PUBLIC NOTICE

In accordance with the statutes of the State of Illinois and the ordinances of the City of Highland Park, a Regular Meeting of the ***Historic Preservation Commission*** of the City of Highland Park is scheduled to be held at the hour of 7:30 p.m., Thursday, October 13, 2016 at Highland Park City Hall, 1707 St. Johns Avenue, Highland Park, Illinois, during which meeting there will be a discussion of the following:

City of Highland Park
Historic Preservation Commission
Thursday, October 13, 2016
1707 St. Johns Avenue, City Hall
7:30 p.m.

REGULAR MEETING AGENDA

I. **Call to Order**

II. **Roll Call**

III. **Approval of Minutes**

A. September 8, 2016

IV. **Scheduled Business**

A. **Determination of Significance**

- 91 Lakewood Place

V. **Discussion Items**

VI. **Business From the Public**

VII. **Other Business**

A. Central Avenue Bridge Reconstruction
- Dept. of Public Works Proposal
- Section 106 Comments

B. Review and Approve the Revised 2017 Work Plan

C. Next meeting scheduled for November 10, 2016

VIII. **Adjournment**

MINUTES OF A REGULAR MEETING OF HISTORIC PRESERVATION COMMISSION OF THE CITY OF HIGHLAND PARK, ILLINOIS

MEETING DATE: Thursday, September 8, 2016

MEETING LOCATION: Pre-Session Conference Room, City Hall, 1707 St. Johns Avenue, Highland Park, IL

CALL TO ORDER
At 7:30 p.m., Chairwoman Thomas called the meeting to order & asked Staff to call the roll.

ROLL CALL
Commissioners Present: Chairwoman Thomas, Commissioners Reinstein, Becker, Temkin, Fradin, Illes, Salamasick

Ex-Officio Member Present: Axelrod

Park District Liaison Present: Mike Evans

Library Liaison Absent: Julia Johnas

Councilman Absent: Blumberg

Student Council Present: Burroughs

Staff declared that a quorum was present.

Staff Present: Jahan

Also Present: Cerabona

APPROVAL OF MINUTES

1. Commissioner Temkin moved to approve the August 11, 2016, regular meeting minutes as presented. Commissioner Fradin seconded the motion.

   On a roll call vote
   Voting Yea: Chairwoman Thomas, Commissioners Reinstein, Becker, Temkin, Fradin, Illes, Salamasick
   Voting Nay: None

   Chairwoman Thomas declared that the motion passed unanimously.

SCHEDULED BUSINESS

1. <u>Determination of Significance</u>

   - 1054 Golf Avenue

   Planner Jahan reviewed this house:
   - Built in 1952
   - Ranch style
   - Architect is Robert Brandt, Highland Park Builders; designed 10 homes in Sunset View Subdivision
   - Contributing status

- Landmark standards were referenced
- Photos were shown

Some HPC comments are:

- Why the Contributing status? Ex-Officio Member Axelrod responded – it was a community look

Commissioner Fradin moved that the house does not meet any landmark criteria. Commissioner Reinstein seconded the motion.

On a roll call vote
Voting Yea: Chairwoman Thomas, Commissioners Reinstein, Becker, Temkin, Fradin, Illes, Salamasick
Voting Nay: None

Chairwoman Thomas declared that the motion passed unanimously.

- 1756 Sunset Road

Planner Jahan reviewed the house:

- Built in 1874 (not defined); alterations in 1940, 1954, and 1965
- Craftsman style
- Architect is unknown
- Sunset Terrace Subdivision
- Photos were shown

Mike Evans arrived at 7:39 p.m.

Petitioner is Bob Hahn, son of owner who is deceased.

Some HPC comments are:

- Were there any other houses on the street? Ex-Officio Member Axelrod stated these were the only homes on the street
- Which alterations are new? Planner Jahan advised – those on the right side of the house
- Not much left of the old house
- Who lives there? Petitioner advised – he is the executor; his mother owned it; home is vacant; it is on the market now; currently unlivable
- Do you want to see if it could be sold? Petitioner advised – no one would live there based on current conditions. A reverse mortgage must be paid off by October.

Commissioner Fradin moved that the house does not meet any landmark criteria. Commission Illes seconded the motion.

On a roll call vote
Voting Yea: Chairwoman Thomas, Commissioners Reinstein, Fradin, Illes, Salamasick
Voting Nay: Becker, Temkin

Chairwoman Thomas declared that the motion passes 5-2.

- 676 Ridge Road

Planner Jahan reviewed the house:

- Built c.1900; alterations in 1927 and 1990
- Gabled Wing Cottage style
- Contributing status

- Architect is unknown
- H.J. Lloyd Subdivision
- Photos were shown; there are grade changes

Some HPC comments are:

- Ex-Officio Member Axelrod stated she believes this was built before 1900; she noted a teacher from Westwood School lived there originally
- Why a Contributing status? Planner Jahan advised – there is no complete back-up
- House doesn't look bad
- Don't think it meets any criteria

Petitioner/Builder is Jeremy Velichkoff, with D.R. Horton, who advised there is a contract pending.

Commissioner Reinstein moved that the house does not meet any landmark criteria. Commission Becker seconded the motion.

On a roll call vote
Voting Yea: Chairwoman Thomas, Commissioners Reinstein, Becker, Temkin, Fradin, Illes, Salamasick
Voting Nay: None

Chairwoman Thomas declared that the motion passed unanimously.

DISCUSSION ITEMS
There were none.

BUSINESS FROM THE PUBLIC
There was no Business from the Public.

OTHER BUSINESS

1. Updates on the Educational Outreach Projects for 2016

a. Mid-Century Modern

Commissioner Temkin displayed the flyer. Expenses were identified. Planner Jahan asked that invoices be submitted.

b. Coloring Book

Planner Jahan illustrated 3 bids. It was stated the Highland Park Library staff would be contacted for a pricing.

c. Confirm Budgets for Projects

Budgets of the above were discussed.

2. 2016 Historic Preservation Awards Program

Planner Jahan advised 3 judges are being sought; various individuals were identified. It was noted an announcement is on the City web site. It was suggested the Battleship House, at 441 Cedar, be nominated. A possible conflict in dates was discussed; a Thursday is preferable. Planner Jahan stated potential judge recommendations should be submitted to her. Potential nominees were discussed.

3. Signing 2017 Meeting Resolution

Chairman Thomas performed the above.

4. Review and Approve 2017 Work Plan

It was noted the bulk of the budget is going toward signage. Planner Jahan & Student Council Member Burroughs reminded these are way finding signs on light posts in the Historic District (along with District names).

Chairwoman Thomas stated her concern of not having funds available for educational initiatives. Commissioner Temkin suggested obtaining a CLG (matching) grant. She advised the deadline is around November 15, 2016. A $2,750 budget (grant) was recommended, then there will be $2,750 remaining for educational purposes.

Commissioner Reinstein recommended the HPC create a coffee table book of the (exterior of perhaps 30) homes in Highland Park. He suggested a high school photography class might be interested. A proposed price is $50. Chairman Thomas recommended funds be obtained from the high school too. Commissioner Reinstein stated perhaps these 30 homes could be primed for landmarking. On-line purchasing of the books was discussed. Commissioner Reinstein advised he would make contact with the Highland Park High School staff.

5. Next meeting is scheduled for October 13, 2016.

ADJOURNMENT

Commissioner Temkin moved to adjourn the meeting at 8:28 p.m. Commissioner Becker seconded the motion.

On a roll call vote

Voting Yea: Chairwoman Thomas, Commissioners Reinstein, Becker, Temkin, Fradin, Illes, Salamasick

Voting Nay: None

Chairwoman Thomas declared that the motion passed unanimously.

Respectfully Submitted,

Gale Cerabona
Minute Taker

MINUTES OF AUGUST 11, 2016, WERE APPROVED WITHOUT CORRECTIONS

91 Lakewood Place Demolition Review

To: Historic Preservation Commission
From: Nusrat Jahan, Planner
Date: 10/13/2016

Year Built:	c. 1936
Style:	French Electric
Petitioner:	Cindy Robinson
Original Owner:	Walter L. Gottschall
Architect:	Robert E. Seyfarth
Original Cost:	$15,000
Significant Features:	Mansard roof, Pocket Dormer, Arched, metal Tower Windows w/decorative Glazing, front Bay Window, Wide Chimney.
Alterations:	• 1st Floor and 2nd Floor Addition (1983)
Staff Opinion:	Staff recommends that the Commission discuss the structure at 91 Lakewood Place and how it may satisfy any of the landmark criteria identified in Chapter 24.

