COMMENT FORM

LIBERTYVILLE TOWNSHIP

Libertyville Township Highway Department
Oak Spring Road Bridge Improvements
Phase I Study
Public Meeting #2 – March 16, 2020

PUBLIC MEETING #2
March 16, 2020

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_____

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_____

Optional:
Name: _____

Address: _____

City/State/Zip: _____

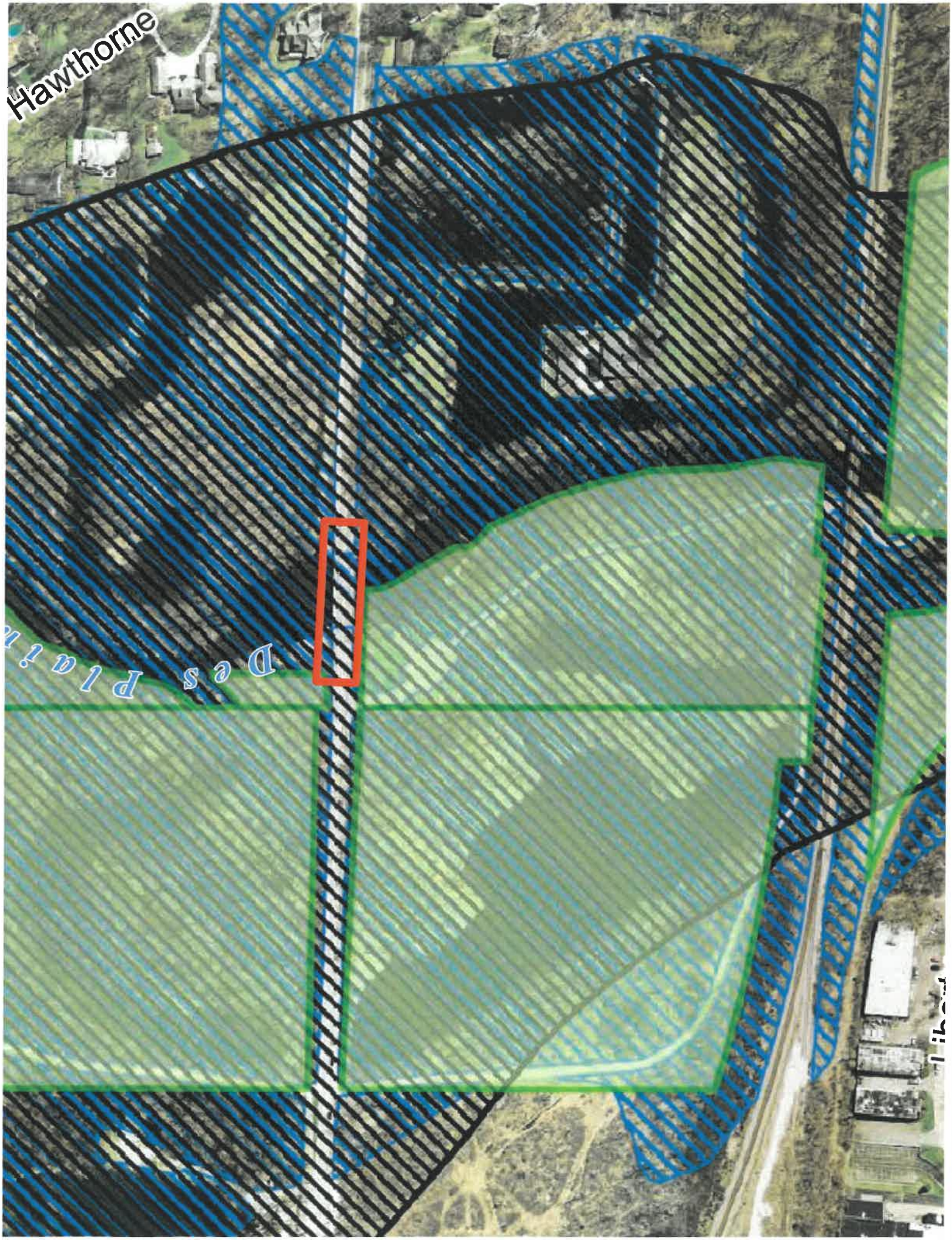
Phone: _____

Comment forms may be left at the sign-in table or mailed to:

