carp	6.0	1		0.12	5.60	Ave
	6.5	2		0.17	6.15	"
	7.0	6		0.18	5.23	Poor
	7.5	6		0.22	5.21	"
	8.0	5		0.26	5.13	"
	8.5	3		0.32	5.15	"
	10.0	1		0.54	5.37	Ave
	12.5	1		0.90	4.56	"
Goldfish	5.5	4		0.14	8.42	No
	6.0	10		0.16	7.41	Available
	6.5	10		0.17	6.19	Data As To
	7.0	4		0.25	7.32	NE Illinois
	7.5	3		0.29	6.73	Averages
	8.0	2		0.32	6.21	

Total Time Involved: 35 minutes Method of Collection: 230V-AC, 3 phase electrofishing

Biologist Harry Wight Date of Report September 1, 1972

COPIES TO: If State or Public—District, Area & Central Offices.
If Organization or Private — District Office.

FM 12.0 5/65

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISHERIES

WATER PHYSICS AND CHEMISTRY

COUNTY Cook

WATER (NAME) Hillcrest Lake & Slough

DATE OF TESTS August 24, December 8, 1972

Station Number -- Location along Willow Road Time 9/24-12 noon, 12/8-2PM

Depth (Ft.)	Water Temp. Degrees F.	Diss. Oxygen PPM	pH	Total Alkalinity PPM	CO_2 PPM	Remarks
August 24: Slough						
surface	71	--	7.4	85?		total sulfides= no trace total hardness= 182 ppm
August 24: Lake						
surface	71	--	7.4	85?		
December 8: Slough						
surface	34	15.6	7.4	257		total hardness= 667 ppm; H_2S= 0
December 8: Lake						
surface	33	23.2	7.8	257		total hardness= 564 ppm; H_2S= 0

Maximum Depth at Stations all 2.0 ft. Present Weather Aug: sunny Dec: cold Air Temp 78 F 29 F

Wind calm Preceding weather (past 24 hrs.) same as days of water tests

Secchi disc --- Cause of turbidity silt

Color of water brown Odor none Limits of Thermocline unknown

Remarks: Water tests taken through 3-4 inches of ice (clear) with a little snow cover. D.O. levels at saturation or above in December.

Biologist Harry Wight Date of Report December 13, 1972

COPIES TO: If State, Public, or Stream—District, Area & Central Offices.
If Private or Organization—District Office.

FM 16.0 2/67

(33240—531—3-67)3-0

STATE OF ILLINOIS
RICHARD B. OGILVIE, GOVERNOR

DEPARTMENT OF CONSERVATION
102 STATE OFFICE BUILDING
400 SOUTH SPRING ST.
SPRINGFIELD 62706

CHICAGO OFFICE — 1227 S. MICHIGAN AVE. 60605

December 13, 1972

Mr. Ron Greenburg
Prospect Heights Park District
9B N. Elmhurst Road
Prospect Heights, Illinois 60070

Dear Mr. Greenburg:

I am very sorry for the delay in this report, however, the loss of our secretary and the large work load associated with monitoring the salmon return have kept from the office and correspondence.

As you can see from the report copies enclosed, the slough is too shallow to support game fish and the cost of dredging to achieve adequate depth to prevent winterkill would probably out weigh benefits due to the large amount of fill that would have to be removed.

I can see no advantages to more completely connecting the slough to Hillcrest Lake. The water chemistries are quite similiar, as far as I could determine from tests with my field kit. This water area should probably be left as it is for wildlife study and some limited fishing for small sunfish and carp.

If you have any questions concerning this report, do not hesitate to contact this office.

Very truly yours,

Harry L. Wight

Harry Wight, Fishery Biologist

Encl: Lake Survey
Fish Population Analysis
Water Physics and Chemistry

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISHERIES

County Cook

Twp. 42N. R 11E. S NE¼ 22

LAKE SURVEY

Directions from nearest town:
in Prospect Heights, Ill. at Willow Rd. and Hillcrest Dr.

Date of inspection: July 7,70

Water (Name) Hillcrest Lake

Owner Hillcrest Lake Homeowners Assoc. **Address** c/o Richard Michels

Lessee n **Address**

Person Contacted Richard Michels **Identification** Pres.

Address of person contacted 412 Hillcrest Dr. Prospect, Heights, Ill. **Phone**

Classification of ownership: State **Public** **Organization** x **Private**
about a 48 ac. sub. with 48 homes about 25 facing lake, but only 11 homes around lake are in assoc.

1. **Survey initiated by:** P. Vidal

2. **Type of water area** dammed marsh, also supposedly deepened about 1955 for home fill

(All figures should be adjusted to spillway level):

3. **Area (Acres)** 13.0 **Source** 67 aerial **Max depth (ft.)** 7.0 **Source** echo soundings
Avr. depth (ft.) 2.7 **Source** avg. 88 soundings **Acre feet** 35.1 **Gallons** 11,437,370
Shoreline Length: Feet 3,100 **Miles** 0.58

4. **Watershed size: (Acres)** 500 **Source** topo estimate
Topography and soils flat to moderately rolling silty clay loam
Other waters in watershed (list) 6-7 ac. marsh across Willow Rd., Old Orchard Golf Club, 1.7,1.7 acs.
Ownership of watershed 90% private, 10% public(streets

5. **Type of dam** 2-3 road fill **Height (ft.)** 2-3' **Year constructed** 1955?
Condition of dam part of Hillcrest Drive with 24" spill pipe under

6. **Type and size of drain** none **Condition**
Type and size of spillway 24" concrete horz. pipe **Condition** good, screened
Present water level: 4" spill

7. **Primary usage** aesethetics, fishing, ice skating

8. **History of past water levels** has been 3' higher, flooded by McDonald Creek in 1957 and 1967

9. **Use of shoreline: No. Boat liveries** none **No. Resorts** n **No. Cottages** 25 face lake homes
Swimming permitted: Yes **No** x **Waterfowl hunting permitted: Yes** **No** x
Resident boats (Number none seen, discouraged **) Motors allowed: Yes** **No** **Size** **Speed**

10. **Fish stocking record:**

Species	Number	Size	Date	Source (list agency or as private)
unknown				

(Draw Impoundment Map on Reverse Side)

(30173—5M Sale—6-66)

11. Pollution (type and kind) extensive urban, mostly residential watershed type chemicals; periodic back-flow(flooding) by McDonald Creek

12. Erosion (extent) insignificnat except along Willow Rd. where sewer is being installed

13. Biological characteristics: Winter and/or summer kill highly prone to summer and/or winter kill; severe winter kill evident March,1970, mostly carp

Common species of aquatic plants (list) fil. algae, cattail, bulrush, sedges, burreed, smartweed, sago and leafy pondweeds,

Extent and coverage of aquatic plants fil. algae rings most of shore, stump areas; cattail along 10% of shore mostly E.shore; other aquatics scarce; 30% of shore in willow trees and brush

14. Fish spawning conditions extensive shallow muck type areas suitable for bass, panfish, but easily distrubed

15. Species composition now known present (list) lm bass, bluegill, green sunfish, bl. crappie, carp, goldfish, bl. bullhead sampled, n. pike reported

16. Natural reproduction and survival success of major species carp and green sunfish, bl. bullhead show various size groups indicating annual recruitment

17. History of past management recommendations ?

18. Special conditions and problems very shallow, highly organic bottom marsh type lake with extensive urbanized watershed subject to undesirable fish contamination during high water from watershed ponds, McDonald Creek when it floods; prone to winter kill, high turbidity

19. Angling success good for small sunfish and rough fish

20. REMARKS AND RECOMMENDATIONS: Overabundance of rough fish(carp, bullheads,goldfish) with a limited population of game fish of desirable siz

Lake not condusive to management of desirable fish population on a sustained basis because of inadequate depth(periodic winter kill), flooding and fish contamination by McDonald Creek and large watershed runoff involving ponds and adjacent marsh, and probable predominance of rough fish population.

Drastic management recommendations include isolation of lake spillway from creek(flapper gate drop box, raise water 1') with fish barrier, deepening of lake to 10-12 ft. in 50% of area with 3:1 shoreline slopes followed by rehabilitation of lake and marsh(approx. 75 gals 5% emul. rotenone) in fall with restocking of fingerling lm bass and bluegill and yearling n. pike. Recommend partial snow removal during severe winters and aquatic weed control as needed using approved chemicals.

(Continue Remarks on Reverse Side)

21. Inspecting Biologist P.Vidal Date of Report 12/28/71

Man hours involved 6 Weather p. cl. warm Temp: Air 85 Water 77

Seechi disc= 6"(greenish brown)

Distribution: State, Public — District, Area, Central Offices
Others — District Office only

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISHERIES

FISH POPULATION ANALYSIS

(Condition Factor & Length-Frequency Summary)

COUNTY Cook

WATER (NAME) Hillcrest Lake

DATE OF COLLECTION July 7,1970

Species	½" Group	Number	Percent of Total	Weight	Condition Factor	Rating
lm bass	6.0	1				
	7.5	3				
	11.0	1				
		5				
bluegill	4.0	3				
	5.0	2				
		5				
green sunfish	1.5	10				
	2.0	6				
	3.0	5				
	3.5	5				
	4.0	8				
	4.5	6				
	5.0	2				
	6.0	1				
		33				
bl. crappie	7.0	6				
	10.5	1				
		7				
bl. bullhead	2.0	8				
	2.5	3				
	3.0	5				
	4.0	1				
	4.5	3				
	5.0	1				
	8.0	3				
	9.0	1				
	9.5	1				
		26				
carp	2.0	18				
	2.5	13				
	3.0	16				
	3.5	8				
	4.0	5				
	4.5	2				
	5.5	1				
	8.0	5				
	9.0	1				
	12.0	2				
	14.0	2				
	15.0	3				
		76				

Sampling Time Involved: 40 minutes Method of Collection: 230 V AC 3PH generator

Biologist P.Vidal, G. Cima Date of Report 12/28/71

COPIES TO: If State or Public — District, Area & Central Offices.
If Organization or Private — District Office only.

F.M. 12.0 (8-70)

(26664—10M—12-70) 2-o

cont.

ILLINOIS DEPARTMENT OF CONSERVATION
DIVISION OF FISHERIES

FISH POPULATION ANALYSIS

(Condition Factor & Length-Frequency Summary)

COUNTY Cook

WATER (NAME) Hillcrest Lake

DATE OF COLLECTION July 7,70

Species	½" Group	Number	Percent of Total	Weight	Condition Factor	Rating
goldfish	12.0	6				
	12.5	1				
	~~13.0~~	~~6~~				
	13.5	4				
		17				

Sampling Time Involved: 40 min. Method of Collection: 230 V AC 3PH gen.

Biologist p.Vidal. G. Cima Date of Report 12/28/71

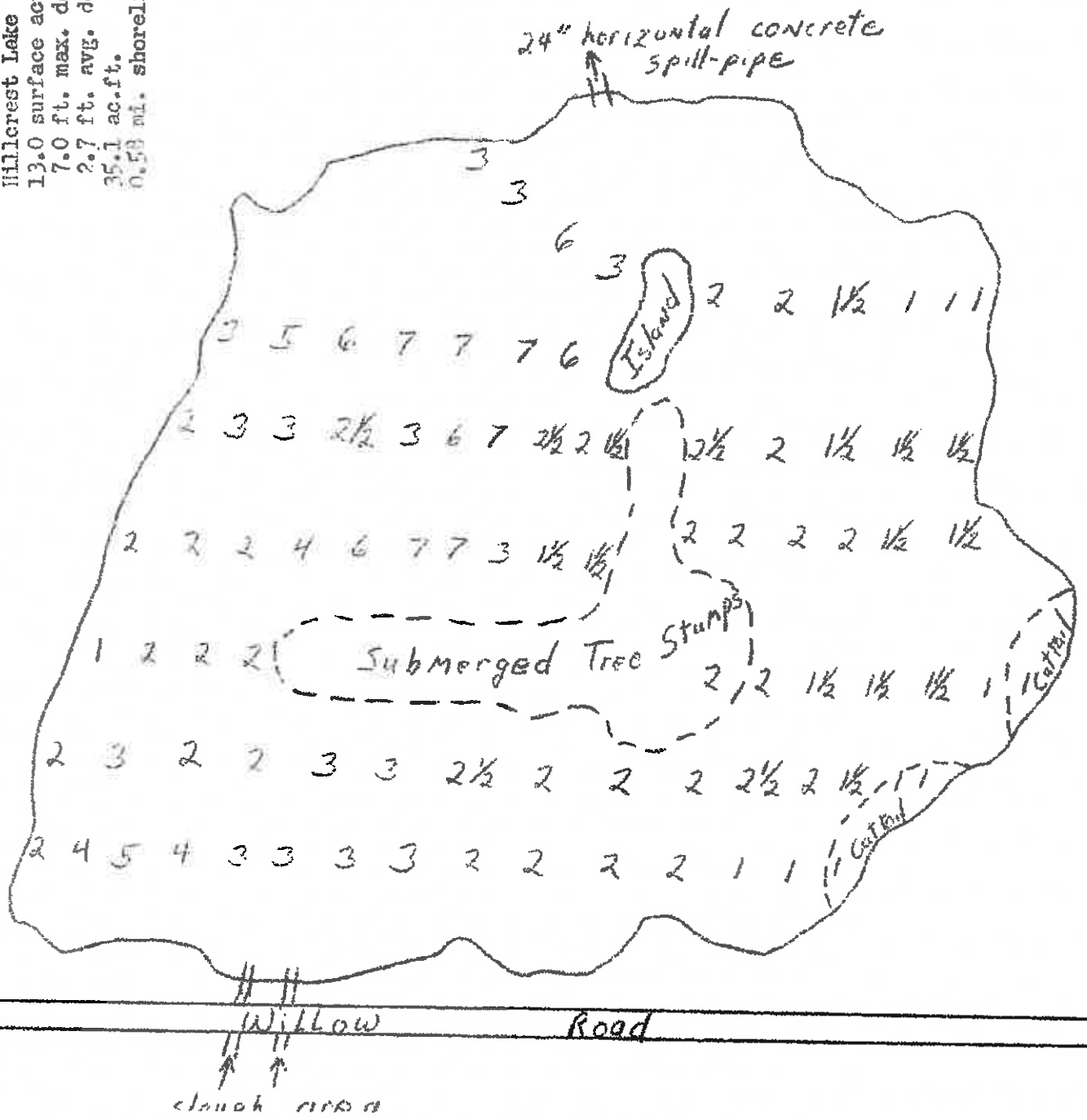
COPIES TO: If State or Public — District, Area & Central Offices.
If Organization or Private — District Office only.

F.M. 12.0 (8-70)

(26664—10M—12-70) 2-o

Cook County
T 42N. R 11E. Sec. NE¼ 22
Prospect Heights, Illinoi

Hillcrest Lake
13.0 surface acres
7.0 ft. max. depth
2.7 ft. avg. depth
35.1 ac.ft.
0.58 mi. shoreline



N
S
1" = 132 ft

P. Vidal

Impoundment Map

City of Prospect Heights

Hillcrest Lake Outlet Investigations

September 9, 2015

Globetrotters Engineering Corporation

Prospect Heights

Prospect Heights – Hillcrest Lake Outlet Investigations

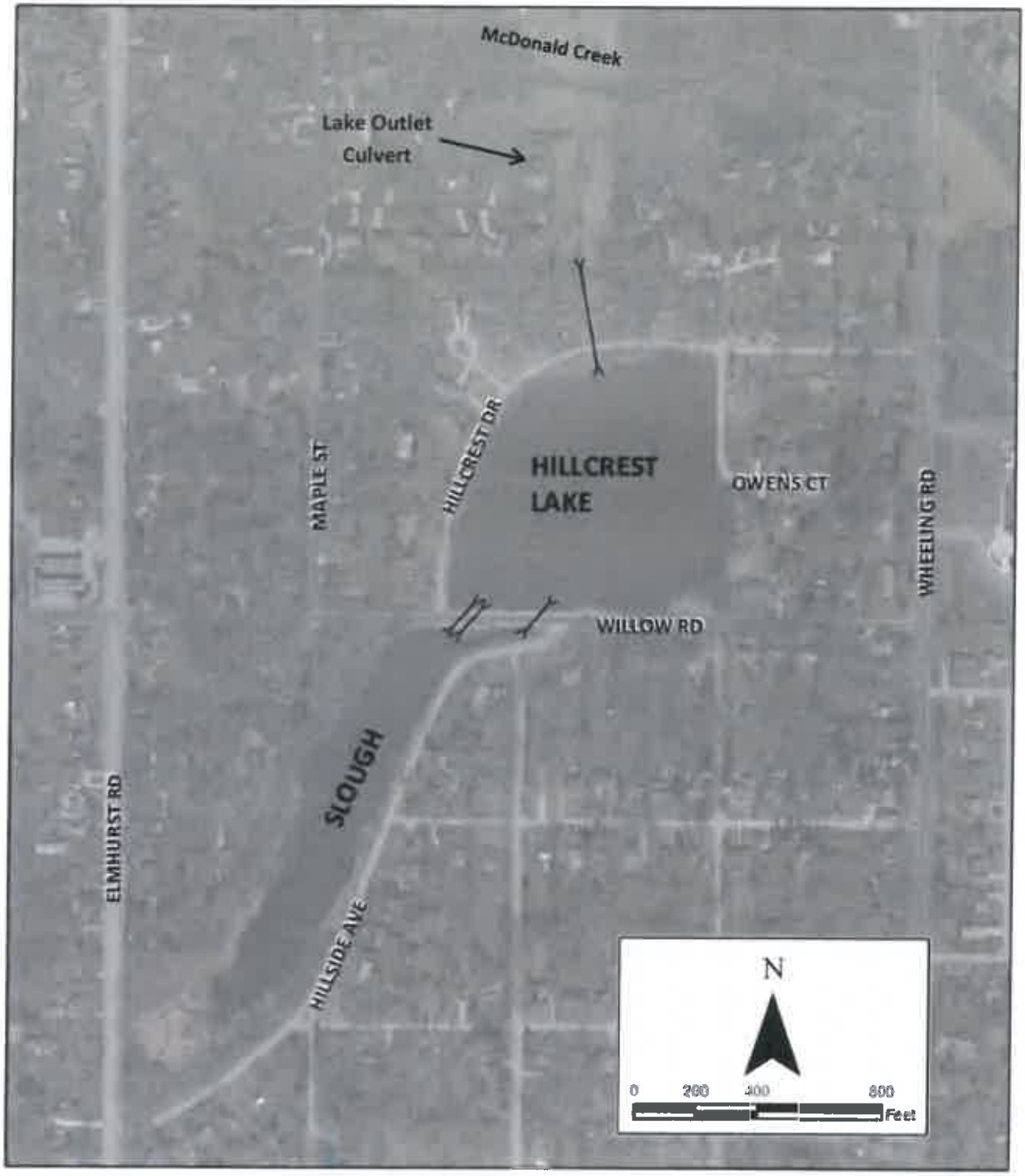
Task 1 Summary Memo - Hillcrest Lake Outlet Investigation and Permitting Summary

Background

Hillcrest Lake is a 14-acre lake located in Prospect Heights, Illinois. The lake outlets to McDonald Creek via an existing 24-inch diameter PVC stormwater culvert under Hillcrest Avenue. The lake is connected to a narrower body of water known as the Slough located south of Willow Road via several culverts under the road. The lake is typically shallow with water depths ranging from a few inches at the upstream end of the slough to approximately 3 feet in the deepest part of the lake based on a lake survey performed in 2014. Roads in the vicinity of the lake (Hillcrest Avenue, Owen Court and Willow Road) flood frequently. Globetrotters Engineering Corporation (GEC) performed a Feasibility Study in 2014 and Preliminary Design Report in 2015 under contract to MWRDGC. The study was focused on reducing the frequency of flooding of local roads.

The Prospect Heights Natural Resources Commission has raised concerns regarding the depth of the lake and has requested a study of the history of the outlet culvert and an analysis of possible options for increasing the depth in the lake by raising the normal water level. The analysis would build upon, but be separate from the MWRDGC study.

The assessment is limited to a weir type overflow structure set at an elevation above the existing outlet sewer elevation. Task 1 of this study includes investigating the current outlet from Hillcrest Lake to McDonald Creek and summarizing the permitting requirements for modifying the outlet.



Hillcrest Lake Area

Existing Outlet History

The history of the existing outlet from Hillcrest Lake to McDonald Creek was investigated. Data sources reviewed included available sewer atlases, drawings, survey and historical aerial photographs.

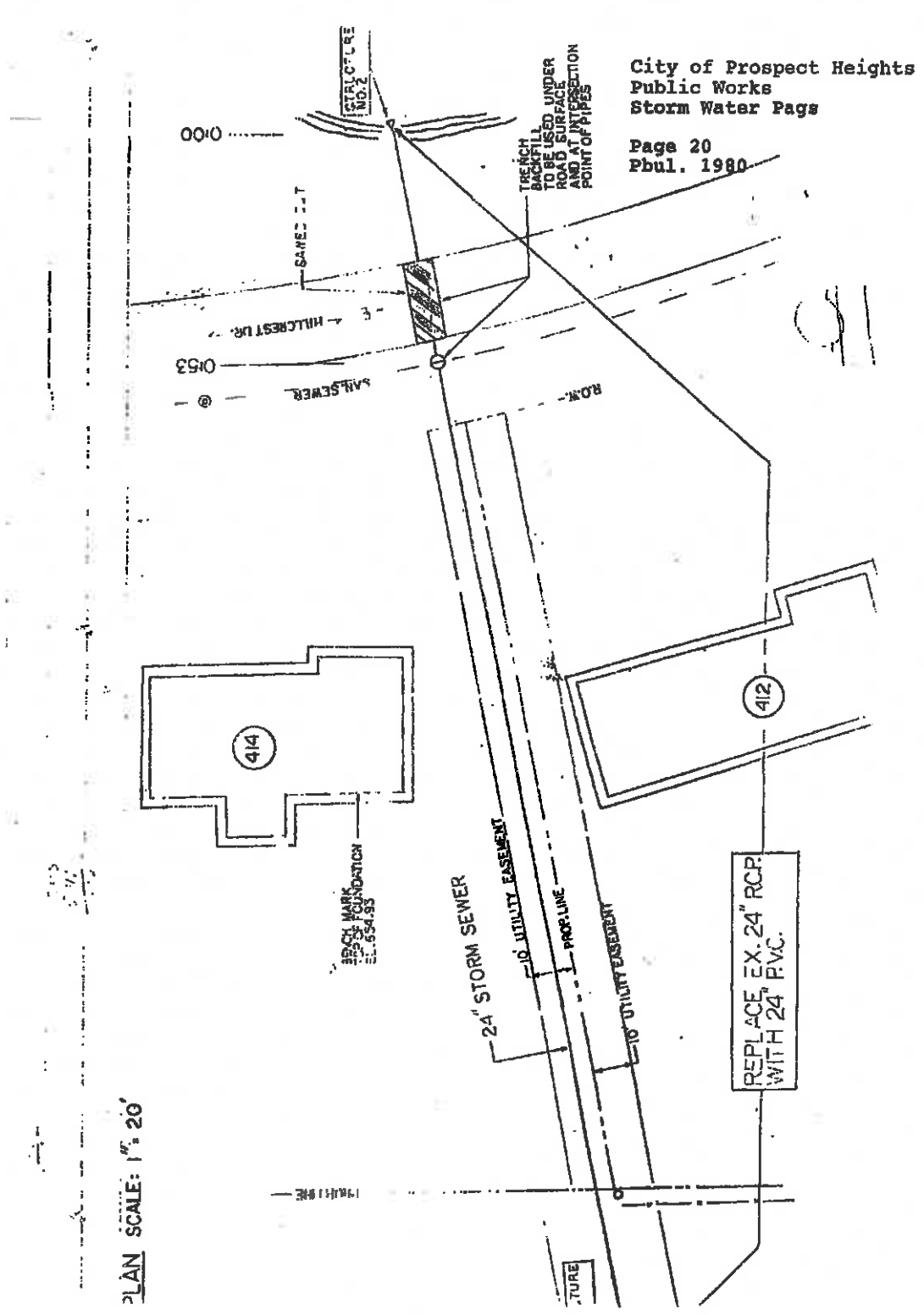
The existing outlet pipe is a 24-inch diameter PVC culvert. Based on survey performed by GEC for the MWRDGC study in 2014, the invert elevation (bottom of pipe) is 647.1 at the upstream (lake) end and 646.3 at the downstream end. The pipe is approximately 350 feet long. Water flows from the lake into the culvert and discharges into a ditch which leads to McDonald Creek.

The normal lake water level during dry weather is typically about 2 to 6 inches above the invert of the culvert. The inlet to the culvert is protected by several metal fence posts driven into the lake bed. These serve to prevent large debris from entering the culvert. Prospect Heights periodically inspects and removes debris accumulations.

Hillcrest Lake Outlet Photos

Based on discussions with Prospect Heights' staff during the MWRDGC study, as-built construction drawings of the outlet culvert were destroyed in a fire, so the exact date of the installation of the culvert is unknown.

Based on the Prospect Heights storm sewer utility atlas (see excerpt on the next page), a 24-inch pipe existed at this location since at least 1980. The atlas indicates a 24-inch diameter reinforced concrete pipe (RCP) at that location with a note that it is to be replaced by a 24-inch diameter PVC pipe. No information regarding elevation of the pipe is shown on the drawings.



Excerpt from Prospect Heights Storm Sewer Atlas

Historic aerial photographs were reviewed to attempt to identify the outlet pipe and / or significant lake level changes that would indicate a change in outlet conditions. As part of the MWRDGC study, an environmental report was prepared focused on the wetland and environmental conditions of soils that may be disturbed by construction. This environmental report included the assembly of historic aerial photographs of the lake and surrounding area. These are included in Appendix A. Aerial photos were obtained and reviewed for the years 2012, 2009, 2005, 1998, 1993, 1988, 1981, 1978, 1974, 1967, 1962, 1955, 1951, and 1938.

Based on a review of these drawings, the area was originally farmed. The earliest photographs appear to indicate a poorly drained wetland type area with no definitive outlet for the aerials from 1955 and earlier. It is likely that there were drain tiles in the farmed areas that may have conveyed some flow from the low area to McDonald Creek.

Hillcrest Drive first appears in the 1962 photograph. This photograph also appears to show a ditch line in its current location south of McDonald Creek. Although the photo quality is not sufficient to identify a portion of a pipe, it is likely that an outlet pipe existed in its present location under Hillcrest Drive. The lake and surrounding roads appear in their current configurations in the 1967 photographs. The lake edge outline appears relatively unchanged from 1967 to present. **This would support the concept that the lake level and outlet pipe elevation are relatively unchanged since 1967.**

Google Earth Pro images were also consulted. The white PVC outlet pipe is clearly visible in the June 2015 and October 2008 photos (see below). Earlier photography back to 1998 were reviewed, but the image quality and / or tree cover prevented clear identification of the outlet pipe.

Conclusions

Based on all the information reviewed, an outlet pipe from the lake under Hillcrest Drive appears to have been installed since at least 1967. The earliest pipe was likely a 24 inch diameter reinforced concrete pipe. The existing PVC outlet pipe was likely installed in the 1980s as a replacement to the original RCP pipe. There is clear evidence from the aerial photography that it existed in its current location in 2008. It is unlikely that the elevation of the PVC pipe has changed significantly since its installation.

Globetrotters' Engineering Corporation

Globetrotters Engineering Corporation

Permitting Requirements

Modifications to the Hillcrest Lake outlet would fall under the regulatory jurisdiction of two primary agencies – the Illinois Department of Natural Resources Office of Water Resources (IDNR) and the U.S. Army Corps of Engineers.

Corps of Engineers Permitting – The Corps of Engineers regulates activities related to wetlands and Waters of the U.S. under Section 10 of the River and Harbors Act of 1899 and Section 404 of the Clean Water Act. A wetlands and Waters of the U.S. Delineation was performed as part of the MWRDGC study. Hillcrest Lake is classified as Waters of the United States by the Corps of Engineers. Wetlands are present on the Slough, primarily on the west and south banks. No jurisdictional wetlands were identified on the lake.

Wetlands and Waters of the U.S. Delineation Map

For this type of project, the Corps of Engineers is primarily concerned with filling of Waters of the U.S. and impacts on wetlands. Modification of the outlet is a somewhat atypical project from a Corps of Engineers permitting perspective. Based on discussions with Corps of Engineers regulatory staff, the

project would likely not require a permit provided that it could be demonstrated that impacts to wetlands would be minimal. Considering the small change in lake level, it is expected that this would be the case. The largest concern would likely be potential impacts on wetlands upstream in the southern end of the slough. The Corps regulatory staff recommended that a request for a Letter of No Objection be submitted to the Corps of Engineers once a plan is developed. A copy of the Request for Letter of No Objection form is included as an attachment to this memo.

IDNR Permitting - IDNR regulates construction in the floodway (17 IAC 3708) and dam safety (17 IAC 3702). The primary focus of the IDNR regulations is to prevent adverse impacts to water levels upstream and downstream of projects and protect life and safety in the vicinity of dams. The summary below is based on review of the pertinent IDNR regulations and a telephone conversation with IDNR regulatory staff.

Floodway Construction Permitting - The outlet to Hillcrest Lake is within the regulatory floodway (see figure below). The upstream drainage area is greater than 1 square mile, therefore the lake falls under IDNR jurisdiction. Modifications for water quality of habitat for fish and wildlife is considered an appropriate use of the floodway (Section 3708.70.c.1 of the IDNR Regulations).

The Floodway Construction regulations generally require that any modifications to waterways not result in increases more than 0.1 feet for flood stages. In the case of culvert modification, all flood frequencies up to and including the 100-year event must be analyzed (Section 3708.70.d.2). Section 3708.70.d.4 addresses "... on-stream structure build for the purpose of backing up water in the stream during normal or flood flows, but not permitted as a dam...". This section would require no increase in flood stages for all flood events up to and including the 100-year frequency event. This requirement will tend to be more difficult to meet for smaller flood events (2- and 5-year frequency events) due to the limited head above the top of the weir. This may require increasing the length of the weir to pass more water.

Compensatory storage is required for any floodway storage impacts from the project per Section 3708.70.6 which states:

> "For all appropriate uses, compensatory storage shall be provided for any regulatory floodway storage lost due to the proposed work from the volume of fill or structures placed and the impact of any related flood control projects."

Preliminary discussions with IDNR staff confirmed that raising the normal water level will require that the project provide compensatory storage for floodway volume lost due to increase in normal water level. Since Hillcrest Lake and the Slough are both completely within the floodway and the surface area of the floodway is approximately 21 acres, compensatory storage volume would be at least 10.5 acre-feet for the six-inch rise. 10.5 acre-feet of compensatory storage will be on the order of 17,000 cubic yards of excavation. Volumes would be double for a 12-inch normal water level raise. This volume must be provided between the normal water level and the 100-year flood level. It is typically required to be provided within the watershed, preferable in the immediate vicinity of the project.