Location Plan: 91 Lakewood Place

A demolition application has been submitted for the house at 91 Lakewood Place; 91 Lakewood Place is a 4,336 square feet house located within Braeside survey area and has a "Significance" rating in the historical survey. The Lake County Tax Assessor's data indicates the house was built in 1936 and the City of Highland Park Building Division records indicate the same date. The City records also indicate that an addition was constructed in 1983. Plans of the addition, including the original site plan are available on microfilm and have been reproduced and included in the Attachments to this report

Historic Significance

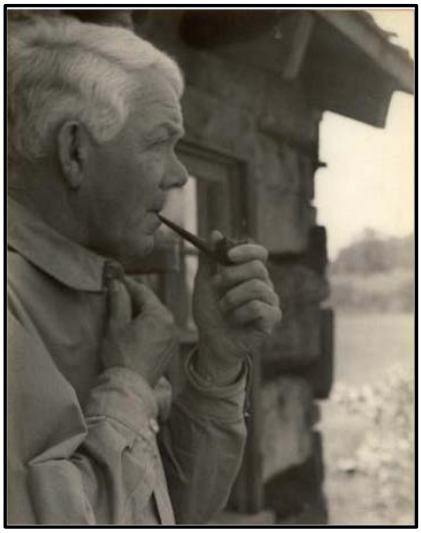
The home at 91 Lakewood Place is located on Lot 10 in Hill & Stones Shore Crest subdivision, which was platted in 1923. The original address of the property was 219 Lakewood Place. The City's Building Division records indicate the home designed by Robert Seyfarth in 1936. The attached site plan shows earlier footprint of the original home found in the archived microfilm,

which can be seen on the front elevation of the house. The 1983 addition and remodeling of first floor and 2nd floor of the house were on the rear. This addition was designed by Robert Drews Associates. The original house of 1936 and the later addition in 1983 retains a stone veneer and wood shingle mansard roof.

2003 Braeside Survey noted that the 91 Lakewood Place has received "Significance" rating for the following reasons: "[1]As a modern interpretation of the French Eclectic style, this would be significant except the replacement windows. Simplified well-proportioned example of this style by well-regarded local architect."

Robert E. Seyfarth

The 2003- 2004 Braeside architectural resource survey provides the following biographical write-up on Robert Seyforth:



Robert E. Seyfarth (1878-1950) was a prolific local architect who was born and educated in Blue Island. After graduating from the Chicago Manual Training School, he began working under George Maher, a prominent Prairie School architect. In 1909, Seyfarth opened his own office in downtown Chicago, and two years later he built a house for himself at 1498 Sheridan Road in Highland Park. The one-story, traditional house signified Seyfarth's departure from the Prairie School, and the architect's development of his own distinctive type of residential design. The house also served as a kind of advertisement to the citizens of Highland Park, and within a few years, Seyfarth had established a thriving residential practice. During the 1910s, 1920s, and 1930s, Seyfarth designed homes for middle-class and upper-middle-class clients in Chicago and most of the surrounding suburbs, with the majority of his work concentrated in Glencoe, Winnetka, and Highland Park. His designs featured simple geometric forms combined with Colonial or Georgian inspired elements, and were admired for their graceful proportions, fine detailing, human scale, and charm.

At the time the National Register nomination was prepared (1982), there were 52 houses by Seyfarth still standing in Highland Park, and two of them are in the survey area. These include 471 Lakeside Place (built in 1934) and **91 Lakewood Place (built in 1936**), both French Eclectic style residences.

The 1936 home was designed by Robert E. Seyfarth, a regarded local architect. He moved in Highland Park in 1911. Unlike his earlier Prairie style home in Blue Island, Seyfarth designed over 60 primarily modest traditional looking homes in Highland Park within the Highland Park Historical

[1] 2003-2004 Braeside His Architectural Resources in Highland Park, Illinois: Braeside Survey Area

surveys.[2] Out of these 60 homes ten have been demolished between1993-2007, see the attach Seyfarth house list.

Research on Robert Drews Associates, the firm that designed the 1983 addition on the house, did not produce many results. The firm's name does not appear in the AIA member archive list and an internet search provided limited information about their architectural work. Staff confirmed they were based in Glendale Heights, Illinois, but have ceased operations.

Architectural Analysis

The house at 91 Lakewood Place is best described as a modern interpretation of the French Eclectic style home because of architectural characteristics of the massive mansard roof, with the ridge parallel the front of the house, recessed front entry with asymmetrical front elevation. A Field Guide to American Houses describes the asymmetrical subtype (Symmetrical being the other) of homes as the following:

Front View: 91 Lakewood Place

West View: 91 Lakewood Place

> "Asymmetrical- This is the most common subtype and includes both picturesque examples based on rambling French farmhouses as well as more formal houses similar to the symmetrical subtype, but with off-center doorway and asymmetrical facades"

The Gottschall house at 91 Lakewood Place is listed on Robert Seyfarth website as one of his great work Highland Park[3].

In 1983 Robert Drews and Associates constructed the tower addition on west side of the house, which is also a subtype of French Eclectic style. A Field Guide to American Houses describes the towered subtype as the following:

[2] Chicago Architectural Journal, 2000

[3] http://www.robertseyfartharchitect.com./gallerypage6.html#

"This common subtype is immediately identifiable by the presence of a prominent round tower with a high conical roof……."

The Seyfarth Event 2014

In 2014 the HPC sponsored a program honoring Robert Seyfarth's prolific body of work in Highland Park. This house was featured in the 2014 Walking Tour of historic houses of Robert Seyfarth, refers to #47 item of the attached HPC 2014 event brochure.

Biographical Information

Ex-Officio member Julia Johnas's provided the Chicago Tribune article on Mr. and Mrs. Gottschall, the original owners of 91 Lakewood Place. Mr. and Mrs. Walter Gottschall were resident of Highland Park for 38 years. Mr. Gattschall who was born in 1897 in Wisconsin, he was a former member of the safety council of Highland Park.

Landmark Criteria

Below are the landmark criteria from the City Code:

1) It demonstrates character, interest, or value as part of the development, heritage, or cultural characteristics of the City, county, state, or country.

2) It is the site of a significant local, county, state, or national event.

3) It is associated with a person or persons who significantly contributed to the development of the City, County, State, or Country.

4) It embodies distinguishing characteristics of an architectural and/or landscape style valuable for the study of a specific time period, type, method of construction, or use of indigenous materials.

5) It is identifiable as the work of a notable builder, designer, architect, artist, or landscape architect whose individual work has influenced the development of the City, County, State, or Country.

6) It embodies, overall, elements of design, details, materials, and/or craftsmanship that renders it architecturally, visually, aesthetically, and/or culturally significant and/or innovative.

7) It has a unique location or it possesses or exhibits singular physical and/or aesthetic characteristics that make it an established or familiar visual feature.

8) It is a particularly fine or unique example of a utilitarian structure or group of such structures, including, but not limited to farmhouses, gas stations or other commercial structures, with a high level of integrity and/or architectural, cultural, historical, and/or community significance.

9) It possesses or exhibits significant historical and/or archaeological qualities.