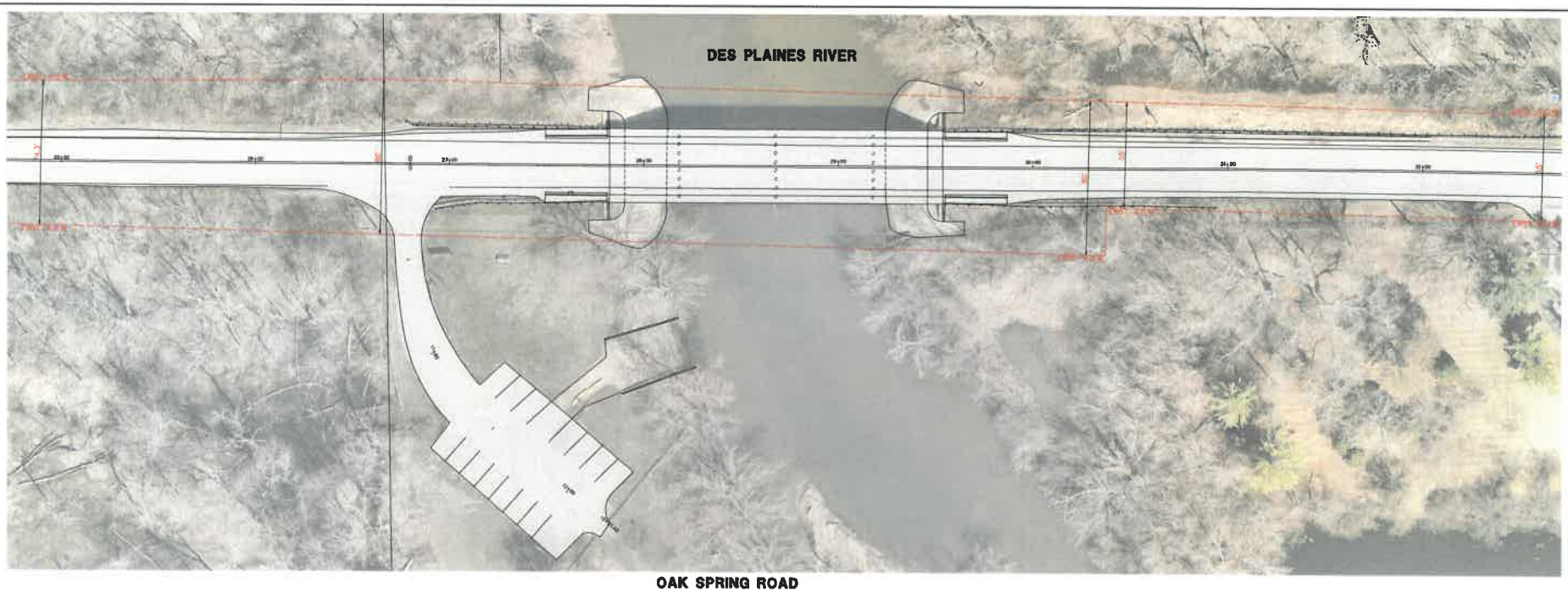
Oak Spring Road Bridge Phase I Study
c/o Libertyville Township Highway Department
343 Merrill Court
Libertyville, Illinois 60048
Attn: Martin Neal, Highway Commissioner

or Provide your comments via email: Subject: Oak Spring Road Bridge Comments
highwaydepartment@libertyvilletownship.us

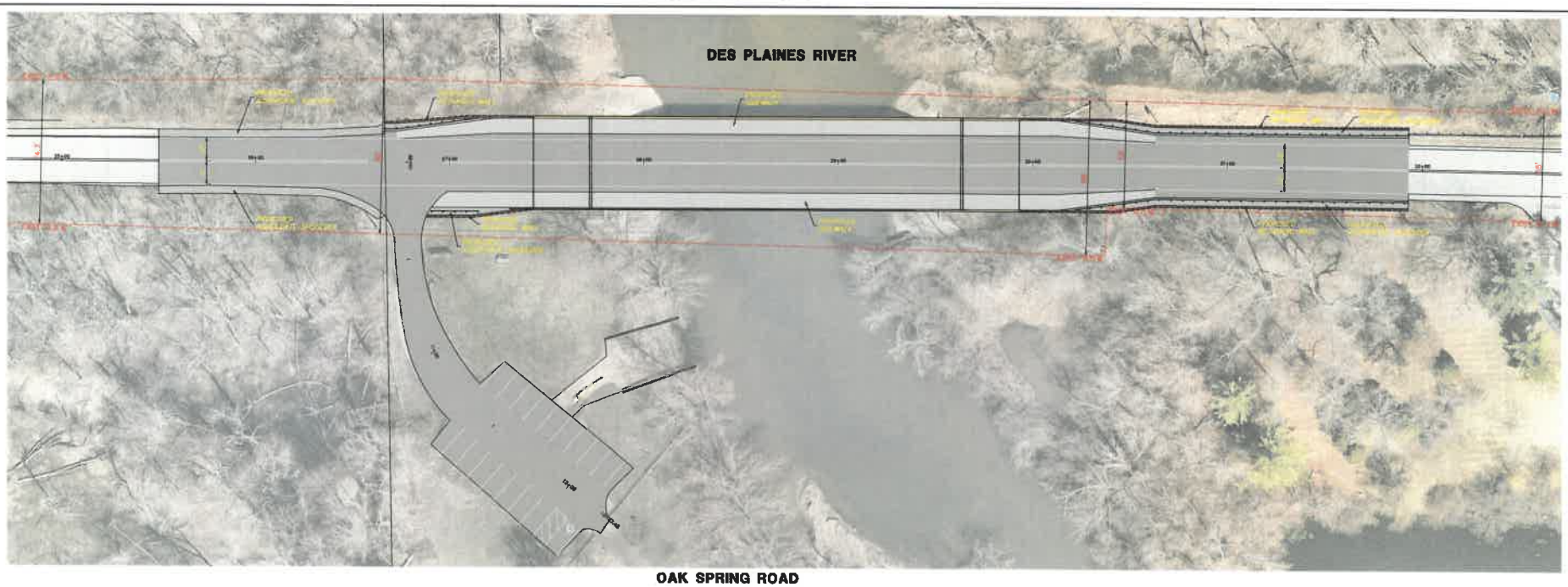
All comments must be postmarked by April 1, 2020