During the course of the MWRDGC flood study, compensatory storage was a significant challenge. The compensatory storage volume required for the road raise alternative was approximately 7,500 cubic yards of excavation. Due to the built out condition of the watershed, general topography and presence of wetlands in some areas, viable, cost effective locations for this volume were very limited. **This issue will likely present the greatest challenge to implementation of a normal water level increase from a regulatory perspective.**

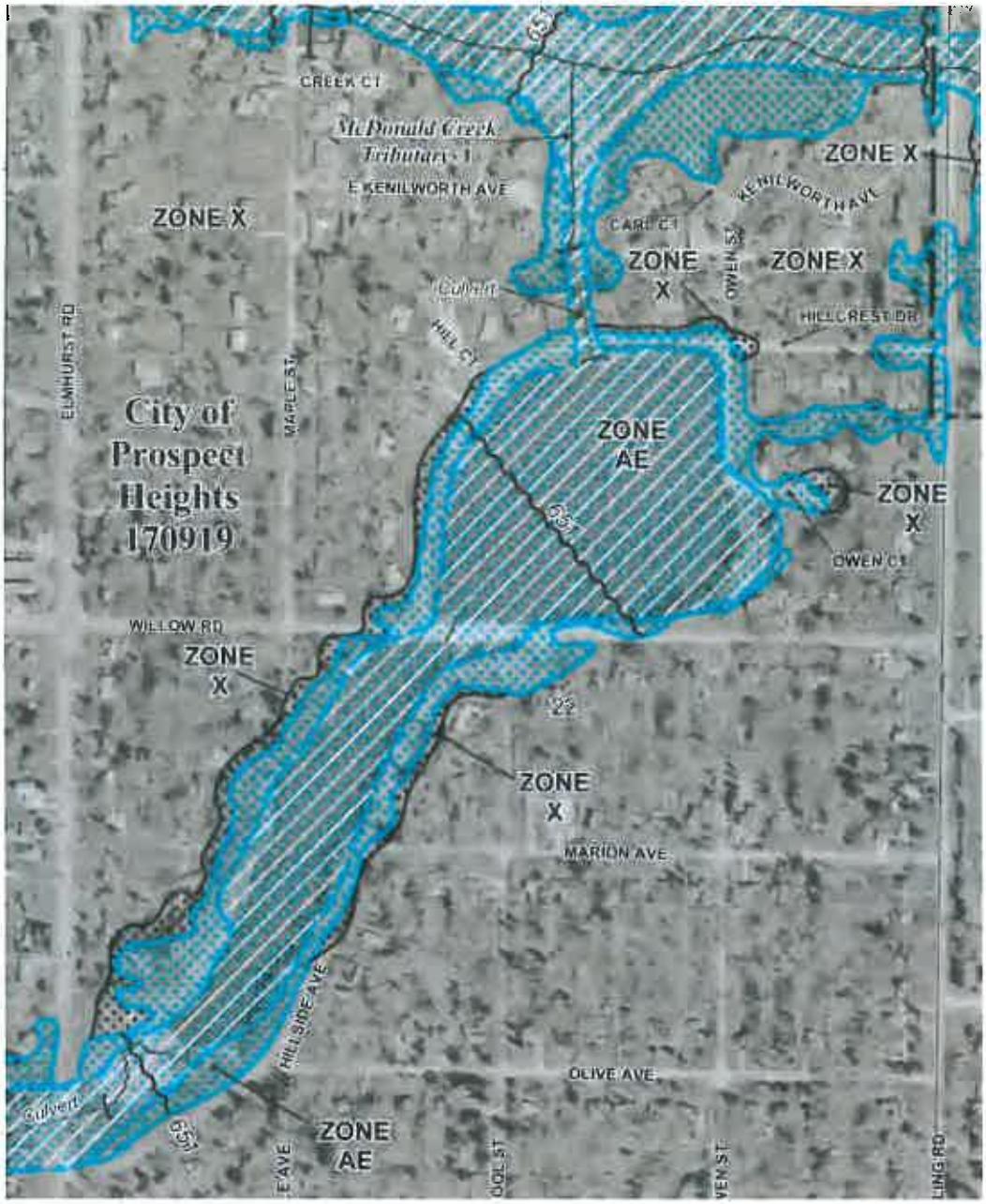
IDNR does not typically have a mechanism for granting permits for temporary measures outside of the normal permitting process for non-emergency measures.

Dam Safety Permitting - 17 IAC 3702 (Construction and Maintenance of Dams), defines a dam as:

> "All obstructions, walls, embankments, or barriers, together with their abutments and appurtenant works, if any, constructed for the purpose of storing or diverting water or creating a pool."

Under a strict interpretation of this regulation the proposed modification could be construed as meeting the definition of a dam. It would likely be classified as a Class III low hazard dam.

Initial discussion with IDNR regulatory staff indicated that a dam safety permit may be required depending on the details of the proposed structure. A structure that is directly connected to the existing culvert would be more likely to require a dam safety permit than a long weir structure built into the lake around the existing culvert. If it is connected directly to the culvert, then the structure, culvert and roadway might be all considered as a single integral dam structure. A final determination as to the need for a dam safety permit would require submittal of a Preliminary Design Report or more formal request including additional data that is beyond the current scope of work.



Hillcrest Lake Floodplain and Floodway Map

Other Potential Permit Requirements

MWRDGC – MWRDGC has regulatory authority regarding floodplains within Cook County. The MWRDGC Watershed Management Ordinance (WMO), although geared more towards regulating development may apply in this instance. An inquiry has been made to MWRDGC regarding the applicability of the WMO for this project. This memo will be updated once a response is received.

Many of the IDNR requirements regarding flood stages are identical, however, Section 602.9 of the WMO would require additional compensatory storage. This section states:

> "Compensatory storage shall be required for any fill, structure, or other material above grade in the regulatory floodplain that temporarily or permanently displaces floodplain storage volume. In addition, compensatory storage shall:
>
> A. Equal at least 1.1 times the volume of flood storage lost below the BFE;"

If the WMO is applied in a manner similar to the IDNR regulations, the compensatory storage required would increase due to the inclusion of the entire floodplain (as opposed to the IDNR floodway requirement) as well as the increased storage replacement ratio required.

City of Prospect Heights – Title 7, Chapter 1 (Flood Control Regulations) of the Prospect Heights City Code regulates floodway development. Many of the regulations mirror the requirements of IDNR. Again, the regulations are more usually applied to more typical land development type projects within the floodplain. However, if the regulations are applied to this project, additional compensatory storage may be required under Section 7-1-8-2: Paragraph L.b. which states in part:

> "Preservation Of Floodway Storage So As Not To Increase Downstream Flooding: Compensatory storage shall be provided for any regulatory floodway storage lost due to the proposed work from the volume of fill or structures placed and the impact of any related flood control projects. Compensatory storage for fill or structures shall be equal to at least one and five-tenths (1.5) times the volume of flood plain storage lost."

If this section is applicable to the proposed increase in normal water elevation, it would increase the volume of compensatory storage required by IDNR by 50%.

Other Considerations

For the proposed structure, the most difficult aspect of meeting a zero stage increase requirement will be for the lower, more frequent flood events (2-year, 5-year frequency events). Below is some of the pertinent elevation information related to the project:

Item	Elevation
Typical lake bottom	644.5 – 645.5 (varies with location
Outlet Culvert Invert	647.1
Normal Lake Level (dry weather)	647.5 (varies with precipitation)
Owen Court Road Pavement	648.5 – 649 (varies with location)
Willow Road Pavement	649.6 (low point, varies with location)
Lake Flood Elevations (Design H&H Model)	
2-year	650.0
5-year	650.6
10-year	651.1
50-year	651.7
100-year	651.9

The flood stage elevations are based on the hydraulic design models from the MWRDGC study. The design model is an unsteady state HECRAS model. Other elevations are based on surveys performed in 2014 and 2015 for the MWRDGC study.

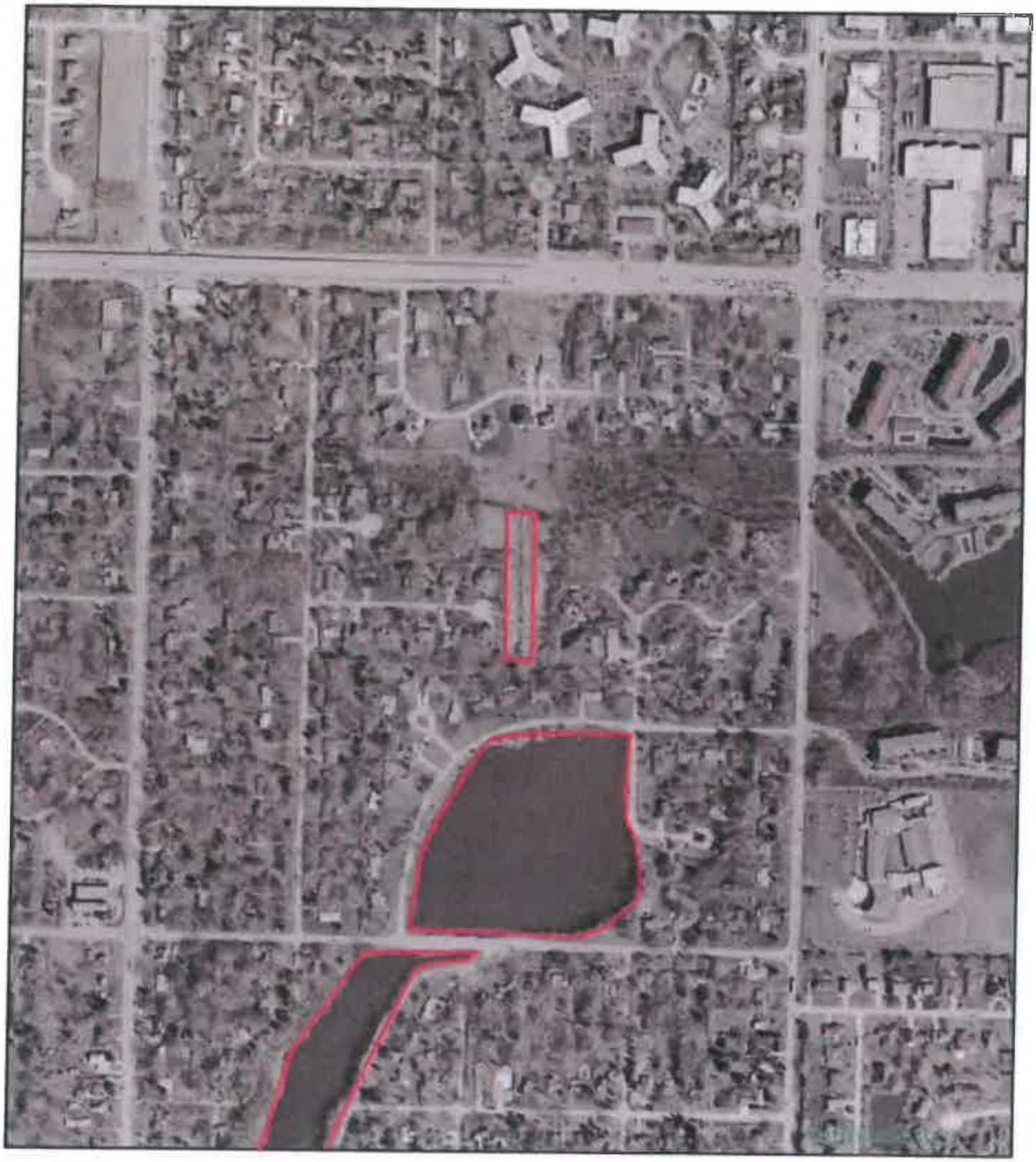
Based on this data, one can see that the normal lake level is approximately 12 inches above the low pavement elevation of Owen Court. This roadway floods for relatively minor flood events. Willow Road overtops for events slightly less than the 2-year event.

In order to prevent increases in flood stages, the length of the overflow weir at the outlet structure must convey sufficient flow to the culvert without increasing water levels. With overflow weirs set at elevation 647.6 and 648.1 (6 and 12 inches above the existing culvert respectively), one would expect to raise the normal water surface elevation to approximately 648.0 and 648.5. The 12-inch rise would increase the normal dry weather water surface to approximately the elevation of Owen Court. This highlights the potential concern for increased flooding of roadways with increases in normal water elevation.

The primary approach to minimizing flood stage increase will be to provide a sufficiently long weir to convey the same or greater flow over the top of the weir as is currently conveyed through the culvert. Hydraulic modeling will be performed and summarized in a separate document.

GEC - MWRD Willow Road n/a Prospect Heights, IL		2012 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	HIG

GEC - MWRD Willow Road n/a Prospect Heights, IL		2009 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	



GEC - MWRD Willow Road n/a Prospect Heights, IL		2005 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

GEC - MWRD Willow Road n/a Prospect Heights, IL		1998 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

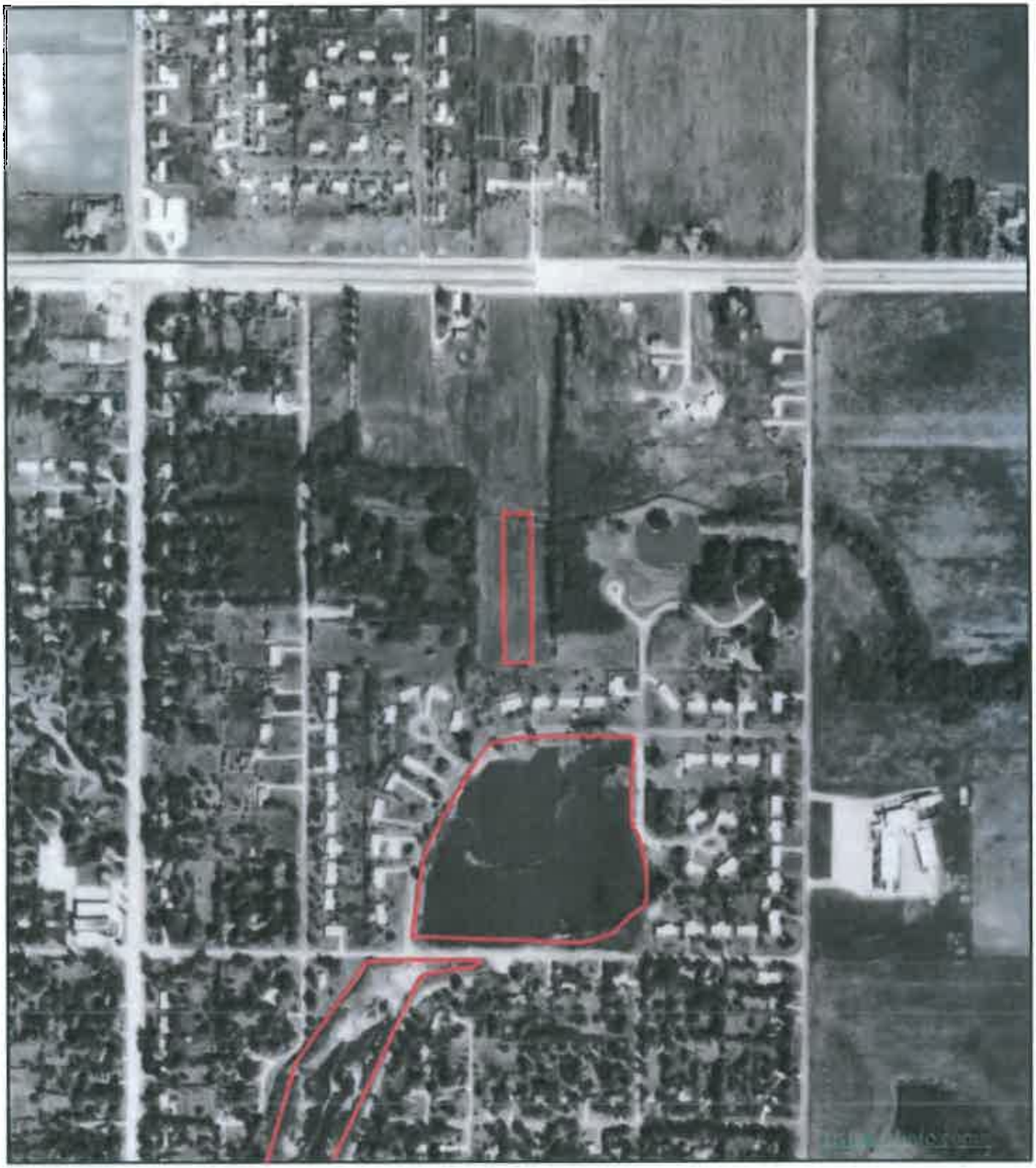
GEC - MWRD Willow Road n/a Prospect Heights, IL		1993 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

GEC - MWRD Willow Road n/a Prospect Heights, IL		1988 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

GEC - MWRD Willow Road n/a Prospect Heights, IL		1981 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	HIG

GEC - MWRD Willow Road n/a Prospect Heights, IL		1978 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

GEC - MWRD Willow Road n/a Prospect Heights, IL		1974 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

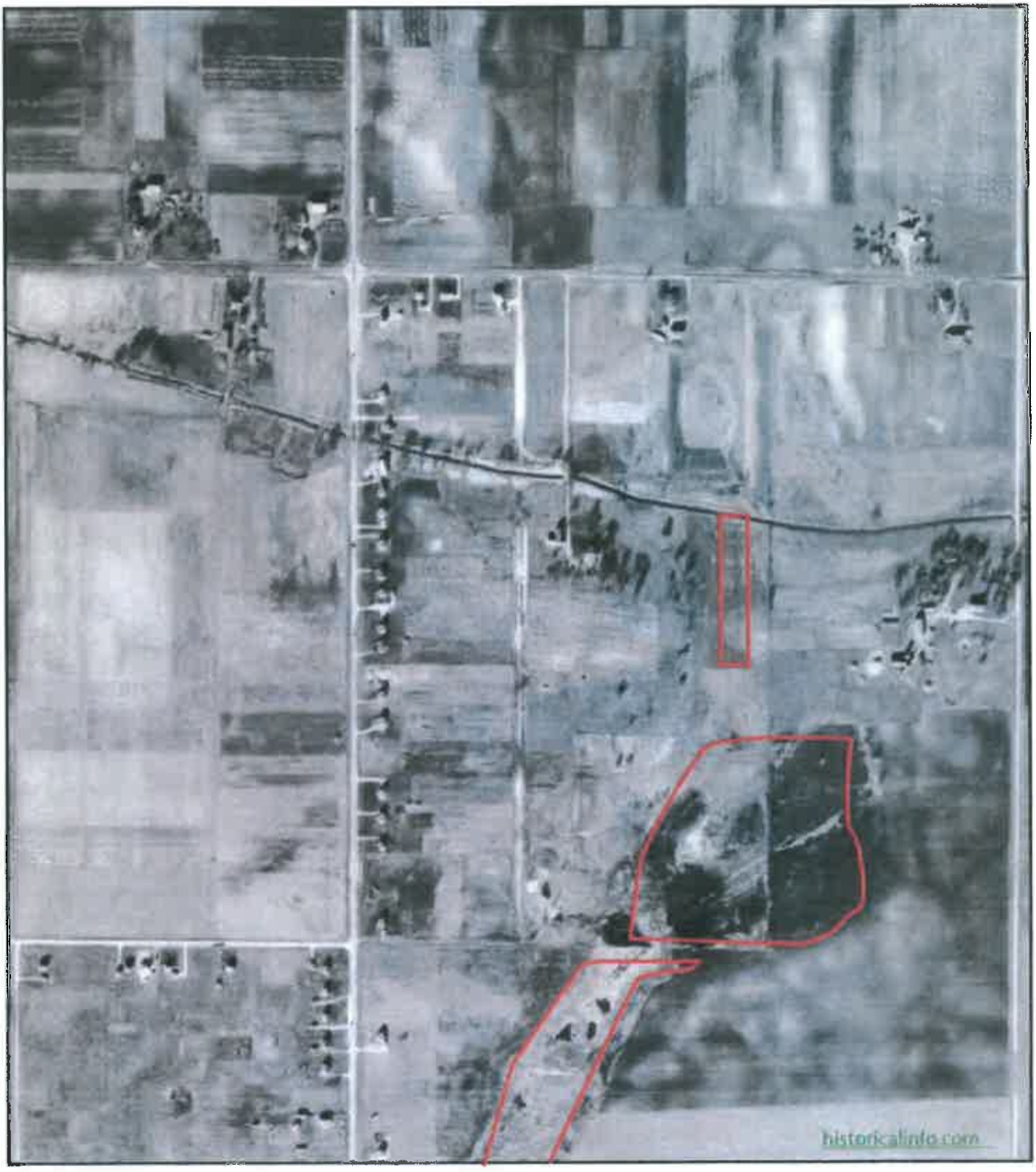


GEC - MWRD Willow Road n/a Prospect Heights, IL		1967 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

GEC - MWRD Willow Road n/a Prospect Heights, IL		1962 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

GEC - MWRD Willow Road n/a Prospect Heights, IL		1955 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	HIG

GEC - MWRD Willow Road n/a Prospect Heights, IL		1951 HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	



GEC - MWRD Willow Road n/a Prospect Heights, IL		1938 West HIG Project # 148709 Client Project # 20141010061 Approximate Scale 1:6000 (1"=500')	

US Army Corps of Engineers
Chicago District

US ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT
REQUEST FOR A LETTER OF NO OBJECTION

The proponent agency is CELRC-TS-R.

THIS FORM CAN BE USED WHEN YOU WANT CONFIRMATION THAT A PROJECT ON YOUR PROPERTY DOES NOT FALL UNDER THE REGULATORY REQUIREMENTS OF THE U.S. ARMY CORPS OF ENGINEERS *(USACE)*. PLEASE SUPPLY THE FOLLOWING INFORMATION AND SUPPORTING DOCUMENTS DESCRIBED BELOW. THIS FORM CAN BE FILLED OUT ONLINE AND THEN PRINTED. IT MUST BE SIGNED BY THE PROPERTY OWNER TO BE CONSIDERED A FORMAL REQUEST. SUBMITTING THIS REQUEST AUTHORIZES THE US ARMY CORPS OF ENGINEERS TO FIELD INSPECT THE PROPERTY SITE, IF NECESSARY, TO HELP IN THE DETERMINATION PROCESS. THE PRINTED FORM AND SUPPORTING DOCUMENTS SHOULD BE MAILED TO:

US ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT REGULATORY BRANCH 231 SOUTH LASALLE STREET, SUITE 1500 CHICAGO, ILLINOIS 60604 PHONE: 312.846.5530 FAX: 312.353.4110	ADDITIONALLY, YOU MAY EITHER CALL OUR BRANCH TELEPHONE AT 312.846.5530 OR VIEW OUR WEBSITE AT http://www.lrc.usace.army.mil/Portals/36/docs/Regulatory/newapps.pdf TO DETERMINE WHICH NUMBER AND PROJECT MANAGER HAS BEEN ASSIGNED TO YOUR REQUEST. PROJECT MANAGER CONTACT INFORMATION CAN BE FOUND HERE: http://www.lrc.usace.army.mil/Missions/Regulatory/ContactInfo.aspx. PLEASE CONTACT US IF YOU NEED ANY ASSISTANCE WITH FILLING OUT THIS FORM.

SECTION I - LOCATION AND INFORMATION ABOUT PROPERTY TO BE SUBJECT TO A LETTER OF NO OBJECTION

1. PROPERTY ADDRESS LOCATION				
2. CITY OR UNINCORPORATED NAME			3. STATE	4. ZIP CODE
5. COUNTY			6. TOWNSHIP NAME	
7. QUARTER	8. SECTION	9. TOWNSHIP	10. RANGE	11. PM
12a. LATITUDE IN DECIMAL DEGREES °NORTH			b. LONGITUDE IN DECIMAL DEGREES °WEST	
13. SIZE OF PROPERTY IN ACRES			14. TAX PIN	
15. PRIOR OR RELATED USACE PROJECT NUMBER			16. OTHER DESCRIPTIVE INFORMATION	

17. IS THE PROPERTY SUBJECT TO A CONSERVATION EASEMENT OR DEED RESTRICTION? ☐ YES *(specify below)* ☐ NO

IF YES, PLEASE EXPLAIN AND SUBMIT DETAILS OF THE PROJECT AREA.

18. WAS THE PROPERTY A SITE FOR MITIGATION PURSUANT TO A PROJECT PREVIOUSLY PERMITTED BY USACE? ☐ YES *(specify below)* ☐ NO

IF YES, PLEASE EXPLAIN AND SUBMIT DETAILS OF THE PROJECT AREA.

19. IS THE PROPERTY NEIGHBORING / ADJACENT TO / BORDERING A PROJECT PREVIOUSLY PERMITTED BY USACE?
☐ YES *(specify below)* ☐ NO

IF YES, PLEASE EXPLAIN AND SUBMIT THE NAME OF THE PROJECT, THE PERMITTEE'S NAME AND / OR ADDRESS, AND CORPS PERMIT NUMBER, IF AVAILABLE.

SECTION II - PROPERTY OWNER / REQUESTOR'S CONTACT INFORMATION		
1. PROPERTY OWNER NAME *(Last, First MI) (must be an individual)*		
2. PROPERTY OWNER COMPANY *(if applicable)*		
3. MAILING ADDRESS *(Street, Post Office Box, City, State and Zip Code)*		
4. DAYTIME TELEPHONE NUMBER	5. FAX NUMBER	6. E-MAIL ADDRESS
IF THE PERSON REQUESTING THE LETTER OF NO OBJECTION IS NOT THE PROPERTY OWNER, PLEASE ALSO SUPPLY THE REQUESTOR'S CONTACT INFORMATION HERE.		
7. REQUESTOR'S NAME *(Last, First MI)*		
8. COMPANY *(if applicable)*		
9. MAILING ADDRESS *(Street, Post Office Box, City, State and Zip Code)*		
10. DAYTIME TELEPHONE NUMBER	11. FAX NUMBER	12. E-MAIL ADDRESS
IF YOU HAVE ANY OF THE FOLLOWING INFORMATION, PLEASE INCLUDE IT WITH YOUR REQUEST: WETLAND DELINEATION, GRADING PLANS, RELEVANT MAPS, TOPOGRAPHIC SURVEY, AND SITE PHOTOGRAPHS. PLEASE IDENTIFY ON THE REQUIRED SITE MAP, PLAT OF SURVEY, OR IN A SEPARATE DRAWING: THE FOOTPRINT, LOCATION, AND TYPE OF POTENTIAL WORK. IT WILL ASSIST US IN DETERMINING IF NO PERMIT IS NECESSARY, AND WILL BE REFERENCED IN OUR RESPONSE LETTER.		
13. PLEASE DESCRIBE THE PROPOSED WORK ON THE PROPERTY		
SECTION III - SIGNATURE CERTIFICATION		
I HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THIS REQUEST FOR A LETTER OF NO OBJECTION IS ACCURATE AND COMPLETE.		
1a. DATE *(YYYYMMDD)*	b. SIGNATURE OF PROPERTY OWNER	

City of Prospect Heights

Hillcrest Lake Outlet Hydraulic Analysis

September 11, 2015

Globetrotters Engineering Corporation

Prospect Heights

Prospect Heights – Hillcrest Lake Outlet Investigations

Task 2 Summary Memo - Hydraulic Analysis

As part of the MWRDGC flood control study for Willow Road, Globetrotters Engineering Corporation (GEC) developed hydraulic and hydrologic models of McDonald Creek, focusing on Tributary A (including Hillcrest Lake and the Slough). These models were based on unsteady state HECRAS models that were developed by MWRDGC as part of the larger Des Plaines River watershed Detailed Watershed Plan (DWP). The updated model incorporated more detailed survey data and other modifications that are summarized in the MWRDGC Feasibility Study.

Note that the updated DWP models are different than the hydraulic models that would be used for IDNR regulatory purposes. Although the DWP models present a more current modeling approach, IDNR relies on the older models that were used for developing FEMA flood insurance studies for their permitting. IDNR does not currently accept unsteady state models for floodway permitting.

To assess the effects of the weir structures on flood elevations, the MWRDGC models were modified to include weirs at the Hillcrest Lake outlet. Weirs were set at elevation 647.6 and 648.1 (approximately a 0.5 and 1.0 foot raise above the existing outlet respectively) and included in the model. The 2, 10, 50 and 100-year events were simulated with the weirs in place and comparisons of flood stages with and without the weir were made to evaluate the impacts on flood stages upstream.

Below is some of the pertinent elevation information related to the analysis:

Item	Elevation
Typical lake bottom	644.5 – 645.5 (varies with location
Outlet Culvert Invert	647.1
Normal Lake Level (dry weather)	647.5 (varies with precipitation)
Owen Court Road Pavement	648.5 – 649 (varies with location)
Willow Road Pavement	649.6 (low point, varies with location)

Based on this data, one can see that the normal lake level is approximately 12 inches above the low pavement elevation of Owen Court. This roadway floods for relatively minor flood events.

Per IDNR Floodway regulations, the proposed weir must result in no increase in water levels during flood events. In order to not increase stages, the length of the overflow weir at the outlet structure must convey sufficient flow to the culvert without increasing water levels. With overflow weirs set at elevation 647.6 and 648.1(6 and 12 inches above the existing culvert respectively), one would expect to raise the normal water surface elevation to approximately 648.0 and 648.5. The 12-inch rise would increase the normal dry weather water surface to approximately the elevation of Owen Court. This highlights the potential concern for increased flooding of roadways with increases in normal water elevation.

The initial modeling assumed the use of a flashboard riser type system (see below). These commercially available systems attach directly to the end of the existing culvert. Flashboards are placed in slots in front of the culvert to allow for adjustment of water levels. This is a relatively simple, inexpensive approach to raising normal water levels. The primary drawback of this system is the limited width of the overflow section. This limits the volume of water that can flow over the flashboard weir, resulting in increased potential for flood stage increases. Debris and ice accumulation can also be a concern.

Flashboard Riser System (Approximately 3-foot weir length, Osceola Machine Works)

This approach was found to raise flood stages for all events and would not be permitted by IDNR. The results of the analysis are shown below.

Lake Flood Elevations – Flashboard Riser Type System

Event	Existing	With 6" High Weir	With 12" High Weir
2-year	650.0	650.4	651.6
5-year	650.6	651.0	651.6
10-year	651.1	651.3	651.6
50-year	651.7	651.8	651.9
100-year	651.9	651.9	652.1

The primary approach to minimizing flood stage increase was to provide a sufficiently long weir to convey the same or greater flow over the top of the weir as is currently conveyed through the culvert. This would require constructing a relatively long weir in the lake. These type structures are typically steel sheet pile or concrete wall type structures. Preliminary analysis was performed for both a 6-inch and 12-inch weirs for the critical 2-year flood event. For a 6-inch high weir (elevation 647.6), a weir length of 10 feet was required to maintain existing flood elevations. For a 12-inch high weir (elevation 648.1) a 16 foot long weir was required. Order of magnitude cost for this type of system would likely be in the $10 – $20,000 range.

If this option is selected, additional hydraulic modeling using the IDNR regulatory hydraulic model would be required. Note that this would only satisfy the permit requirement to not increase flood stages. Compensatory storage would continue to be required (where a typical flashboard riser system would have a width of 30 to 36 inches).

Conclusions and Recommendations

Based on the modeling conducted, a flashboard riser type system appears to provide inadequate weir length to avoid raising flood elevations. A 10 foot long weir would be required for a 6-inch high weir and a 16 foot long weir would be required for a 12-inch high weir. Since the work would be in the regulatory floodway, an IDNR permit will be required. This will require evaluation of the selected weir design using the IDNR / FEMA steady state model and providing the analysis to IDNR as part of the overall permit application. This may result in changes to the weir length.

Project Number: 15-0320

Project Name:
Hillcrest Lake and Slough Assessment

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Appendix Title:
Water Quality Report

Exhibit:
D

McHenry Analytical Water Laboratory, Inc.
A Crystal Lake Rd. McHenry, IL 60050-4314

Phone: (815) 344 4044 Fax: (815) 344 2208
Email: www.mchenrylab.com

LABORATORY RESULTS

Hey and Associates
Attn: Jeremy Husnik
26575 W. Commerce Drive, Suite 601
Volo IL, 60073

Date Received: 10/01/15 15:32
Report Date: 10/15/2015
NPDES/SI Permit Number:
Facility Number:
Facility Name:

Sample No: **15J0143-01** Collect Date: **10/01/15 11:00**
Client ID: **Hey and Associates** Site: **Hillcrest Lake**

Parameter	Results	Units	Analysis Date & Time		Qualifier	Analyst
Residue, Non-Filterable SM2540D - 1997						
Total Suspended Solids	48	mg/L	10/02/15	15:26		BA
Residue, Total Ignition at 550C by SM2540 E						
Total Volatile Suspended Solids	11.0	mg/L	10/02/15	15:26		BA
Total-P as P, by SM4500 F - 1999						
Phosphate, Total as P	0.103	mg/L	10/06/15	13:46		PJ
Chloride by LACHAT 10-117-07-1-A						
Chloride	139	mg/L	10/07/15	14:22		PJ
Nitrogen Ammonia, SM4500-NH3 G - 1997						
Nitrogen Ammonia by SM4500NH3	0.07	mg/L	10/09/15	15:49		PJ

Sample No: **15J0143-02** Collect Date: **10/01/15 11:00**
Client ID: **Hey and Associates** Site: **Slough**

Parameter	Results	Units	Analysis Date & Time		Qualifier	Analyst
Residue, Non-Filterable SM2540D - 1997						
Total Suspended Solids	7.0	mg/L	10/02/15	15:26		BA
Residue, Total Ignition at 550C by SM2540 E						
Total Volatile Suspended Solids	3.0	mg/L	10/02/15	15:26		BA
Total-P as P, by SM4500 F - 1999						
Phosphate, Total as P	0.140	mg/L	10/06/15	13:49		PJ
Chloride by LACHAT 10-117-07-1-A						
Chloride	211	mg/L	10/07/15	14:24		PJ

** Results contained in this report relate only to the items tested or to the samples received by the Laboratory
** This report shall not be reproduced, except in full, without the written approval of McHenry Analytical Laboratories

McHenry Analytical Laboratories participates in the following accreditation/certification and proficiency programs.
Endorsment by the Federal or State Government or their agencies is not implied.
State of Wisconsin Bacteriological Analysis in Drinking Water Certified Lab DNR No. 105-10102
State of Illinois Accreditation of Environmental Laboratories, **NELAP/TNI accredited Laboratory No. 100279**
State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17556
McHenry Analytical Laboratories, 4314-A Crystal Lake Road, McHenry, IL 60050.