Recommended Action

In accordance with Section 170.040 Demolition of Dwellings(E)(1) Historic Preservation Commission Review, the Commission is asked to review the structure per Section 24.015 of the Historic Preservation Regulations. If the Historic Preservation Commission determines that the Structure that is the subject of the Demolition Application satisfies:

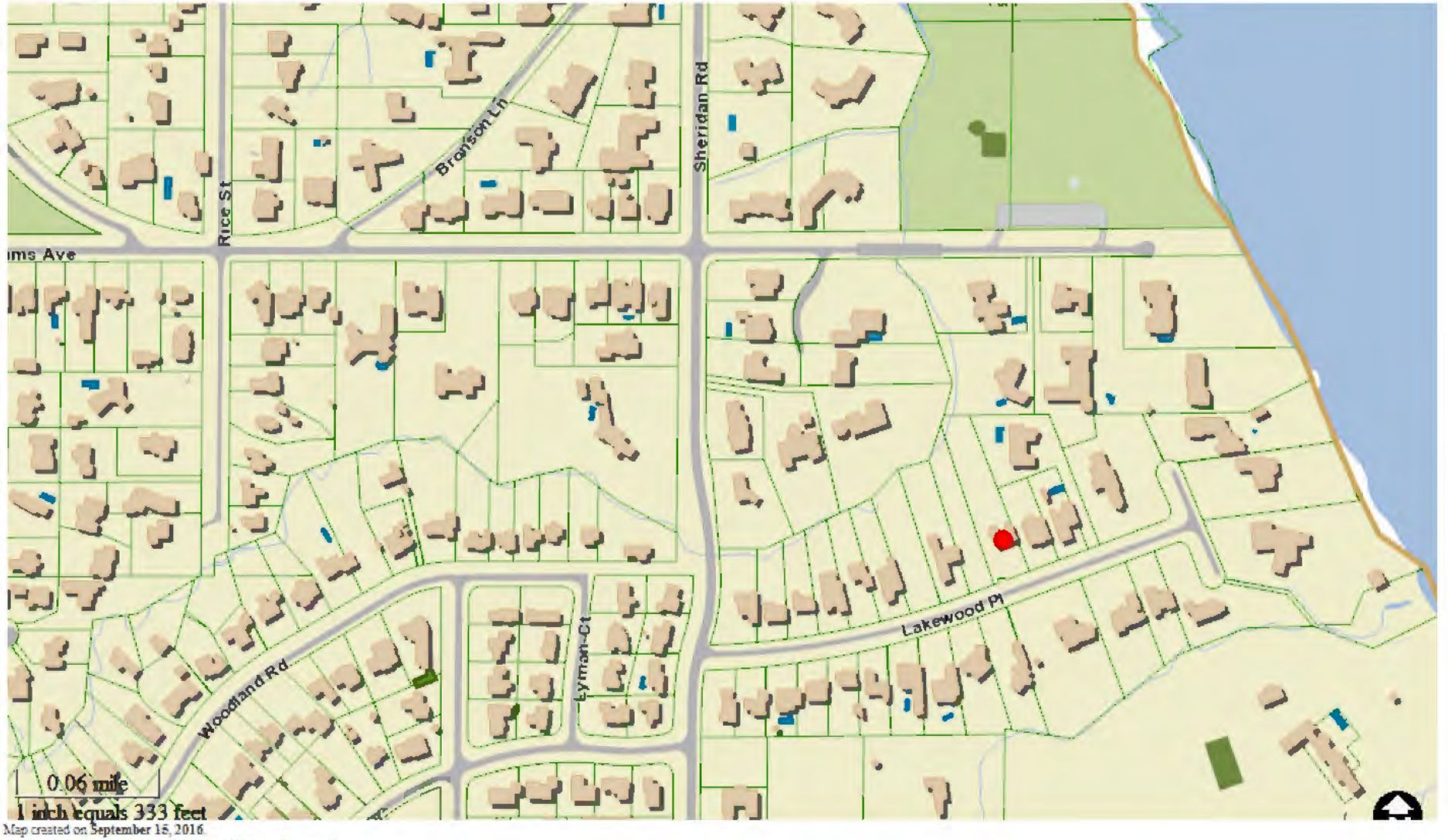
(1) Three or more of the Landmark Criteria within Section 24.015 of the Historic Preservation Regulations, then a mandatory 365-day Review Period commencing on the Application Completion date will be in effect.
(2) One or two of the Landmark Criteria within Section 24.015 of the Historic Preservation Regulations, then a mandatory 180-day Review Period commencing on the Application Completion date will be in effect,
(3) None of the Landmark Criteria within Section 24.015 of the Historic Preservation Regulations are met, in which case the Application for Demolition shall be processed.

Attachments

Location Map
Site Photos
Architectural Survey Entry
Original Building Permit
County Assessor Data
List of Seyfarth House in Highland Park
Article - Chicago Architectural Journal 2000
Plans and Elevations from Microfilm

GIS consortium MapOffice™

91 Lakewood Place



Map created on September 15, 2016.

City of HIGHLAND PARK

ILLINOIS URBAN ARCHITECTURAL AND HISTORICAL SURVEY

STREET #	91
DIRECTION	
STREET	LAKEWOOD
ABB	PL
PIN	1636206021
LOCAL SIGNIFICANCE RATING	S
POTENTIAL IND NR? (Y or N)	N
CRITERIA	-
Contributing to a NR DISTRICT?	C
Contributing secondary structure?	-
Listed on existing SURVEY?	

GENERAL INFORMATION

CATEGORY	building	CURRENT FUNCTION	Domestic - single dwelling
CONDITION	good	HISTORIC FUNCTION	Domestic - single dwelling
INTEGRITY	minor alterations and addition(s)	REASON for SIGNFICANCE	As a modern interpretation of the French Eclectic style, this would be significant except the replacement windows. Simplified well proportioned example of this style by well regarded local architect.
SECONDARY STRUCTURE	-		
SECONDARY STRUCTURE	-		

ARCHITECTURAL DESCRIPTION

ARCHITECTURAL CLASSIFICATION	French Eclectic	PLAN	rectangular
DETAILS		NO OF STORIES	2
DATE of construction	1936	ROOF TYPE	Mansard
OTHER YEAR		ROOF MATERIAL	Wood - shingle
DATESOURCE	building permit	FOUNDATION	Concrete - poured
WALL MATERIAL (current)	Stone	PORCH	Recessed front
WALL MATERIAL 2 (current)		WINDOW MATERIAL	Vinyl
WALL MATERIAL (original)	Stone	WINDOW MATERIAL	Metal
WALL MATERIAL 2 (original)		WINDOW TYPE	casement; fixed
		WINDOW CONFIG	multi-light

SIGNIFICANT FEATURES: Mansard roof; pocket dormers; rear corner tower w/mansard roof; arched, metal tower windows w/decorative glazing; front bay window; side oriel window; wide chimney rising through the roof

ALTERATIONS: 1983 permit for rear addition (#25366); replacement entry doors; replacement windows

HISTORIC INFORMATION

HISTORIC NAME	Gottschall, Walter L. House
COMMON NAME	
PERMIT NO	3277; 25366
COST	$15,000
ARCHITECT	Seyfarth, Robert E.
ARCHITECT2	
BUILDER	Perterson, Edward
ARCHITECT SOURCE	building permit

HISTORIC INFO	
LANDSCAPE	Midblock of no-outlet residential street; uniform setback; wide lot; front driveway lined w/short stone wall; foundation bushes & plantings; rear ravine; mature trees

PHOTO INFORMATION

ROLL1	1
FRAMES1	5
ROLL2	
FRAMES2	
ROLL3	
FRAMES3	
DIGITAL PHOTO ID	e:\lakewood0091.jpg

SURVEY INFORMATION

PREPARER	Kristin Martin
PREPARER ORGANIZATION	Granacki Historic Consultants
SURVEYDATE	6/18/03
SURVEYAREA	Braeside Survey Area

Date 7 April 1936 1610 Oct 1936 Building Permit No. 3277

Location of Building—No. 219 Street Lakewood Dr

Name of Owner Walter L. Gothschall

Present Address HP 542 De Tamble Ave HP Phone 549

Type of Construction stone veneer Remodeling

General Contractor Edw. Peterson Address Winnetka, Ill. Phone

Permit issued to Owner to construct a single family dwelling

building on Lot 10 Blk Sub'n. Shore Crest Sub

Builder's estimate $15000 — Permit fee $51.50

Location on Lot verified April 3 1936 by [illegible]

Other inspections Stair in rear not 3'-0" wide as clear

Deposits Sidewalks planked

Remarks Edw. Peterson 896 Lincoln Ave, Highland Woods, Winnetka Ill.

Job completed Receipt for returned plans Owner

Excavation & Sewer work started before permit issued

Electric Contractor Peterson Address

Wiring Permit No. 2294 Issued 1 Jun 36 Fixture Permit No. 2426 Issued Oct 27 1936

1st Inspection + Range 193 by

2nd Inspection 193 by

Size of main wire Size of branch wire System

No. of Openings No. Sockets No. Circuits No. Motors No. Ranges

Certificate of Inspection Issued 193 No.