Hawthorne
Des Plai

Hawthorne
Des Plain



OAK SPRING ROAD
EXISTING CONDITIONS



OAK SPRING ROAD
PROPOSED IMPROVEMENTS

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
Tel. 847.478.9700 ■ Fax 847.478.9701

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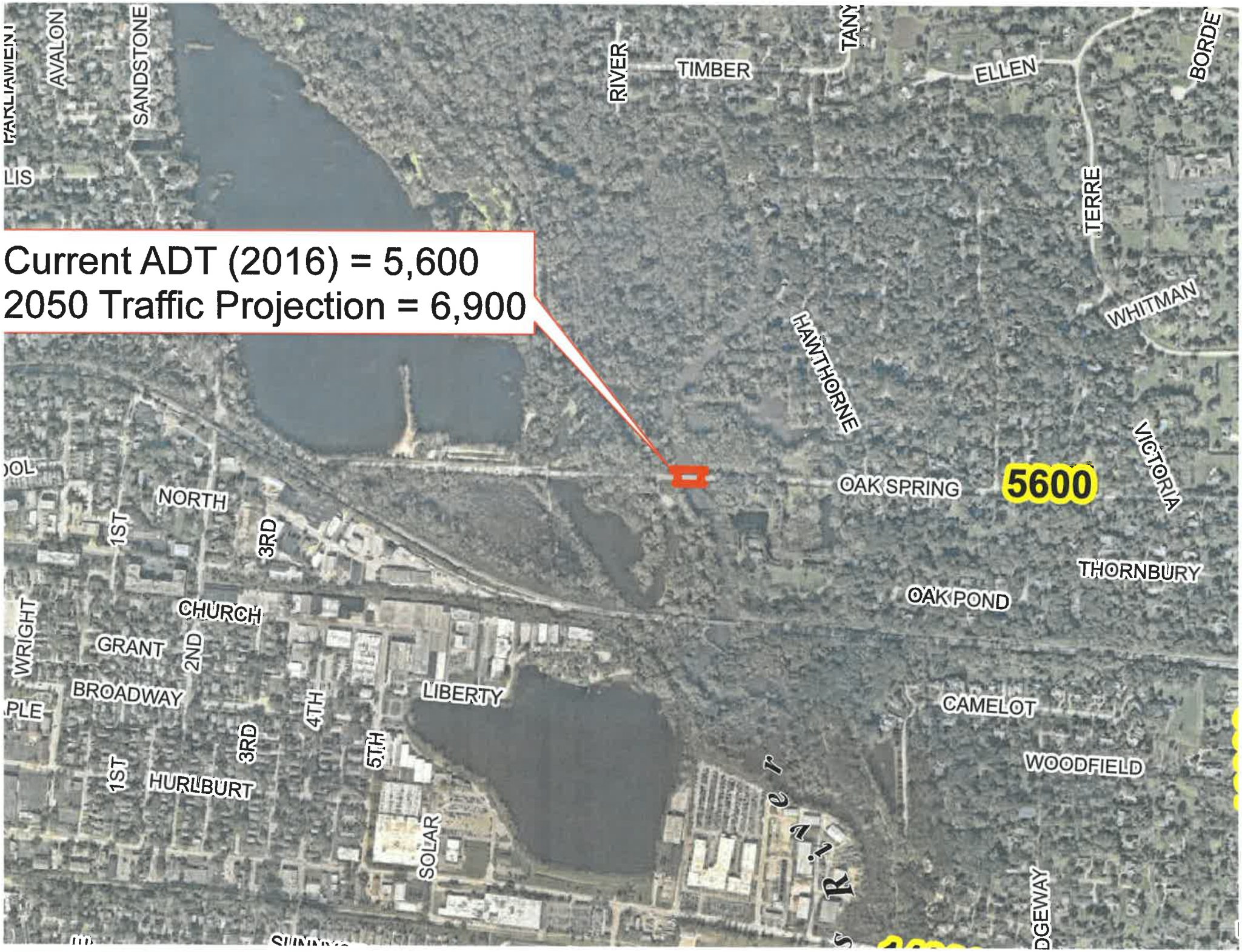
OAK SPRING BRIDGE EXHIBIT