Certified by: Mark Mueller

Mark Mueller, Project Manager

McHenry Analytical Water Laboratory, Inc.
A Crystal Lake Rd. McHenry, IL 60050-4314

Phone: (815) 344 4044 Fax: (815) 344 2208
Email: www.mchenrylab.com

Sample No: **15J0143-02**	Collect Date: **10/01/15 11:00**
Client ID: **Hey and Associates**	Site: **Slough**

Parameter	Results	Units	Analysis Date & Time		Qualifier	Analyst
Nitrogen Ammonia, SM4500-NH3 G - 1997						
Nitrogen Ammonia by SM4500NH3	0.22	mg/L	10/09/15	15:52		PJ

QUALIFIERS

E MS and or MSD associated with analytical batch failed to meet acceptance criteria due to matrix effects.

** Results contained in this report relate only to the items tested or to the samples received by the Laboratory
** This report shall not be reproduced, except in full, without the written approval of McHenry Analytical Laboratories

McHenry Analytical Laboratories participates in the following accreditation/certification and proficiency programs.
Endorsment by the Federal or State Government or their agencies is not implied.
State of Wisconsin Bacteriological Analysis in Drinking Water Certified Lab DNR No. 105-10102
State of Illinois Accreditation of Environmental Laboratories, **NELAP/TNI accredited Laboratory No. 100279**
State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17556
McHenry Analytical Laboratories, 4314-A Crystal Lake Road, McHenry, IL 60050.

Certified by: Mark Mueller

Mark Mueller, Project Manager

McHenry
Analytical Water Laboratory, Inc.

4314-A CRYSTAL LAKE ROAD
McHENRY ILLINOIS 60050
815-344-4044 • Fax 815-344-2208
www.mchenrylab.com

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

(1) CLIENT: Hey & Associates, Inc.

ADDRESS:

CITY / STATE / ZIP: Volo IL 60073

CONTACT PERSON: Jeremy Heinz

PROJECT NUMBER: 15-0320

P.O. NUMBER: 15-0320

PH NUMBER: 847-740-0888

FAX NUMBER: 847-740-2788

BY RELINQUISHING SAMPLES TO THE LAB THE CLIENT ACCEPTS THE TERMS OF THE LAB'S PRICE SCHEDULE IN THE EXCHANGE OF THIS FORM

SAMPLER (PLEASE PRINT): Nick Spitzmesser

SAMPLER'S SIGNATURE:

MEANS SHIPPED: Delivered

DATE SHIPPED: 10/6/15

MATRIX TYPES
SW- SURFACE WATER
WW- WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WAST-SLUDGE
HAS-SOLID / SOIL
OTHER

Preservation Key
(1) H_2SO_4 (2) HCl (3) HNO_3
(4) NaOH (5) $Na_2S_2O_3$ (6) None Required

(3) ANALYSIS REQUESTED

(2) SAMPLING LOCATION	PRESERV TYPE ADDED	PRESERV UPON RECEIPT YES / NO	LAB TEMP	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	Nitrate	Ammonia	Chlorides	TSS	TDS	LABORATORY LOC NUMBER
Hillcrest Lake	6/1	N/Y	58	10/6/15	11:00am	X		SW	2	X	X	X	X	X	15J0143-01
Slough	6/1	N/Y	48	10/6/15	1:00pm	X		SW	2	X	X	X	X	X	15J0143-02

(4) TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
RUSH IS SUBJECT TO MCHENRY ANALYTICAL LABS APPROVAL AND SURCHARGES

RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE

E-MAIL ADDRESS:

DATE RESULTS NEEDED

(5) RELINQUISHED BY (SIGNATURE) DATE 10/7 TIME 3:00pm

RELINQUISHED BY (SIGNATURE) DATE 10/7/15 TIME 3:22pm

RECEIVED BY (SIGNATURE) DATE 10/7/15 TIME 1532

THE SAMPLE TEMPERATURE MAY BE CHECKED AND NOTED BY THE LAB BY INSERTING ONE OF THE VIALS TOUCH TAB FOR NOTIFY YOU BEFORE PROCEEDING WITH ANALYSIS IF THE SAMPLE TEMPERATURE IS OUTSIDE OF THE 0°C TO 6°C BY YOU INITIALING THE BOX YOU GIVE THE LAB PERMISSION TO PROCEED WITH ANALYTICAL TESTING REGARDLESS OF THE SAMPLE TEMPERATURE

(6a) FOR MCHENRY ANALYTICAL

INCOMPLETE DOCUMENTATION	Y OR (N)
SAMPLES RECIEVED IN PROPER CONTAINERS	(Y) OR N
CHILL PROCESS STARTED PRIOR TO RECEIPT	(Y) OR N
SAMPLE(S) RECEIVED ON ICE (WET) (BLUE)	(Y) OR N
BOTTLES RECEIVED IN GOOD CONDITION	(Y) OR N
BOTTLES FILLED WITH ADEQUATE VOLUME	(Y) OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S)	(Y) OR N

(6b) FOR SUBCONTRACTORS

INCOMPLETE DOCUMENTATION	Y OR N
SAMPLES RECIEVED IN PROPER CONTAINERS	Y OR N
CHILL PROCESS STARTED PRIOR TO RECEIPT	Y OR N
SAMPLE(S) RECEIVED ON ICE (WET) (BLUE)	Y OR N
BOTTLES RECEIVED IN GOOD CONDITION	Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME	Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S)	Y OR N

ww landscape 1-05

11B

DRAFT

Prospect Heights – Hillcrest Lake Outlet Investigations – Phase 2

Background

Hillcrest Lake is a 12-acre lake located in Prospect Heights, Illinois. The lake outlets to McDonald Creek via an existing 24-inch diameter PVC sewer under Hillcrest Avenue. The lake is typically shallow with water depths ranging from a few inches to approximately 3 feet based on a lake survey performed in 2014. Roads in the vicinity of the lake (Hillcrest Avenue, Owen Court and Willow Road) flood frequently. Globetrotters Engineering Corporation (GEC) performed a Feasibility Study and Preliminary Design Report in 2014 and 2015 under contract to MWRDGC. The study was focused on reducing the frequency of flooding.

The Prospect Heights Natural Resources Commission has raised concerns regarding the depth of the lake and has requested a study of the history of the outlet culvert and an analysis of possible options for increasing the depth in the lake by raising the normal water level. The analysis would build upon, but be separate from the MWRDGC study.

In September 2015, GEC performed two tasks associated with the work. Task 1 focused on documenting the history of the existing lake outlet culvert and identifying permitting requirements. Task 2 was a preliminary hydraulic analysis of potential options for raising the lake normal water level using the MWRDGC study hydraulic model.

Based on these initial tasks, Prospect Heights has requested a scope of services for additional activities leading to a design for construction.

Task 3 –Permitting and Regulatory Requirements

Since the work is within the regulatory floodway, an IDNR floodway construction permit would be required. An IDNR Dam Safety permit may also be required. Concurrence from the Corps of Engineers that no permit would be required is recommended (request for Letter of No Objection).

For the IDNR Floodway construction permit, the regulatory hydraulic & hydrologic models are different than the model used in the preliminary design (task 2 from the previous scope of work). Once a final target normal water surface elevation is identified by Prospect Heights, GEC will analyze the plan using the enhanced regulatory model for the 2, 5, 10, 50, 100 and 500 year events to verify that it will not increase flood stages upstream. The model will finalize the weir length required to meet permitting requirements. The road raise option from the MWRDGC study will not be assumed. The product will be a summary memo of the regulatory hydraulic analysis.

Following the final hydraulic analysis, a floodway construction permit application will be prepared. This will include a pre-application meeting with IDNR regulatory staff, completion of the permit application

and preparation of all associated documentation. As noted in the memo documenting tasks 1 and 2 completed in September 2015, compensatory storage is likely to be required.

The analysis will identify the volume of compensatory storage required, however, identification and design of compensatory storage is not included in the current scope of work. Additional analysis to re-delineate the regulatory floodway could be performed in an effort to reduce IDNR required compensatory storage. This is not included in the current fee estimate. This analysis can be added if requested.

A Corps of Engineers Request for Letter of No Objection form will be completed and sent to the Corps of Engineers Regulatory Branch. It is expected that there will be no Corps of Engineers permitting required based on previous discussions. Preparation of a Corps of Engineers permit application is not included in the scope of services.

An MWRDGC stormwater management permit is likely to be required based on initial discussion with MWRDGC permit staff, particularly if the weir is implemented separately from the road raise project. An MWRDGC permit will be prepared and submitted. One meeting with MWRDGC staff is included. It is anticipated that the backup documentation submitted as part of the IDNR permit application will be sufficient.

If an IDNR dam construction and maintenance permit if required, additional analysis and document preparation will be required. This would include preparation of a Preliminary Design Report per IDNR requirements. This is not currently included in this scope of services.

Permit application fees are not included in the current fee estimate. These can be added if requested.

Task 4 – Weir Final Design and Construction Documents – Optional Item – Not Included in Current Fee Estimate

Once the weir length is finalized based on the Task 3 hydraulic analysis, a final design of the weir will be developed for construction. It is anticipated that the weir will be approximately 10 – 20 feet long. Either a metric sheeting type system or a pile and lagging system will be used. Prospect Heights engineering staff will be consulted at the start of design to identify the preferred approach. The top of the weir wall will be approximately 2 feet above the existing lake bottom. The weir would tie back to existing ground. Riprap would be placed on the downstream end of the weir to reduce potential erosion and scouring.

Drawings will include a general site plan, layout and typical section and details. Technical specifications and a construction cost estimate will be developed.

Prospect Heights - Hilcrest Lake Outlet - Phase 2

		Globetrotters Hours				
	Task	**PM**	**Civil**	**QA Review Staff**	**Total GEC Hours**	**GEC Labor Cost**
					-	$ -
3	**Permitting Analysis**				-	$ -
	Regulatory H&H Modeling		24	2	26	$ 3,045.00
	IDNR Pre-App meeting	4	4		8	$ 1,274.38
	IDNR Permit prep & Submittal	8	16	1	25	$ 3,607.25
	Corps LONO request Prep & Submittal	2			2	$ 405.19
	MWRDGC Pre-app meeting	2	2		4	$ 637.19
	MWRDGC Permit prep & Submittal	2	4		6	$ 869.19
	Permit follow up & Comment response	8	12		20	$ 3,012.75
	Permit Application Fees	Not Included			-	
	Compensatory Storage Basin Design	Not Included			-	
	Floodway Re-delineation	Not Included			-	
	IDNR Dam Safety Permit	Not Included			-	
					-	$ -
4	**Weir Final Design and Construction Documents**	Not Included			-	
					-	$ -
					-	$ -
					-	$ -
					-	$ -
	Subtotal	$ 26.00	$ 62.00	$ 3.00	**91**	**$ 12,850.94**
	Direct Labor	$ 1,816.36	$ 2,480.00	$ 135.00	**$ 4,431.36**	
	Unit Price	$ 202.59	$ 116.00	$ 130.50	$ 141.22	
	Subtotal	$ 5,267.44	$ 7,192.00	$ 391.50	$ 12,850.94	**$ 12,850.94**

October 19, 2015

Globetrotters® Engineering Corporation

12A

To: Mayor and City Council

From: Joe Wade, City Administrator

Subject: Request from Ruffolo Fresh Market, Palwaukee Plaza, for Consideration of Sales Tax Sharing Agreement with City of Prospect Heights

Purpose: Ruffolo Fresh Market is in the process of negotiating lease terms with the ownership of Palwaukee Plaza for the space formerly occupied by the former Savalot Grocery Store. Louie Ruffolo, the owner of the Market has advised the City that a sales tax sharing agreement is necessary for him to finalize the lease agreement and begin operating the store. The grocery store is seeking a sharing agreement for five years, with terms of 50 per cent of municipal sales tax share for the first year, 40 per cent share for the second year, 30 per cent shared for the third year, twenty per cent shared for the second year and 10 per cent shared for the fifth and final year. The terms reflect the desire to use the sales tax assistance as the business develops, but not as an ongoing, structural assistance mechanism.

If lease and sales tax sharing agreements can be enacted, Mr. Ruffolo anticipates opening the store before Thanksgiving.

Background: Mr. Ruffalo is a veteran in the groceries business, having worked for Caputo's for twenty-five years. Presently, he owns and manages Ruffalo Fresh Market, in Rolling Meadows. The business plan for the Prospect Heights location is to provide a full-service grocery store, with a butcher and meat counter, deli, produce, and standard grocery shelf items.

Projected gross revenue for the store is projected from $3,650,000-$4,750,000, with associated municipal sales tax of $36,000-$47,000.

City Resolution R-11-28 "A Resolution Establishing a Sales Tax Incentive Program for New or Expanded Business" provides authorization for applications of this nature. A copy of this resolution is attached with the Market's letter of request.

Ruffolo Fresh Market

October 13, 2015

Nick Helmer
8 N Elmhurst Road
Prospect Heights, Illinois 60070

Re: Resolution R-11-28
Palwaukee Plaza
610 N Milwaukee Road
Prospect Heights, IL 60070

Dear Mr. Helmer,

First, Thank you for your generous time along with your colleagues to discuss the opportunity at hand.

As discussed, **Ruffolo Fresh Market,** has engaged in a lease for the subject property, located within Palwaukee Plaza. The contingencies are subject to Prospect Heights granting all necessary permits and applications as a new full service grocery store. in addition to participating in the " Sales Tax Incentive" program (Resolution R-11-28).

We anticipate the store projected gross revenue to range from $3,650,000.00 - $4,750,000.00 annually. This is based on prior tenants similar use and market knowledge.

Lastly, we propose the following structure:

Five (5) Year program

Year 1	Ruffolo Fresh Market 50% / Prospect Heights 50%
Year 2	Ruffolo Fresh Market 40% / Prospect Heights 60%
Year 3	Ruffolo Fresh Market 30% / Prospect Heights 70%
Year 4	Ruffolo Fresh Market 20% / Prospect Heights 80%
Year 5	Ruffolo Fresh Market 10% / Prospect Heights 90%

We hope this arrangement can be heard at the councils earliest convenience, possibly October 26, 2015.

Thank you in advance,

Louie Ruffolo
Founder/Owner

CC:
Joe Wade
Steve Skiber
Chad Arthur
Jim Tsevis
Ted Arvanitis

RESOLUTION NO. R-11-28

A Resolution Establishing a Sales Tax Incentive Program for New or Expanded Businesses

WHEREAS, the Mayor and City Council find that the promotion of retail sales and the expansion of the commercial tax base is in the best interest of the residents of the City of Prospect Heights;

WHEREAS, in order to promote retail businesses, the Mayor and City Council find it is necessary, convenient and in the public interest to make it of record that they support the rebate of sales taxes to new retail businesses or existing businesses which invest in their Prospect Heights business and substantially expand operations here;

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF PROSPECT HEIGHTS, ILLINOIS as follows:

Section 1: **Findings.** The City Council hereby finds and determines that the facts set forth in the preamble hereto are true and correct and hereby adopts same as part of this Resolution.

Section 2: **Sales Tax Incentive Program**. That there is hereby established the Prospect Heights Sales Tax Incentive Program. The program shall commence December 1, 2011 and continue until November 30, 2012.

Section 3: **Eligibility**. The program is available to all new businesses desiring to open within the City of Prospect Heights during the program term. The program is also available to existing businesses desiring to expand by a factor of two either the size of their physical store or their sales operations as measured in dollars of sales per calendar year.

Section 4: **Application**. Businesses desiring to participate in the program must compete an application on a form prepared by the City Administrator's office. In the application, the applicant must (a) describe the nature of the business and whether it is a new or existing business; (b) explain in detail the amount of the rebate requested and the proposed use of the rebated funds; (c) certify that applicant can comply with all applicable law including the Prevailing Wage Act, as applicable; (d) if applicant is an existing business, applicant shall explain in detail the nature of the expansion and whether it is a physical or an operational expansion; (e) if the expansion is a physical expansion, provide the existing size of the retail store and the proposed size; (f) if the expansion is an operational expansion, provide (i) the amount of current annual retail sales, (ii) the forecasted amount of annual retail sales resulting from the expansion, (iii) the method of accomplishing the expansion whether by addition of employees or the investment in new sales systems or otherwise.

Section 5: **Action on Applications.** The Mayor and City administrator shall review all applications for compliance with the above criteria. They shall work with the applicant to reach a proposed sales tax incentive agreement subject to approval by the City Council. Upon recommendation by the Mayor, the City Council may approve an application and sales tax incentive agreement as it determines compliance with the above criteria in its sole discretion.

Section 6: **Compliance with this Resolution.** Any deviation from the terms of this resolution shall not affect the validity of any sales tax incentive agreement now existing or which may be entered into in the future. Nothing in this resolution shall require the City to enter into a sales tax incentive agreement with any person or firm.

PASSED AND APPROVED this 24th day of October, 2011.

Nicholas J. Helmer,
MAYOR

ATTEST:

CITY CLERK

AYES: Aldermen Higgins, Ludvigsen, Mendez, Styler, Williamson

NAYS: None

ABSENT: None

CITY OF PROSPECT HEIGHTS CORPORATE SEAL Incorporated A.D. 1976 ILLINOIS

City of Prospect Heights

Department of Engineering
8 North Elmhurst Road, Prospect Heights Illinois, 60070-6070
Office:847/398-6070 x 210-FAX: 847/590-1854
www.prospect-heights.il.us

12 B

October 20, 2015

Mr. Joe Wade, City Administrator
City of Prospect Heights
8 N. Elmhurst Road
Prospect Heights, IL 60070

Re: Quincy Park Condominium Association –
SSA#5 – Storm Sewer Drainage Improvement along West Property Line
Request for Additional Funding

Dear Mr. Wade:

Enclosed is a letter prepared by Ament Design, dated October 18, 2015. Ament Design was retained by Quincy Park Association to design and provide construction engineering management services throughout the project. SSA#5 funds were used for the contractor construction costs, which were approved at a prior Council meeting early this year.

Ament's letter states the reasons for the contract overage and they are requesting payment for the overage to the contractor, Canyon Contracting Inc., in the amount of $18,516.00. An engineer from Ament Design will be present at the Council meeting to answer questions. Stephanie Hannon and I will also be in attendance at the Council meeting for this item.

Sincerely,

Steven D. Berecz

Steven D. Berecz, P.E.
City Engineer
sberecz@prospect-heights.org

Ament
DESIGN
Civil Engineering

October 18, 2105

City of Prospect Heights
Steve Berecz, PE
8 N. Elmhurst Road
Prospect Heights, IL. 60070

Re: Quincy Park West Drainage Improvements

Mr Berecz,
Due to the record rains encountered during the month of June and start of July we experienced delays and project overages well beyond anticipated. Due to the wet weather any movement on site caused excessive rutting and grass damage to the area's surrounding the project. The project is located in a densely populated condominium association and the safety of the residents and accessibility was of utmost importance. Despite the wet conditions the sidewalk and trench drains were installed in a timely manner but left major trip hazards just off the sidewalk in the lawns.

Canyon contracting also replaced approximately 420 square feet of sidewalk where it was most logical to go to a sidewalk "joint" rather than cut in the middle of a panel, where a panel had heaved and was an obvious trip hazard, or where additional sidewalk cracked or lifted once the specified sidewalk was removed.

It was decided by Quincy Park and Canyon Contracting that seed and blanket was an acceptable restoration method as a cost savings measure from the specified topsoil and sod. It was in the best interest of the contractor, Quincy Park, and the City to not stop or delay the restoration as there were multiple trip hazards left behind once the sidewalk had been poured. Every appropriate measure to mitigate cost was taken while provided a timely completion & safe site.

Canyon Contracting was awarded a contract for $101,524.00 to perform the work at Quincy Park and due to the above issues there is an additional $18,516.00 in work performed on site for a total project balance of $120,058.00. At this time both Ament Design and Quincy Park Condominium Association are satisfied with the work completed on site and request that SSA 5 release payment to Canyon Contracting for completion of the project. If you should have any questions, please feel free to contact our office at (847) 253-1515.

Respectfully,

Carmen J. Arvia, P.E.
Design Engineer

12C

City of Prospect Heights

Department of Building & Zoning
8 North Elmhurst Road, Prospect Heights Illinois, 60070-6070
Office:847/398-6070 x 211-FAX: 847/590-1854
www.prospect-heights.il.us

MEMORANDUM

Date: October 22, 2015

To: Joe Wade, City Administrator

Cc: Steve Skiber, Economic Development Director

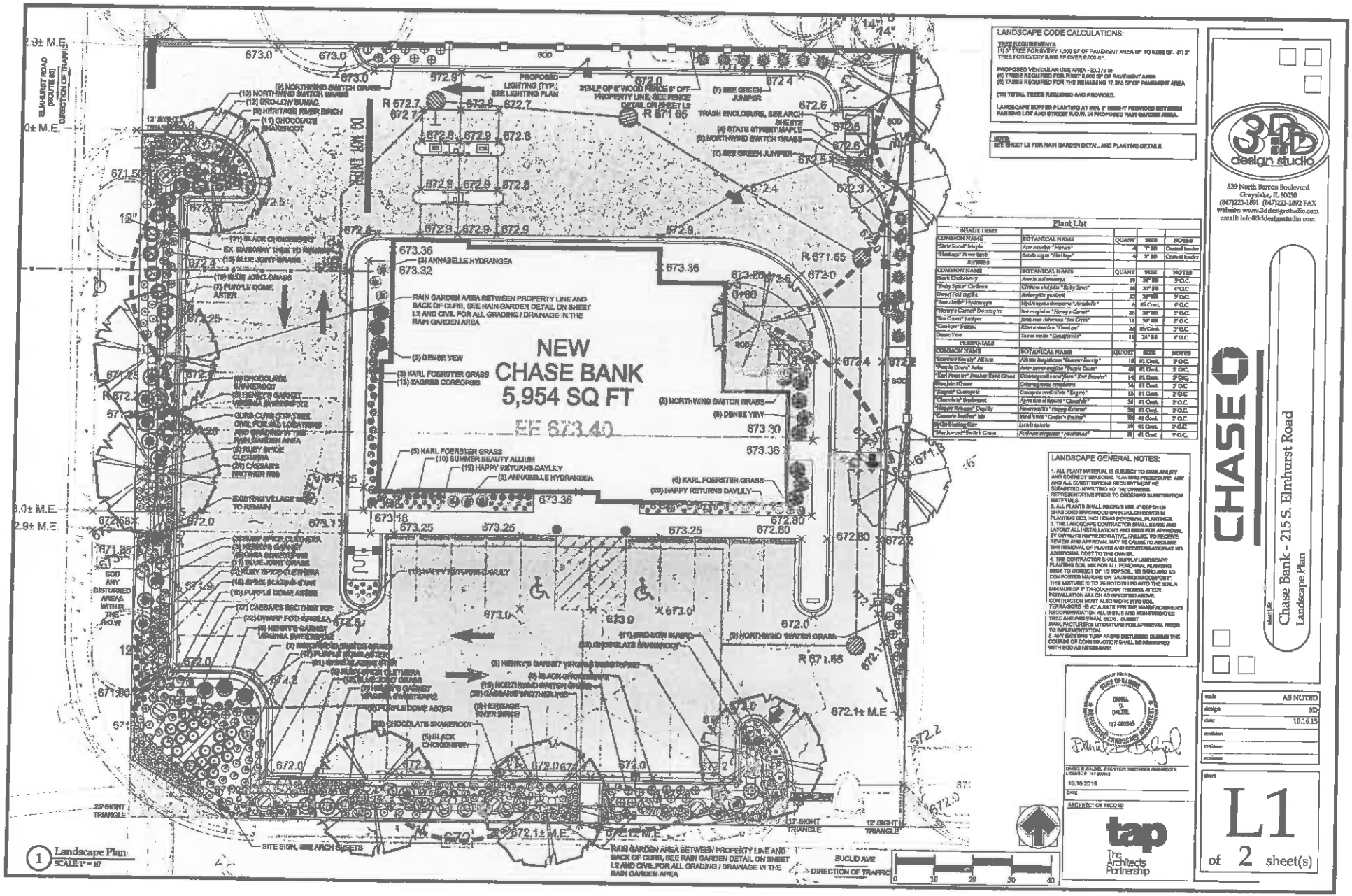
From: Daniel A. Peterson, Director of Building & Development

Subject: Introduction of Proposed Redevelopment of 215 S. Elmhurst Road
Proposed Chase Bank

Issue: The City has received a complete application for the redevelopment of the vacant property located at 215 S. Elmhurst Road. Tim Maseck, The Architect's Partnership, representing the proposed user, Chase Bank, will be present to provide an overview of the proposed redevelopment project.

Background: Chase bank has entered into an agreement to purchase the property and demolish the existing structure and parking lot and constructing an approximately 6,000 square foot retail bank with three drive-in "ATM" lanes. The property is currently in the City's B-2A General Commercial Business District. The applicant is seeking relief through a "Special Use Permit" and variance to the Code. This application has been scheduled for a public hearing at the PZBA regular meeting on November 19,

Recommendation: The application for a Special Use Permit and variance requests for a Bank with Drive-in Facilities warrants a hearing with Planning Zoning Board of Appeals (PZBA).



LANDSCAPE CODE CALCULATIONS:

TREE REQUIREMENTS
(1) 3" TREE FOR EVERY 1,500 SF OF PAVEMENT AREA UP TO 6,000 SF. (1) 3" TREE FOR EVERY 3,000 SF OVER 6,000 SF.

PROPOSED VEHICULAR USE AREA - 22,379 SF
(4) TREES REQUIRED FOR FIRST 6,000 SF OF PAVEMENT AREA
(6) TREES REQUIRED FOR THE REMAINING 17,379 SF OF PAVEMENT AREA.

(10) TOTAL TREES REQUIRED AND PROVIDED.

LANDSCAPE BUFFER PLANTING AT MIN. 3' HEIGHT PROVIDED BETWEEN PARKING LOT AND STREET R.O.W. IN PROPOSED RAIN GARDEN AREA.

NOTE:
SEE SHEET L2 FOR RAIN GARDEN DETAIL AND PLANTING DETAILS.

Plant List

SHADE TREES				
COMMON NAME	BOTANICAL NAME	QUANT	SIZE	NOTES
"State Street" Maple	*Acer miyabei "Morton"*	4	3" BB	Central leader
"Heritage" River Birch	*Betula nigra "Heritage"*	4	3" BB	Central leader
SHRUBS				
COMMON NAME	BOTANICAL NAME	QUANT	SIZE	NOTES
Black Chokeberry	*Aronia melanocarpa*	19	36" BB	5' O.C.
"Ruby Spice" Clethera	*Clethera alnifolia "Ruby Spice"*	16	30" BB	4' O.C.
Dwarf Fothergilla	*Fothergilla gardenii*	22	24" BB	3' O.C.
"Annabelle" Hydrangea	*Hydrangea arborescens "Annabelle"*	6	#5 Cont.	4' O.C.
"Henry's Garnet" Sweetspire	*Itea virginica "Henry's Garnet"*	25	30" BB	5' O.C.
"Sea Green" Juniper	*Juniperus chinensis "Sea Green"*	14	36" BB	5' O.C.
"Gro-Low" Sumac	*Rhus aromatica "Gro-Low"*	29	#5 Cont.	3' O.C.
Dense Yew	*Taxus media "Densiformis"*	11	24" BB	4' O.C.
PERENNIALS				
COMMON NAME	BOTANICAL NAME	QUANT	SIZE	NOTES
"Summer Beauty" Allium	*Allium hollandicum "Summer Beauty"*	10	#1 Cont.	2' O.C.
"Purple Dome" Aster	*Aster novae-angliae "Purple Dome"*	69	#1 Cont.	2' O.C.
"Karl Foerster" Feather Reed Grass	*Calamagrostis acutiflora "Karl Foerster"*	14	#1 Cont.	3' O.C.
Blue Joint Grass	*Calamagrostis canadensis*	14	#1 Cont.	2' O.C.
"Zagreb" Coreopsis	*Coreopsis verticillata "Zagreb"*	13	#1 Cont.	2' O.C.
"Chocolate" Snakeroot	*Ageratina altissima "Chocolate"*	34	#1 Cont.	2' O.C.
"Happy Returns" Daylily	*Hemerocallis "Happy Returns"*	36	#1 Cont.	2' O.C.
"Cassata Brother" Iris	*Iris sibirica "Caesar's Brother"*	29	#1 Cont.	2' O.C.
"Stella Starling Star"	*Liatris spicata*	39	#1 Cont.	2' O.C.
"Northwind" Switch Grass	*Panicum virgatum "Northwind"*	28	#1 Cont.	2' O.C.

LANDSCAPE GENERAL NOTES:

1. ALL PLANT MATERIAL IS SUBJECT TO ANNUAL/LATE AND CORRECT SEASONAL PLANTING PROCEDURE. ANY AND ALL SUBSTITUTIONS REQUEST MUST BE SUBMITTED IN WRITING TO THE OWNERS REPRESENTATIVE PRIOR TO ORDERING SUBSTITUTION MATERIALS.
2. ALL PLANTS SHALL RECEIVE MIN. 4" DEPTH OF SHREDDED HARDWOOD BARK MULCH COVER IN PLANTING BED, NO LIGNO PERSONAL PLANTINGS.
3. THE LANDSCAPE CONTRACTOR SHALL STAKE AND LAYOUT ALL INSTALLATIONS AND BEDS FOR APPROVAL BY OWNERS REPRESENTATIVE. FAILURE TO RECEIVE REVIEW AND APPROVAL MAY BE CAUSE TO REQUIRE THE REMOVAL OF PLANTS AND REINSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
4. THE CONTRACTOR SHALL SUPPLY LANDSCAPE PLANTING SOIL MIX FOR ALL PERENNIAL PLANTING BEDS TO CONSIST OF 1/3 TOPSOIL, 1/3 SAND AND 1/3 COMPOSTED MANURE OR "GILDEROOM COMPOST". THIS MIXTURE IS TO BE ROTOTILLED INTO THE SOIL A MINIMUM OF 8" THROUGHOUT THE BED, AFTER INSTALLATION AREA ON AS SPECIFIED ABOVE. CONTRACTOR MUST ALSO WORK INTO SOIL TERRA-SORB HB AT A RATE PER THE MANUFACTURER'S RECOMMENDATION ALL SHRUB AND NON-MATURED TREE AND PERENNIAL BEDS. SUBMIT MANUFACTURER'S LITERATURE FOR APPROVAL PRIOR TO IMPLEMENTATION
5. ANY EXISTING TURF AREAS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE RESTORED WITH SOD AS NECESSARY.