Date of Public Service Tap Remarks

Plumbing Contractor Moran P & H Address

Water Tap No. Sewer Tap No. Job Order No. Issued Paid

Inspected 8 July 1936 by

Inspected 193 by

No. Catch Basins 1 No. Lavatories 6 No. Toilets

No. Baths 3 No. Sinks 1 No. Laundry Tubs 1

No. Shower Baths 3 No. Stacks 3-4" - 1-2" Other Items 1

Certificate of Inspection Issued 193 No.

Downspouts connected to

Kind of Heat Name of Burner Gilbert Barker Permit No. 642

Tank Inspection Robert J. O'Leary

1 DS Shower
2 7'-6" ceiling Hall
3 Flue

office in downtown Chicago, and two years later he built a house for himself at 1498 Sheridan Road in Highland Park. The one-story, traditional house signified Seyfarth's departure from the Prairie School, and the architect's development of his own distinctive type of residential design. The house also served as a kind of advertisement to the citizens of Highland Park, and within a few years, Seyfarth had established a thriving residential practice. During the 1910s, 1920s, and 1930s, Seyfarth designed homes for middle-class and upper-middle-class clients in Chicago and most of the surrounding suburbs, with the majority of his work concentrated in Glencoe, Winnetka, and Highland Park. His designs featured simple geometric forms combined with Colonial or Georgian inspired elements, and were admired for their graceful proportions, fine detailing, human scale, and charm.

At the time the National Register nomination was prepared (1982), there were 52 houses by Seyfarth still standing in Highland Park, and two of them are in the survey area. These include 471 Lakeside Place (built in 1934) and 91 Lakewood Place (built in 1936), both French Eclectic style residences.

William David Mann (1871-1947) was another local architect who specialized in residential design. Mann, who studied civil engineering at Purdue University, managed his own architectural practice for over 30 years, maintaining offices in Chicago and Highland Park, where he lived. Over the course of his career, Mann designed hundreds of homes along the North Shore—many of these residences were large country homes and private estates. Three houses designed by Mann are in the survey area: a Dutch Colonial Revival style house built in 1937 at 237 Elder Lane; a French Eclectic style house at 120 Sheridan Road (built in 1938) and a Tudor Revival style residence at 340 Carol Court (built in 1936).

Ernest Grunsfeld, Jr. (1897-1970), was one of the most prominent local architects in Highland Park. Grunsfeld designed large, elegant houses for wealthy local clients. His designs were generally in traditional styles, but reflected an original approach. He studied at MIT, the Ecole des Beaux Arts in Paris, and the American Academy in Rome. He is noted for his design of the Adler Planetarium in Chicago, for which he won a gold medal at the 1939 Pan American Congress. He worked in partnership with Eugene H. Klaber (1883-1971) as Klaber and Grunsfeld from 1924 to 1929. He then had an independent practice from 1929 to 1939. In 1939 he co-founded Grunsfeld, Yerkes and Koenig, and in 1946, Friedman, Alschuler, Sincere and Ernest A. Grunsfeld. Grunsfeld designed two houses in the survey area—a Tudor Revival style house at 650 Sheridan Road (built in 1925) and a Ranch style house at 665 Sheridan Road (built in 1968).

R. Harold Zook (1889-1949) was a Hinsdale architect who designed homes that were superbly crafted and often charmingly unique. Born in Indiana, he received his degree in architecture from the Armour Institute of Technology and began his career working with Howard Van Doren Shaw. Zook opened his first offices in Chicago but moved to Hinsdale in 1924, where he implemented a master plan for the village. He practiced in Hinsdale until his death in 1949. Zook designed one house within the survey area, a Tudor Revival style residence at 675 Judson Avenue (built in 1940).

366 LAKESIDE PL Colonial Revival 1937 Klemperer, Mrs. Dorothy House Lichtmann, Samuel	
450 LAKESIDE PL Tudor Revival 1927 Beman, Spencer S.	
460 LAKESIDE PL International Style 1954 Van Gelder, Mark House Keck, George Fred & William	
471 LAKESIDE PL French Eclectic 1934 Kidd, Alan R. House Seyfarth, Robert E.	
416 LAKESIDE MANOR RD Tudor Revival 1931 Grace, Stanley D. House Sailor, Homer Grant	
444 LAKESIDE MANOR RD French Eclectic 1925 Lynn, Dr. Harold House	
46 LAKEVIEW TER Tudor Revival 1931 Braucher, Ernest N.	

65 LAKEVIEW TER Colonial Revival 1945 Ruby, Seymour House Dahlquist, C. L.	
77 LAKEVIEW TER Colonial Revival 1927 Lyons, Andrew J. House Schimek, Alfred F.	
96 LAKEVIEW TER Colonial Revival 1936 Decker, Alice T. House Gliatto, Leonard Anthony	
22 LAKEWOOD PL Contemporary 1953 Bederman, N. B. House Schurecht, Inc.	
25 LAKEWOOD PL International Style 1960 Caine, Hannah House Newhouse, Henry L.	
91 LAKEWOOD PL French Eclectic 1936 Gottschall, Walter L. House Seyfarth, Robert E.	
565 LYMAN CT Colonial Revival 1941 Wilber, J. B. House Weber, Bertram A.	

44		LAKEWOOD	PL	Ranch	1953	C		Schnur, James C.
45		LAKEWOOD	PL	Georgian Revival	1933	C	Severin, A. N. House	Wilkinson, Laurence E.
59		LAKEWOOD	PL	Ranch	1955	NC	Sherwin, Julius L. House	Schaffner, Arnold & Assoc.
62		LAKEWOOD	PL	Neo-Traditional	1949	NC	Brody, Joseph House	Schnur, James C.
67		LAKEWOOD	PL	Ranch	1957	NC	Chazin, Seymour House	Koenig, Philip
76		LAKEWOOD	PL	Contemporary	1951	C	Kaplan, M. A. House	Dubin & Dubin
77		LAKEWOOD	PL	Neo-Traditional	1990s	NC		
90		LAKEWOOD	PL	Contemporary	1940	C	Michaels, Ralph House	Eppenstein, James F.
91		LAKEWOOD	PL	French Eclectic	1936	S	Gottschall, Walter L. House	Seyfarth, Robert E.
100		LAKEWOOD	PL	Tudor Revival	1928	C	Kettner, Magnus House	Sloan & Johnson
110		LAKEWOOD	PL	Neo-Traditional	1939	NC	Wellman, Barbara & Lester House	Lowenstein, Edward
111		LAKEWOOD	PL	Colonial Revival	1935	C	Kraft, K. H. House	White & Weber
124		LAKEWOOD	PL	Neo-Traditional	1990s	NC		
135		LAKEWOOD	PL	Ranch	1952	C	Greenberg, William A. House	Rider, Robert
136		LAKEWOOD	PL	International Style	1950	C	Greenfield, Burton J. House	Rissman & Rissman
145		LAKEWOOD	PL	Colonial Revival	1941	C	Johnson, Reginald C. House	
146		LAKEWOOD	PL	Tudor Revival	1936	C	Moreland, L. T. House	Strauch, M. F.
155		LAKEWOOD	PL	Ranch	1964	NC	Silberman, Peggy S. House	Holland, John D. & Assoc.
156		LAKEWOOD	PL	Spanish Colonial Revival	1926	C	Durrand, A. F. House	
167		LAKEWOOD	PL	Monterey	1936	C	Brown, R. C. Jr. House	Perkins, Wheeler & Will
168		LAKEWOOD	PL	Colonial Revival	1948	C	Dorph, H. House	Forsyth, Malcolm C.
177		LAKEWOOD	PL	Colonial Revival	1934	C		Houlihan, Ray F.
178		LAKEWOOD	PL	Colonial Revival	1940	C	Finch, Gibert H. House	Allen & Webster
188		LAKEWOOD	PL	French Eclectic	1948	C	Phillips, Phillip T. House	Fotsyth, Malcolm C.
191		LAKEWOOD	PL	Ranch	1950	NC		Marling, J. H.
200		LAKEWOOD	PL	Colonial Revival	1948	C	Wertheimer, D. P. House	Forsyth, Malcolm C.
307		LAMBERT TREE	AV	International Style	1954	C		Simon, Louis L.
321		LAMBERT TREE	AV	Cape Cod	1936	C	White, Stuart E. House	Serpico, Frank J.
327		LAMBERT TREE	AV	Colonial Revival	1939	C	Saltiel, Robert House	
335		LAMBERT TREE	AV	Ranch	1920s	NC		
353		LAMBERT TREE	AV	Spanish Colonial Revival	1927	C	Halverson, Lillie House	
389		LAMBERT TREE	AV	Colonial Revival	1925	C	Kinberg, Elmer House	
415		LAMBERT TREE	AV	Ranch	1953	C	Finch, Herman House	Newhouse, Henry L.
445		LAMBERT TREE	AV	Ranch	1952	C	Edelman, Benjamin H. House	Hayes, Joseph C.