OAK SPRING ROAD
LIBERTYVILLE TOWNSHIP
LIBERTYVILLE, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: 1449.010_CAD-R.dwg
DRAWN BY: RJS DATE: 03.13.2009
CHECKED BY: DFB DATE: 03.13.2009
GHA PROJECT # 1449.010
SCALE: 1"=20'
SHEET NUMBER: 1 OF 1 SHEETS


Current ADT (2016) = 5,600
2050 Traffic Projection = 6,900
5600
AVALON
SANDSTONE
RIVER
TIMBER
ELLEN
TERRE
WHITMAN
HAWTHORNE
VICTORIA
OAK SPRING
THORNBURY
OAK POND
NORTH
1ST
3RD
CHURCH
WRIGHT
GRANT
2ND
BROADWAY
LIBERTY
4TH
5TH
CAMELOT
WOODFIELD
HURLBURT
SOLAR

Bench Mark: Top of northwest anchor bolt on west mechanical gate post near entrance into LCFP canoe launch. Station 26+69.48. Offset 67.66 Rt., Elevation 651.67 NAVD 88.

Existing Structure: Structure No. 049-3047 was built in 1967 as Section 4-11-28-4C by Lake County and the Libertyville Road District. Superstructure consists of 4-span continuous reinforced concrete T-beams and deck with an overlay supported by pile bent abutments and piers. Length is 173'-9" Bk. to Bk. Abutments with an overall width of 38'-0" out to out.

Traffic on Oak Spring Road will be detoured for construction.

Salvage: None.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

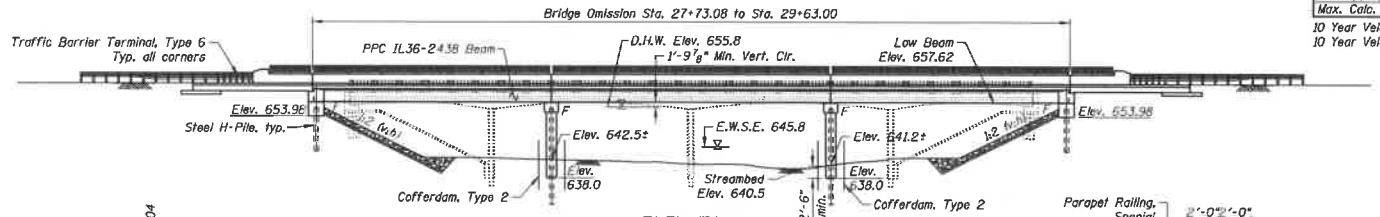
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

WATERWAY INFORMATION

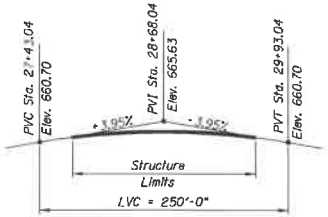
Drainage Area = 259.4 Sq. mile Low Grade Elev. 654.0 @ Sta. - 22+76.57

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	3,385	1,738	2,192	654.1	0.1	0.0	654.2	654.1
Design	30	4,577	1,967	2,443	655.8	0.0	0.0	655.8	655.8
Base	100	5,865	2,213	2,697	657.4	0.2	0.0	657.6	657.4
Overtopping									
Max. Calc.	500	7,705	2,475	3,019	659.5	0.0	0.0	659.5	659.5

10 Year Velocity through Existing Bridge = 2.0 ft/sec
10 Year Velocity through Proposed Bridge = 2.0 ft/sec



ELEVATION



PROFILE GRADE

(Along ℄ Oak Spring Rd.)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.078
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.129
Soil Site Class = D

HIGHWAY CLASSIFICATION

Oak Spring Road F.A.U. 1234
Functional Class: Major Collector
ADT: 5,600 (2016); 6,000 (2040)
ADTT: 74 (2016); 79 (2040)
DHV: 800 (2040)
Design Speed: 40 m.p.h.
Posted Speed: 35 m.p.h.