STATE OF ILLINOIS
DANIEL S. DALZEL
157-005543
REGISTERED LANDSCAPE ARCHITECT

10.16.2015
DATE

ARCHITECT OF RECORD

tap
The Architects Partnership

3D design studio
529 North Barron Boulevard
Grayslake, IL 60030
(847)223-1691 (847)223-1692 FAX
website: www.3ddesignstudio.com
email: info@3ddesignstudio.com

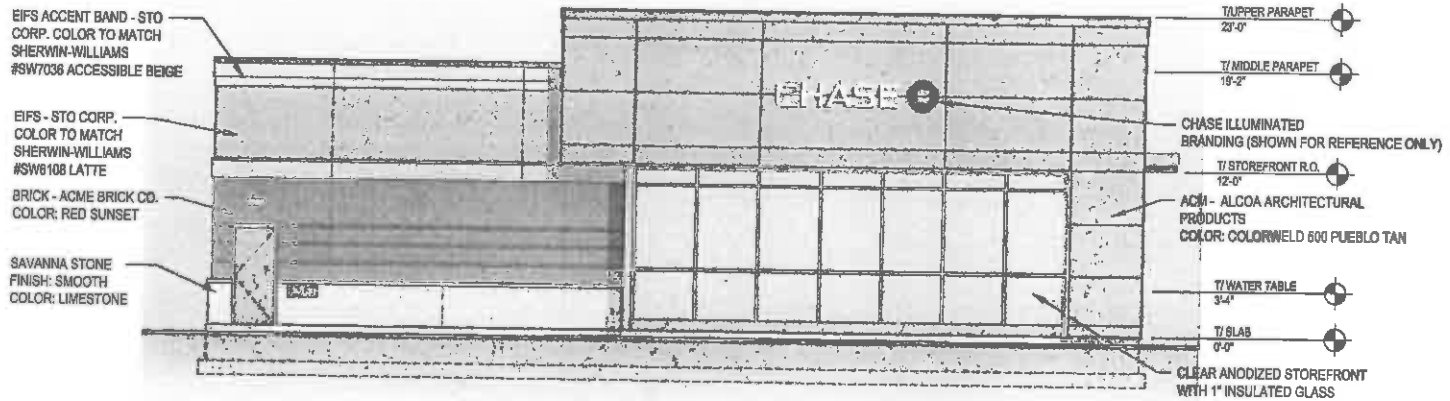
CHASE

Chase Bank - 215 S. Elmhurst Road
Landscape Plan

scale	AS NOTED
design	SD
date	10.16.15
revisions	
revisions	
revisions	

sheet
L1
of 2 sheet(s)

FRONT (SOUTH) ELEVATION



LEFT (WEST) ELEVATION

SCALE: 1 : 48

0 5 10' 19'

CHASE

RANDHURST

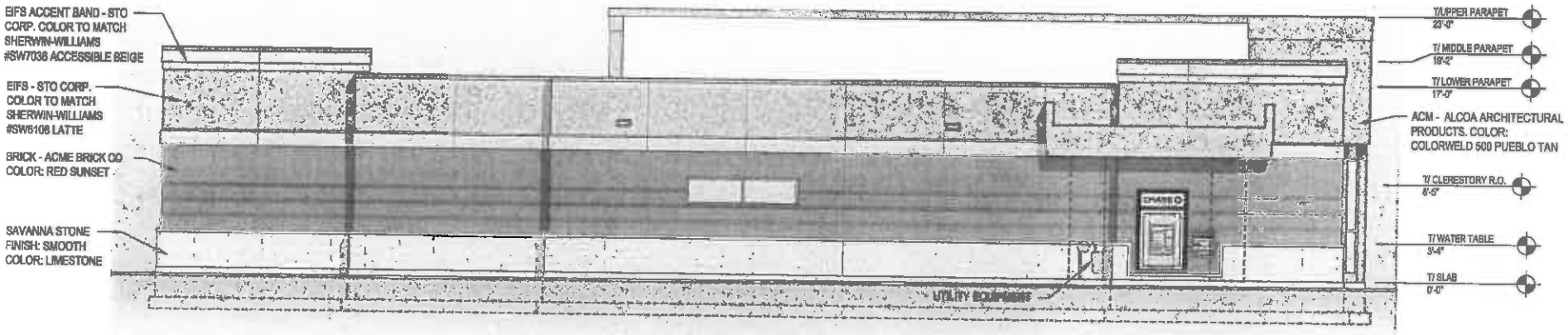
215 S. Elmhurst Rd.
Prospect Heights, IL. 60070

ARCHITECTURAL EXTERIOR ELEVATIONS

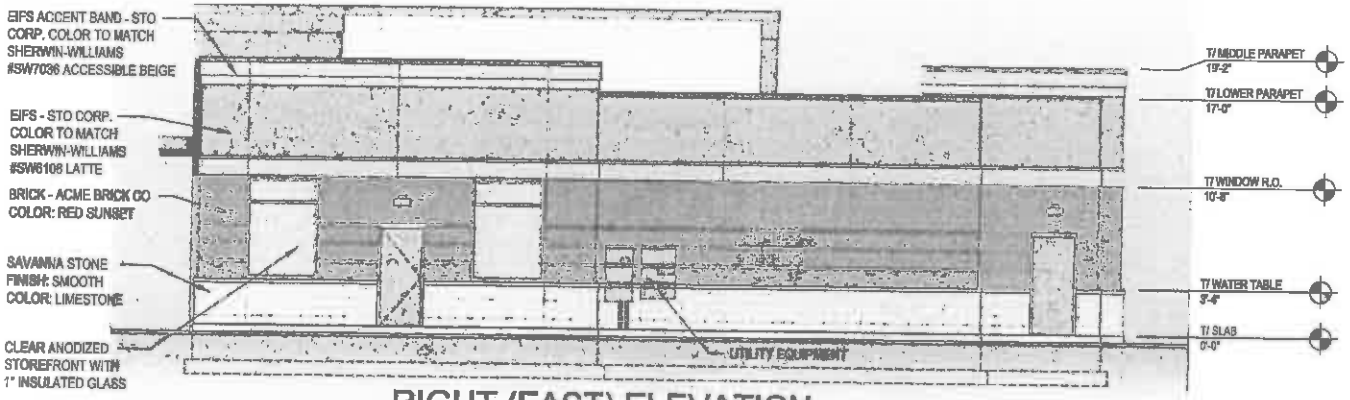
OCTOBER 19, 2015

Architect/Designer
The Architects Partnership
122 South Michigan Avenue
Chicago, IL 60603
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 15101

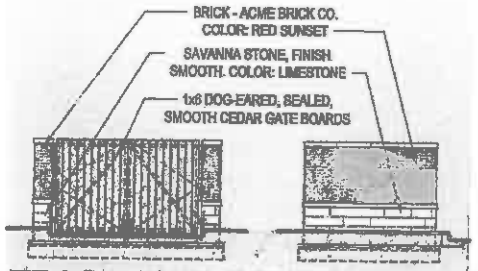
tap



REAR (NORTH) ELEVATION



RIGHT (EAST) ELEVATION



TRASH ENCLOSURE (FRONT & SIDE) ELEVATIONS

SCALE: 1 : 48

0 5' 10' 15'

CHASE
RANDHURST
215 S. Elmhurst Rd.
Prospect Heights, IL. 60070

ARCHITECTURAL EXTERIOR ELEVATIONS

OCTOBER 19, 2015

Architect/Designer
The Architects Partnership
122 South Michigan Avenue
Chicago, IL 60603
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 15101

12D

To: Mayor and City Council Members

From: Joe Wade, City Administrator

Subject: An Ordinance Authorizing an Amended and Restated Dedication Agreement between Rob Roy Country Club Village Association and the City Of Prospect Heights

October, 22, 2015

Purpose: This ordinance clarifies the City's maintenance responsibilities for streets, sanitary sewers and water mains and the Rob Roy Association's responsibility for sidewalks, street lights and other facilities not expressly dedicated and assumed by the City.

Background: This summer, uncertainty arose regarding the delineation of responsibilities between the City and Association concerning infrastructure maintenance responsibilities. City Attorney Zimmermann worked closely with Association representatives and City staff to provide clarification and definition to these responsibilities. This ordinance and agreement is the product of that effort. The agreement offers a practical and common-sense based approach to infrastructure maintenance responsibilities.

ORDINANCE No. _____

AN ORDINANCE AUTHORIZING AN AMENDED AND RESTATED DEDICATION AGREEMENT BETWEEN ROB ROY COUNTRY CLUB VILLAGE ASSOCIATION AND THE CITY OF PROSPECT HEIGHTS

WHEREAS, the ROB ROY COUNTRY CLUB VILLAGE ASSOCIATION ("Association") dedicated its private streets and cul-de-sacs to the City for maintenance and repair of said streets pursuant to a certain Dedication Agreement dated August 7, 1989 ("1989 Agreement") and an accompanying plat of dedication; and

WHEREAS, the City accepted the dedication and acknowledged that certain conditions of the 1989 Agreement had been met when it adopted Resolution R-90-67 on July 2, 1990; and

WHEREAS, the City and the Association wish to clarify their respective maintenance responsibilities by detailing those facilities which have been dedicated and expressing the City's maintenance responsibility for streets, sanitary sewers, water mains and expressing the Association's responsibility for sidewalks, street lights and other facilities not expressly dedicated and assumed by the City; and

WHEREAS, the AMENDED AND RESTATED DEDICATION AGREEMENT BETWEEN ROB ROY COUNTRY CLUB VILLAGE ASSOCIATION AND THE CITY OF PROSPECT HEIGHTS ("Amended Agreement") attached and incorporated hereto as Exhibit A contains said clarification and the City Council deems it in the best interest of the public health safety and welfare of the residents of Prospect Heights to enter into the Amended Agreement;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PROSPECT HEIGHTS, COOK COUNTY, ILLINOIS as follows:

SECTION ONE. The City Council hereby finds and determines that the facts and conditions set forth in the preamble hereto are true, correct and appropriate and hereby adopts same as part of this Ordinance.

SECTION TWO. The Amended Agreement is hereby approved and the mayor is authorized to execute same.

SECTION THREE. The Mayor, City Administrator and City Attorney are authorized and directed to take all necessary steps to carry out this ordinance.

SECTION FOUR. This ordinance shall be in full force and effect from and after its passage and approval as required by law.

AYES:

NAYS:

ABSENT:

PASSED this _____ day of _____, 2015.

APPROVED this _____ day of _____, 2015.

_____
NICHOLAS J. HELMER, Mayor

ATTEST:

_____
City Clerk

Published in pamphlet form _____, 2015.

EXHIBIT A

Amended And Restated Dedication Agreement Between
Rob Roy Country Club Village Association and the City of Prospect Heights

AMENDED AND RESTATED DEDICATION AGREEMENT BETWEEN ROB ROY COUNTRY CLUB VILLAGE ASSOCIATION AND THE CITY OF PROSPECT HEIGHTS

THIS AGREEMENT made and entered into this _____ day of October, 2015 by the Rob Roy Country Club Village Association, a corporation of the State of Illinois, hereinafter referred to as "Association" and the City of Prospect Heights, a municipal corporation located in Cook County, Illinois, hereinafter referred to as "City.

WHEREAS, the Association dedicated its private streets and cul-de-sacs to the City for maintenance and repair of said streets pursuant to that certain Dedication Agreement dated August 7, 1989 ("1989 Agreement") and an accompanying plat of dedication dated _____("Plat of Dedication"); and

WHEREAS, the City accepted the dedication and acknowledged that certain conditions of the 1989 Agreement had been met when it adopted Resolution R-90-67 on July 2, 1990; and

WHEREAS, the City and the Association wish to clarify their respective maintenance responsibilities by detailing those facilities which have been dedicated and expressing the city's maintenance responsibility for streets, sanitary sewers, water mains and expressing the Association's responsibility for sidewalks, street lights and other facilities not expressly dedicated and assumed by the City;

NOW, THEREFORE, in consideration of mutual promises and agreements herein contained, the parties hereto agree as follows:

1. The above recitals are hereby incorporated into this Amended and Restated Dedication Agreement ("Amended Agreement") as if fully set forth.

2. This Amended Agreement hereby supersedes and replaces the 1989 Agreement. The Plat of Dedication remains in full force and effect.

3. **Definitions.** As used in this Amended Agreement, the following terms shall have the following meanings unless the context clearly requires another meaning:

a. "Sidewalks" shall mean the paved pathways for pedestrians located throughout the Association's property which are not Streets

b. "Streets" shall mean streets, including the cul-de-sacs, lying only within the dedicated area which are paved, contain curbs and gutters, and are primarily intended for vehicular use.

c. "Curbs and gutters" shall mean the portland cement curbs and gutters lying within the Streets adjacent to asphalt pavement.

d. "Dedicated Area" means the area of land dedicated to the public on the Plat of Dedication.

DRAFT

4. **Maintenance of Streets**. The City agrees to maintain, repair and/or replace the Streets (including the pavement and Curbs and Gutters) as it deems necessary from time to time in its sole discretion as respects City capital projects. Any repair or replacement shall be done in accordance with the city's standard design specifications for streets.

5. **Snow and Ice Removal**.

a. The City hereby authorizes and the Association hereby agrees to provide for the removal of snow accumulations of two inches or more from all dedicated Streets. The Association shall be responsible for repairing all damages caused to streets, potable water facilities or sanitary sewer facilities by said snow removal operations.

b. The City agrees to apply ice melting materials on the Streets, and only the Streets and no other areas, in accordance with City snow removal/salting policy.

6. **Street Lights, Signs and Parkway Vegetation.** Whether resting within the Dedicated Area or not, the Association owns and agrees to maintain, repair or replace at its cost all street lights, light standards, fixtures, appurtenances, related wiring, street identification, traffic control signs, and parkway trees and vegetation.

7. **Sanitary Sewers and Potable Water System**.

a. The Parties acknowledge that the City owns and operates the sanitary sewer mains, pipes, catch basins, valves, vaults and related facilities and equipment , but specifically excluding lateral sewer connections to private buildings ("City Sewer System").

b. The Parties further acknowledge and agree that the City owns and operates the potable water mains, pipes, valves, curb stops, "buffalo boxes", vaults, meters and related facilities and equipment , but specifically excluding private water connections from the curb stop to private buildings ("City Water System").

c. The City agrees that it is responsible for the operation, maintenance, repair and replacement of the City Sewer System and the City Water System. These functions shall be done in the ordinary course of the city's operation of its public infrastructure. Repair and replacement shall be done in the City's sole discretion as is the case with the City's water and sewer systems lying outside of the Rob Roy Country Club Village. The City agrees to promptly repair any damage to Sidewalks resulting from the City's maintenance, repair or replacement of the City Sewer System and/or City Water System performed by or at the direction of the City.

d. Utilities Easement Granted. In the event any components of the City Sewer System and the City Water System lie outside the Dedicated Area, the Association hereby grants to the City a permanent easement for the installation, maintenance, operation, repair or replacement of such component. The easement area shall be a strip of land 10 feet wide which is centered over the component and runs from the Dedicated Area to the terminus of said component. The easement includes the right of access thereto.

8. **Sidewalks**. The Parties acknowledge that the Sidewalks lie outside the Dedicated Area and that the Association has owned the Sidewalks since November 12, 1982, the date of the recording of the Declaration of Condominium for Rob Roy Country Club Village and continues to own the Sidewalks. Accordingly, the Association has sole responsibility for the maintenance, repair or replacement of the Sidewalks. The City shall have no responsibility whatsoever for sidewalks, except to the very limited extent provided in section 7.c.

9. **Electricity Cost**. The City agrees to pay for the electrical energy costs for the lighting of Country Club Drive and Rob Roy Lane. All other energy costs shall be borne by the Association.

10. **Exclusions**. Any Association assets or facilities which are not expressly provided for in this Amended Agreement shall be the sole responsibility of Association.

11. **Miscellaneous Provisions**.

a. In the event of any breach of this Agreement, such breaching party shall upon written notice proceed promptly to cure or remedy such default or breach within sixty (60) days after receipt of such notice; provided, however, that in the event such default is incapable of being cured within said sixty (60) day period and the defaulting party commences to cure within said sixty (60) day period and proceeds to cure with due diligence, such party shall not be deemed to be in default under this Agreement.

b. In case such action is not taken or not diligently pursued, or the default or breach shall not be cured or remedied within the above time, or in the event of a monetary default (time being of the essence with respect to the payment of any sums required hereunder), the aggrieved party may institute such proceedings as may be necessary or desirable in its opinion to cure and remedy such default or breach, including but not limited to, proceedings to compel specific performance by the party in default or breach of its obligations.

DRAFT

c. Nothing in this Amended Agreement shall limit the City's authority and ability to enforce its Code of Ordinances, including its Property Maintenance Code, and applicable statutes in any way.

d. The rights of the parties to this Agreement, whether provided by law or this Agreement, shall be cumulative and the exercise by either party of any one or more of such remedies shall not preclude the exercise by it of any one or more of such remedies in relation to the same default or breach by the other party.

e. No waiver made by either party with respect to any specific default by the other party under this Agreement shall be construed as a waiver of rights with respect to any other default by the defaulting party under this Agreement or with respect to the particular default, except to the extent specifically waived in writing.

f. Coordination of Work. The parties recognize that the Sidewalks and the City Sewer System and City Water System are located in close proximity to one another and portions of the water system such as manhole covers are located in the Sidewalks. Subject to the City's need to address emergencies affecting the City Sewer System and City Water System, the parties shall use their best efforts to coordinate work on the Sidewalks and the City Sewer System and City Water System to avoid damage to any portion of the City Sewer System and/or City Water System and/or Sidewalks that may be affected by such work.

g. The Association for itself, its employees, agents, or contractors ("Association Parties") does hereby, defend, hold harmless and indemnify the City and all City elected or appointed officials, officers, employees, agents, representatives, engineers, and attorneys, from any and all claims that may be asserted at any time against any of such parties in connection with the existence of this Amended Agreement, the acts or omissions of the Association Parties, the acts or omissions of the Association Parties in carrying out their duties or failing to carry out their duties under this Amended Agreement, the failure of the Association to maintain the Sidewalks or the street lights, wiring, signage, vegetation or other assets and fixtures which are the responsibility of the Association.

The City for itself, and all City elected or appointed officials, officers, employees, agents, representatives, engineers, and attorneys, agents, or contractors ("City Parties") does hereby, defend, hold harmless and indemnify the Association and its Board of Managers, members, agents or contractors, from any and all claims that may be asserted at any time against any of such parties in connection with

the existence of this Amended Agreement, the acts or omissions of the City Parties, and the acts or omissions of the City Parties in carrying out their duties or failing to carry out their duties under this Amended Agreement.

h. Binding Agreement. This Amended Agreement shall be binding upon and inure to the benefit of the parties hereto, their successors and assigns and upon any successor municipal authority of the City.

i. Attorneys Fees and Costs. In the event that either party institutes legal action against the other under this Amended Agreement, then in that event the prevailing party shall be entitled to recover its costs and professional fees (including, but not limited to, reasonable attorney's fees) from the losing party.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first written above.

CITY OF PROSPECT HEIGHTS

By:_____

Attest:

_____

City Clerk

ROB ROY COUNTRY CLUB VILLAGE ASSOCIATION

By:_____

DRAFT

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, the undersigned, a notary public in and for said county, in the state aforesaid, do hereby certify that _____, personally known to me to be the _ _____ of Rob Roy Country Club Village Association and personally known to me to be the same Association whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered said instrument in his/her capacity as _____ as his/her free and voluntary act and as the free and voluntary act of said Association for the uses and purposes therein set forth.

GIVEN under my hand and official this ____ day of October, 2015.

DRAFT

(SEAL)_____
Notary Public

12E

To: Mayor and City Council Members

From: Joe Wade, City Administrator

Subject: A Resolution Directing the Mayor And City Administrator To Implement Public Act 99-14

Purpose: The dissolution of the Old Town Sanitary District requires actions by the City of Prospect Heights to assume service and management responsibilities. These actions involve determination of the adequacy of sewer fees for the operation, maintenance and reserves of the system; evaluation of existing pension obligation to be assigned to the City; update of the City budget to account for increased costs and revenues due to the takeover of the Old Town system; invoicing of sanitary sewer service customers in accordance with the City Code; and a public information campaign to advise customers of the City's assumption of services and fees previously provided by Old Town.

This resolution provides formal Council authorization and direction to City staff to commence these actions.

Background: The Old Town Sanitary District was dissolved by Public Act 99-14. With this dissolution, assumption of service is being undertaken by the affected communities, Prospect Heights, Wheeling, Arlington Heights and Mount Prospect. This resolution provides authorization and direction for City staff to undertake necessary financial management steps to support the City's assumption of services formerly provided by the Old Town Sanitary District.

RESOLUTION NO. R-15-_____

A RESOLUTION DIRECTING THE MAYOR AND CITY ADMINISTRATOR TO IMPLEMENT PUBLIC ACT 99-14

WHEREAS, the Illinois General Assembly adopted Public Act 99-14 (P.A. 99-14) which amended the sanitary district act of 1936; and

WHEREAS, P.A. 99-14 effectively dissolved the Old Town Sanitary District (OTSD) and provided that the City take over those portions of the OTSD system that lie within the City limits; and

WHEREAS, the Mayor, Administrator and Attorney need certain direction and authority in order to facilitate the city's assumption of OTSD facilities and property and to otherwise implement P.A. 99-14; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PROSPECT HEIGHTS, COOK COUNTY, ILLINOIS AS FOLLOWS:

SECTION 1. The Mayor is authorized and directed to accept any conveyance of real and personal property from the OTSD officers as is necessary to carry out P.A. 99-14.

SECTION 2. To extent the City Council's approval or consent is required, the OTSD officers are authorized to liquidate the real property of the OTSD and distribute the net proceeds according to percentage of territory of each municipality as authorized in P.A. 99-14.

SECTION 3. The City Administrator, or his designee, is authorized and directed to take the following actions:

A. Review Title 8, Chapter 5 of city code (sections 8-5-1 through 14) to determine whether sewer fees are adequate to support operation, maintenance and reserves for newly added OTSD system.

B. Evaluate and obtain a determination from the Illinois Municipal Retirement Fund if there is outstanding pension obligation being assigned to the City.

C. Update the city budget to account for increased costs and revenues due to the takeover of the OTSD system and to prepare any budget amendments necessary for final approval by the City Council.

D. To begin invoicing sanitary sewer customers pursuant to sections 8-5-1 and 8-5-2 of the city code on a quarterly basis in arrears beginning in January, 2016 (or as soon as practicable), for sanitary sewer service from November through December, 2015.

E. To carry out an appropriate public information campaign to inform sanitary sewer customers of the effect of P.A. 99-14 and the commencement of billing for services.

SECTION 4. All documents necessary for carrying out this resolution shall be approved by the city attorney prior to their execution by the appropriate city officer.

SECTION 5. This Resolution shall be in full force and effect from and after its passage as provided by law and that the Mayor, City Administrator and City Attorney are directed to take any action necessary to carry out the purpose of this resolution.

PASSED and APPROVED this _____ day of **October, 2015.**

Nicolas J. Helmer, Mayor

ATTEST:

CITY CLERK

AYES:

NAYS:

ABSENT:

12F

Meeting Date: October 26, 2015

Item: A Resolution approving a contract between the City of Prospect Heights and CivicPlus for the expedited redesign of the City's website for a onetime fee of $3,760.00. Optional on-site training for up to 10 individuals is also available for an additional onetime fee of $8,800.00.

Motion: I move to approve the resolution approving a contract between the City of Prospect Heights and CivicPlus for the expedited redesign of the City's website for a onetime fee of $3,760.00 with/without the optional onetime fee of $8,800 for on-site training.

Staff Contact: Peter Falcone, Assistant to the City Administrator, 847-398-6070, ext. 206

Purpose: The expedited redesign will allow the City to continue to provide all the current functions of the existing website while providing the City the opportunity for the City to take advantage of CivicPlus' new version 5 web platform including the ability to play Council Meetings and other videos on the website through YouTube, greater mobile device compatibility (website adjusts to device), easier design and content changes by in-house staff, and 6 hours of webinar training for 2 staff members.

Background: The City's current website contract with CivicPlus is in its third year and allows for a redesign after four years. A survey about the website was distributed and after the input of Elected Official and Staff, the decision was made to move forward with the website redesign a year early and to investigate costs. The cost of the expedited website redesign with CivicPlus is a fraction of the cost of an average website redesign which would be upward of $20,000.

Fiscal Impact: The City will pay CivicPlus $3,760.00 for the expedited website redesign. The City also has the option to pay CivicPlus $8,800.00 for on-site training for up to 10 individuals.

Staff Recommendation: Staff recommends the adoption of the City of Prospect Heights and CivicPlus expedited website redesign contract due to the added functionality brought by the new version 5 web platform and the low redesign cost.

At this time, Staff does not recommend the adoption of the on-site training contract option for $8,800 for 10 individuals as it is viewed as excessive and the included 6 hours of training for 2 staff members will provide sufficient training to manage the website. Staff also has the ability to utilize free training videos from CivicPlus for all website functions along with free phone assistance.

Service & License Agreement for **Prospect Heights, IL**

CivicPlus Redesign Contract

Organization	City of Prospect Heights, IL			URL	www.prospect-heights.il.us
Street Address	8 N. Elmhurst Road				
Address 2					
City	Prospect Heights	State	IL	Postal Code	60070

CivicPlus provides telephone support for all trained clients from 7am –7pm Central Time, Monday-Friday (excluding holidays). Emergency Support is provided on a 24/7/365 basis for representatives named by the Client. Client is responsible for ensuring CivicPlus has current updates.

Emergency Contact & Mobile Phone	Assistant to the City Administrator - Peter Falcone- 847-971-9358
Emergency Contact & Mobile Phone	Deputy Clerk - Karen Schultheis – 847-922-6178
Emergency Contact & Mobile Phone	City Administrator - Joe Wade – 224-234-6438

Billing Contact	Peter Falcone			E-Mail	pfalcone@prospect-heights.org
Phone	847-398-6070	Ext.	206	Fax	847-392-4244
Billing Address	8 N. Elmhurst Road				
Address 2					
City	Prospect Heights	ST	IL	Postal Code	60070
Tax ID #	32-2893978			Sales Tax Exempt #	E9975-7745-06
Billing Terms	Annual			Account Rep	Reece Hammitt
Info Required on Invoice (PO or Job #)					

Contract Contact	Peter Falcone			Email	pfalcone@prospect-heights.org
Phone	847-398-6070	Ext.	206	Fax	847-392-4244

Project Contact	Peter Falcone			Email	pfalcone@prospect-heights.org
Phone	847-398-6070	Ext.	206	Fax	847-392-4244

Terms & Conditions

Client Deliverable

1. Icon Enterprises, Inc., d/b/a CivicPlus ("CivicPlus") will create a basic redesign of the City of Prospect Heights, IL ("Client") website that includes all functionality as defined in Exhibit A – CivicPlus Project Deliverables, attached hereto.
2. This contract shall embrace and include the City of Prospect Height's RFP as Exhibit C and CivicPlus' proposal response as Exhibit D.

Billing & Payment Terms

3. One-half of the total Project Development fee will be billed upon completion of the layout presentation, the remainder of the Project Development fee and any additional Project Development services will be invoiced after the reveal presentation.

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

4. The Client shall sign a project completion and acceptance form prior to project go-live. The date may be extended if material system or operational failures are encountered. All Parties agree that the website will not go-live until the project is accepted in writing by the Client.
5. Project Development invoices are due by the first of the following month, but no sooner than 30 days from invoice date.
6. Annual Support, Maintenance & Hosting invoices may be prorated in order to correlate with the Client's budget year.
7. Fees for CivicPlus Annual Support, Maintenance & Hosting services are invoiced prior to the year of service. They are due by the first of the following month, but no sooner than 30 days from invoice date.
8. Project development will be discontinued if payment is not made within 30 days after the invoice due date.
9. Should the Client fail to meet any deadlines mutually agreed upon in the timeline meeting both parties will mutually agree to extend the affected milestone dates. CivicPlus will not be held liable under this Agreement for any delay caused by the Client. Should delays caused by the Client extend the website redesign go live date by more than 30 days past the originally agreed upon date the Client can select one of the following options:
    a. Client will pay annual fees for the current live website and the redesigned website under development, as both are being hosted on our servers.
    b. Annual Services will be discontinued for the current live website (website will no longer be accessible to the public or Client).
10. After project go-live, if the Client's account exceeds 60 days past due, Support will be discontinued until the Client's account is made current. If the Client's account exceeds 90 days past due, Annual Support, Maintenance & Hosting will be discontinued until the Client's account is made current. Client will be given 30 days notice prior to discontinuation of services for non-payment
11. The Client will be invoiced electronically through email. Upon request CivicPlus will mail invoices and the Client will be charged a $5.00 convenience fee.
12. Unless otherwise limited by law, a finance charge of 2.9 percent (%) per month or $5.00, whichever is greater, will be added to past due accounts. Payments received will be applied first to finance charges, then to the oldest outstanding invoice(s).
13. Provided the Client's account is current, at any time the Client may request an electronic copy of the website graphic designs, the page content, all module content, all importable/exportable data, and all archived information ("Customer Content"). Client agrees to pay $250 per completed request.
14. Client acknowledges and agrees that certain services for which Client is contracting hereunder may be rendered by or with third-party providers under contract with CivicPlus, and thus the cost of such services hereunder is dependent upon the financial arrangements between CivicPlus and such third-party providers. Client acknowledges and agrees that the price to Client for the services hereunder may be reasonably adjusted at any time, at CivicPlus' sole discretion, to reflect an increase in cost to CivicPlus as a result of its financial arrangement with a third-party provider. Client acknowledges and agrees that this Agreement as so modified will continue in full force and effect as otherwise provided herein, and that Client will pay any such increased price according to such other payment terms hereof.

Changes to Existing Service

15. **Effective with this renewal, the following services will be added:**

Services to be ADDED	One-Time Fee	Annual Fee
Expedited redesign from October '16 to October '15 - Responsive Design presented on Aurora	$12,560	N/A
Additional Modules (Exhibit A)	Waived	Waived

Agreement Renewal

16. Either party may terminate the Annual Support, Maintenance & Hosting Agreement at the end of the contract term by providing the other party with 60 days written notice, prior to the contract renewal date.
17. In the event that neither party gives 60 days notice prior to the end of the initial or any subsequent term, this Agreement will automatically renew for an additional contract term.
18. In the event of early termination of this Agreement by the Client, full payment of the remainder of the contract is due within 15 days of termination.

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

19. Each year this Agreement is in effect, a technology investment and benefit fee of 5 percent (%) of the total Annual Support, Maintenance & Hosting costs will be applied.

Support

20. CivicPlus will provide unlimited telephone support Monday-Friday, 7:00 am – 7:00 pm (Central Time) excluding holidays, for all trained Client staff. Emergency Support is provided on a 24/7/365 basis for emergency contacts named by the Client. Client is responsible for providing CivicPlus with contact updates.
21. Support includes providing technical support of the GCMS® software, application support (pages and modules), and technical maintenance of Client's website. Following initial setup, additional page design, graphic design, user training, site modification, and custom programming may be contracted separately for an additional fee.
22. During the period of this agreement and subsequent annual renewals, CivicPlus warrants that it will, without additional charge to the Client, take action to correct any problems or defects discovered in the GCMS® software and reported to CivicPlus by the Client, such warranty to include ongoing maintenance upgrades and technical error correction.
23. CivicPlus provides online website statistics software at no extra charge. If Client desires to use other website statistic software, CivicPlus will provide the necessary log file access.

Intellectual Property, Ownership & Content Responsibility

24. Upon full and complete payment of submitted invoices for the Project Development and launch of the website, Client will own the Customer Content. Client will not own the GCMS® software or its associated applications and modules.
25. Upon completion of the development of the site, Client will assume full responsibility for website content maintenance and content administration. Client, not CivicPlus, shall have sole responsibility for the accuracy, quality, integrity, legality, reliability, appropriateness, and intellectual property ownership or right to use of all Customer Content.
26. Client shall not (i) license, sublicense, sell, resell, transfer, assign, distribute or otherwise commercially exploit or make available to any third party the GCMS® software in any way; (ii) modify or make derivative works based upon the GCMS® software; (iii) create Internet "links" to the GCMS® software or "frame" or "mirror" any GCMS® administrative access on any other server or wireless or Internet-based device; or (iv) reverse engineer or access the GCMS® software in order to (a) build a competitive product or service, (b) build a product using similar ideas, features, functions or graphics of the GCMS® software, or (c) copy any ideas, features, functions or graphics of the GCMS® software.
27. The CivicPlus name, the CivicPlus logo, and the product and module names associated with the GCMS® software are trademarks of CivicPlus, and no right or license is granted to use them.

Indemnification

28. Client shall defend, indemnify and hold harmless CivicPlus, its partners, employees, and agents from and against any and all lawsuits, claims, demands, penalties, losses, fines, liabilities, damages, and expenses including attorney's fees of any kind, without limitation, in connection with the operations of and installation of software contemplated by this Agreement, or otherwise arising out of or in any way connected with the CivicPlus provision of service and performance under this Agreement. This section shall not apply to the extent that any loss or damage is caused by the negligence or willful misconduct on the part of CivicPlus. If Client and CivicPlus are both negligent, damages shall be apportioned in accordance with the percentage of negligence of each party. This paragraph is not intended to benefit entities not a party to this contract.

Liabilities

29. CivicPlus will not be liable for any act, omission of act, negligence or defect in the quality of service of any underlying carrier or other service provider whose facilities or services are used in furnishing any portion of the service received by the Client. CivicPlus will not be liable for any failure of performance that is caused by or the result of any act or omission by Client or any entity other than CivicPlus that furnishes services, facilities or equipment used in connection with CivicPlus services or facilities.
30. Except as expressly provided in this Agreement, CivicPlus makes no expressed or implied representations or warranties, including any warranties regarding merchantability or fitness for a particular cause.

Force Majeure

31. No party shall have any liability to the other hereunder by reason of any delay or failure to perform any obligation or covenant if the delay or failure to perform is occasioned by force majeure, meaning any act of God, storm, fire, casualty, unanticipated

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

work stoppage, strike, lockout, labor dispute, civic disturbance, riot, war, national emergency, act of Government, act of public enemy, or other cause of similar or dissimilar nature beyond its control.

Taxes

32. It is CivicPlus' policy to pass through sales tax in those jurisdictions where such tax is required. If the Client is tax-exempt, the Client must provide CivicPlus proof of their tax-exempt status, within fifteen (15) days of contract signing, and this agreement will not be taxed. If the Client's state taxation laws change, the Client will begin to be charged sales tax in accordance with their jurisdiction's tax requirements and CivicPlus has the right to collect payment from the Client for past due taxes.

Acceptance

We, the undersigned, agreeing to the conditions specified in this document, understand and authorize the provision of services outlined in this Agreement.

Client	Date
CivicPlus	Date

Sign and E-mail the entire contract with exhibits to:

Contracts@CivicPlus.com

We will e-mail a counter-signed copy of the contract back to you so we can begin your project.

CivicPlus does not require a physical copy of the contract, however, if you would like a physical copy of the contract, mail one (1) copy of the contract with original signature to:

CivicPlus Contract Manager
302 S. 4th Street, Suite 500
Manhattan, KS 66502

Upon receipt of signed original, we will counter-sign and return the copy for your files.