Property Tax Assessment Information by PIN

Enter the 10 to 14 digit Property Index Number (PIN) with or without dashes for the property

1636206021 Submit

View Board of Review Appeal Schedule and Assessor Evidence

Print Version

Property Address

Pin:	16-36-206-021
Street Address:	91 LAKEWOOD PL
City:	HIGHLAND PARK
Zip Code:	60035
Land Amount:	$153,325
Building Amount:	$218,879
Total Amount:	$372,204
Township:	Moraine
Assessment Date:	2016

Property Characteristics

Neighborhood Number:	1831010
Neighborhood Name:	Deere Parks & Lakewood Place
Property Class:	104
Class Description:	Residential Improved
Total Land Square Footage:	33446
House Type Code:	22
Structure Type / Stories:	2.0
Exterior Cover:	Brick
Multiple Buildings (Y/N):	N
Year Built / Effective Age:	1936 / 1944
Condition:	Average
Quality Grade:	Exc
Above Ground Living Area (Square Feet):	4336
Lower Level Area (Square Feet):	
Finished Lower Level (Square Feet):	
Basement Area (Square Feet):	1255
Finished Basement Area (Square Feet):	0
Number of Full Bathrooms:	5
Number of Half Bathrooms:	1
Fireplaces:	1
Garage Attached / Detached / Carport:	1 / 0 / 0
Garage Attached / Detached / Carport Area:	418 / 0 / 0
Deck / Patios:	0 / 0
Deck / Patios Area:	0 / 0
Porches Open / Enclosed:	2 / 0
Porches Open / Enclosed Area:	54 / 0
Pool:	0

"Chicago Architectural Journal," 2000

ROBERT E. SEYFARTH, ARCHITECT

STUART E. COHEN, FAIA

FIGURE 1 ROBERT SEYFARTH, CA. 1935. PHOTOGRAPHER HELEN MORRISON. SEYFARTH DESIGNED A HOUSE FOR HER IN 1935. COURTESY STUART COHEN

Except for a cadre of homeowners and a few architectural historians, the work of Robert E. Seyfarth is virtually unknown. Primarily a residential architect, Seyfarth was a contemporary of David Adler and Howard Van Doren Shaw, who was nine years his senior. However, unlike the mansions for Chicago's elite designed by those architects, Seyfarth's houses were modest by comparison, designed for well-to-do merchants and businessmen. Seyfarth's talent as a designer of houses is evident in his handsome proportions, careful massing, elegant detailing, conscious manipulation of scale, and fine control of space and natural light.

Robert Edward Seyfarth (Figure 1) was born in Blue Island, Illinois, in 1878, the son of Edward Seyfarth, a prominent local businessman and hardware storeowner, and his wife Clara. After attending primary school in Blue Island, Seyfarth enrolled in the Chicago Manual Training School, a vocational high school where he probably studied architectural drafting and construction. In 1898 after his graduation, Seyfarth went to work for the prominent Prairie School architect, George W. Maher, a position he may have obtained through William Weber, president of the First National Bank of Blue Island, who would have known Robert's father. Maher had just completed a house for Weber at 12956 S. Greenwood Ave. in Blue Island.

In 1903 while working for Maher, Seyfarth built his first house. He had married Nell Martin and constructed a small house for himself and his bride at 12852 S. Maple Avenue in Blue Island. The house was even more Wrightian in its cubic form and details than Maher's work. During his apprenticeship, in addition to residential projects, Seyfarth worked on Maher's designs for Northwestern University's Patton Gymnasium and Swift Chemistry Building. He also supervised the construction of James A. Patton's house on Ridge Avenue in Evanston.

Seyfarth also began designing on his own. In 1908, his H.C. Dickinson House at 7150 S. Yale Ave. in Chicago was published in the February issue of *House Beautiful* magazine. A brick structure with a projecting full-width second-floor porch and low-hipped roof, it is similar to the Prairie-style house Seyfarth had built for himself in 1903.

By 1909 Seyfarth was ready to open his own private practice. In the process of supervising the construction of several Maher houses in Highland Park, he saw an opportunity for himself in the wealthy North Shore suburb. He sold his house in Blue Island and built a new home at 1498 Sheridan Road in Highland Park in 1911. Seyfarth's move to Highland Park was not unlike Frank Lloyd Wright's move to Oak Park, where the construction of his fashionable Shingle-style house served as an advertisement of his skill as a residential architect. It is interesting that Seyfarth's new house was unlike his earlier Prairie-style home in Blue Island. Instead, it was a modest, one-story, traditional-looking house with a gambrel roof and tall double-hung windows.

FIGURE 2 STEWART HOUSE,
1442 FOREST HIGHLAND PARK, ILLINOIS
CA 1913 COURTESY STUART COHEN

His decision to move to Highland Park was a good one. By the mid 1920s he had built over a dozen houses within two blocks of his home. The best of these early houses is the Alexander Stewart house (Figure 2), built in 1913 at 1442 Forest. Volumetrically simple, the Stewart house has a hipped roof, overscaled double-hung windows with shutters, and an arched Georgian-style entry canopy supported on scrolled brackets. The most unusual feature is the pair of symmetrically-placed sun porches with floor-to-ceiling glass on three sides. These face south at either end of the main façade. The sun porches have pitched roofs, which slope up to join the main hipped roof, completely integrating them into the volume of the house. The studied asymmetries and private informality of the rear façade (Figure 3), with its centered stair window and paired inset dormers, should be compared to the public formality of the front façade.

The Stewart house was purchased in 1952 by Seyfarth's son Hugh, and Hugh's daughter Mary still lives there. Mary remembers her grandfather as a friendly, outgoing man who was always working, often missing family vacations. It was Nell Seyfarth who probably made many of the social contacts that led to residential commissions for her husband. Considered a civic leader, she was head of the Highland Park School Board for nine years, president of the PTA and president of the Highland Park Women's Club from 1925 to 1927.

Why did Robert Seyfarth abandon the Prairie Style when he began his career in Highland Park? Was it a personal decision involving ideology or a change in his own taste, or was it an acknowledgement that his clients preferred more conservative-looking designs? Was Seyfarth simply separating himself from Maher, distinguishing his work from that of his mentor? Seyfarth's house was literally down the block from Frank Lloyd Wright's 1902 Prairie School masterpiece, the Ward Willitts house. Did Seyfarth understand that the derivative Prairie-style work of Wright's followers would pale by comparison to the master's work? Could he have known that the Prairie School as an architectural style would almost completely disappear by the 1920s, a phenomenon of taste and circumstance about which Prairie School historian H. Allen Brooks speculates but cannot explain. One fact is clear: Wright built only two more houses in Highland Park while Seyfarth built over fifty.

Although Seyfarth served a predominately suburban clientele, he kept offices in downtown Chicago during the 1910s and 1920s. Upon leaving Maher's employ, he rented an office in the Corn Exchange Bank Building at the corner of LaSalle and Adams streets. In 1925 he moved to the 21st floor of the Tribune Tower, Chicago's most prestigious new building. Seyfarth prepared his own drawings, aided by his secretary, a Miss Eldridge who typed his specifications. Affected by the Depression, he gave up his Chicago office in 1934 and moved his practice into his house, where he worked until his death in 1950.