DESIGN STRESSES

FIELD UNITS

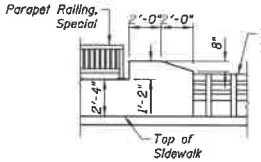
f'c = 3,500 psi
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

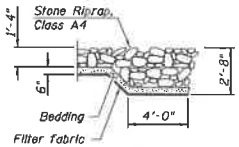
f'c = 8,500 psi
f'ci = 7,000 psi
fpu = 270,000 psi (0.6" ϕ low relax strands)
fpbt = 202,300 psi (0.6" ϕ low relax strands)

DESIGN SCOUR ELEVATION TABLE

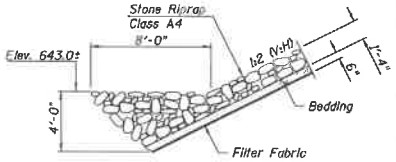
Event/Limit State	Design Scour Elevations (ft.) W. Abut.	W. Pier	E. Pier	E. Abut.	Item
					113
Q100	653.98	628.40	628.75	653.98	5
Q200	653.98	628.40	628.75	653.98	
Design	653.98	628.40	628.75	653.98	
Check	653.98	628.40	628.75	653.98	



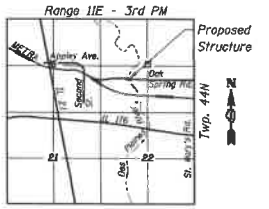
END OF PARAPET DETAIL



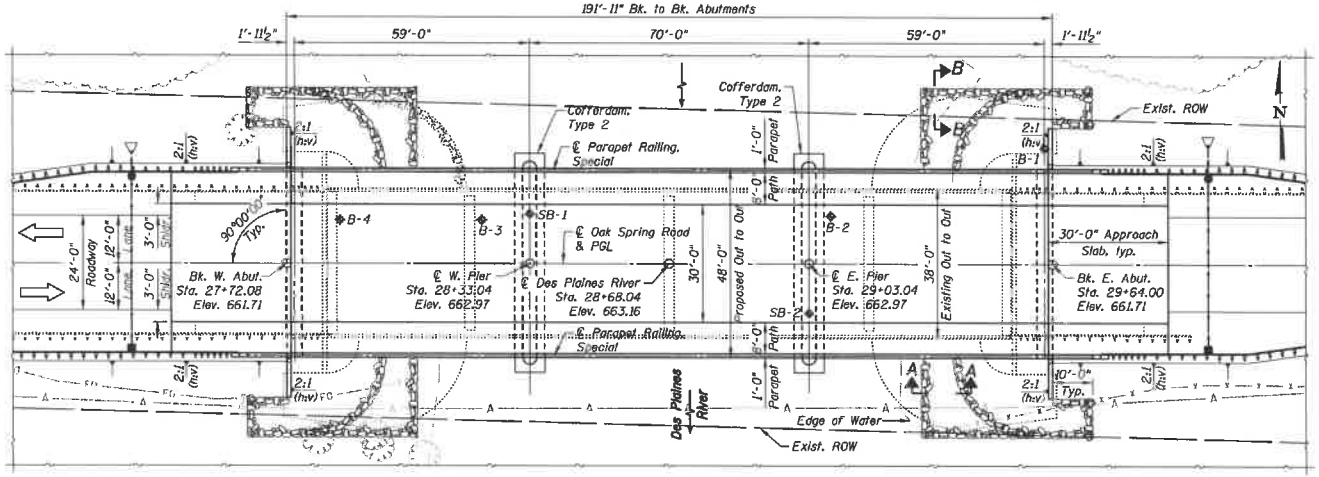
SECTION B-B



SECTION A-A



LOCATION SKETCH



PLAN

GENERAL PLAN & ELEVATION
OAK SPRING ROAD (F.A.U. 1234)
OVER DES PLAINES RIVER
SECTION 15-10112-00-BR
LAKE COUNTY
STATION 28+68.04
STRUCTURE NO. 049-3046

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
www.civiltechinc.com

DRAWN	M. RENDINO
DESIGNED	M. RENDINO
CHECKED	G. HATLESTAD
DATE	NOVEMBER 2, 2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