--Remainder of this page left intentionally blank—

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

Exhibit A - CivicPlus Project Deliverables

CivicPlus Project Development Services & Scope of Services for CP Basic Redesign		Annual Fee	One Time Fee
Design & Project Overview			
• Expedited Redesign (originally on October 2016 scheduled) • New responsive design presented on Aurora • Redevelop navigation method based on Website Schematic – Provided by client • Design setup – wireframe • Print this page option • Email this page option • Breadcrumbs • Sitemap • Redevelop graphic elements of website (Newsflash, FAQs, Calendar, etc.) • Project Management • Testing • Review • Content o Includes migrating of all existing content and retouching of published pages to ensure new site styles are applied and modules are related to feature columns. o Contact information will be moved to an info advanced area if previously formatted in a right contact layout. o Pages will be moved to coordinate with new menu structure **Note:** Content will not be rewritten, reformatted or broken up. Additionally, new pages will not be created. • Six hours of Aurora webinar group training for 2 people that will be scheduled during the project with other client participants • Spelling and broken links will be ran and provided to client • 10GB of Media Storage • Translation Tool • Inclusion of all standard modules (see follow page for complete list)		**N/A**	**$3,760**
Add-On Options			
On-site training – (3) 8 hour days of on-site training for up to10 individuals			**$8,800**
Subsite	*Optional*		
Custom Mobile App	*Optional*		
Additional Banners	*Optional*		
12 hours interactive webinar training (up to 6 employees)	*Optional*		
Media Center Module	*Optional $1,000 per year*		
	Annual Increase	**N/A**	
	Total One-Time Fee		**$12,560**
	Total Due (depends on payment terms)	**$12,560**	

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

Project Development and Deployment Includes the Following:

Modules	Functionality
• Agenda Center	• Action Items Queue
• Alerts Center & Emergency Alert Notification	• Audit Trail / History Log
• Archive Center	• Automated PDF Converter
• Bid Postings	• Automatic Content Archiving
• Blog	• Dynamic Breadcrumbs
• Business/Resource Directory	• Dynamic Sitemap
• Calendar	• Expiring Items Library
• Citizen Request Tracker™ (5 users)	• Graphic Link Administration
• Community Connection	• Links Redirect
• Community Voice™	• Menu Management
• Document Center	• Mouse-over Menu Structure
• ePayment Center	• Online Editor for Editing and Page Creation (WYSIWYG)
• Facilities & Reservations	• Online Web Statistics
• Frequently Asked Questions	• Printer Friendly/Email Page
• Forms Center	• RSS
• Intranet	• Site Layout Options
• Job Postings	• Site Search & Entry Log
• My Dashboard	• Slideshow
• News Flash	• Social Media Integration (Facebook, Share and Twitter)
• Notify Me® email and 500 SMS subscribers	• User & Group Administration Rights
• Photo Gallery	• Web Page Upload Utility
• Quick Links	• Website Administrative Log
• Spotlight	
• Staff Directory	

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

Exhibit B - Annual Support, Maintenance and Hosting Services

Current Annual Support, Maintenance and Hosting Fee Server Storage not to exceed 10G Does Include Media Center Module Storage 10GB	**$5,701.45**
Total Annual Support, Maintenance and Hosting Fee (Effective upon Contract Signing)	**$5,701.45**

Annual Support, Maintenance & Hosting Service Include the Following:		
Support	**Maintenance of CivicPlus Application & Modules**	**Hosting**
7 a.m. – 7 p.m. (CST) Monday – Friday (excluding holidays)	Install Service Patches for OS	Shared Web/SQL Server
24/7 Emergency Support	System Enhancements	DNS Consulting & Maintenance
Dedicated Support Personnel	Fixes	Monitor Bandwidth-Router Traffic
2-hour Response During Normal Hours	Improvements	Redundant ISP
Usability Improvements	Integration	Redundant Cooling
Integration of System Enhancements	Testing	Diesel Powered Generator
Proactive Support for Updates & Fixes	Development	Daily Tape Backup
Online Training Manuals	Usage License	Intrusion Detection & Prevention
Monthly Newsletters		Antivirus Protection
Routine Follow-up Check-ins		Upgrade Hardware
CivicPlus Connection		

CivicPlus • 302 S. 4th St., Suite 500 • Manhattan, KS 66502 • www.CivicPlus.com
Toll Free 888-228-2233 • Accounting Ext. 291 • Support Ext. 307 • Fax 785-587-8951

Prospect Heights Website Schematic – Conceptual Design

September 2015

Based upon Staff and Elected Officials Responses to Website Survey

(a work in progress)

Design Principles & Considerations

- Multiple resources for input to the design
- Design configuration oriented to the "end" users with diverse backgrounds
- Logical and related content arrangement
- Use hyperlinks to create a variety of portals
- Have content management that can be built from standard content development applications
- Provide for future growth and expansion
- Alignment to the site Mission Statement

Prospect Heights Website Schematic – Home Page

Top Ribbon for all Website Tab Pages

Payments	Applicatons & Service Requests	Transparency	Calendar	Language	How do I find....

Website Mission Statement – Home Page Only

Main Tabs and Access Points

Prospect Heights Website Schematic – Home Page

Top Ribbon for all Website Tab Pages

Payments	Payments & Service Requests	Transparency	Calendar	Language	How do I find....
		1.Council minutes 2. Committee, commission minutes or summation reports 3.Municipal Code & ordinances 4.Departmental activity reports 5. Financial information 6. FOIA requests 7. Strategic plans and implementation 8. Other documents	Calendar format ability to add event to user's calendar. Includes community events, Council meetings, committees, commissions and all other municipal entities	Select the language in which you prefer to have the site displayed	

Website Mission Statement – Home Page Only

The Prospect Heights website serves as the primary two-way interactive communication, information dissemination and reference tool and vehicle to a variety of audiences. Among these are:

- **Residents of Prospect heights**
- **Non-residents considering living in Prospect Heights**
- **Businesses conducting their activities within Prospect Heights on behalf of themselves or for Prospect Heights residents**
- **Businesses seeking to do business in the Prospect Heights community**
- **Elected officials**
- **Staff of the City of Prospect Heights**
- **Other audiences interested in learning about Prospect Heights**

The website will also function as a primary communications vehicle for residents who may need to interact with the various components of Prospect Heights' governmental or administrative units. Additionally, the website will be the avenue that will support and promote transparency of the municipality.

Prospect Heights Website Schematic – Home Page – Cont'd

Main Tabs and Access Points

Your Government	City Services	Business & Development	Our Community	How we can help you find
Contains information and links for Local, County, State and Federal officials that comprise the overall PH governance structure	***The tab contains information on all City departments; with overall descriptions with links to staff by name, title, direct telephone and email addresses. Provides links to specialized request forms completed online and submitted by email to the unit head, or printed for offline completion and submission.***	***Provides information to attract new businesses, provides information and links to licenses, permits and other business related forms that can be completed online or printed for offline completion and submission***	***Provides information on the Prospect Heights community, including a calendar of community events, governmental meetings of the Council, committees, commissions and all other municipal entities***	***Provides a robust search engine for the entire site This function will available on the main pages of the website.***

These tabs will be "drop down" in design to reveal the next level of available information

Top Ribbon Tab & Pages Schematic

This page contains descriptive information and links to the various functions and units described at the top of the Home Page. Display descriptive information and links by means of a user click on the function . **Staff page coordinators - Pardeep Deol & Karen Schultheis**

Payments	**Allows for the making of payments via credit card for various City services that are billed. Provide format and approval review link for payments by credit card**
Applications and Service requests	**Forms to be submitted as templates from staff. Use PDF forms that allow for input by user and form in Word**
Transparency	**Drop down menu for access to the information described on the Ribbon page**
Calendar	**In calendar format with the ability to download or print event information or a specified period of time. Discuss with vendor. Current thinking is to have a calendar for meetings and for events with ability for the user to select pathway**
Language Translation	**Function to allow non-English speaking residents to utilize the website in a language that is familiar to them. See Murphy, TX website as an example.**
How do I find....	**Robust search function to allow for searching and accessing any portion of the website by name or partial name. Examples could be for persons on the website, specific drill down pages or forms. Design of this tab will require input and specifications from the vendor doing the website re-design.**

Your Government Tab & Pages Schematic

This page contains descriptive information and links to the various governmental units that have relevance to Prospect Heights and its citizen. Display Units. Display descriptive information and links by means of a user click on the unit Staff page Coordinator - Peter Falcone

City Council	**List of Elected officials with titles, access information such as emails phone numbers and "head shot photo Contains descriptive information such as scope of duties and responsibilities and general meeting schedules**
Committees & Commissions	**Lists of members and chairs with titles, access information such as emails phone numbers for the Chair and "head shot photo of the members Contains descriptive information such as scope of duties and responsibilities and general meeting schedules**
Fire District	**Name of Chief with access information such as emails phone numbers for the Chair and "head shot photo of the members Contains descriptive information such as scope of duties and responsibilities and general meeting schedules**
Cook County Clerk	**Provide link to the Clerk's website. This will be a portal to the site**
Cook County Treasurer	**Provide link to the Treasurer's website. This will be a portal to the site**
State Representatives	**Provide link the reps website**
State Senators	**Provide link to senators' website**
U.S. Representative	**Provide to the reps website**
U.S. Senators	**Provide link to senators' website**
White House	**Provide link**

City Services Tab & Pages Schematic

This page contains descriptive information and links to the various departmental units of Prospect Heights.. Display Units. Display descriptive information and links by means of a user click on the unit **Staff Page Coordinator - Peter Falcone**

Administration	**List unit's duties and responsibilities. Identify department staff with access information i.e.: telephone and email. Provide photo "head shots". Provide links to any special forms and requests that are serviced by the unit. Provide links to other relevant information. This specification applies for all units displayed on this page**
Building & Zoning	
Engineering	
Finance	
Health Dept.	
Police	
Public Works	
Television	

Business and Development

This page contains descriptive information and links to the various businesses in Prospect Heights. It also contains information and specific forms for those businesses that may be interested in establishing a presence in the City Page Coordinators - Joe Wade, Nick Helmer and Steve Skiber

Available Properties	
Building Codes	
Licenses Needed	
Economic Development Planning	
Local Businesses	**Description and link to the business website if one exists. Include contact person and telephone number if no website.**

Our Community Tab & Pages Schematic

This page contains descriptive information and links to the various community activities such as the Events Calendar and links to schools, the library, park districts and other community services organizations. **Page Coordinator - TBD**

Community Events Calendar	**Display in calendar format. Allow user to download events to the user's calendar software. Allow user to be able to print the detail of a specific event and to print a given period of the calendar. Allow for ability of the user to download event information to personal user calendar software.**
Library	**List the Library and provide a link to the website**
Park Districts	**List districts and provide a link to their website.**
Schools	**List schools and have a link to their various websites**
Other Service Organizations	**Define and provide access through a link.**

Next Steps

- Contact current vendor & give first right of refusal
- Organize project implementation team (elected & staff)
- Finalize the RFP
- Establish Project Work Program

Project Work Program – Prospect Heights Website Redesign

Task/Activity	Start	Complete	Assigned To	Comments
Phase I --Launch Planning	8/6		LER	
A. Convene Staff Meeting	8/6	8/6	LER	Conducted at City Hall
1. Present overview of project 2. Identify staff input 3. Review staff survey 4. Establish due dates to complete				
B. Conduct survey	8/7	8/15	LER	Distributed by email
1. Staff 2. Elected officials 3. Interested third parties				
C. Synthesize survey results	8/15	8/18		Completed surveys returned and reviewed. A sample of other municipalities included in the review.
D. Establish RFP Template	8/20	8/22		
E. Identify Potential Vendors	8/5			Allow current vendor first attempt due to contract provision. If "no-go" release to broader base of potential bidders
Phase II – Develop & Publish RFP	8/22	8/31		
A. Develop 1st draft	8/23	8/28		
B. Conduct draft review	9/25	9/25		
1. Staff 2. Elected officials *for info purposes only	9/11	9/16	LER	Presented at September Council Workshop Meeting
C. Modify draft as determined	9/25	9/25		Completed at Project Team meeting
D. Publish RFP	9/28	9/28		
E. Meet with Current Vendor	10/14	10/14		In person and by teleconference. Determine willingness to proceed with redesign
F. Establish RFP evaluation template				

Project Work Program – Prospect Heights Website Redesign

Task/Activity	Start	Complete	Assigned To	Comments
Phase III – Create Detailed Design & Content Specifications				
A. Top Ribbon Tabs 1. Payments 2. Applications & Requests 3. Transparency 4. Calendar 5. Language 6. How do I find	9/28	10/5	Pardeep Deol & Karen Schultheis	Refer to "Design Task Definitions" for detailed specifications
B. Your Government	9/28	10/5	Peter Falcone	Refer to "Design Task Definitions" for detailed specifications
C. City Services	9/28	10/5	Peter Falcone	Refer to "Design Task Definitions" for detailed specifications
D. Business & development	9/28	10/12	Joe Wade, Nick Helmer & Steve Skiber	Refer to "Design Task Definitions" for detailed specifications
E. Our Community	9/28	10/5	Pardeep Deol	Refer to "Design Task Definitions" for detailed specifications
Phase IV – Review Vendor Proposals	10/15			
A. Meet with Evaluation team to describe role and requirements				
B. Conduct quantitative and qualitative review				
C. Select finalists to be interviewed				
Phase IV – Interview finalist vendors (includes demonstrations of functioning websites based upon City specified functions)				
Phase V – Select vendor for project				
A. Make presentation to the Council				
B. Secure Council approval				
C. Negotiate contract				

Project Work Program – Prospect Heights Website Redesign

Task/Activity	Start	Complete	Assigned To	Comments
Design Task Definitions				
Top Ribbon Tabs	9/28		Pardeep Deol Karen Schultheis	
Payments 1. Define the types of payments that can be made online 2. Define the process that will provide for online credit card verification and authorization 3. Define the types of credit cards that will be accepted 4. Define how invoices and notification will occur 5. Define the process for recording receivables			Pardeep Deol Karen Schultheis	
Applications and Requests 1. Define permitted online service requests 2. Define data elements to be collected that will become part of the request record. 3. Define the flow of requests from requester to department with return message to the requester 4. Define follow-up process on Pending Requests 5. Define process by which completed Requests will be retained for future analysis and reporting			Pardeep Deol Karen Schultheis	
Transparency This will be static information 1. See design schematic for specific content 2. Allow for display, download and/or printing of the document			Pardeep Deol Karen Schultheis	

Project Work Program – Prospect Heights Website Redesign

3. Define process by which content will be maintained and updated by City staff				
Calendar 1. Define focal point/position from which data will be entered and maintained in the calendar 2. Determine time retention of past events 3. Define process by which data will flow from the entire organization to the focal point for purposes of maintenance and updating of the calendar 4. Identify "backup" position for this activity 5. Provide access pathway for meetings and for events to be made by user selection			Pardeep Deol Karen Schultheis	
Language 1. Determine and select software that can interface with the website 2. Review Google Translate 3. Review the Murphy Texas municipal website			Pardeep Deol Karen Schutheis	
How Do I Find 1. Define parameters and scope of the search argument 2. Review various search techniques 3. Choose appropriate search routine			Pardeep Deol Karen Schultheis & Vendor	
Your Government – Tab & Pages	9/28		Pete Falcone	
1. Design standardized form to be used to populate all of the entries for the local units 2. Incorporate specific data elements as described in the design schematic				

Project Work Program – Prospect Heights Website Redesign

3. Identify the URL that will provide the link to units and officials described that are beyond the municipal environment				
City Services -Tab & Pages	9/28		Pete Falcone	
1. Develop standardized form that will provide the content as specified in the design schematic 2. Develop links to other pages within the website as may be necessary				
Business and Development	9/28		Joe Wade, Nick Helmer & Steve Skiber	Need definition of specific content for this tab and the pages associated with it.
Our Community	9/28			
1. Provide URL to accomplish the links specified and for any additions needed 2. Determine whether additional links are needed				

Request for Proposal (RFP) Prospect Heights (PH) Website Outline

I. **Introduction**

A. Project scope and purpose

The City of Prospect Heights, IL seeks a vendor who will revise and update the City of Prospect Heights (PH) website to bring it more aligned to the needs of the community and to implement the requirements as specified in this RFP. Additionally, PH expects the successful vendor to lend its expertise, experience in the development of such websites that will further the mission of the website as described in this RFP.

B. Due date for response to RFP – 10/15/2015

C. Mechanism for Questions and Answers

Submit questions related to development and submission of the proposal by email. Responses will sent by email. Peter Falcone, Assistant to the City Administrator will be the person on the website team who will receive and respond to any inquiries.

D. Proposal Evaluation Methodology

PH staff will review and evaluate proposals on the following basis:

1. Alignment of response to the specifications in this RFP
2. Level of detail and definition by which the proposal addresses the specification of the RFP
3. Demonstrated successful experience on the development and implementation of websites for other municipalities
4. Ability to demonstrate operation of the functional requirements specified in the RFP
5. Financial impact
6. Develop and present an overall planning and implementation approach of the project
7. Projected time frame from approval to the revised website being made operational
8. Presenting of a plan by which an "expected results" test will be conducted

II. **Project Overview**

A. Project Scope

Revise the PH website bade upon the design schematic that is incorporated into this RFP. Based upon the vendor experience the PH project team welcomes any recommendations and suggestions made by the vendor that will improve the final product.

B. Phase definition

PH expects the project to have several progressive phases. Define each of the phases as the vendor may envision them. Define each phase by its scope of activity, time, and the evaluation to define the phase as completed.

C. PH Project Team

The PH members of the project team will consist of a combination of PH Elected officials (2) and PH staff members (3). The Project Leader will be one person from PH. The successful vendor will assign its staff as members of this project team.

They are:

Peter Falcone, Assistant to the City Administrator, Project Leader
Karen Schulthesis, Deputy Clerk
Pardeep Deol, Community Liaison Officer
Joe Wade, City Administrator
Wendy Morgan, City Clerk
Larry Rosenthal, Alderman Ward 2

The mission of the Team will be to manage the full design, development and implementation of the revised website. The Project Team will provide periodic progress reports to the City Council

III. Functional Specifications

A. Review the Schematic Design of Proposed Website Re-design
   1. Provide analysis and evaluation of the design's feasibility
   2. Provide any recommended adjustments or approaches that will accomplish the conceptual design schematic
   3. Provide a detailed explanation of the manner and how the project will be organized, managed and implemented

B. Provide methodology for interaction between PH Project Team and Contractor Team

C. Identify vendor project team and provide duties and areas of responsibility.

D. Describe approach to review and evaluation of work completed during the design and implementation phases

E. Provide the method by which the bidder will demonstrate and allow evaluation by the PH Team of the project components identified below
   1. Design and implementation of the various pages of the site
   2. Utilization and demonstration of the content management sub-system of the site
   3. Interface of content development by PH staff with site implementation
   4. Description of technical knowledge needed to update existing content place on the revised website and the process of adding new content and deleting old content
   5. Demonstration of the currently available content templates currently part of the overall site
   6. Define the impact, both technical and financial, of the addition of new templates for PH use
   7. Describe the process you propose by which the completed site will undergo "acceptance testing" and remediation of identified flaws or errors.

F. Establish a database of PH forms as PDF files that are input capable and are accessible with links at identified places on the website.

G. Provide and demonstrate ability for mobile users to have effective and readable access to the website.

H. Other specifications

IV. **Project Calendar & Work Program**

A. Present a detailed project work program and calendar that will define the following for each task and phase
    1. Task/Activity description
    2. Start date
    3. Complete date
    4. Responsible person(s) for the specific activity/task

B. Detail how the work program will be updated and used as a project management tool

V. **Financial Requirements**

Present a detailed budget aligned to each of the project phases defined in your proposal

VI. **Contractual Requirements**

PH and the successful vendor will enter into a contract in conformance with the rules, regulations and ordinances of the City of Prospect Heights.

VII. **Other Specifications**

A. The final proposal of the successful vendor will be incorporated and made a part of the contract executed by PH and the vendor

CIVICPLUS®

WEBSITE PROPOSAL FOR

CITY OF PROSPECT HEIGHTS, ILLINOIS

REECE HAMMITT
WEBSITE REDESIGN SPECIALIST

October 9, 2015

Pete Deol
Community Liaison Officer
City of Prospect Heights
14 E. Camp McDonald Rd
Prospect Heights, IL 60070

RE: Prospect Heights Website Redesign

Dear Pete:

Meeting the expectations of citizens is at the core of civic responsibility. Finding that perfect blend of functionality, ease of maintenance and citizen engagement can be daunting. Today's "what I want, when I need it" population is all about digital and timely responses. Saving time and money and increasing citizen satisfaction is every government entity's goal. How do you achieve both? It's easy with CivicPlus—we help you achieve your vision of success.

Our experience with Prospect Heights over the past three years and our extensive experience with other municipalities across the United States gives us the confidence to say that we can accomplish the mission of creating the two-way interactive communication, information dissemination and reference tool that your staff and elected officials have imagined. Our company is passionate about our mission to help make local government better. We are not just designing a website, we are helping build a trusted and long-term relationship between you and your community through our state-of-the-art technology and process. Our expertise lies in collaborating with our clients to deliver the right solution, housed within a sophisticated and custom design that captures the culture of your community.

How will we help you achieve your vision? With our proven, **The 5 Essentials**, process to creating functional and dynamic websites and teaming with CivicPlus on the journey, you will get where you want to go.

- **Vision** – Finding your way with clarity. Determine where you want to go, and why.
- **Alignment** – Moving forward...together. Clearly communicate your goals and plans to all stakeholders.
- **Usability** – Navigating your journey in style. Designing a website that is up-to-date, easy-to-navigate and user friendly.
- **Mobility** – Keeping your visitors in touch – wherever they access. Today's websites need to be accessible from any device.
- **Measurement** – Monitoring how successful your website is throughout the process and beyond. Analyze and adjust to meet your needs.

The City of Prospect Heights was planned to receive a free basic redesign after four years of continuous service with CivicPlus in 2016 and this proposal is based on expediting that detail from your contract. The following information will show you how the CivicPlus solution can continue to reduce your staff's workload, respect your available budget and most importantly provide your community with a powerful online resource. A resource that promotes open and transparent access to your municipal offices and becomes an engaging communication hub for your community.

Please review our proposal closely. We encourage you to contact our references and find out others' experiences working with CivicPlus. We think you will be impressed. With CivicPlus, you will save time, resources, and dollars by using our experience and expertise in the design of municipal websites to satisfy the needs of your community today and to grow with them into the future. We look forward to continuing to work with you and your staff making your vision become a reality.

Sincerely,

Reece Hammitt
Website Redesign Specialist
reece@civicplus.com
785-323-4789

TABLE OF CONTENTS

ACHIEVING YOUR VISION 5

CIVICPLUS COMPANY OVERVIEW 6

FUNCTIONAL SPECIFICATIONS 8

PROJECT DEVELOPMENT APPROACH 10

DEMONSTRATED MOBILE CAPABILITY & OTHER SPECIFICATIONS 15

CIVICPLUS VERSION 5 FEATURES & FUNCTIONALITY 17

CIVICPLUS PREMIUM VERSION 5 MODULES 18

HOSTING & SECURITY SERVICES 21

CONTINUING SERVICE & SUPPORT 23

COMPANY & CONTACT INFORMATION 24

PROJECT CALENDAR & WORK PROGRAM 25

FINANCIAL REQUIREMENTS 26

PROJECT OVERVIEW

A. Project Scope

CivicPlus will revise the Prospect Heights, Illinois website based upon the design schematic in the provided RFP and make recommendations and suggestions to improve the final product.

B. Phase definition

Kick-Off Meeting

Deliverable: Project timeline, training jump start, online forms, Kick-Off meeting

CivicPlus will:	What we will need from you:
■ Assign your dedicated project manager	■ Completion of: Functionality and Design Form, Web Team Form and Content Form (prior to Phase 1)
■ Conduct a project Kick-Off Meeting to review awarded contract	■ Attend Kick-Off Meeting with key stakeholders and decision makers
■ Establish communication plan for project duration	■ Approval of the project timeline
■ Identify all key internal and external stakeholders	■ Update current primary content and delete any pages no longer needed or not to be migrated.
■ Develop project plan and timeline	
■ Provide project management and support	

Phase 1: Website Optimization

Deliverable: Website optimization meeting

CivicPlus will:	What we will need from you:
■ Provide communication support and status to key stakeholders via email or phone as needed	■ Gather and provide statistics from the current website for the previous 12 months
■ Review goals and expectations you submitted on the completed forms to ensure all needs are clearly understood	■ Collect graphics to be incorporated in the new site
	■ Submit a list of all divisions and/or departments within the organization
	■ Submit a list of third-party and in-house developed applications presently being utilized
	■ A site map or outline of the current website's navigational structure
	■ A list of any content on the primary website that must remain intact (verbatim)

Phase 2: Website Layout

Deliverable: Website grayscale layout and mood board color pallet presentation

CivicPlus will:

- Present one custom layout in grayscale and one mood board color palette including placement of navigation, graphic buttons and feature areas - based on previously determined goals
- Begin design development once approved

What we will need from you:

- Approval of and/or request changes to layout and mood board concepts
- Review of marketing packet material and guidelines
- Phase 2 - Website Layout billing milestone complete

Phase 3: Website Reveal

Deliverable: Website design and production

CivicPlus will:

- Present a fully functional website on production URL
- Migrate all agreed upon content pages
- Migrate Microsoft Word or .pdf documents of current, plus previous three years, of agendas and minutes
- Conduct a quality review of the website to ensure the statement of work is met, after approval of design and functionality
- Coordinate training needs

What we will need from you:

- Evaluate and provide feedback on design and content
- Collaborate with CivicPlus on proposed changes
- Provide all necessary DNS items identified
- Submit any revisions to design (until agreed deadline date determined during Kick-Off Meeting)
- Design changes requested after agreed deadline date, will cause Go Live date to be adjusted

Phase 4: Three 8-hour Days of On-Site Training for up to 10 individuals

Deliverable: Train *System Administrator(s)* on GCMS® Administration, permissions, setting up groups and users, module administration. *Basic User* training on pages, module entries, applying modules to pages. Applied use and usability consultation

CivicPlus will:

- Provide training as agreed upon for staff members, based on internal daily task and workflow
- Train staff on GCMS®, including updating content pages and modules
- Provide access to online training manuals and videos for additional assistance

What we will need from you:

- Provide a location for training with internet access
- Provide computers for training purposes
- Phase 4 - Training billing milestone complete

Phase 5: Go Live

Deliverable: Custom website launched to the public.

CivicPlus will:

- Address system issues identified
- Redirect the domain name to the newly developed website once you sign off on the completed project

What we will need from you:

- Test GCMS® functionality ("acceptance testing") and update the final site as per approved timeline
- Report any system issues
- Sign off on finalized site before Go Live

Kick-Off Meeting

During the initial Kick-Off meeting, you will meet your project manager to establish your project timeline, review the startup kit and discuss the takeaway items that need to be completed. Your project manager will discuss the implications of deadlines and the expectations required to keep the project on track.

Phase 1: Website Optimization

Review Needs

We will review where you are now and discuss where you want to go.

Functionality & Design

We will review how you want your website to look, feel and function.

Best Practices

We will discuss our CivicPlus content best practices and standards.

Phase 2: Website Layout

Based on your results and goals outlined during the website optimization phase, your project team will collaborate to present the most effective user interface for your website, ensuring a flexible design optimized to display in any format now and in the future.

Deliverables Include:

- Layout: You will be presented with a custom layout that showcases the placement of your navigation and key functionality. Very similar to the floor plan of a house, the layout will allow you to focus on where things are and if the function and proportion of the space is adequate.
- Global Navigation: Simple navigation and consistent page layouts ensure that your visitors can easily find the information they seek. We'll provide you with a best practice navigation for your new website based on your community engagement goals and our prior experience in working with government entities.
- Mood Board: Your Project Team will also present a custom mood board reflecting the color and imagery that will set the tone for your design. A mood board is a collection of colors, textures, images, graphics, text and descriptive words. These items will be applied to the floor plan you choose. Think of this as the paint that will be used on the canvas that you have chosen.

Average Project Timeline 16-24 Weeks

KICKOFF

PHASE 1

Timeline 3-6 Weeks

PHASE 2

Timeline 3-5 Weeks

PHASE 3

Timeline 3-5 Weeks

PHASE 4

Timeline 3-4 Weeks

PHASE 5

Timeline 3-5 Weeks

Phase 3: Website Reveal

Your Project Team will present your layout, functionality and design based on your goals, our recommendations and our combined vision.

Design Review

You will have the opportunity to evaluate and collaborate with the Project Team on proposed changes. You can revise your design composition up to the deadline that you and your project manager agree upon during the timeline meeting (the average client requests a total of three). After that deadline, your project's Go Live date will be adjusted. Following design approval and functionality development, we conduct a review to ensure your expectations are met and website best practices are upheld. Custom designs are rarely produced in anticipation of a project. Copyright authorization and/or photography production are required unless you already have quality, usable photographs.

Accessibility Compliance

Our designers and programmers automatically implement all the accessibility features necessary to ensure your site is compliant with accessibility standards outlined within Section 508. We will make recommendations on best practices for keeping your content accessible and available for all users by ensuring that, among other things:

- All menu items are clickable
- Submenus display throughout the site
- Alt tags are used for images
- Site maps are dynamically generated
- Documents and links can be set to open in the same window

CivicPlus recognizes accessibility standards recommendations made by a variety of groups, including the World Wide Web Consortium (W3C) and the Web Accessibility Initiative (WAI) as written in the Web Content Accessibility Guidelines (WCAG). Through adherence to Section 508, CivicPlus is able to meet nearly all Priority One, Two and Three guidelines set forth in the WCAG. Those left unmet do not need to be addressed in order to allow basic access to content; some of the more stringent requirements of the WCAG may limit design and content development options.

Phase 4: Customized Training

Our goal for training is to give your staff the skills and tools they need to quickly and easily keep your website current. Trainers will work with you to ensure your staff is correctly trained. Before your site is launched, CivicPlus provides in-person training to equip your staff with the knowledge, tools and comfort level needed to maintain the site's integrity upon Go Live.

Regardless of technical ability, we will help your staff gain the confidence to effectively maintain your website.

Features, Module & Page Creation Training

Included in our training for Administrators & Content Contributors will be delivering an understanding of your site's navigation and page layout and how these affect target audiences. We will instruct your staff on creating area-rights and back-end features for site administration as well as review all the modules included with your site. Your staff will learn how to create links, format text and lay out pages for usability and scannability.

CivicPlus training manuals and videos are available for download at no cost from our online resources.

Average Project Timeline 16-24 Weeks

Timeline 3-6 Weeks

Timeline 3-5 Weeks

Timeline 3-5 Weeks

Timeline 3-4 Weeks

Timeline 3-5 Weeks

Phase 5: Go Live

This is an exciting time; it is the last step before your new site launches! Your Project Team will provide you the information you need to prepare your site for Go Live.

Testing and Review

You typically have three weeks after training to become familiar with your site. This will allow you to add, create and make adjustments to content on your production site, as well as ensure overall satisfaction with your website. Content changes will display and function the same way before and after your Go Live date.

Upon completion of a collaborative final review of the website and a final spelling and links checkup by our Quality Control Team, your domain name is directed to the newly developed website.

Your Role

We will need your help to create the strongest possible website for your community. During the process, you will have homework. Yes, homework! We will need you to:

Assess Your Current Website

For the best consulting experience possible the following takeaways need to be completed prior to your consulting:

- **Functionality and Design Form** - Prior to starting this form, research other websites that you like based on functionality and design elements. Provide URLs and specifics about what you like. This form also asks for details on your community's tagline, logo and branding.
- **Web Team Form** - Prior to starting this form, please have an understanding of your project goals, focus and expectations. This allows your CivicPlus project team to develop a site specific to your needs and lays the foundation for developing a highly functional information architecture.

Average Project Timeline 16-24 Weeks

KICKOFF

PHASE 1

Timeline 3-6 Weeks

PHASE 2

Timeline 3-5 Weeks

PHASE 3

Timeline 3-5 Weeks

PHASE 4

Timeline 3-4 Weeks

PHASE 5

Timeline 3-5 Weeks

FUNCTIONAL SPECIFICATIONS

A. Review the Schematic Design of Proposed Website Re-design

CivicPlus will provide analysis and evaluation of the proposed design's feasibility based on our extensive expertise and experience with local government websites. Our project management and content development team will provide recommended adjustments and approaches to accomplish theconceptual design schematic. A detailed explanation of the manner in which the project will be organized, managed and implemented is included in the previous Phase Definitions and the Project Calendar & Work Program.