During the 1940s, Seyfarth hired his first and only professional employee, Edward Humrich. Humrich recalled in an

FIGURE 1 STEWART HOUSE
REAR FACADE
COURTESY STUART COHEN

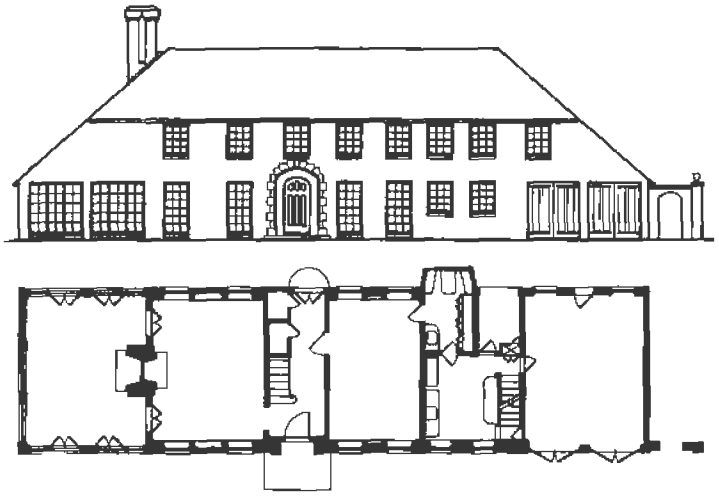
interview, conducted by the Department of Architecture of the Art Institute of Chicago, that Seyfarth had no car, never learned to drive and hired him because he did. Humrich drove him twice a week to visit the North Shore houses he had under construction. He also took over the typing of Seyfarth's specifications.

During the 1910s and the 1920s Seyfarth built houses in Chicago and many Chicago-area suburbs, including Evanston, Winnetka, Glencoe, Highland Park, Northbrook, Deerfield, Waukegan, Barrington, Libertyville, River Forest and Oak Park. He also built in his boyhood town of Blue Island, where he designed houses in 1926 for his brothers William and Ward and in 1929 for cousin Arthur Seyfarth. Seyfarth's work was published with some regularity in the pages of the *Western Architect*, and his houses also appeared in *Architectural Record, House Beautiful* and *House and Garden*.

His late son Hugh remembered that Seyfarth particularly admired the work of Howard Van Doren Shaw and was a good friend of Hugh Garden and Jens Jensen, who designed the landscaping for Seyfarth's Holmes house, built in Highland Park at 2693 Sheridan Road in 1928. Seyfarth lunched regularly to discuss questions of architectural practice with a group of North Shore architects that included Morgan Yost and John van Bergen. Yost remembered Seyfarth as "an excellent designer. His houses were not really colonial...they used colonial elements." He also noted that "they were beautifully put together."

Perhaps the most interesting aspect of Seyfarth's work might also account for the reason it has never really received serious critical attention. Almost all of Seyfarth's houses are typologically related, sharing similar organizational schema. These seem to be variants on several geometrically simple ideas about planning, building form and massing. Almost all of the houses from his forty years of practice are thin linear buildings, rectangular volumes with single or double wings projecting forward, or cubes. Roof forms and general massing, combined with his consistent use of tall, (often) shuttered, double-hung windows and decorative entryways, are so similar for each of the house types that it might be easy to conclude that Seyfarth kept building the same house over and over again for different clients. While Seyfarth's work hardly constitutes the same kind of systematic typological exploration we see in the cruciform and pinwheel plans of Wright's Prairie houses, his work consistently looks at the spatial implication and volumetric development of each of his preferred plan types. Each of these formal plan types has a correspondence to the size and complexity of the individual commission. The simple cube houses are "center entry colonials" like the tiny house built in 1915 at 199 Central in Highland Park. Also in Highland Park but at the other end of the spectrum is the Adamson House with its single attached forward-projecting wing and a detached garage. Built in 1927 at 2219 Egandale, it is a grand mansion on Lake Michigan with elegantly simple brick work and Tudor detailing. Of particular interest are Seyfarth's linear plans, a type largely absent from the history

FIGURE 4. WAGSTAFF HOUSE
[illegible] HAWTHORNE TERRACE
[illegible], IL 1927
FRONT ELEVATION AND
GROUND FLOOR PLAN
COURTESY TUAC FOUR



of freestanding American houses. These are different from the "shot-gun" houses found in the South in both their internal planning and their orientation to the street.

The ability to produce recognizable works is usually acknowledged as a sign of talent, invention and ideological conviction. That these characteristics are not generally recognized in Seyfarth's work is a function of contemporary architectural sensibilities, an uneasiness about the seeming arbitrariness of eclecticism. However, for Seyfarth the eclecticism of his work is more like a "kit of parts" approach to the elements of architecture that may be seen in the variation of entry doors and the (sparse) application of trim to window openings. The buildings themselves are about the pure geometry of form. It is the contrast between the often-classical entryways and the utter simplicity of the rest of his houses that have led Seyfarth's work to be labeled as "Colonial" or "Georgian."

The original front elevation and ground-floor plan of the Wagstaff House (Figure 4), built in Glencoe ca. 1927, may serve to illustrate the linear "wall house" type referred to above. The scale of the house is manipulated by the manner in which the ends of the hipped roof of the two-story main section extend down to the one-story-high sunporch and garage at either end of the house. In addition, the overscaled windows miniaturize the house by diminishing the visual length of the front and rear facades. Inside, the principal ground-floor rooms are accessed *ensuite* from the entry and stair hall. The living room and sun porch are spatially interconnected with a double fireplace and sets of French doors dividing them. The longitudinal character of the spaces is countered by the nearly floor-to-ceiling, double-hung windows which align on opposite walls and which form cross axes within the length of the rooms, flooding them with light.

Ultimately it is the livability, light-filled spaces, careful attention to interior and exterior details, beautiful proportions, and manipulation of architectural scale that made Seyfarth's houses so prized by their owners. These are the same qualities that should secure Seyfarth the place he deserves in the history of Chicago's residential architecture.

Stuart Cohen is professor of architecture at the University of Illinois at Chicago.

NOTES

General biographical information about Robert Seyfarth is to be found in the *Blue Island Trivia Sampler*, written by Jean Simon and published by the Blue Island Forum, July 25, 1989. There is a brief biography of Seyfarth in a pamphlet published by the Blue Island Historical Society to accompany the Robert Seyfarth House Walk, September 22, 1991. This reprints (unacknowledged) portions from Simon's work and from a brief biographical sketch of Seyfarth by David Van Zanten in *The Chicago Architectural Journal* 5 (1985), pp. 40-41. Van Zanten's information was based on an interview with Seyfarth's son Hugh. The Art Institute of Chicago's Department of Architecture also has a taped interview with Hugh Seyfarth made by Betty Blum in 1983.

MAYFIELD HOUSE,
145 MONTGOMERY
GLENCOE, ILLINOIS,
CA 1926
COURTESY STUART COHEN

After Robert Seyfarth's death, the family donated his drawings to the Chicago Historical Society, which has seventy sets of drawings for houses and house additions done between 1932 and 1948. No drawings of his houses from the 1920s and earlier seem to have survived except those in the possession of individual homeowners. Mary Seyfarth believes her grandfather threw away drawings each time he moved his office. Partial building lists have been compiled by the Commission on Chicago Landmarks' Chicago Historic Resources Survey, the 1972 Illinois Historic Structures Survey, and by Hugh Seyfarth shortly before his death.

My own interest in Robert Seyfarth stems from the opportunity to remodel two of his houses, one in Glencoe and one in Highland Park. Several years ago Susan Benjamin generously shared her materials on Seyfarth with me, including a copy of the Illinois Historic Structures Survey. With addresses in hand, I began to realize that most of my favorite "anonymous" houses on the North Shore were Seyfarth designs. Since then, Mary Seyfarth and Marion Roberts have kindly allowed me access to their own material.

PARTIAL BUILDING LIST BY LOCATION (CHICAGO AND SUBURBS)

The following list, arranged by location and date of construction, is not complete, and the accuracy of many entries has not been verified. The list is based on the sources noted above and is provided as an indication of Seyfarth's extraordinary productivity as a sole practitioner and as a starting point for the study of Seyfarth's built work. Many of these houses, particularly the smaller ones, have been extensively altered by additions and modifications to the rooflines, including the addition of projecting dormers. Besides the towns and cities listed here, Seyfarth also built in Dwight, Illinois; Williams Bay and near Kenosha, Wisconsin; Muskegon, Kalamazoo, Flint, Battle Creek, Dowagiac and Sturgis, Michigan; Rossford, Ohio; Firhope, Alabama; and Randolph, Virginia.