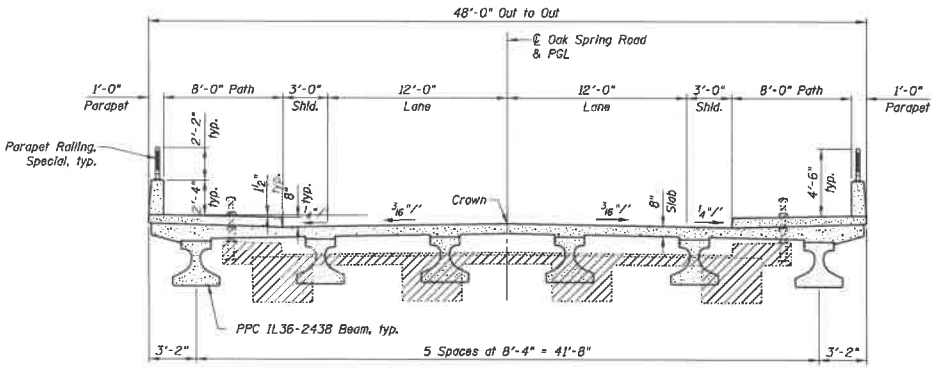
OAK SPRING ROAD OVER DES PLAINES RIVER

SHEET NO. 1 OF 2 SHEETS

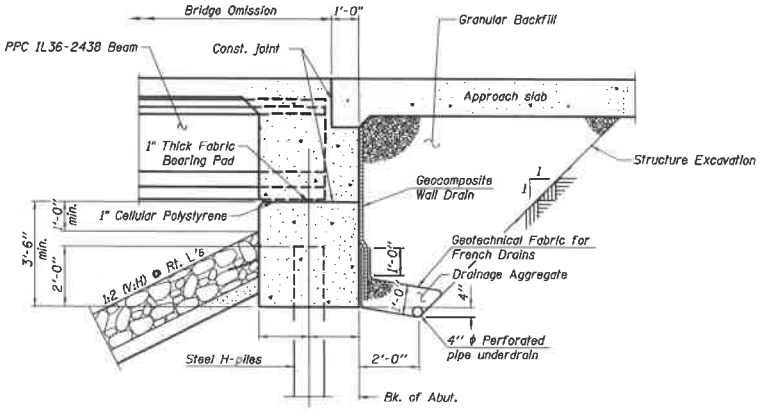
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1234	15-10112-00-BR	LAKE		

CONTRACT NO. ____

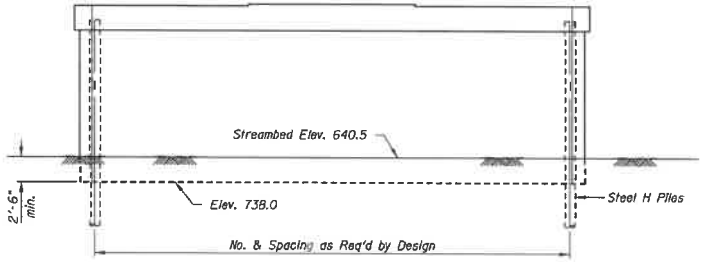
ILLINOIS FED. AID PROJECT



PROPOSED CROSS SECTION
(Looking West)



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



PIER SKETCH

DETAILS
OAK SPRING ROAD (F.A.U. 1234)
OVER DES PLAINES RIVER
SECTION 15-10112-00-BR
LAKE COUNTY
STATION 28+68.04
STRUCTURE NO. 049-3046

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3800 Fax: 630.773.3975
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DRAWN	M. RENDINO
DESIGNED	M. RENDINO
CHECKED	G. HATLESTAD
DATE	NOVEMBER 2, 2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OAK SPRING ROAD OVER DES PLAINES RIVER