B. Methodology for Interaction between PH & CivicPlus Project Team

Alignment is an essential component of every project at CivicPlus. Our goal is to achieve your goal, which means clear, continuous communication between our team and yours. Regular meetings with specific goals and key due dates are set throughout our Redesign Timeline at the initial Kick-Off Meeting to keep all key stakeholders involved and informed. Your project manager will assist your team in managing the full design, development and implementation

C. CivicPlus Project Team

From project management, design and development to training and support, our professional staff ensures the success of your website. Our expert project leaders will coordinate your needs with qualified specialists who will work directly with you throughout your project development and beyond.

Reece Hammitt – Website Redesign Specialist

As your website redesign specialist, I will initially work with you to determine the best solutions for your administrative users and website audience. With over five years of experience with CivicPlus, my extensive knowledge of our GCMS®, website usability expertise and client-driven philosophy will ensure that we arrive at the best solution for your budget.

Molly Adams – Project Manager

Molly will be your redesign project manager. She will oversee all inter-departmental and PH Project Team interactions, assuring that your project will be developed in a timely manner by professional website experts. Using her knowledge of effective online citizen engagement techniques, she will keep the process moving smoothly from phase to phase.

Jessica Jones – Manager of Content Development

Jessica's goal is to help make your website convey the messages you need. She heads our content development department. She will assign a team of developers to help you develop and maintain quality content for your site and keep your project on schedule.

Tony Ridder – Manager of Creative Services

Tony knows all things design. He is the head of our creative development and graphic representations and is responsible for each website overview and uniqueness. He leads our brilliant team of designers at CivicPlus and will team you with the right designer for your project. Your senior designer will assist the project manager in the direction of your project.

Jim Steffensmeier – Manager of Training and Consulting

From consulting services to content development to technical specifications, our consulting and training department will assist you in developing the right message in the right way by the right team. As Manager, Jim brings unprecedented experience to our customers through his many years with CivicPlus and in the technology industry. He will coordinate his team of professionals to deliver the solutions you need to achieve your training and consulting success and hit the ground running at Go Live.

Troy Galvan - Manager of Account Management

Upon launch of your website to the public, Troy will assign an account manager to your project. Your dedicated account manager stays current on new CivicPlus products and will continue to optimize your site. This specialized team member will provide you with information on how to better engage your citizens utilizing the tools that CivicPlus has put into place on your website.

Robin Genschorck – Manager of Support

Robin's team is here to help you. Our proactive approach to keeping you up and running is in identifying and preventing potential issues before they occur. Through regularly scheduled reviews of site logs, error messages, servers, router activity and the internet in general, our personnel often identify and correct issues before they even affect our clients' websites. They are ready and available to answer your staff members' questions and ensure their confidence in using our site.

D. Approach to review and evaluate work completed during the design and implementation phases

Your project manager will coordinate review meetings throughout the design and implemtation phases as laid out in the Phase definitions on page 5. These will give the PH Project Team the opportunity to reqest clarifications and revisions before proceeding to the next phase.

E. Method by which CivicPlus will demonstrate and allow evaluation by the PH Team

1. Design and implementation of the various pages of the site

During Phase 3: Website Reveal, the PH Team will be asked to evaluate and provide feedback on design and content, collaborate with CivicPlus on proposed changes, and submit any revisions to design (until agreed deadline date determined during Kick-Off Meeting). Design changes requested after agreed deadline date, will cause Go Live date to be adjusted.

2. Utilization and demonstration of the content management sub-system of the site

During Phase 4: Customized Training, CivicPlus will provide training as agreed upon for staff members, based on internal daily task and workflow, train staff on GCMS®, including updating content pages and modules, and provide access to online training manuals and videos for additional assistance.

3. Interface of content development by PH staff with site implementation

Included in Phase 4: Customized Training.

4. Description of technical knowledge needed to update existing content place on the revised website and the process of adding new content and deleting old content

Recognizing that not all site administrators possess high levels of technical expertise, the CivicPlus GCMS® Version 5 makes it easy to add new content, edit old content, and keep page layout consistent through use of our WYSIWYG editor. The page content creation functionality is separate from the overall design of the site; the content will reflect font sizes and styles associated with the various heading levels and content types. Content changes will not affect the design, though the site breadcrumbs, page structure and sitemap will dynamically update upon publish of any content changes. This front-end edit feature makes updating website content even quicker and easier, as users have point-click-edit access to information, right from the front-end of the website. During Phase 4: Customized Training, your on-site trainer will demonstrate the process and train up to 10 individuals to update, add and delete content on the site.

5. Demonstration of the currently available content templates currently part of the overall site

One overall design template is created specifically for the site's homepage and interior pages. Page layout options are available within the Online Page Editor content creation functionality, and those layouts are separate from the overall design of the site, though they do reflect font sizes and styles associated with the various heading levels and content types. Content changes will not affect the design, though the site breadcrumbs, page structure and sitemap will dynamically update upon publish of any content changes.

6. Define the impact, both technical and financial, of the addition of new templates for PH use

Should design changes be requested and/or necessary, the site's content – in most cases – should adjust to the new design with little to no content manipulation needed. Additional sub-sites or department header packages can be purchased if there are additional pages or URLs that need a different look, feel or navigation from the overall design template for the site's homepage and interior pages laid out in your conceptual design schematic.

7. Describe the process you propose by which the completed site will undergo "acceptance testing" and remediation of identified flaws or errors.

During Phase 5: Go Live, CivicPlus will ask the PH Project Team and any other potential site users to test GCMS® functionality ("acceptance testing"), update the final site as per approved timeline, report any system issues, and sign off on finalized site before Go Live.

F. Database of PH forms as input-capable PDF files that are accessible with links at identified places

The Document Center is a document storage center that allows for a variety of file types (e.g., PDF, spreadsheets, pictures, video files, sound clips and more) to be downloaded or viewed by the end user, allowing for easy access for your site visitors. Instead of bogging down your employees with requests for documentation, site visitors can locate the forms and documents they need easily online through links at identified places on any page of the website. Your employees can easily add new documents and direct residents to the information they requested online, without sending out extra paperwork. Moreover, all files are organized by our structured filing system of folders and subfolders, keeping all of your information easily obtainable by your citizenry 24/7. All digital PDFs that are input capable will maintain that ability.

Our Form Center can also be used as an altewrmative to input capable PDFs. Having online forms makes it easy for you to receive useful information from your community and for your community to complete tasks online. These completely customizable forms can be used as a means for citizens to contact you with questions, requests and feedback or to sign up for various events and activities. You can have as many online forms as you need with this module, creating forms easily from scratch or from our library of sample online forms. Various field options include long answer, radio button, drop-down lists and multiple choice (among others), with formatting options that include font colors, background colors, text alignment and more. The Form Center lets you develop every aspect of your online form with no programming knowledge necessary through a simple drag-and-drop interface. In addition to being able to create your own form, you can track your forms through your website! No more lost emails and sorting for statistical data through multiple emails. Any form submitted on your website can be received via email to as many people as you wish and/or be kept in a backend database with basic analytical reporting available. This data can then be exported to Microsoft Access, Excel or other database software.

G. Provide and demonstrate ability for mobile users to have effective and readable access to website.

Here are just a few references of our effective and readable mobile-responsive websites.

Yorkville, Illinois

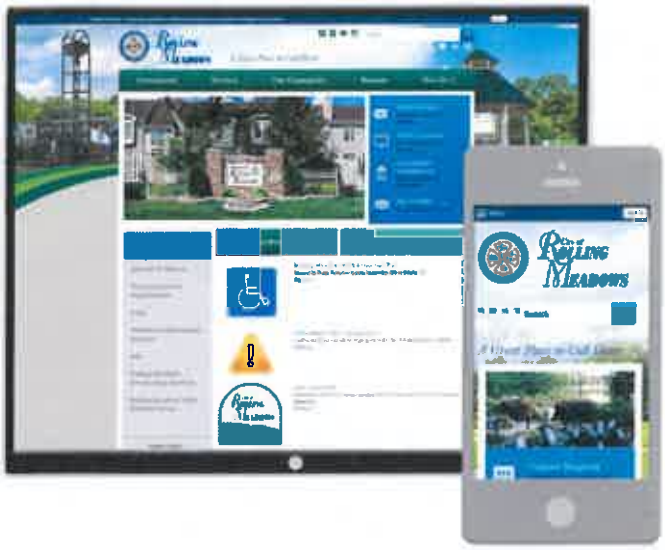
URL:
www.yorkville.il.us

Contact:
Bart Olson
City Administrator
630-553-8529
bolson@yorkville.il.us

HEAR FROM OUR CUSTOMERS

"Converting our old web site in to the modern County web presence would have cost more in time and frustration than the reasonable cost associated with hiring CivicPlus consulting staff to lead the way."

Snohomish County, WA
David Stroble
Business Analysis & Project Management Team



Rolling Meadows, Illinois

URL:
www.ci.rolling-meadows.il.us

Contact:
Melissa Gallagher
Finance Director
847-870-9041
gallagherm@cityrm.org

Dekalb, Illinois

URL:
www.cityofdekalb.com

Contact:
Lauren Stott
Management Analyst
815-748-2396
lauren.stott@cityofdekalb.com

Buffalo Grove, Illinois

URL:
www.vbg.org

Contact:
Kevin M. McMaster
Communications Manager
847-459-2508
kmcmaster@vbg.org

HEAR FROM OUR CUSTOMERS

"A company is created by its people. The CivicPlus staff is phenomenal. CivicPlus is going to understand what your town means to you and your residents and how you want your town or city to appear. They are just as passionate about promoting your area as you are."

Castle Rock, Colorado
Karen McGrath

H. Other specifications

Here is a complete list of the CivicPlus Version 5 features and functionality.

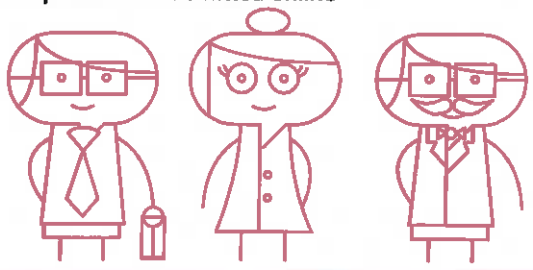
Developed for organizations that have a need to update their site frequently, CivicPlus provides a powerful government content management structure and website menu management system. The system allows non-technical employees the ability to easily update any portion of your website instantaneously. The CivicPlus Government Content Management System (GCMS®) utilizes Microsoft SQL Server, ASP, JavaScript and HTML for web development.

Each website begins with a unique design developed to meet your specific communication and marketing goals, while showcasing the individuality of your community. Features and capabilities are added and customized as necessary, and all content is organized in accordance with web usability standards.

Modules	Functionality
Agenda Center	Action Items Queue
Alerts Center & Emergency Alert Notification	Audit Trail / History Log
Archive Center	Automated PDF Converter
Bid Postings	Automatic Content Archiving
Blog	Dynamic Breadcrumbs
Business/Resource Directory	Dynamic Sitemap
Citizen Request Tracker™	Expiring Items Library
Community Connection	Graphic Link Administration
Community Voice™	Links Redirect
Document Center	Menu Management
ePayments	Mouse-over Menu Structure
Facilities & Reservations	Live Editing and Page Creation
Frequently Asked Questions	Online Web Statistics
Forms Center	Printer Friendly/Email Page
Intranet	RSS
Job Postings	Site Layout Options
My Dashboard	Site Search & Entry Log
News Flash	Slideshow
Notify Me™ email and 500 SMS subscribers	Social Media Integration
Photo Gallery	User & Group Administration Rights
Quick Links	Web Page Upload Utility
Spotlight	Website Administrative Log
Staff Directory	

CIVICPLUS PREMIUM VERSION 5 MODULES

- Agenda Center – Create and display agendas and minutes for various civic organizations
- Alert Center - Graphically show when there is an emergency or important notification
- Bid Postings - Simple and easy to use method of posting your bids
- Blog - Post opinions/information about various topics. Can also be set up to allow site visitors to comment and subscribe
- Business / Resource Directory – The *Yellow Pages* of your website
- Calendar – Create multiple calendars for various divisions and departments
- Citizen Request Tracker™ - Allow users to report a problem while providing follow-up communication with the point of contact
- Community Voice™ – Open forum in which citizens can interact while allowing you to showcase projects in your community
- Document Center – Organize and house documents in department or division folders and sub-folders
- ePayment Center - The ePayment module is included with our premium website solution and allows customers to have the ability to process payment transactions via the website.
- Facilities & Reservations - Facilities and meeting places in one convenient place allowing reservations online
- Form Center - Create custom online forms that can be completed and submitted online



- Frequently Asked Questions (FAQs) – Answer the most frequently asked questions from your visitors
- Job Postings - Post available jobs in an easy to access manner
- My Dashboard – Allow users to personalize their dashboard to stay updated on news, events, and information they care about
- NotifyMe™ - Send out mass emails to subscribers of specific lists and modules, Includes 500 SMS subscribers
- News Flash - Post organizational news items, right on your home page, that are important to your citizens
- Opinion Poll – Interact with your site visitors by posting various questions and polls
- Photo Gallery - Store and display photos
- Quick Links - Place links on any page
- Spotlight – Allows you to highlight important text or widgets in a compact, easy-to-update module
- Staff Directory - Detailed contact information for your staff and offices

Social Networking & Gov 2.0

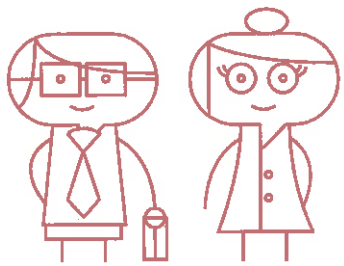
CivicPlus understands the importance of Gov 2.0 and how social networking sites like Facebook and Twitter help governments connect with their residents in unique and innovative ways. From community-centric pages on Facebook to real-time Twitter feeds that can deliver emergency alerts, we are dedicated to helping our clients integrate their web content into the most dynamic social media sites and make their marks in the world of Gov 2.0.

CivicPlus can sync your website to your Facebook and Twitter profiles to automatically publish news, notices, and calendar events on Facebook with a link to your website for more information. Twitter's short, 140-character "tweets"

offers a way to distribute information quickly and effectively. Other social networking sites (such as LinkedIn, YouTube, Pinterest, etc.) can be featured on your website as links to your profile on those websites.

Administrative Features

- Instantaneous Updates – Once published, updates are posted to the live site in real time.
- Browser Based – No installation of programs or software needed! Your staff can update the site from an internet connection or platform (Mac or PC) at any time.
- Mobile Updates – Immediately upgrade your site from any location using your tablet or phone.
- Action Items – Direct access to a queue of pending items to be published or reviewed by the administrator upon login.
- Site Search and Search Log – Powerful site search automatically indexes all content making it easy for visitors to find information. A log of all words that have been searched by visitors is kept, allowing you to update highly searched information and feature key items.
- Automatic Alt Tags – Built-in features ensure your site is Section 508 compliant without having to know the requirements.
- Bad Links Identifier - This module creates a list of the broken links on your site when they are accessed.
- Content Creation - The CivicPlus GCMS® makes it easy to add new content, edit old content, and keep page layout consistent through use of our *What You See Is What You Get* (WYSIWYG) editor. Content changes will not affect the design - site breadcrumbs, page structure and sitemaps will dynamically update upon publishing. With mega menus and drop-down, pop-out menu functionality, you can essentially get to any page on your website within a single click if desired!
- Content Scheduling - Material throughout the entire system can be set to auto-unpublish (expire) or it can be manually retired.
- Content Versioning - The GCMS includes version control, a history log for reviewing changes made within the system, file locking through our permission system and an archive of all published content.
- Dynamic Layout - The layout for your website will be determined by you and the designer. Placement of navigation and dynamic areas are important in guiding site visitors to key information quickly and easily.
- Dynamic Page Components - Events Calendar, FAQs, Opinion Poll, News Flash and other new features may be included as dynamic page components. Dynamic Page Components may be placed on any page and will help dedicated areas of the site appear as its own website. For example, the entry page for your Parks and Recreation Department can be customized with specific lists of events, FAQs and news announcements pertaining to that department.
- Dynamic Breadcrumbs and Site Map - Dynamic Breadcrumbs are used to show a visitor's location within the site. Breadcrumbs are automatically generated by our system. A dynamically generated site map automatically updates to reflect your new navigation if changes are made.
- ePayment & eCommerce Integration - The ePayment module is included with our premium website solution and allows customers to have the ability to process payment transactions via the website. This makes payment processes more convenient for clients as well as online visitors, saving staff time and effort by lessening the burden and confusion of manually processing payments. To take advantage of this module, additional processing transaction and merchant account fees will apply. Please talk to your Sales Representative for additional information regarding the CivicPlus ePayment module.
- History Log - Easily tracks changes made to your website including items in your Page Menu, Archive Center, Document Center and more. History Log information is searchable, sortable and exportable.



- **Integration/Interfacing** - CivicPlus' integration services work cohesively with most third-party software applications. We have the capability to link with most software or databases currently utilized. Systems such as purchasing, taxes, assessment and utilities have been developed for many of our clients.
- **Intranet** - An intranet is a secure location on your website that allows employees and other groups to login and access non-public resources and information. You will have the ability to set up multiple intranet groups with varying view rights.
- **Levels of Rights** - Levels of Rights may be defined as publishers (create or publish) or authors (create but not publish), or as administrators of modules. Assigned groups may have the right to update their own content without affecting web pages, menu structure, top of page, banner or navigation.
- **LDAP Authentication** - LDAP authentication provides a powerful and simple way to manage users and permissions within our system by syncing your website with your existing active directory database - negating the need for multiple user upload and sign-on. Because LDAP authentication requires custom programming time, additional fees apply.
- **Link Redirects** - Instead of sending your users to http://civicplus.com/248/Awards-and-Recognition, you can send them to http://civicplus.com/awards. A more intuitive approach to help visitors find particular pages.
- **Maps** – Help website users find commonly requested information such as bus routes, highways, tourist attractions, education information, major employers, or demographics. Maps can be simple, clickable maps, using our Image Map Editor, or more sophisticated JavaScript or Flash (additional fees required for JavaScript or Flash development).
- **Printer Friendly** - Our printer friendly functionality does separates critical content from the site template to provide a clean print without menu structure and banner information included.
- **RSS Feeds** - RSS stands for Real Simple Syndication and in short, it brings your site to the people. After signing up, they receive email notifications of the latest news updates.
- **Supported Browsers** - CivicPlus websites are viewable in all common browsers. We optimize them for administrative use with Windows 2000+ and in the two most recent versions of major browsers including: Internet Explorer, Firefox, Safari and Chrome.
- **Website Statistics** - Administrators will be trained on the use and analysis of web statistics, provided through Piwik Analytics.

Application Programming Interfaces

We have nearly a dozen application programming interfaces (APIs) throughout the system and continue to build more to make integrations with our GCMS® and disparate applications as straightforward as possible. It's this "open architecture" approach that allows your IT staff and programmers to spend time creating applications and systems that are specific to your community's needs and tie them into the site, using the site itself as a sturdy platform on which to build.

Media Center - Mobile Video

CivicPlus offers a robust mobile video experience as part of our Media Center solution. Consumption of mobile video is continuing to grow, and providing this option as part of your overall mobile experience is a must have to drive engagement.

Mobile Video

- Just about any file format is supported and are easily searchable, shareable and accessible from all devices.

HOSTING & SECURITY SERVICES

Redundant power sources and internet access ensure consistent and stable connections. Regular hardware upgrades make certain that our hosted sites are maintained on up-to-date, reliable equipment.

Hosting & Security Features

Physical Security	■ Biometric access ■ Proximity card key system prevents unauthorized access to servers ■ High-resolution, closed-circuit video with time lapse recording covering secured areas ■ All visitors require a full-time escort within hosting area
Power	■ Building tied into two separate main grids ■ All systems fed by uninterruptible power supplies (UPSs) with diesel-powered generator backup
Bandwidth	■ The Data center has 50 GB of Bandwidth provided Multiple Tier 1 carriers with BGP routing to provide for redundancy and load balancing ■ Currently 1 GB burstable is what is available to servers (soon to be upgraded) ■ We strive to maintain a cushion of 40+ percent on what is available to the servers. That typically means we can support a single site's need 10X beyond their normal traffic
Monitoring	■ Round-the-clock (24/7/365) monitoring of all critical components, including: internet connectivity, servers, routers, switches and power systems ■ Monitoring of site homepage, for status, response time and string
Backup	■ Backup performed daily ■ Off-site archive ■ Daily back-ups retained for one week ■ Weekly back-ups retained for one month ■ Monthly back-ups retained for one year

? DID YOU KNOW?

Our Network Operations Center, based in Kansas City, MO, is set up specifically for website hosting and administration

Antivirus	■ Continuously scan system ■ Signature files auto-updated every four hours from national registry
Network Security	■ Server operating systems applied as necessary ■ Router level port blocking and reporting ■ Firewall level port, packet filtering and reporting ■ Server level logging ■ Access to Layer 3 DDOS soaking up to 200GBps via GRE tunnel to protect Data Center. ■ Collaboration with Application layer DDOS vendors ■ Dedicated IP Address
Hardware	■ Four Head SAN N+3 ■ Virtualized server infrastructure ■ Redundant Cooling Solution ■ 36-month hardware refresh cycle ■ Geographically dispersed back-up hot site
Intrusion Detection	■ Redundant Firewalls
Staff Certifications	■ Electrical Engineer (EE) ■ Cisco-certified network associates (CCNA) ■ CompTIA Security+ ■ CompTIA Networks+

? DID YOU KNOW?

Walk-in and phone questions can cost on average $17 per transaction? Online, self-service resources for information average only $4 each!

Source:
Public Policy & Administration University of Utah, 2012

CONTINUING SERVICE & SUPPORT

CivicPlus won't be with you just for the development, design and launch – we will be here year after year to respond to new needs and new opportunities for you to continue to have the best site possible. We offer all of our clients continuing support and additional advantages as a member of the CivicPlus family.

Dedicated Account Management

CivicPlus has a team of dedicated account managers to help you implement the tools needed to successfully meet the level of Community Engagement that you desire. Upon website Go Live, you will have a dedicated member of this team to help you keep up on new CivicPlus products and optimize your site. This specialized team member can provide you with further information on how to engage your citizens, utilizing the tools that CivicPlus has put into place on your new website.

Around-the-Clock Technical Support

Our support personnel are ready to answer your staff members' questions and ensure their confidence in using our site. When you choose CivicPlus, our knowledgeable staff is available from 7 a.m. to 7 p.m. (CST) to field your calls and emails, and emergency services are available after regular hours with our on-call staff 24-hours a day.

In addition to fielding support requests, CivicPlus is proactive in identifying any potential system issues. Through regularly scheduled reviews of site logs, error messages, servers, router activity and the internet in general, our personnel often identify and correct issues before they even affect our clients' websites. Our expertise in website management provides assurance to our clients that their site is in good hands.

Support	Maintenance of CivicPlus Application & Modules
7 a.m. – 7 p.m. (CST) Monday – Friday (excluding holidays)	Install service patches for OS system enhancements
24/7 Emergency Support	Fixes
Dedicated support personnel	Improvements
2-hour response during normal hours	Integration
Usability improvements	Testing
Integration of system enhancements	Development
Proactive support for updates & fixes	Usage License
Online training manuals	
Monthly newsletters	
Routine follow-up check-ins	
CivicPlus Connection	

COMPANY & CONTACT INFORMATION

Contact Information	Reece Hammit Website Redesign Specialist reece@civicplus.com 888-228-2233 ext. 341	Primary Office	302 S. 4th Street, Suite 500 Manhattan, KS 66502 Toll Free 888-228-2233 Fax 785-587-8951
Incorporated In	State of Kansas	Company Website	www.CivicPlus.com
Legal Name	Icon Enterprises, Inc. d/b/a CivicPlus	Company Founder	Ward Morgan, President/CEO
GSA Contract	# GS-35F-0124U	TIPS/TAPS Contract	# 2092613
CMAS Contract	# 3-13-70-2966A		

PROJECT CALENDAR & WORK PROGRAM

This is an example of a typical project timeline based on our described project development approach. We understand that Prospect Heights desires an earlier Go Live date and a more ambitious schedule may be developed with your project manager at the Kick-Off Meeting.

Consulting, design, usability guidance, programming, secure hosting and dedicated training - CivicPlus delivers all of this and more during the development of your new website.

Typical Project Timeline	Timeline
Phase 1 – Website Optimization Includes: Needs assessment, best practices, and takeaways assigned.	4-6 weeks
Phase 2 - Website Layout Includes: Layout presentation, mood board and main navigation review, design feedback meeting and approval and takeaways assigned.	3-5 weeks
Phase 3 – Website Reveal Includes: Presentation of a functional website based on goals, recommendations and combined vision; final approval and take-aways assigned.	3-5 weeks
Phase 4 – Customized Training (if purchased) Includes: Customized to give your staff the skills they need to maintain your website.	3-4 weeks
Phase 5 – Go Live	3-5 weeks
Website Launch	16 - 24 Weeks (On Average)

Average Project Timeline 16-24 Weeks

KICKOFF

PHASE 1

Timeline 3-6 Weeks

PHASE 2

Timeline 3-5 Weeks

PHASE 3

Timeline 3-5 Weeks

PHASE 4

Timeline 3-4 Weeks

PHASE 5

Timeline 3-5 Weeks

FINANCIAL REQUIREMENTS

All Quotes are in US Dollars and Valid for 90 Days from October 9, 2015.

CivicPlus prices on a per project basis. We have found that this type of pricing structure eliminates surprise costs and is overall more cost effective. Our goal is not to "nickel and dime" our clients with hidden fees or hourly rates. We present the most cost effective solution while still meeting your needs.

Basic Recurring Redesign	
Design & Project Overview	

• Expedited Redesign
• New responsive design presented on newest platform
• Redevelop navigation method based on Prospect Heights Website Schematic
• Design setup – wireframe
• Print this page option
• Email this page option
• Breadcrumbs
• Sitemap
• Redevelop graphic elements of website (Newsflash, FAQs, Calendar, etc.)
• Project Management
• Testing
• Review
• Content
  • Includes migrating of all existing content and retouching of published pages to ensure new site styles are applied and modules are related to feature columns.
  • Contact information will be moved to an info advanced area if previously formatted in a right contact layout.
  • Pages will be moved to coordinate with new menu structure
Note: Content will not be rewritten, reformatted or broken up. Additionally, new pages will not be created.
• Inclusion of all standard modules
• 10 GB of Media Storage
• Translation Tool	

Additional Options	
Three 8-hour Days of On-Site Training for up to 10 individuals	**$8,800**
One Time Fee	**$12,560**

Annual Fee	
Current annual hosting, Media Center, maintenance and support fees	**$5,701.45**

APPROVAL OF WARRANTS

13A

10/26/2015 COUNCIL MEETING		
Checks		
General Fund	$ 359,658.25	
MFT Fund		
Palatine/Milwaukee TIF		
Tourism District	66.00	
Development Fund		
DEA Fund	420.84	
Solid Waste Fund		
S S Area #1		
S S Area #2		
S S Area #3		
S S Area #4		
S S Area #5	11,830.70	
S S Area #8 - Levee Wall #37		
S S Area-Constr#6(Water Main)		
S S Area-Debt#6		
Road Construction		
Road Construction Debt		
Water Fund	22,408.88	
Parking Fund	34.52	
Road/Building Bond Escrow		
TOTAL	$ 394,419.19	
Wire Payments		
10/16/2015 PAYROLL	153,378.33	
10/20/15 POLICE PENSION PAYMENT	30,712.77	
Total Warrant	$ 578,510.29	

GL Account and Title	Net Invoice Amount	Amount Paid	Date Paid
GENERAL FUND			
Total GENERAL FUND:	359,658.25	7,108.35	
TOURISM DISTRICT			
Total TOURISM DISTRICT:	66.00	.00	
DEA SEIZURE FUND			
Total DEA SEIZURE FUND:	420.84	.00	
SSA #5			
Total SSA #5:	11,830.70	.00	
WATER FUND			
Total WATER FUND:	22,408.88	.00	
PARKING FUND			
Total PARKING FUND:	34.52	.00	
Grand Totals:	394,419.19	7,108.35	

Report Criteria:
Detail report.
Invoices with totals above $0.00 included.
Paid and unpaid invoices included.