BARRINGTON, ILLINOIS

Buffington House, 296 Donlea Rd., ca. 1933
Jerrems House, 42 Brinker Rd., ca. 1935
Dwyer House, 373 County Line Rd., ca 1936

BLUE ISLAND, ILLINOIS

Robert Seyfarth House, 12852 S. Maple Ave., 1903
Roy E. Geyer House, 12850 S. Greenwood Ave., 1923
Ward Seyfarth House, 2523 W. High St., 1926
William Seyfarth House, 12804 S. Elm St., 1926
Krueger Funeral Home, 13050 S. Greenwood Ave., 1927
Arthur Seyfarth House, 12844 S. Greenwood Ave., 1929
William Schreiber House, 12857 S. Maple Ave., 1950

CHICAGO, ILLINOIS

(Beverly neighborhood)
9357 S. Pleasant Ave., 1908
9220 S. Pleasant Ave., 1909
10400 S. Seeley Ave., 1909

(West Rogers Park neighborhood)
2050 W. Pratt Ave., 1912
2064 W. Pratt Ave., 1913
7114 N. Ridge Ave., 1913
2074 W. Pratt Ave., 1914

(Greater Grand Crossing neighborhood)
7150 S. Yale Ave., ca. 1908

DEERFIELD, ILLINOIS

1124 N. Waukegan Rd., ca 1918

DAY HOUSE, 1264 LINDEN,
HIGHLAND PARK, ILLINOIS,
CA 1921
COURTESY STUART COHEN

EVANSTON, ILLINOIS

630 Central St., 1909
2514 Sheridan Rd., 1909
Commercial building, northeast corner of Sherman & Grove, ca. 1920
2500 Lincoln St., ca. 1925
Freeman House, 2418 Lincoln St., ca. 1935
Page House, 2424 Lincoln St., ca. 1936
2730 Broadway Ave., ca. 1937
Mueller House, 2320 Lincolnwood, ca. 1938

GLENCOE, ILLINOIS

(Northeast)

Stonehill House, 258 Maple Hill Rd., ca. 1911-12
150 Maple Hill Rd., ca. 1913
221 Franklin Rd., ca. 1920
246 Franklin Rd., ca. 1920
231 Franklin Rd., ca. 1924
Aspley House, 20 Maple Hill Rd., ca. 1928
31 Crescent Ct., date not known
57 Crescent Ct., date not known

(East and Southeast)

233 Fairview, ca. 1914-15
241 Fairview, ca. 1914-15
520 Greenleaf, ca. 1915
Taylor House, 92 Dell Pl., ca. 1916
Aspley House, 230 Fairview, ca. 1920
Rodgers House, 210 Park Ave., ca. 1924
Abel Davis House, 600 Sheridan Rd., ca. 1925-26
Mayfield House, 145 Montgomery, ca. 1926
• Wagstaff House, 181 Hawthorne, ca. 1927
David Meyer House, 611 Greenleaf, ca. 1928
171 Greenbay, ca. 1950 (completed by Humrich)

(West and Northwest)

462 Adams, ca. 1911
Coffin House, 463 Washington, ca 1914
445 Washington, ca. 1915
400 Lincoln, ca. 1916-18
944 Bluff, ca. 1924
565 Washington, ca. 1924-25
566 Washington, ca. 1924-25
580 Washington, ca. 1924-25
573 Grove, ca. 1925
Milliken House, 1058 Skokie Ridge, ca. 1925
Redfield House, 186 Oak Ridge Dr., ca. 1937
Gewalt House, 1000 Old Elm Pl., ca. 1938
Charles Rothermel House, 540 Lincoln, ca. 1938
Powers House, 420 Sunset Ln., 1939
Samuel Rothermel House, 609 Park Ave., ca. 1942

GLENVIEW, ILLINOIS

Keller House, 830 Normandy Ln., 1938

HIGHLAND PARK, ILLINOIS

• Seyfarth House, 1498 Sheridan Rd., ca. 1910
Glidden House, 1426 Waverly Rd., ca. 1910
Thayer House, 325 Orchard Ln., ca. 1910
Wolcott Hall, Trinity Church, 425 Laurel Ave., ca. 1910
Bournique Houses (4), 1955 to 1981 Linden, ca. 1912
Oliver House, 246 Melba Ln., ca. 1912
Kosminski House, 521 Sheridan Rd., ca 1913
McBride House, 2130 Linden, ca. 1913
• Stewart House, 1442 Forest, ca. 1913

RODGERS HOUSE
210 PARK AVE GLENCOE
ILLINOIS CA 1924
COURTESY STUART COHEN

Bunnell House I, 2144 Linden, ca. 1914
Williams House, 2200 Sheridan Rd, ca. 1914
Card House, 199 Central, ca. 1915
Herman House, 2160 Linden, ca. 1915
Montgomery Ward Garage & Servants House, 1371 Waverly Rd., ca. 1915
Store building, 1862 Sheridan Rd., ca. 1915
427 Woodland Pl., ca. 1915
1240 Forest, ca. 1916
Insul House, 2244 Sheridan Rd. ca. 1916
Jones House, 275 Linden Park Pl., ca. 1916
Purdy House, 1960 Sheridan Rd., ca. 1917 (demolished 1950s)
Goelitz House, 1441 Linden Ave., ca. 1918
McPherson House, 1506 Sheridan Rd., ca. 1918
Murray & Terry House, 1429 Linden Ave., ca. 1918
Schauffler House, 1349 Lincoln, ca. 1918
Chapin House, 1555 Hawthorn Ln., ca. 1919
Churchill House, 1375 Sheridan Rd., ca. 1919
Ruble House, 1304 Lincoln, ca. 1919
Mahler House, 1442 Waverly Rd., ca. 1920
Sanderson House, 1270 Linden, ca. 1920
Speculative house, 1336 Linden Ave., ca. 1920
Day House, 1264 Linden, ca. 1921
Sheridan House, 1304 Linden, ca. 1921
Young House, 1314 Forest, ca. 1921
Vaughn House, 1270 Forest, ca. 1922
Woodward House, 1192 St. Johns Ave., ca. 1922
Flewelling House, 1180 St. Johns Ave., ca. 1923
Speed House, 1502 Sheridan Rd., ca. 1923
Williams House, 1328 Linden Ave., ca. 1924
West Ridge School remodeling, Ridge Rd., 1925-26
Bunnell House II, 195 Maple Ave. ca. 1927
Adamson House, 2219 Egandale, ca. 1927
Holmes House, 2693 Sheridan Rd. ca. 1928
McDonald House remodeling (new facade), 1878 Linden Ave., ca 1928
Kittermaster House, 1415 Waverly Rd., ca. 1936
Gottschall House, 91 Lakewood Pl., ca. 1937
Farrell House, 1024 Sheridan Rd., ca 1938
Kidd House, 471 Lakeside Pl., ca. 1938
Staniff House, 1590 Hawthorn Ln., ca 1939
Howes House, 125 Maple Ave., ca. 1940
Lawyer House, 338 Woodland Pl., ca. 1940
Nelson House, 1267 Forest, ca. 1940
Mahler House, 90 Ridge Road, ca. 1942
Bournique House, 1509 Oakwood Ave., date not known
Vetter House, 650 Lincoln Ave. West, date not known

LAKE FOREST, ILLINOIS

Townley House, 2021 Knollwood Dr., ca. 1925
Malcomb House, 1320 Elm Tree Rd., ca. 1930

NORTHBROOK, ILLINOIS

Gallagher House, 478 Pebblebrook Rd., 1936
Morrison House, 401 Lee Rd., ca. 1939
Robert Morrison House, Morrison Ln., ca. 1940

OAK PARK, ILLINOIS

William G. Oliver House, 403 N. East Ave., 1911
Ashley Smith House, 700 Augusta, ca. 1938