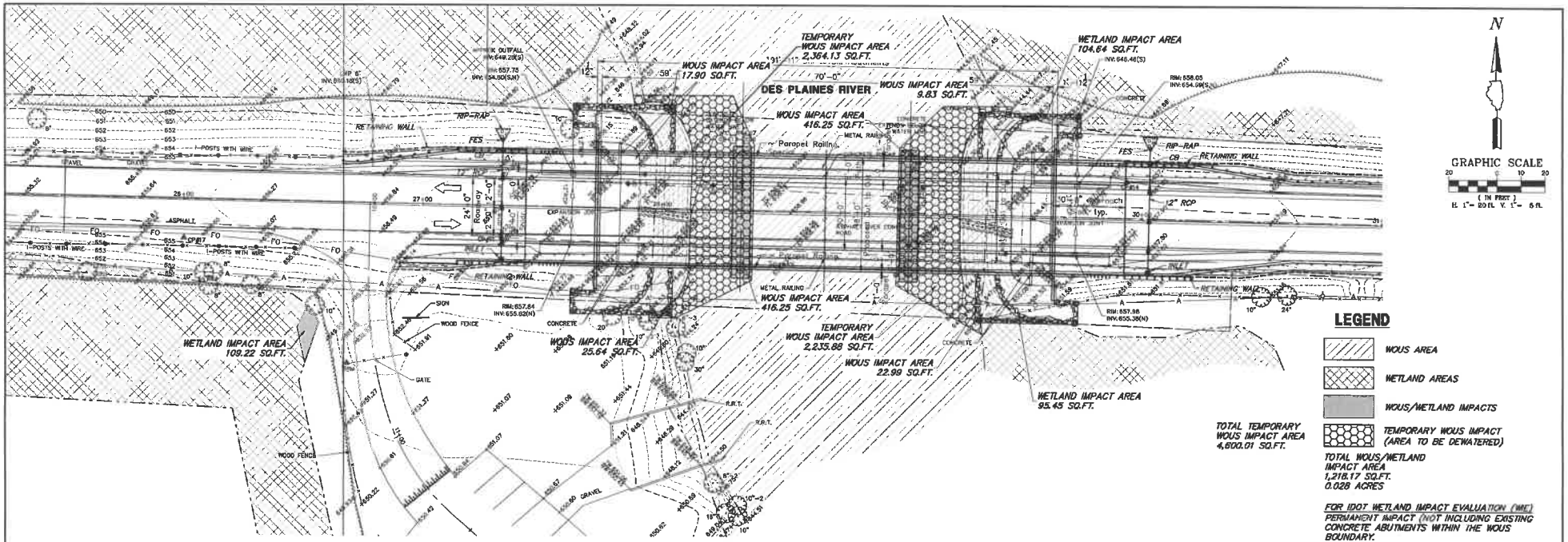
SHEET NO. 2 OF 2 SHEETS

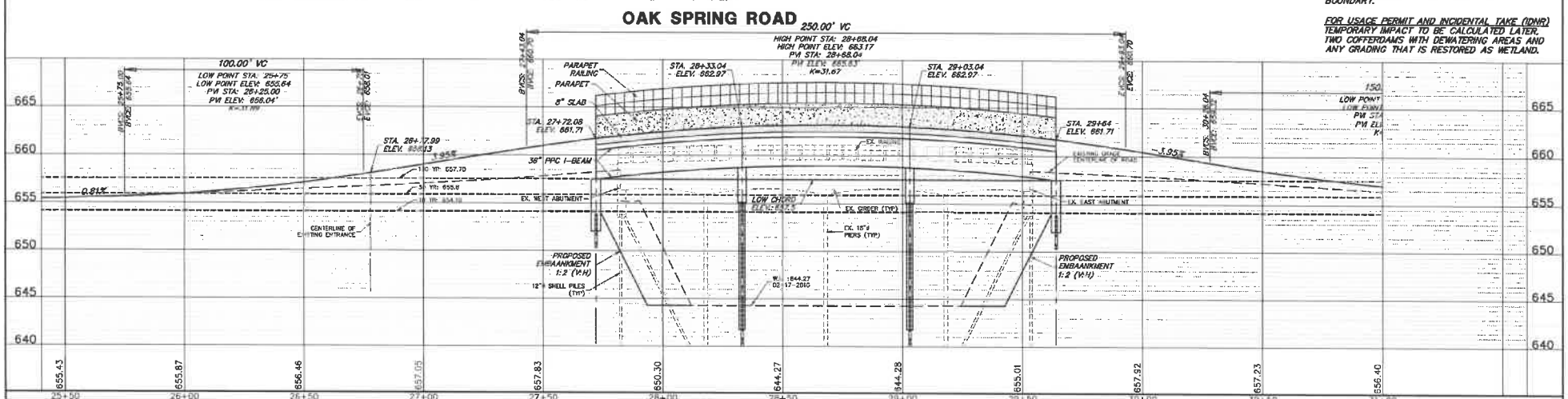
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1234	15-10112-00-BR	LAKE		

CONTRACT NO.

ILLINOIS FED. AID PROJECT

J:\3930\Cad\CADD Sheets\02_TS_Details.dgn
b38M PM
8/22/2018





GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

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WETLAND EXHIBIT

LIBERTYVILLE TOWNSHIP - OAK SPRING ROAD PHASE 1
OAK SPRING ROAD
LIBERTYVILLE, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: 4449.010_Wetland Exhibit.dwg		SHEET NUMBER
DRAWN BY: PJS DATE: 7/16/19	GHA PROJECT # 4449.010	1
CHECKED BY: CMB DATE: 7/16/19	SCALE: 1" = 20'	OF — SHEETS

Libertyville Township Highway Department Oak Spring Road Bridge Replacement

Public Informational Meeting #2 – March 16, 2020

PROJECT OVERVIEW

The Township Highway Department has secured Federal Funding through the Surface Transportation Program – Bridge (STP-BR) fund and the Statewide Township Bridge Fund to assist in the design and construction of a replacement bridge on Oak Spring Road over the Des Plaines River. The existing bridge was constructed in circa 1968. Despite regular maintenance by the Township, the bridge had continued to deteriorate. A number of inspections have been performed and determined that while the bridge is still safe to travel, the next appropriate step is to replace the structure.