Vendor Name	Invoice Number	Description	Invoice Date	GL Account Number	Net Invoice Amt	Amount Paid	Date Paid
AFLAC	177238	P/R WITHHOLDING	10/07/2015	01-000-2031	192.98	.00	
Total AFLAC:					192.98	.00	
ALPHAGRAPHICS	73268	WATER SURVEY PRINTING	10/09/2015	51-300-5100	1,187.77	.00	
Total ALPHAGRAPHICS:					1,187.77	.00	
AMERICAN WATER WORKS AS	7001088462	1/1/16-13/31/16 AWWA MEMBER	09/27/2015	51-300-5310	330.00	.00	
Total AMERICAN WATER WORKS ASSN:					330.00	.00	
ARAMARK UNIFORM SERVICES	09/30/2015	PW UNIFORM SERVICE	09/30/2015	01-350-5104	631.89	.00	
Total ARAMARK UNIFORM SERVICES:					631.89	.00	
ARLINGTON HEIGHTS FORD	737955	VEH MTC SUPPLIES	10/15/2015	01-350-5020	243.85	.00	
Total ARLINGTON HEIGHTS FORD:					243.85	.00	
AT&T	847398608010/	PD FAX #3493	10/10/2015	01-320-5410	38.21	.00	
AT&T	847398616010/	CH ALARM LINES #5533	10/10/2015	01-320-5410	125.22	.00	
AT&T	847485118010/	PD SUBSTATION RING DOWN #	10/10/2015	01-320-5410	38.21	.00	
Total AT&T:					201.64	.00	
AT&T LONG DISTANCE	10/04/2015	LONG DISTANCE STATEMENT	10/04/2015	01-320-5410	23.36	.00	
Total AT&T LONG DISTANCE:					23.36	.00	
BERTOG LANDSCAPE CO	15331	DRAINAGE WORK - 300 PINE S	10/12/2015	01-550-7053	1,885.60	.00	
Total BERTOG LANDSCAPE CO:					1,885.60	.00	
BILL STASEK CHEVROLET	CVR643964	SWAY BAR/PARTS FOR IMPALA	09/16/2015	01-350-5020	118.50	.00	
Total BILL STASEK CHEVROLET:					118.50	.00	
BOB BARKER COMPANY, INC	NC100125242	PD PRISONERS CARE	10/12/2015	01-360-5140	162.00	.00	
Total BOB BARKER COMPANY, INC:					162.00	.00	
BROOKS-ALLAN	0040000	PD OFFICE SUPPLIES	10/05/2015	01-360-5710	971.68	.00	
Total BROOKS-ALLAN:					971.68	.00	
BUSSE CAR WASH	1983	PD CAR WASHES	09/09/2015	01-360-5321	9.00	.00	
Total BUSSE CAR WASH:					9.00	.00	
CHICAGOLAND PAVING	152410-XR1	REMOVE & REPLACE STRUCT	07/16/2015	25-500-7053	5,900.00	.00	
CHICAGOLAND PAVING	152410-XR2	REMOVE & REPLACE STRUCT	08/16/2015	25-500-7053	5,900.00	.00	

Vendor Name	Invoice Number	Description	Invoice Date	GL Account Number	Net Invoice Amt	Amount Paid	Date Paid
Total CHICAGOLAND PAVING:					11,800.00	.00	
COMCAST	10/22-11/21	CH SVC #0510	10/15/2015	01-320-5410	252.85	.00	
Total COMCAST:					252.85	.00	
COMCAST CABLE	10/13-11/12	PW SVC #8066	10/06/2015	01-320-5410	305.20	.00	
Total COMCAST CABLE:					305.20	.00	
COMED I	9/14/15-10/13/	WATER 1823083040	10/13/2015	51-300-5410	30.99	.00	
Total COMED I:					30.99	.00	
CONSTELLATION NEWENERGY	0028057066	SSA#5 #2048011018	10/02/2015	25-300-5050	30.70	.00	
CONSTELLATION NEWENERGY	0028138664	STRTS #0924068002	10/07/2015	01-350-5411	147.27	.00	
CONSTELLATION NEWENERGY	0028285373	STRTS #4395721010	10/14/2015	01-350-5411	43.09	.00	
CONSTELLATION NEWENERGY	0028388936	STRTS #3147007013	10/18/2015	01-350-5411	258.91	.00	
CONSTELLATION NEWENERGY	0028389967	STRTS #0051066105	10/18/2015	01-350-5411	437.13	.00	
Total CONSTELLATION NEWENERGY INC.:					917.10	.00	
CONSTRUCTION & GEOTECHNI	3107	TESTING/ANALYSIS/REPORTS -	09/29/2015	01-520-7011	1,710.00	.00	
Total CONSTRUCTION & GEOTECHNICAL MATERIAL TES:					1,710.00	.00	
CYNTHIA LA MANTIA	10/14/15	COURT REPORTING SERVICES	10/14/2015	01-320-5122	280.00	.00	
Total CYNTHIA LA MANTIA:					280.00	.00	
DAN PETERSON	15-OCT-15	MILEAGE REIMBURSEMENT	10/15/2015	01-340-5321	49.45	.00	
Total DAN PETERSON:					49.45	.00	
DURON, JESUS	12/OCT/15	PD TRAINING REIMBURSEMEN	10/12/2015	01-360-5330	17.49	.00	
DURON, JESUS	28/SEPT/15	PD TRAINING REIMBURSEMEN	09/28/2015	01-360-5330	39.40	.00	
Total DURON, JESUS:					56.89	.00	
EVARISTO MENDEZ JR.	10/19/15	MEDICAL EXPENSE REIMBURS	10/19/2015	01-000-2061	200.00	.00	
Total EVARISTO MENDEZ JR.:					200.00	.00	
FIRST IMPRESSION WINDOW	137560	WINDOW CLEANING	10/16/2015	01-350-5104	229.00	.00	
Total FIRST IMPRESSION WINDOW:					229.00	.00	
GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	GIS UPDATES	10/21/2015	01-350-5100	728.00	.00	
GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	DRAINAGE IMPROVEMENT PR	10/21/2015	01-550-7053	2,839.00	.00	
GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	TOURISM PROJECTS	10/21/2015	13-300-5108	66.00	.00	
GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	BILLABLE ENGINEERING SERVI	10/21/2015	01-330-5110	1,254.00	.00	
GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	GENERAL ENGINEERING SERV	10/21/2015	01-330-5100	3,530.01	.00	
Total GEWALT HAMILTON ASSOCIATES INC.:					8,417.01	.00	
GLENBROOK EXCAVATING & C	PAY #3	DRAINAGE WORK - VARIOUS S	10/22/2015	01-550-7053	166,972.50	.00	

Vendor Name	Invoice Number	Description	Invoice Date	GL Account Number	Net Invoice Amt	Amount Paid	Date Paid
Total GLENBROOK EXCAVATING & CONCRET, INC:					166,972.50	.00	
HEY AND ASSOCIATES, INC.	15-0320-4225	HILLCREST LAKE/SLOUGH FIEL	10/15/2015	01-330-5100	5,700.00	.00	
Total HEY AND ASSOCIATES, INC.:					5,700.00	.00	
IL CITY-COUNTY MANAGEMEN	249	JOB POSTING - PW DIRECTOR	10/12/2015	01-350-5100	50.00	.00	
Total IL CITY-COUNTY MANAGEMENT ASSOCIATION:					50.00	.00	
ILLINOIS-AMERICAN WATER C	09/01/15-10/01	WTR 1025-210004321674	10/07/2015	51-300-5412	16,716.89	.00	
Total ILLINOIS-AMERICAN WATER CO.:					16,716.89	.00	
IUOE LOCAL 150 ADMIN	#150 A 10/16/2	LOCAL 150 ADMIN DUES	10/16/2015	01-000-2050	339.92	.00	
Total IUOE LOCAL 150 ADMIN:					339.92	.00	
IUOE LOCAL 150 MEMBERSHIP	#150 M 10/16/2	LOCAL 150 MEMBERSHIP DUE	10/16/2015	01-000-2050	82.39	.00	
Total IUOE LOCAL 150 MEMBERSHIP:					82.39	.00	
JG UNIFORMS INC	38783	PD UNIFORM	10/07/2015	01-360-5741	120.69	.00	
JG UNIFORMS INC	38809	PD UNIFORM	10/08/2015	01-360-5741	515.61	.00	
Total JG UNIFORMS INC:					636.30	.00	
JOURNAL & TOPICS NEWSPAP	166804	PZBA LEGALS	10/07/2015	01-340-5222	112.28	.00	
Total JOURNAL & TOPICS NEWSPAPERS INC.:					112.28	.00	
KUNTZE CONSTRUCTION SER	10/12/15	ENTRY DOOR HANDLE REPLA	10/12/2015	01-350-5104	115.00	.00	
Total KUNTZE CONSTRUCTION SERVICES:					115.00	.00	
LOGSDON OFFICE SUPPLY	0953821-001	CH OFFICE SUPPLIES	10/13/2015	01-320-5700	8.97	.00	
LOGSDON OFFICE SUPPLY	0953894-001	CH OFFICE SUPPLIES	10/14/2015	01-320-5700	59.90	.00	
LOGSDON OFFICE SUPPLY	0953897-001	CH OFFICE SUPPLIES	10/14/2015	01-320-5700	20.20	.00	
Total LOGSDON OFFICE SUPPLY:					89.07	.00	
MAILBOX PLUS	10-13-15	PD SHIPPING	10/13/2015	01-360-5200	80.75	.00	
Total MAILBOX PLUS:					80.75	.00	
MODERN MARKETING, INC.	MMI111163	PENCILS AND TRAVEL MUGS -	09/09/2015	16-300-5710	420.84	.00	
Total MODERN MARKETING, INC.:					420.84	.00	
MOE FUNDS	12/2015	HEALTH/DENTAL INS PREMIUM	10/22/2015	51-300-4100	1,800.00	.00	
MOE FUNDS	12/2015	HEALTH/DENTAL INS PREMIUM	10/22/2015	01-340-4100	1,800.00	.00	
MOE FUNDS	12/2015	HEALTH/DENTAL INS PREMIUM	10/22/2015	01-350-4100	9,000.00	.00	
Total MOE FUNDS:					12,600.00	.00	
MT. PROSPECT/PROSPECT HEI	267	DUES & LUNCHES FOR PD CHI	09/30/2015	01-360-5330	213.00	.00	

Vendor Name	Invoice Number	Description	Invoice Date	GL Account Number	Net Invoice Amt	Amount Paid	Date Paid
Total MT. PROSPECT/PROSPECT HEIGHTS ROTARY:					213.00	.00	
N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	01-370-4101	260.00	.00	
N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	51-300-4100	40.00	.00	
N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	01-360-4100	3,025.25	.00	
N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	01-340-4100	357.00	.00	
N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	01-320-4100	375.00	.00	
Total N SUB EMPL DENTAL BENEFIT COOP:					4,057.25	.00	
N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	01-320-4100	2,389.50	.00	
N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	01-330-4100	573.50	.00	
N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	01-340-4100	3,753.50	.00	
N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	01-360-4100	24,762.00	.00	
N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	51-300-4100	266.50	.00	
Total N SUBURBAN EMPL BENEFIT COOP:					31,745.00	.00	
NORTH EAST MULTI-REGIONAL	200503	PD TRAINING	10/16/2015	01-360-5330	250.00	.00	
NORTH EAST MULTI-REGIONAL	200561	PD TRAINING	10/16/2015	01-360-5330	300.00	.00	
Total NORTH EAST MULTI-REGIONAL TRAINING INC.:					550.00	.00	
NORTHWEST ELECTRICAL SUP	17237686	PW OPERATING SUPPLIES	10/02/2015	01-350-5710	153.14	.00	
NORTHWEST ELECTRICAL SUP	17237688	PW OPERATING SUPPLIES	10/02/2015	01-350-5710	11.68	.00	
NORTHWEST ELECTRICAL SUP	17238254	PW OPERATING SUPPLIES	10/06/2015	01-350-5710	217.05	.00	
NORTHWEST ELECTRICAL SUP	17238296	PW OPERATING SUPPLIES	10/06/2015	01-350-5710	101.79	.00	
NORTHWEST ELECTRICAL SUP	17238302	PW OPERATING SUPPLIES	10/06/2015	01-350-5710	83.43-	.00	
NORTHWEST ELECTRICAL SUP	17238342	PW OPERATING SUPPLIES	10/06/2015	01-350-5710	7.00	.00	
NORTHWEST ELECTRICAL SUP	17239396	PW OPERATING SUPPLIES	10/13/2015	01-350-5710	51.31	.00	
Total NORTHWEST ELECTRICAL SUPPLY CO:					458.54	.00	
NORTHWEST POLICE ACADEM	10/8/2015	PD SEMINAR EXPENSE	10/08/2015	01-360-5330	25.00	.00	
Total NORTHWEST POLICE ACADEMY:					25.00	.00	
NWBOCA 2015 FALL SCHOOL	2015 FALL SC	2015 FALL SCHOOL REGISTRA	10/19/2015	01-340-5330	80.00	.00	
Total NWBOCA 2015 FALL SCHOOL:					80.00	.00	
OHANA FARMS, INC.	3132/DEPOSIT	TREE PLANTING	10/08/2015	01-350-5650	1,622.50	.00	
Total OHANA FARMS, INC.:					1,622.50	.00	
PENTEGRA SYSTEMS LLC	52832	ANNUAL FEE FOR INTRUSION	10/15/2015	01-360-5610	360.00	.00	
Total PENTEGRA SYSTEMS LLC:					360.00	.00	
PERSONNEL CONCEPTS INC.	2015 POSTER	2015 IL LABOR LAW POSTERS	10/02/2015	01-320-5700	25.85	.00	
Total PERSONNEL CONCEPTS INC.:					25.85	.00	
PETTY CASH PD	7/17/15-10/9/1	WINDOW WASHING	10/09/2015	01-350-5104	72.00	72.00	10/15/2015
PETTY CASH PD	7/17/15-10/9/1	SHIPPING PACKAGE	10/09/2015	01-360-5200	9.00	9.00	10/15/2015
PETTY CASH PD	7/17/15-10/9/1	PD TRAINING	10/09/2015	01-360-5330	93.05	93.05	10/15/2015
PETTY CASH PD	7/17/15-10/9/1	PD EQUIPMENT SUPPLIES	10/09/2015	01-360-5610	30.14	30.14	10/15/2015

Vendor Name	Invoice Number	Description	Invoice Date	GL Account Number	Net Invoice Amt	Amount Paid	Date Paid
PETTY CASH PD	7/17/15-10/9/1	PD OPERATING SUPPLIES	10/09/2015	01-360-5710	127.99	127.99	10/15/2015
Total PETTY CASH PD:					332.18	332.18	
PRO DATA PAYROLL SERVICE	352228	PAYROLL PROCESSING	10/14/2015	01-320-5540	206.95	.00	
Total PRO DATA PAYROLL SERVICES INC.:					206.95	.00	
PROSPECT HEIGHTS PARK DIS	2015 BP	2015 BLOCK PARTY EXPENSES	10/13/2015	01-310-5950	6,420.17	6,420.17	10/15/2015
PROSPECT HEIGHTS PARK DIS	2015-07	MOWER RENTAL REIMBURSEM	08/05/2015	01-350-5103	356.00	356.00	10/15/2015
Total PROSPECT HEIGHTS PARK DISTRICT:					6,776.17	6,776.17	
READY PRESS LLC	76499	B&Z INSPECTION FORMS	10/14/2015	01-340-5221	230.00	.00	
Total READY PRESS LLC:					230.00	.00	
RUSSO POWER EQUIPMENT IN	2702857	PW OPERATING SUPPLIES	10/08/2015	01-350-5710	377.38	.00	
RUSSO POWER EQUIPMENT IN	2703057	SNOW REMOVAL OPERATING	10/08/2015	01-350-5730	534.95	.00	
RUSSO POWER EQUIPMENT IN	2711483	BOBCAT MOWER PARTS	10/13/2015	01-350-5610	12.96	.00	
Total RUSSO POWER EQUIPMENT INC.:					925.29	.00	
S & J SERVICES INC.	1761	ELECTRICAL INSPECTIONS	10/07/2015	01-340-5100	1,055.50	.00	
Total S & J SERVICES INC.:					1,055.50	.00	
SAFEBUILT INC.	0021812-IN	BUILDING INSPECTIONS	09/30/2015	01-340-5100	448.50	.00	
Total SAFEBUILT INC.:					448.50	.00	
SECOND CHANCE CARDIAC S	15-010-137	CITY HALL AED	10/12/2015	01-350-5710	145.90	.00	
Total SECOND CHANCE CARDIAC SOLUTIONS:					145.90	.00	
SNAP-ON INDUSTRIAL INC.	ARV/27082682	VEH MTC SUPPLIES	10/13/2015	01-350-5020	62.73	.00	
Total SNAP-ON INDUSTRIAL INC.:					62.73	.00	
STONE WHEEL INC	13 521210	VEH MAINT SUPPLIES	10/20/2015	01-350-5020	318.39	.00	
Total STONE WHEEL INC:					318.39	.00	
SUBURBAN ACCENTS INC.	22811	GRAPHICS & LETTERING	10/12/2015	01-350-5020	300.00	.00	
Total SUBURBAN ACCENTS INC.:					300.00	.00	
TEMPERATURE EQUIPMENT C	4226449-00	METRA STATION FURNANCE	10/05/2015	52-300-5710	34.52	.00	
Total TEMPERATURE EQUIPMENT CORP:					34.52	.00	
VERIZON WIRELESS	9753762044	PD AIRCARDS	10/10/2015	01-360-5610	456.12	.00	
Total VERIZON WIRELESS:					456.12	.00	
VIAN CONSTRUCTION CO., INC.	PAY REQUES	ELM STREET DRAINAGE PROJ	10/13/2015	01-550-7053	105,854.37	.00	

Vendor Name	Invoice Number	Description	Invoice Date	GL Account Number	Net Invoice Amt	Amount Paid	Date Paid
Total VIAN CONSTRUCTION CO., INC.:					105,854.37	.00	
VILLAGE OF MOUNT PROSPEC	10/15/15	WATER USAGE #3287-001	10/15/2015	51-300-5412	58.38	.00	
VILLAGE OF MOUNT PROSPEC	10/15/2015	WATER USAGE #3288-001	10/15/2015	51-300-5412	308.58	.00	
Total VILLAGE OF MOUNT PROSPECT:					366.96	.00	
WATER PRODUCTS COMPANY	0261754	WATER MTC PARTS	10/14/2015	51-300-5050	1,669.77	.00	
Total WATER PRODUCTS COMPANY OF AURORA INC.:					1,669.77	.00	
XTIVITY SOLUTIONS INC.	367	OCT - DEC MONTHLY SECURIT	10/01/2015	01-320-5130	750.00	.00	
XTIVITY SOLUTIONS INC.	430	OCT - DEC PHONE/INTERNET S	10/01/2015	01-320-5130	1,226.00	.00	
Total XTIVITY SOLUTIONS INC.:					1,976.00	.00	
Grand Totals:					394,419.19	7,108.35	

Dated: _____

Mayor: _____

City Council: _____

_____

_____

_____

_____

_____

City Recorder: _____

Report Criteria:
Detail report.
Invoices with totals above $0.00 included.
Paid and unpaid invoices included.

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
GENERAL FUND							
01-000-2031 WITHHOLDING - Q AFLA	AFLAC	177238	P/R WITHHOLDING	10/07/2015	192.98	.00	
01-000-2050 W/H LOCAL 150 UNION	IUOE LOCAL 150 ADMIN	#150 A 10/16/2	LOCAL 150 ADMIN DUES	10/16/2015	339.92	.00	
01-000-2050 W/H LOCAL 150 UNION	IUOE LOCAL 150 MEMBERSHIP	#150 M 10/16/2	LOCAL 150 MEMBERSHIP DUE	10/16/2015	82.39	.00	
01-000-2061 WITHHOLDING FLEX ME	EVARISTO MENDEZ JR.	10/19/15	MEDICAL EXPENSE REIMBURS	10/19/2015	200.00	.00	
Total :					815.29	.00	
CITY COUNCIL & BOARDS							
01-310-5950 SPECIAL EVENTS	PROSPECT HEIGHTS PARK DIS	2015 BP	2015 BLOCK PARTY EXPENSES	10/13/2015	6,420.17	6,420.17	10/15/2015
Total CITY COUNCIL & BOARDS:					6,420.17	6,420.17	
ADMINISTRATION							
01-320-4100 HEALTH INSURANCE	N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	375.00	.00	
01-320-4100 HEALTH INSURANCE	N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	2,389.50	.00	
01-320-5122 CITY PROSECUTOR	CYNTHIA LA MANTIA	10/14/15	COURT REPORTING SERVICES	10/14/2015	280.00	.00	
01-320-5130 COMPUTER CONSULTA	XTIVITY SOLUTIONS INC.	367	OCT - DEC MONTHLY SECURIT	10/01/2015	750.00	.00	
01-320-5130 COMPUTER CONSULTA	XTIVITY SOLUTIONS INC.	430	OCT - DEC PHONE/INTERNET S	10/01/2015	1,226.00	.00	
01-320-5410 UTILITIES	AT&T	847398608010/	PD FAX #3493	10/10/2015	38.21	.00	
01-320-5410 UTILITIES	AT&T	847398616010/	CH ALARM LINES #5533	10/10/2015	125.22	.00	
01-320-5410 UTILITIES	AT&T	847465118010/	PD SUBSTATION RING DOWN #	10/10/2015	38.21	.00	
01-320-5410 UTILITIES	AT&T LONG DISTANCE	10/04/2015	LONG DISTANCE STATEMENT	10/04/2015	23.36	.00	
01-320-5410 UTILITIES	COMCAST	10/22-11/21	CH SVC #0510	10/15/2015	252.85	.00	
01-320-5410 UTILITIES	COMCAST CABLE	10/13-11/12	PW SVC #8066	10/06/2015	305.20	.00	
01-320-5540 PAYROLL SERVICE FEE	PRO DATA PAYROLL SERVICE	352228	PAYROLL PROCESSING	10/14/2015	206.95	.00	
01-320-5700 OFFICE SUPPLIES	LOGSDON OFFICE SUPPLY	0953821-001	CH OFFICE SUPPLIES	10/13/2015	8.97	.00	
01-320-5700 OFFICE SUPPLIES	LOGSDON OFFICE SUPPLY	0953894-001	CH OFFICE SUPPLIES	10/14/2015	59.90	.00	
01-320-5700 OFFICE SUPPLIES	LOGSDON OFFICE SUPPLY	0953897-001	CH OFFICE SUPPLIES	10/14/2015	20.20	.00	
01-320-5700 OFFICE SUPPLIES	PERSONNEL CONCEPTS INC.	2015 POSTER	2015 IL LABOR LAW POSTERS	10/02/2015	25.85	.00	
Total ADMINISTRATION:					6,125.42	.00	
ENGINEERING							
01-330-4100 HEALTH INSURANCE	N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	573.50	.00	
01-330-5100 PROFESSIONAL SERVIC	GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	GENERAL ENGINEERING SERV	10/21/2015	3,530.01	.00	
01-330-5100 PROFESSIONAL SERVIC	HEY AND ASSOCIATES, INC.	15-0320-4225	HILLCREST LAKE/SLOUGH FIEL	10/15/2015	5,700.00	.00	
01-330-5110 BILLABLE ENGINEERING	GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	BILLABLE ENGINEERING SERVI	10/21/2015	1,254.00	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total ENGINEERING:					11,057.51	.00	
BUILDING DEPARTMENT							
01-340-4100 HEALTH INSURANCE	MOE FUNDS	12/2015	HEALTH/DENTAL INS PREMIUM	10/22/2015	1,800.00	.00	
01-340-4100 HEALTH INSURANCE	N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	357.00	.00	
01-340-4100 HEALTH INSURANCE	N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	3,753.50	.00	
01-340-5100 PROFESSIONAL SERVIC	S & J SERVICES INC.	1761	ELECTRICAL INSPECTIONS	10/07/2015	1,055.50	.00	
01-340-5100 PROFESSIONAL SERVIC	SAFEBUILT INC.	0021812-IN	BUILDING INSPECTIONS	09/30/2015	448.50	.00	
01-340-5221 PRINTING	READY PRESS LLC	76499	B&Z INSPECTION FORMS	10/14/2015	230.00	.00	
01-340-5222 LEGAL NOTICES	JOURNAL & TOPICS NEWSPAP	166804	PZBA LEGALS	10/07/2015	112.28	.00	
01-340-5321 AUTO EXPENSE	DAN PETERSON	15-OCT-15	MILEAGE REIMBURSEMENT	10/15/2015	49.45	.00	
01-340-5330 TRAINING	NWBOCA 2015 FALL SCHOOL	2015 FALL SC	2015 FALL SCHOOL REGISTRA	10/19/2015	80.00	.00	
Total BUILDING DEPARTMENT:					7,886.23	.00	
PUBLIC WORKS							
01-350-4100 HEALTH INSURANCE	MOE FUNDS	12/2015	HEALTH/DENTAL INS PREMIUM	10/22/2015	9,000.00	.00	
01-350-5020 VEHICLE MAINTENANCE	ARLINGTON HEIGHTS FORD	737955	VEH MTC SUPPLIES	10/15/2015	243.85	.00	
01-350-5020 VEHICLE MAINTENANCE	BILL STASEK CHEVROLET	CVR643964	SWAY BAR/PARTS FOR IMPALA	09/16/2015	118.50	.00	
01-350-5020 VEHICLE MAINTENANCE	SNAP-ON INDUSTRIAL INC.	ARV/27082682	VEH MTC SUPPLIES	10/13/2015	62.73	.00	
01-350-5020 VEHICLE MAINTENANCE	STONE WHEEL INC	13 521210	VEH MAINT SUPPLIES	10/20/2015	318.39	.00	
01-350-5020 VEHICLE MAINTENANCE	SUBURBAN ACCENTS INC.	22811	GRAPHICS & LETTERING	10/12/2015	300.00	.00	
01-350-5100 PROFESSIONAL SERVIC	GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	GIS UPDATES	10/21/2015	728.00	.00	
01-350-5100 PROFESSIONAL SERVIC	IL CITY-COUNTY MANAGEMEN	249	JOB POSTING - PW DIRECTOR	10/12/2015	50.00	.00	
01-350-5103 PROF SERVICES - FORE	PROSPECT HEIGHTS PARK DIS	2015-07	MOWER RENTAL REIMBURSEM	08/05/2015	356.00	356.00	10/15/2015
01-350-5104 PROF SERVICES - BUILD	ARAMARK UNIFORM SERVICES	09/30/2015	PW UNIFORM SERVICE	09/30/2015	631.89	.00	
01-350-5104 PROF SERVICES - BUILD	FIRST IMPRESSION WINDOW	137560	WINDOW CLEANING	10/16/2015	229.00	.00	
01-350-5104 PROF SERVICES - BUILD	KUNTZE CONSTRUCTION SER	10/12/15	ENTRY DOOR HANDLE REPLA	10/12/2015	115.00	.00	
01-350-5104 PROF SERVICES - BUILD	PETTY CASH PD	7/17/15-10/9/1	WINDOW WASHING	10/09/2015	72.00	72.00	10/15/2015
01-350-5411 WATER AND ELECTRIC	CONSTELLATION NEWENERGY	0028138664	STRTS #0924068002	10/07/2015	147.27	.00	
01-350-5411 WATER AND ELECTRIC	CONSTELLATION NEWENERGY	0028285373	STRTS #4395721010	10/14/2015	43.09	.00	
01-350-5411 WATER AND ELECTRIC	CONSTELLATION NEWENERGY	0028388936	STRTS #3147007013	10/18/2015	258.91	.00	
01-350-5411 WATER AND ELECTRIC	CONSTELLATION NEWENERGY	0028389967	STRTS #0051066105	10/18/2015	437.13	.00	
01-350-5610 EQUIPMENT MAINTENA	RUSSO POWER EQUIPMENT IN	2711483	BOBCAT MOWER PARTS	10/13/2015	12.96	.00	
01-350-5650 LANDSCAPE SUPPLIES	OHANA FARMS, INC.	3132/DEPOSIT	TREE PLANTING	10/08/2015	1,622.50	.00	
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17237686	PW OPERATING SUPPLIES	10/02/2015	153.14	.00	
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17237688	PW OPERATING SUPPLIES	10/02/2015	11.68	.00	
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17238254	PW OPERATING SUPPLIES	10/06/2015	217.05	.00	
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17238296	PW OPERATING SUPPLIES	10/06/2015	101.79	.00	
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17238302	PW OPERATING SUPPLIES	10/06/2015	83.43-	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17238342	PW OPERATING SUPPLIES	10/06/2015	7.00	.00	
01-350-5710 OPERATING SUPPLIES	NORTHWEST ELECTRICAL SUP	17239396	PW OPERATING SUPPLIES	10/13/2015	51.31	.00	
01-350-5710 OPERATING SUPPLIES	RUSSO POWER EQUIPMENT IN	2702857	PW OPERATING SUPPLIES	10/08/2015	377.38	.00	
01-350-5710 OPERATING SUPPLIES	SECOND CHANCE CARDIAC S	15-010-137	CITY HALL AED	10/12/2015	145.90	.00	
01-350-5730 TOOLS	RUSSO POWER EQUIPMENT IN	2703057	SNOW REMOVAL OPERATING	10/08/2015	534.95	.00	
Total PUBLIC WORKS:					16,263.99	428.00	
PUBLIC SAFETY							
01-360-4100 HEALTH INSURANCE	N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	3,025.25	.00	
01-360-4100 HEALTH INSURANCE	N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	24,762.00	.00	
01-360-5140 PRISONERS CARE	BOB BARKER COMPANY, INC	NC100125242	PD PRISONERS CARE	10/12/2015	162.00	.00	
01-360-5200 POSTAGE	MAILBOX PLUS	10-13-15	PD SHIPPING	10/13/2015	80.75	.00	
01-360-5200 POSTAGE	PETTY CASH PD	7/17/15-10/9/1	SHIPPING PACKAGE	10/09/2015	9.00	9.00	10/15/2015
01-360-5321 AUTO EXPENSE	BUSSE CAR WASH	1983	PD CAR WASHES	09/09/2015	9.00	.00	
01-360-5330 TRAINING	DURON, JESUS	12/OCT/15	PD TRAINING REIMBURSEMEN	10/12/2015	17.49	.00	
01-360-5330 TRAINING	DURON, JESUS	28/SEPT/15	PD TRAINING REIMBURSEMEN	09/28/2015	39.40	.00	
01-360-5330 TRAINING	MT. PROSPECT/PROSPECT HEI	267	DUES & LUNCHES FOR PD CHI	09/30/2015	213.00	.00	
01-360-5330 TRAINING	NORTH EAST MULTI-REGIONAL	200503	PD TRAINING	10/16/2015	250.00	.00	
01-360-5330 TRAINING	NORTH EAST MULTI-REGIONAL	200561	PD TRAINING	10/16/2015	300.00	.00	
01-360-5330 TRAINING	NORTHWEST POLICE ACADEM	10/8/2015	PD SEMINAR EXPENSE	10/08/2015	25.00	.00	
01-360-5330 TRAINING	PETTY CASH PD	7/17/15-10/9/1	PD TRAINING	10/09/2015	93.05	93.05	10/15/2015
01-360-5610 EQUIPMENT MAINTENA	PENTEGRA SYSTEMS LLC	52832	ANNUAL FEE FOR INTRUSION	10/15/2015	360.00	.00	
01-360-5610 EQUIPMENT MAINTENA	PETTY CASH PD	7/17/15-10/9/1	PD EQUIPMENT SUPPLIES	10/09/2015	30.14	30.14	10/15/2015
01-360-5610 EQUIPMENT MAINTENA	VERIZON WIRELESS	9753762044	PD AIRCARDS	10/10/2015	456.12	.00	
01-360-5710 OPERATING SUPPLIES	BROOKS-ALLAN	0040000	PD OFFICE SUPPLIES	10/05/2015	971.68	.00	
01-360-5710 OPERATING SUPPLIES	PETTY CASH PD	7/17/15-10/9/1	PD OPERATING SUPPLIES	10/09/2015	127.99	127.99	10/15/2015
01-360-5741 CLOTHING	JG UNIFORMS INC	38783	PD UNIFORM	10/07/2015	120.69	.00	
01-360-5741 CLOTHING	JG UNIFORMS INC	38809	PD UNIFORM	10/08/2015	515.61	.00	
Total PUBLIC SAFETY:					31,568.17	260.18	
REIMBURSABLE EXP							
01-370-4101 RETIREE HEALTH INSUR	N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	260.00	.00	
Total REIMBURSABLE EXP:					260.00	.00	
01-520-7011 BUILDING IMPROVEMEN	CONSTRUCTION & GEOTECHNI	3107	TESTING/ANALYSIS/REPORTS -	09/29/2015	1,710.00	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total :					1,710.00	.00	
01-550-7053 DRAINAGE IMPROVEME	BERTOG LANDSCAPE CO	15331	DRAINAGE WORK - 300 PINE S	10/12/2015	1,885.60	.00	
01-550-7053 DRAINAGE IMPROVEME	GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	DRAINAGE IMPROVEMENT PR	10/21/2015	2,839.00	.00	
01-550-7053 DRAINAGE IMPROVEME	GLENBROOK EXCAVATING & C	PAY #3	DRAINAGE WORK - VARIOUS S	10/22/2015	166,972.50	.00	
01-550-7053 DRAINAGE IMPROVEME	VIAN CONSTRUCTION CO., INC.	PAY REQUES	ELM STREET DRAINAGE PROJ	10/13/2015	105,854.37	.00	
Total :					277,551.47	.00	
Total GENERAL FUND:					359,658.25	7,108.35	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
TOURISM DISTRICT							
EXPENSES							
13-300-5108 BEAUTIFICATION	GEWALT HAMILTON ASSOCIAT	THRU 9/21/15	TOURISM PROJECTS	10/21/2015	66.00	.00	
Total EXPENSES:					66.00	.00	
Total TOURISM DISTRICT:					66.00	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
DEA SEIZURE FUND							
EXPENSES							
16-300-5710 OPERATING SUPPLIES	MODERN MARKETING, INC.	MMI111163	PENCILS AND TRAVEL MUGS -	09/09/2015	420.84	.00	
Total EXPENSES:					420.84	.00	
Total DEA SEIZURE FUND:					420.84	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
SSA #5							
EXPENSES							
25-300-5050 SYSTEM MAINTENANCE	CONSTELLATION NEWENERGY	0028057066	SSA#5 #2048011018	10/02/2015	30.70	.00	
Total EXPENSES:					30.70	.00	
CAPITAL OUTLAY GENERAL							
25-500-7053 DRAINGAGE IMPROVEM	CHICAGOLAND PAVING	152410-XR1	REMOVE & REPLACE STRUCT	07/16/2015	5,900.00	.00	
25-500-7053 DRAINGAGE IMPROVEM	CHICAGOLAND PAVING	152410-XR2	REMOVE & REPLACE STRUCT	08/16/2015	5,900.00	.00	
Total CAPITAL OUTLAY GENERAL:					11,800.00	.00	
Total SSA #5:					11,830.70	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
WATER FUND							
EXPENSES							
51-300-4100 HEALTH INSURANCE	MOE FUNDS	12/2015	HEALTH/DENTAL INS PREMIUM	10/22/2015	1,800.00	.00	
51-300-4100 HEALTH INSURANCE	N SUB EMPL DENTAL BENEFIT	NOV-15	DENTAL & VISION INSURANCE	10/22/2015	40.00	.00	
51-300-4100 HEALTH INSURANCE	N SUBURBAN EMPL BENEFIT C	SEP-15	MEDICAL INSURANCE EXPENS	10/20/2015	266.50	.00	
51-300-5050 SYSTEM MAINTENANCE	WATER PRODUCTS COMPANY	0261754	WATER MTC PARTS	10/14/2015	1,669.77	.00	
51-300-5100 PROFESSIONAL SERVIC	ALPHAGRAPHICS	73268	WATER SURVEY PRINTING	10/09/2015	1,187.77	.00	
51-300-5310 MEMBERSHIPS	AMERICAN WATER WORKS AS	7001088462	1/1/16-13/31/16 AWWA MEMBER	09/27/2015	330.00	.00	
51-300-5410 UTILITIES	COMED I	9/14/15-10/13/	WATER 1823083040	10/13/2015	30.99	.00	
51-300-5412 WATER	ILLINOIS-AMERICAN WATER C	09/01/15-10/01	WTR 1025-210004321674	10/07/2015	16,716.89	.00	
51-300-5412 WATER	VILLAGE OF MOUNT PROSPEC	10/15/15	WATER USAGE #3287-001	10/15/2015	58.38	.00	
51-300-5412 WATER	VILLAGE OF MOUNT PROSPEC	10/15/2015	WATER USAGE #3288-001	10/15/2015	308.58	.00	
Total EXPENSES:					22,408.88	.00	
Total WATER FUND:					22,408.88	.00	

GL Account and Title	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
PARKING FUND							
EXPENSES							
52-300-5710 OPERATING SUPPLIES	TEMPERATURE EQUIPMENT C	4226449-00	METRA STATION FURNANCE	10/05/2015	34.52	.00	
Total EXPENSES:					34.52	.00	
Total PARKING FUND:					34.52	.00	
Grand Totals:					394,419.19	7,108.35	

City of Prospect Heights

Department of Engineering
8 North Elmhurst Road, Prospect Heights Illinois, 60070-6070
Office:847/398-6070 x 210-FAX: 847/590-1854
www.prospect-heights.il.us

To: Joe Wade, City Administrator
From: Steven Berecz, City Engineer
Date: October 13, 2015
Re: Pay Request #2 for Vian Construction
Elm Street 36" Storm Sewer Project

The City has received the attached pay request from Vian Construction Company for work completed through October 1st for the above referenced project. All work has been completed. I have reviewed the project and I do not have any remaining punch list items to be completed. I've checked with other City Departments and those Departments do not have any punch list items for the project.