KEY POINTS

- The new bridge will be constructed such that the bridge deck is above the 100-yr flood elevation.
- One 12-foot travel lane in each direction will be provided on the new bridge.
- An 8-foot wide path will be provided on each side of the bridge to accommodate future sidewalks / multi-use trails along Oak Spring Road.
- Township will stage materials and construction activities in the boat launch parking lot and will re-pave the lot when construction is complete.

FUNDING SUMMARY

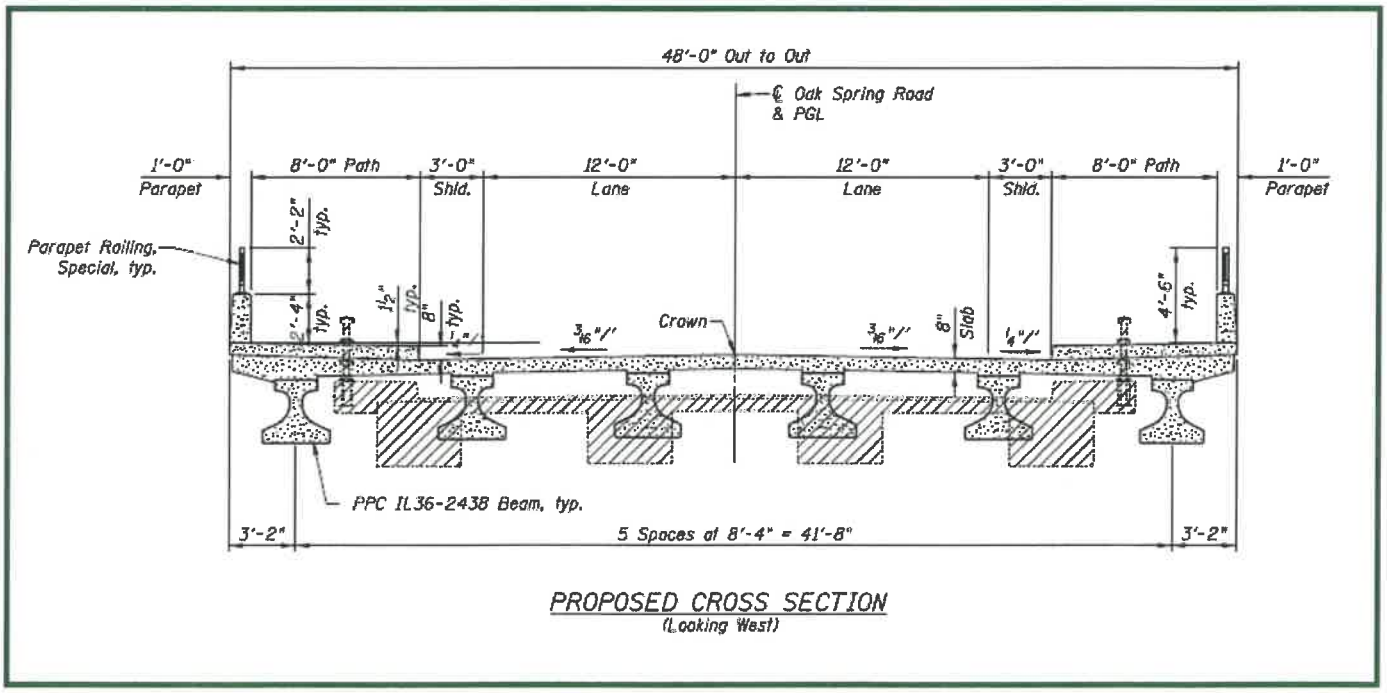
The following table summarizes the cost sharing for the engineering and construction of the replacement structure.

PROJECT PHASE	TOTAL COST	FEDERAL FUNDS	STATE FUNDS	LOCAL TOWNSHIP FUNDS
PHASE I ENGINEERING	$150,917.00	$120,734.00	$20,501.00	$9,682.00
PHASE II ENGINEERING	$200,000.00	$160,000.00	$10,000.00	$30,000.00
CONSTRUCTION	$2,500,000.00	$2,000,000.00	$100,000.00	$400,000.00
CONSTRUCTION ENGINEERING	$275,000.00	$220,000.00	$45,000.00	$10,000.00
TOTALS	$3,125,917.00	$2,500,734.00	$175,501.00	$449,682.00

PROJECT TIMELINE

LOCATION MAP

PROPOSED BRIDGE CROSS SECTIONS



Please provide any additional comments or information requests by Wednesday April 1, 2020 to:

By Mail:
Oak Spring Road Bridge Phase I Study c/o
Libertyville Township Highway Department
343 Merrill Court
Libertyville, Illinois 60048
Attn: Martin Neal, Highway Commissioner

By email:
highwaydepartment@libertyvilletownship.us
Subject: Oak Spring Road Bridge Comments