The City has measured quantities and agrees with the quantities submitted in this pay request. The unit prices, extended unit prices and totals have been checked for accuracy. All work has been completed in general conformance with the contract drawings and specifications.

The project quantities included are final amounts. There were two project change orders, which are detailed on the following pages. These two change orders total $7,906.26 are were required to relocate two sanitary sewer services under the newly installed 36" storm sewer. The final project cost is $336,897.06, which is $9,742.06 (2.98%), over the awarded amount. In addition to the two change orders, a few of the contract quantities were over the estimated amounts established in the design stage, which resulted in the remaining contract overage.

Enclosed is Vian's waiver of lien to date for this pay request. Vian Construction has included all of their subcontractors' final waivers of lien with this pay request. They will forward their certified payrolls and all of their subcontractors' certified payrolls directly to the City at the end of each month and prior to receipt of this payment.

Based on the above information, we recommend semi-final payment to Vian Construction Company in the amount requested of $105,854.37. This amount represents a 2% reduction ($6,737.94) for retainage on the work completed to date. It is anticipated that the final payment will be considered in the spring of 2016, to ensure that all sod / final restoration has taken and is acceptable.

Sincerely,
City of Prospect Heights

Steven D. Berecz

Steven D. Berecz, P.E.
City Engineer

10/20/15

01-550-7053

Encl: Invoice
Vian Waiver of Lien to Date
Subcontractor final waiver of liens

Elm St. drainage project

VIAN CONSTRUCTION CO., INC.
1041 MARTHA
ELK GROVE VILL., IL 60007
847/364-5369 FAX 847 364-5371

DATE: *October 13,2015*

PAY APPLICATION REQUEST # 2 (Two)

INVOICE TO:
City of Prospect Heights
8 N. Elmhurst Road
Prospect Heights, IL 60070.

PROJECT: "ELM STREET DRAINAGE IMPROVEMENTS"

Item #	Item	UNIT	Unit Price	AWARDED QUANTITIES	TOTAL	COMPLETED QUANTITIES	TOTAL AMT.
1	Trench Backfill	CU YD	$ 30.00	1000	$ 30,000.00	1605.00	$ 48,150.00
2	Earth Excavation	CU YD	$ 58.00	40	$ 2,320.00	40.00	$ 2,320.00
3	Hot Mix Asphalt Surface Removal, 2"	SQ YD	$ 13.00	375	$ 4,875.00	0.00	$ -
4	Remove & Reset Brick Pavers	SQ FT	$ 12.00	225	$ 2,700.00	196.00	$ 2,352.00
5	Driveway Pavement Removal	SQ YD	$ 16.00	50	$ 800.00	87.30	$ 1,396.80
6	Curb & Gutter Removal	FOOT	$ 12.00	75	$ 900.00	61.00	$ 732.00
7	Storm Sewer Removal	FOOT	$ 12.00	50	$ 600.00	100.00	$ 1,200.00
8	Structure to be Removed	EACH	$ 850.00	3	$ 2,550.00	2.00	$ 1,700.00
9	Inlet Filter Basket	EACH	$ 210.00	12	$ 2,520.00	13.00	$ 2,730.00
10	Sidewalk Removal	SQ FT	$ 2.00	200	$ 400.00	91.00	$ 182.00
11	Class D Patches, 5"	SQ YD	$ 78.00	600	$ 46,800.00	600.00	$ 46,800.00
12	B.612 Combination Concrete Curb & Gutter	FOOT	$ 40.00	75	$ 3,000.00	61.00	$ 2,440.00
13	PCC Sidewalk, 5"	SQ FT	$ 8.00	200	$ 1,600.00	91.00	$ 728.00
14	Aggregate Shoulder, CA-6, Reclaimed Asphalt Pavement, 6"	SQ YD	$ 56.00	150	$ 8,400.00	119.00	$ 6,664.00
15	Aggreate Base Course, Type B, 4"	SQ YD	$ 29.00	50	$ 1,450.00	75.00	$ 2,175.00
16	Aggreate Base Course, Type B, 10"	SQ YD	$ 34.00	550	$ 18,700.00	625.00	$ 21,250.00
17	Hot Mix Asphalt Driveway, 3"	SQ YD	$ 45.00	30	$ 1,350.00	68.40	$ 3,078.00
18	Hot-Mix Asphalt Surface Course, Mix D, N50	TON	$ 210.00	60	$ 12,600.00	0.00	$ -
19	Portland Cement Concrete Driveway Pavement, 6"	SQ YD	$ 110.00	20	$ 2,200.00	18.90	$ 2,079.00
20	Prime Coat	POUND	$ 2.00	175	$ 350.00	275.00	$ 550.00
21	Manhole, 5' DIA, Type 1 Frame & Lid	EACH	$ 6,318.00	5	$ 31,590.00	5.00	$ 31,590.00
22	2' Concrete Plug	EACH	$ 380.00	18	$ 6,840.00	18.00	$ 6,840.00

23	Concrete Fill for Structures	CU YD	$ 490.00	7	$ 3,430.00	10.00	$ 4,900.00
24	Storm Sewers, PVC SDR 26, 8"	FOOT	$ 85.00	60	$ 5,100.00	48.00	$ 4,080.00
25	Storm Sewers, PVC SDR 26, 12"	FOOT	$ 90.00	20	$ 1,800.00	48.00	$ 4,320.00
26	Storm Sewers, RCP CL IV, 36"	FOOT	$ 153.00	700	$ 107,100.00	680.00	$ 104,040.00
27	Connection to Existing Structure	EACH	$ 1,780.00	6	$ 10,680.00	9.00	$ 16,020.00
28	Paint Pavement Marking Line 4"	FOOT	$ 18.00	75	$ 1,350.00	0.00	$ -
29	Remove & Relocate Existing Sign & Post	EACH	$ 60.00	5	$ 300.00	4.00	$ 240.00
30	Parkway Restoration (Sod)	SQ YD	$ 12.00	600	$ 7,200.00	232.00	$ 2,784.00
31	Mobilization	L SUM	$ 4,000.00	1	$ 4,000.00	1.00	$ 4,000.00
32	Traffic Control & Protection, Special	L SUM	$ 3,650.00	1	$ 3,650.00	1.00	$ 3,650.00
					$ 327,155.00		**$ 328,990.80**
CO 1	Change Order - Aug.10th for 6" Sanitary Sewer Relocation	L SUM	$ 4,306.72	0	$ -	1.00	$ 4,306.72
CO 2	Change Order - Aug.11th for 6" Sanitary Sewer Relocation	L SUM	$ 3,559.54	0	$ -	1.00	$ 3,599.54
							$ 336,897.06

TOTAL VALUE OF WORK COMPLETED	**$ 336,897.06**
RETAINAGE (2%)	**$ (6,737.94)**
NET AMOUNT EARNED	**$ 330,159.12**
TOTAL OF DEBTS	**$ (224,304.75)**
BALANCE DUE ON COMPLETED WORK	**$ 105,854.37**
NET DUE AMOUNT	**$ 105,854.37**

Submitted by,

Vince Rendina
Vian Construction Co., Inc. President.

Signed and Approved by,

City of Prospect Heights City Engineer

VIAN CONSTRUCTION CO., INC.

SEWER AND WATER CONTRACTOR

1041 MARTHA STREET • ELK GROVE VILLAGE, IL 60007

TELEPHONE: (847) 364-5369 • FAX: (847) 364-5371

Invoice Date: August 10,2015

City of Prospect Heights
8 N. Elmhurst Road
Prospect Heights, IL 60070

RE: Elm Street Drainage Improvements
(TIME AND MATERIAL WORKED PERFORMED)

Location: *On 08/10/15 @ Empty lot south of 103 Elm Street* - Replaced 6 LF of 6" Sanitary Sewer under the new 36" Storm Sewer. Elevation conflicted by 0.2 Ft. (2 Hrs of additional crew time).

ITAM DESCRIPTION:	QUANTITY	UNIT	UNIT PRICE	UNIT	TOTAL
HYUNDAI' EXCAVATOR	2	HRS	$ 125.00	PH	$ 250.00
215 JCB LOADER	2	HRS	$ 105.00	PH	$ 210.00
FOREMAN	2	HRS	$ 110.84	PH	$ 221.68
LABOR (4) EACH 2 HR	8	HRS	$ 88.46	PH	$ 707.68
OPERATOR (2) EACH 2 HR	4	HRS	$ 110.84	PH	$ 443.36
VIAN DUMP TRUCK	2	HRS	N/C-No Charge	PH	N/C- No Charge
SEMI-TRUCKS 6 EACH 2 HRS	12	HRS	$ 115.00	PH	$ 1,380.00
				Sub-Total:	$ 3,212.72

MATERIAL:

ITAM DESCRIPTION:	QUANTITY	UNIT	UNIT PRICE	UNIT	TOTAL
6" PVC	6	LF	$ 4.00	LF	$ 24.00
Aggregate Trench Backfill (Gravel)	15	CY	$ 30.00	CY	$ 450.00
Excavate & offsite disposal of spoil (includes Enviornmental dump fee)	2	LOADS	$ 310.00	LOAD	$ 620.00
				Sub-Total:	$ 1,094.00

Total Amount Due: $ 4,306.72

VIAN CONSTRUCTION CO., INC.

SEWER AND WATER CONTRACTOR

1041 MARTHA STREET • ELK GROVE VILLAGE, IL 60007
TELEPHONE: (847) 364-5369 • FAX: (847) 364-5371

Invoice Date: August 11,2015

City of Prospect Heights
8 N. Elmhurst Road
Prospect Heights, IL 60070

RE: Elm Street Drainage Improvements
(TIME AND MATERIAL WORKED PERFORMED)

Location: *On 08/11/15 @ 103 Elm Street* - Replaced 6 LF of 6" Sanitary Sewer under 36" Storm Sewer. (1.5 Hours of additional crew time.)

ITAM DESCRIPTION:	QUANTITY	UNIT	UNIT PRICE	UNIT	TOTAL
HYUNDAI' EXCAVATOR	1.5	HRS	$ 125.00	PH	$ 187.50
215 JCB LOADER	1.5	HRS	$ 105.00	PH	$ 157.50
FOREMAN	1.5	HRS	$ 110.84	PH	$ 166.26
LABOR (4) EACH 1.5 HR	6	HRS	$ 88.46	PH	$ 530.76
OPERATOR (2) EACH 1.5 HR	3	HRS	$ 110.84	PH	$ 332.52
VIAN DUMP TRUCK	1.5	HRS	N/C-No Charge	PH	N/C- No Charge
SEMI-TRUCKS 6 EACH 1.5 HRS	9	HRS	$ 115.00	PH	$ 1,035.00
				Sub-Total:	**$ 2,409.54**

MATERIAL:

ITAM DESCRIPTION:	QUANTITY	UNIT	UNIT PRICE	UNIT	TOTAL
6" PVC	6	LF	$ 4.00	LF	$ 24.00
6" x 6" Non Share Couping	2	Each	$ 48.00	Each	$ 96.00
Aggregate Trench Backfill (Gravel)	15	CY	$ 30.00	CY	$ 450.00
Excavate & offsite disposal of spoil (includes Enviornmental dump fee)	2	LOADS	$ 310.00	LOAD	$ 620.00
				Sub-Total:	**$ 1,190.00**

Total Amount Due: **$ 3,599.54**

WAIVER OF LIEN TO DATE

STATE OF ILLINOIS }
COUNTY OF COOK } SS

Qty # _____

Escrow # _____

TO WHOM IT MAY CONCERN:

WHERAS the undersigned has been employed by VIAN CONSTRUCTION CO., INC.
to furnish LABOR, MATERIAL AND EQUIPMENT
for the premises known as ELM STREET DRAINAGE IMPROVEMENTS
of which CITY OF PROSPECT HEIGHTS is the owner

THE undersigned, for and in consideration of One Hundred Five Thousand Eight Hundred Fifty Four Dollars and 37/100.
($ 105,854.37) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do(es) hereby, waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises. INCLUDING EXTRAS.*

DATE 10/13/15

COMPANY NAME VIAN CONSTRUCTION CO., INC.

ADDRESS 1041 Martha Street, Elk Grove Village, IL 60007

SIGNATURE AND TITLE Vince Rendina - President.

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS }
COUNTY OF COOK } SS

TO WHOM IT MAY CONCERN:

THE UNDERSIGNED, (NAME) VINCE RENDINA BEING DULY SWORN, DEPOSES
AND SAYS THAT HE OR SHE IS (POSITION) PRESIDENT OF
(COMPANY NAME) VIAN CONSTRUCTION CO., INC. WHO IS THE
CONTRACTOR FURNISHING LABOR, MATERIAL AND EQUIPMENT WORK ON THE BUILDING
LOCATED AT ELM STRET DRAINAGE IMPROVEMENTS
OWNED BY CITY OF PROSPECT HEIGHTS

That the total amount of the contract including extras* is $ 336,897.06 on which he or she has received payment of $ 224,304.75 prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES AND ADDRESSES	WHAT FOR	CONTRACT PRICE INCLDG EXTRAS *	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
SEE ATTACHED					
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE.					

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE 10/13/15 SIGNATURE: Vince Rendina - President.

SUBSCRIBED AND SWORN TO BEFORE ME THIS 13th DAY OF October, 2015

* EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT

OFFICIAL SEAL
ELISA M SCHLIEP
NOTARY PUBLIC
Notary Public – State of Illinois
My Commission Expires June 17, 2018

SWORN STATEMENT OF CONTRACTOR AND SUBCONTRACTOR
TO OWNER AND TO CHICAGO TITLE INSURANCE COMPANY

STATE OF ILLINOIS
COUNTY OF COOK

The affiant,Vince Rendina being duly sworn, on oath desposes and says that he is President, of Vian Construction Co., Inc. that has a contract with the City of Prospect Heights, owner of ELM STREET DRAINAGE IMPROVEMENTS on the following described premises In said County, to wit: City of Prospect Heights, Cook County

That, for the purpose of said contract, the following persons have been contracted with and have furnished, or are furnishing and preparing materials for, and have done or are doing labor on said improvements. That there is due and to become due them, respectively, the amounts set apposite their names for materials or labor stated. That this statement is full, true and complete statement of all such persons, the amount paid and the amounts due or to become due to each.

1	2	3	4	5	6
Name and Address	Kind of Work	Amount of Contract	Net of Previous Payments	Net Amount of This Payment	Balance to Become Due (Inc. Retention)
VIAN CONSTRUCTION 1041 martha st. Elk Grove , Il 60007	GENERAL	$ 281,422.46	$ 148,830.15	$ 105,854.37	$ 6,737.94
WELCH BROTHERS, INC. 1050 ST. CHARLES ST. P.O. BOX 749 ELGIN, IL 60121-0749	MATERIAL	$ 29,407.90	$ 29,407.90	$ -	$ -
PRIAIRE MATERIAL 7601 W 79TH STREET BRIDGEVIEW, IL 60455	GRAVEL	$ 14,176.70	$ 14,176.70	$ -	$ -
MARVEL CONSTRUCTION CORP. 5150 B, OUTTSBURGH AVE. NORRIDGE, IL 60706	CONCRETE	$ 5,250.00	$ 5,250.00	$ -	
ARROW ROAD CONSTRUCTION CO. 3401 S. BUSSE RD. P.O. BOX 334 MOUNT PROSPECT, IL 60056	ASPHALT	$ 26,640.00	$ 26,640.00	$ -	$ -
TOTAL		$ 336,897.06	$ 224,304.75	$ 105,854.37	$ 6,737.94

AMOUNT OF ORIGINAL CONTRACT	$ 327,155.00	WORK COMPLETED TO DATE	$ 336,897.06
EXTRA/CREDIT/ADJUSTMENTS TO CONTRACT	$ 9,742.06	LESS RETAINAGE 2%	$ (6,737.94)
		NET AMOUNT EARNED	$ 330,159.12
ADJUSTED TOTAL CONTRACT	$ 336,897.06	NET PREVIOUSLY PAID	$ 224,304.75
		NET AMOUNT OF THIS PAYMENT	$ 105,854.37
		BALANCE TO BECOME DUE (INCL. RETENTION)	$ 6,737.94

I understand that the total amount paid to date plus the amount requested in this application shall not exceed ____% of the cost of work completed to date.

I agree to furnish Waivers of lien for all materials under my contract when demanded.

Vince Rendina - President

Vian Construction Co., Inc

Subscribed to me this 13th day of October,2015

OFFICIAL SEAL
ELISA M SCHLIEP
Notary Public – State of Illinois
My Commission Expires June 17, 2018

FINAL WAIVER OF LIEN

STATE OF ILLINOIS)
) SS
COUNTY OF KANE)

To Whom It May Concern:

WHEREAS the undersigned has been employed by **Vian Construction Company, Inc., 1041 Martha Street, Elk Grove, Illinois 60007-3459** to furnish **Precast Concrete Structures, Pipe and Miscellaneous Construction Materials** for the premises known as **Elm Street Drainage Improvements** located at **100-111 Elm Street** in **Prospect Heights, Cook County, Illinois** of which the **City of Prospect Heights** is/are the owner(s).

THE undersigned, for and in consideration of **Twenty-Nine Thousand Four Hundred Seven and 90/100ths ($29,407.90)** Dollars and other good and valuable considerations, the receipt whereof is hereby acknowledged, does hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanic's liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, heretofore furnished, or which may be furnished at any time hereafter, by the undersigned under said contract for the above described premises.

Date: September 25, 2015

WELCH BROS., INC.
1050 Saint Charles Street
P. O. Box 749
Elgin, Illinois 60121-0749
847-741-6134

WELCH BROS INC CORPORATE Seal Seal ILLINOIS

Signature and Title _____ Vice-President
Gregory O. Parker

Subscribed and sworn to before
me this 25th day of September 2015.

_____
Notary Public

OFFICIAL SEAL
DENISE M. OLTMANN
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires Sept. 6, 2017

WAIVER OF LIEN
MATERIALS OR LABOR-UNDER ACT OF 1903

FINAL WAIVER

State of Illinois,
Cook County SS

TO ALL WHOM IT MAY CONCERN:

Whereas, We the undersigned, **VCNA Prairie, Inc., / PRAIRIE MATERIAL** have been employed by **Vian Construction Co., Inc.,** to furnish **Ready Mix Concrete** for the building and premises known as

Elm Street Drainage Improvements
Owner: City of Prospect Heights (Cook County)

NOW, THEREFORE, KNOW YE, That We, the undersigned, for and in consideration of **$14,176.70** and other good and valuable considerations, the receipt whereof is hereby acknowledged, do hereby waive and release any and all lien, or claim, or right of lien on said above described building and premises under the Statutes of the State of Illinois relating to Mechanic's Liens, on account of labor and or materials, or both, which have been furnished or which may be furnished at any time by the undersigned to or on account of the said **Vian Construction Co., Inc.**; for said building and premises.

GIVEN UNDER my hand this **2st Day of October, 2015**

VCNA Prairie, Inc.
PRAIRIE MATERIAL
7601 W. 79th Street
Bridgeview, IL 60455

This waiver invalid if altered in any manner.

Its Duly Authorized Agent
Terry L. Brach, Account Manager

STATE OF ILLINOIS

COUNTY OF Cook

FINAL WAIVER OF LIEN

Qty #

Escrow #

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by VIAN Construction Inc.

to furnish Site-concrete Sidewalk and Curb & gutter

for the premises known as Prospect Heights Elm street Construction

of which City of Prospect Heights is the owner.

THE undersigned, for and in consideration of Five thousand two hundred fifty dollars and 00/100 ($ 5,250.00) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, heretofore furnished, or which may be furnished at any time hereafter, by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE 9/18/15 COMPANY NAME MARVEL Construction Corporation

ADDRESS 5150 N. Pittsburgh Ave. Norridge IL 60706

SIGNATURE AND TITLE President

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT

STATE OF ILLINOIS

COUNTY OF Cook

CONTRACTOR'S AFFIDAVIT

TO WHOM IT MAY CONCERN:

THE UNDERSIGNED, (NAME) Nicholas Losacco BEING DULY SWORN, DEPOSES AND SAYS THAT HE OR SHE IS (POSITION) President OF (COMPANY NAME) MARVEL construction Corporation WHO IS THE CONTRACTOR FURNISHING Site-concrete sidewalk and curb & gutter WORK ON THE BUILDING LOCATED AT Prospect Heights Elm Street Construction OWNED BY City of Prospect Heights

That the total amount of the contract including extras* is $ 5,250.00 on which he or she has received payment of $ 0.00 prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES AND ADDRESSES	WHAT FOR	CONTRACT PRICE INCLDG EXTRAS*	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
MARVEL Construction Corp 5150 N. Pittsburgh Ave. Norridge IL 60706	Labor & Material	5,250.00	0.00	5,250.00	0.00
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE		5,250.00	0.00	5,250.00	0.00

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE September 18, 2015 SIGNATURE:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 18th DAY OF September

OFFICIAL SEAL
ELISA M SCHLIER
Notary Public - State of Illinois
My Commission Expires Sep 17, 2018

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT.

F.3870 R5/06

Provided by Chicago Title Insurance Company

STATE OF ILLINOIS
COUNTY OF COOK } SS

FINAL WAIVER OF LIEN

Qty # _____

TO WHOM IT MAY CONCERN:

Escrow # _____

WHEREAS the undersigned has been employed by Vian Construction

to furnish Asphalt Paving

for the premises known as Elm Street Drainage Improvements

of which City of Prospect Heights (Cook County) is the owner.

THE undersigned, for and in consideration of Twenty-Six Thousand Six Hundred Forty Dollars & 00/100** ($ 26,640.00) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, heretofore furnished, or which may be furnished at any time hereafter, by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE October 13, 2015

COMPANY NAME Arrow Road Construction Company

ADDRESS 3401 S. Busse Road, Mount Prospect, IL 60056

SIGNATURE AND TITLE Michael Salmon

Michael J. Salmon, Vice President

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT.

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS
COUNTY OF COOK } SS

TO WHOM IT MAY CONCERN:

THE UNDERSIGNED, (NAME) Michael J. Salmon BEING **DULY SWORN, DEPOSES**

AND SAYS THAT HE OR SHE IS (POSITION) Vice President

(COMPANY NAME) Arrow Road Construction Company OF

CONTRACTOR FURNISHING Asphalt Paving WHO IS THE

LOCATED AT Elm Street Drainage Improvements WORK ON THE BUILDING

OWNED BY City of Prospect Heights (Cook County)

That the total amount of the contract including extras* is $ 26,640.00 on which he or she has received payment of $ 0.00 prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications.

NAMES AND ADDRESSES	WHAT FOR	CONTRACT PRICE INCLDG EXTRAS*	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
Arrow Road Construction Co.	LEM	26,640.00	0.00	26,640.00	0.00
					0.00
					0.00
					0.00
					0.00
Arrow Road Construction Co.	LEM				0.00
Arrow Road Construction Company manufacturers its own asphalt products. Principle suppliers used in manufacturing are Vulcan Materials					0.00
and BP Amoco. All materials used in manufacture are from fully paid stock and delivered to job site in Arrow's trucks.					
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE		26,640.00	0.00	26,640.00	0.00

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE October 13, 2015 SIGNATURE Michael Salmon

Michael J. Salmon, Vice President

SUBSCRIBED AND SWORN TO BEFORE ME THIS 13th DAY OF October, 2015

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT.

NOTARY PUBLIC

NICOLE A. ENGELKING
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
May 31, 2016

F 3870 R5/96

Provided by Chicago Title Insurance Company

Job # 21508

City of Prospect Heights-Various Streets

Glenbrook Excavating & Concrete, Inc.
1350 North Old Rand Road
Wauconda, IL 60084
(847) 724-9477
fax (847) 469-9476

For work performed:Through 9/10/2015

20-Oct-15
09:22 AM

PAY REQUEST # 3

ITEM	DESCRIPTION	QUANTITY	unit msr.	UNIT PRICE	BID TOTAL	PREVIOUS ESTIMATE QUANTITY	PREVIOUS ESTIMATE AMOUNT	THIS ESTIMATE QUANTITY	THIS ESTIMATE AMOUNT	TOTAL TO DATE QTY.	TOTAL TO DATE AMOUNT
1	29 Wildwood S	1.00	LS	$9,500.00	9,500.00	1.00	9,500.00		$0.00	1.00	9,500.00
2	37 Wildwood S	1.00	LS	$8,500.00	8,500.00	1.00	8,500.00		$0.00	1.00	8,500.00
3	1008 Wildwood E	1.00	LS	$7,700.00	7,700.00	1.00	7,700.00		$0.00	1.00	7,700.00
4	1104 Maple Lane	1.00	LS	$15,250.00	15,250.00	1.00	15,250.00		$0.00	1.00	15,250.00
5	1102 Maple Lane	1.00	LS	$11,750.00	11,750.00	1.00	11,750.00		$0.00	1.00	11,750.00
6	1105 Maple Lane	1.00	LS	$10,250.00	10,250.00	1.00	10,250.00		$0.00	1.00	10,250.00
7	15 Countryside	1.00	LS	$22,250.00	22,250.00	1.00	22,250.00		$0.00	1.00	22,250.00
8	16 Countryside	1.00	LS	$12,250.00	12,250.00	1.00	12,250.00		$0.00	1.00	12,250.00
9	1105 Cherry Creek	1.00	LS	$10,500.00	10,500.00		0.00	1.00	$10,500.00	1.00	10,500.00
10	5 Lynwood	1.00	LS	$13,250.00	13,250.00		0.00	1.00	$13,250.00	1.00	13,250.00
11	713 Lynbrrok Dr.	1.00	LS	$30,250.00	30,250.00		0.00	1.00	$30,250.00	1.00	30,250.00
12	21 E. Stonegate	1.00	LS	$22,750.00	22,750.00		0.00	1.00	$22,750.00	1.00	22,750.00
13	101 Drake Terrace	1.00	LS	$7,500.00	7,500.00		0.00	1.00	$7,500.00	1.00	7,500.00
14	1105 & 1107 Oak St.	1.00	LS	$31,275.00	31,275.00		0.00	1.00	$31,275.00	1.00	31,275.00
15	11 Drake Terrace	1.00	LS	$10,750.00	10,750.00		0.00	1.00	$10,750.00	1.00	10,750.00
16	1111 Elmhurst Road Rear Yard	1.00	LS	$29,750.00	29,750.00		0.00	1.00	$29,750.00	1.00	29,750.00
17	209 North Parkway	1.00	LS	$9,375.00	9,375.00		0.00	1.00	$9,375.00	1.00	9,375.00
18	207 North Parkway	1.00	LS	$9,375.00	9,375.00		0.00	1.00	$9,375.00	1.00	9,375.00
19	35 Wildwood S	1.00	LS	$5,375.00	5,375.00		0.00	1.00	$5,375.00	1.00	5,375.00
20	37 S. Wildwood	1.00	LS	$5,375.00	5,375.00		0.00	1.00	$5,375.00	1.00	5,375.00
	EXTRAS										
1					0.00		0.00		$0.00	0.00	0.00
0.1	'Amount of Approved Change Orders			$0.00	$282,975.00		$97,450.00		$185,525.00		$282,975.00

MISC. EXTRAS & MATERIAL STORED

	MISC. EXTRAS & MATERIALS STORED	QUANTITY	UN MSR	MATERIAL UNIT COST	TOTAL COST
1					0.00
2					0.00
3					0.00
					$0.00

CONTRACT AMOUNT	97,450.00
AMOUNT OF APPROVED CHANGE ORDERS	185,525.00
NEW CONTRACT AMOUNT	282,975.00
TOTAL AMOUNT DUE	282,975.00
MISC. EXTRAS & MATERIALS STORED ON SITE	0.00
RETAINED PERCENTAGE 6.75%	18,552.50
TOTAL AMOUNT EARNED	264,422.50
TOTAL AMOUNT PREVIOUSLY PAID FROM EST. #1,2	97,450.00
AMOUNT DUE THIS ESTIMATE	166,972.50
COST OF EXCESS ENGINEERING	0.00

Amount left on contract including retention after this pay estimate

	18,552.50
percent complete	100.00%

CONTRACTOR _____
Terry R. Barnett-President Glenbrook Excavating

ENGINEER _____, City Engineer

OWNER City of Prospect Heights

$ 166,972.50
approved
SOB
10/22/15

WAIVER OF LIEN TO DATE

STATE OF ILLINOIS
COUNTY OF LAKE

GTY # _____

LOAN # _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by
to furnish Labor, Equipment and Material for the premises known as Various Street Strom Sewer
of which the Village of Prospect Heights is the owner.

THE undersigned, for and in consideration of One Hundred Sixty Six Thousand Nine Hundred Seventy Two & .50/100 $166,972.50 Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of labor services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises.

Given under my hand and seal this 20th day of October 2015

Signature and Seal: Terry R. Barnett - President G.E.C., INC.

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS
COUNTY OF LAKE
TO WHOM IT MAY CONCERN:

THE undersigned, being duly sworn, deposes and says that he is Terry R. Barnett - President of the corporation GLENBROOK EXCAVATING & CONCRETE, INC. who is the contractor for the site utilities work in the Village of Prospect Heights , state of Illinois owned by the Village of Prospect Heights That the total amount of the contract including extras is $282,975.00 on which he has received payments $97,450.00 of prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES	WHAT FOR	CONTRACT PRICE	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
Mid American Water	Pipe and Materials	$8,447.00	$0.00	$8,447.00	$0.00
Performance and Construction & Engine	Misc Engineering	$14,195.00	$0.00	$14,195.00	$0.00
		$0.00	$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00	$0.00
Glenbrook Excavating & Concrete, Inc.	Labor/Equipment	$260,333.00	$97,450.00	$144,330.50	$18,552.50
TOTAL LABOR AND MATERIAL TO COMPLETE		$282,975.00	$97,450.00	$166,972.50	$18,552.50

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material labor or other work of any kind done upon or in connection with said work other than that above stated.

Signed this 20th day of October 2015

Signature: Terry R. Barnett - President G.E.C

Subscribed and sworn to before me this 20th day of October 2015

OFFICIAL SEAL
KARIN A WAGNER
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:02/19/19

Notary Public: Karin A. Wagner

My commission expires

WAIVER OF LIEN - FINAL
MATERIALS

STATE OF Illinois

Lake County SS. June 24th , 2015

TO WHOM IT MAY CONCERN:

Whereas; we the undersigned **Mid American Water of Wauconda, Inc.**
have been employed by **Glenbrook Excavating**
to furnish **Water and Sewer Related Material**
For the building known as Number Street,
PROJECT: Various Streets
OWNER: The Village of Prospect Heights
City of **Prospect Heights** Situated on Lot
In Section , Township , Range
County of **Cook** , State of Illinois

Now, Therefore, Know Ye, That we the undersigned, for and in consideration of **$8,447.00** Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do we hereby waive and release any and all lien, or claim, or right to lien on said above described building and premises under the status of the Statutes of the State of Illinois relating to Mechanics' Liens, on account of materials furnished by the undersigned to

Glenbrook Excavating for said building or premises.

Given Under *my* hand - and - seal this 24th day of June ,2015

Mid American Water of Wauconda, Inc. Seal

SIGNATURE Seal

WAIVER OF LIEN TO DATE

STATE OF ILLINOIS)
) SS
COUNTY OF LA SALLE)

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by Glenbrook Excavation

to furnish Drain tile installations

for the premises known as 207 N Parkway

of which Prospect Heights, IL is the owner.

The undersigned, for and in consideration of Fourteen thousand, one hundred ninety five dollars and 00/100
$ 14,195.00 Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of labor services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises. "INDLUDING EXTRAS".

Given under my hand this October 2, 2015

Signature:
Lonnie Avery, President

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS)
) SS
COUNTY OF LA SALLE)

TO WHOM IT MAY CONCERN:

The undersigned, being duly sworn, deposes and says that s/he is Lonnie Avery, President of
nce Construction and Engineering who is the contractor for the Water main installations on the building located at
207 N Parkway and owned by Prospect Heights, IL

That the total amount of the contract including extras is $14,195.00 on which we have invoiced for a partial payment of zero prior to this payment.

That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names of all parties who have furnished material or labor, or both, for said work and all parties having contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications.

NAMES	WHAT FOR	CONTRACT PRICE	AMOUNT PREVIOUSLY INVOICED	THIS PAYMENT	BALANCE DUE
Performance Construction and Engineering	Labor/Stock material completely paid for by PCE	14,195.00		14,195.00	
TOTAL		14,195.00		14,195.00	

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in

Signed this 2-Oct-15

Signature:
Lonnie Avery, President

Subscribed and sworn to before me this Friday, October 02, 2015

Signature:
Cheryl Taplin