RIVER FOREST, ILLINOIS

Ryder House, 1231 Ashland, ca 1935
McGrath House, 1408 Keystone, ca. 1936

MCPHERSON HOUSE,
1506 SHERIDAN
HIGHLAND PARK, ILLINOIS.
CA 1918
COURTESY STUART COHEN

WILMETTE, ILLINOIS

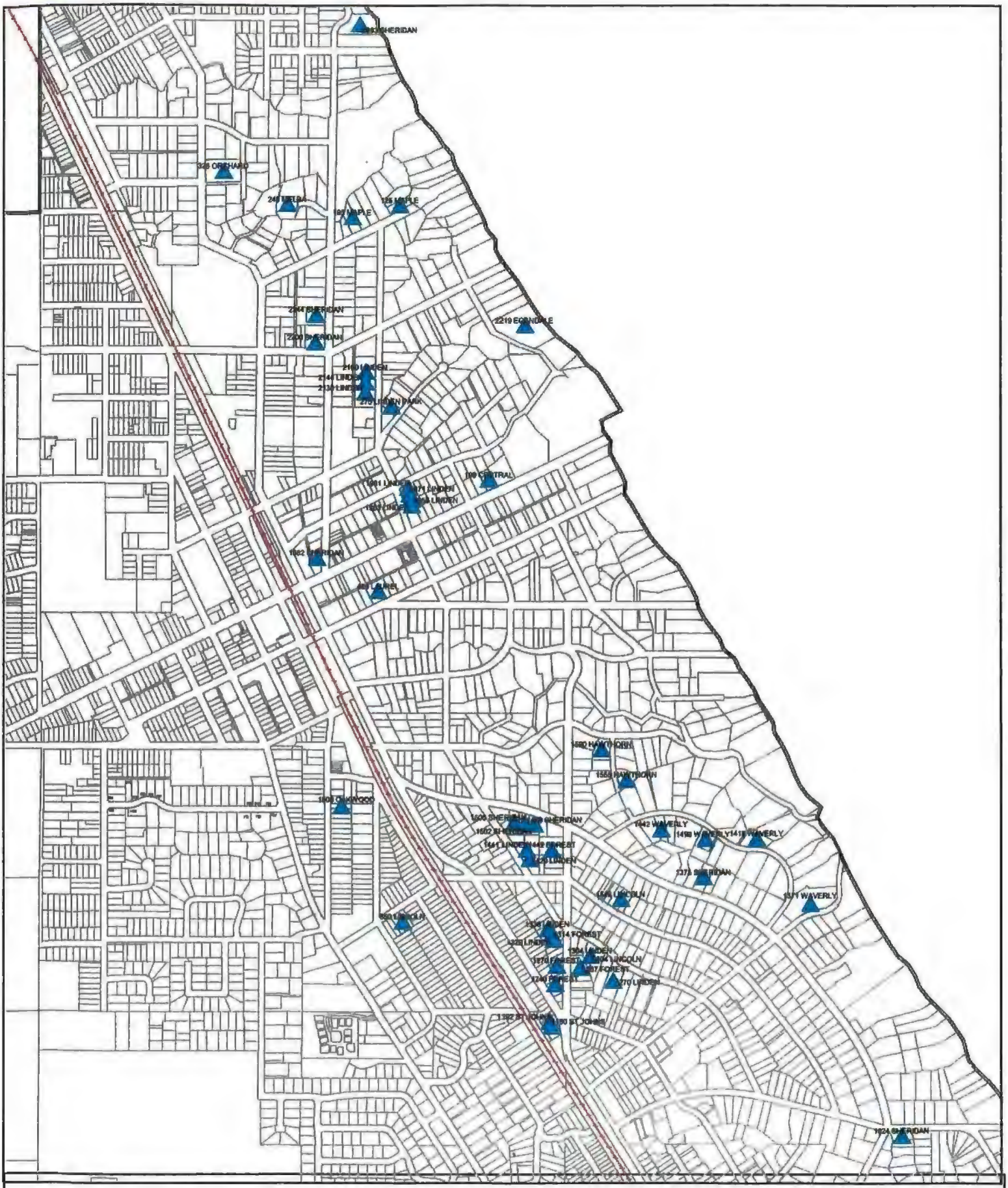
700 Greenwood (at 7th Ave.), ca. 1926

WINNETKA, ILLINOIS

Mrs. Charles Ross House, 206 Scott, ca. 1915
175 Chestnut St., ca. 1920
185 Chestnut St., ca. 1920
32 Indian Hill Rd., ca. 1920
648 Pine St., ca. 1920
490 Cherry Street, 1922
Chase House, 115 Meadow Ln., 1927
McFarland House, 633 Ardsley Rd., 1927
318 Sunset, ca. 1938
Piehl House, 181 Birch St., 1939
Vandercook House, 96 Woodley Rd., 1939
C. Bouton McDougal House, 682 Ardsley Rd., date not known
1236 Asbury, date not known
790 Ash St., date not known
Bagley House, 240 Chestnut St., date not known
247 Church, date not known
141 Euclid, date not known
681 Garland, date not known
258 Forest St., date not known
316 Forest St., date not known
330 Forest St., date not known
1160 Oakley, date not known
Brach House, 595 Sheridan Rd., date not known
William C. Childs House, 594 Spruce St., date not known
Walter Nadler House, 602 Spruce St., date not known
Joseph Varley House, 620 Spruce St, date not known
811 Sunset, date not known
708 Willow Rd., date not known
Walling House, 808 Willow Rd., date not known

WAUKEGAN, ILLINOIS

Steele House I, 703 N. Sheridan Rd., 1912
Beaubien House, 831 N. Sheridan Rd., ca. 1926
Wetzel House, 975 N. Sheridan Rd., 1930
Steele House II, 1101 N. Sheridan Rd., ca. 1938



Robert Seyfarth Structures in Highland Park

June 26, 2002

Master List - Seyfarth Houses in Highland Park

	House Number	Street		Year Built	Demolished	Year of Demolition
1	455	Cedar	Ave			
2	199	Central	Ave	1915		
3	2219	Egandale	Rd	1927		
4	1230	Forest	Ave	1924		
5	1240	Forest	Ave	1916		
6	1267	Forest	Ave	1940		
7	1270	Forest	Ave	1922		
8	1314	Forest	Ave	1921	Yes	2007
9	1442	Forest	Ave	1913		
10	565	Green Bay	Road	1925		
11	1555	Hawthorne	Ln	1919		
12	1590	Hawthorne	Ln	1939	Yes	2006
13	1765	Lake	Ave			
14	471	Lakeside	Pl	1938		
15	91	Lakewood	Pl	1937		
16	425	Laurel	Ave	1910		
17	650	Lincoln	Ave W			
18	1304	Lincoln	Ave S	1919		
19	1349	Lincoln	Ave S	1918		
20	1264	Linden	Ave	1921		
21	1270	Linden	Ave	1920	Yes	2002
22	1304	Linden	Ave	1916	Yes	2004
23	1328	Linden	Ave	1924		
24	1336	Linden	Ave	1920	Yes	1993
25	1429	Linden	Ave	1918		
26	1441	Linden	Ave	1918		
27	1864	Linden	Ave			
28	1876	Linden	Ave	1928		
29	1955	Linden	Ave	1912		
30	1963	Linden	Ave	1912		
31	1971	Linden	Ave	1912		
32	1981	Linden	Ave	1912		
33	2130	Linden	Ave	1913		
34	2144	Linden	Ave	1914		
35	2160	Linden	Ave	1915		
36	2276	Linden	Ave			
37	2290	Linden	Ave			
38	275	Linden Park	Pl	1916		
39	125	Maple	Ave	1929		
40	195	Maple	Ave	1927		
41	246	Melba	Ln	1912		

42	1509	Oakwood	Ave		Yes	2000
43	325	Orchard	Ln	1910		
44	90	Ridge	Rd	1942	Yes	2003
45	636	Ridge	Rd	1925		
46	521	Sheridan	Rd	1913		
47	1024	Sheridan	Rd	1938	Yes	
48	1375	Sheridan	Rd	1919		
49	1498	Sheridan	Rd	1910		
50	1502	Sheridan	Rd	1923		
51	1506	Sheridan	Rd	1918		
52	1882	Sheridan	Rd	1915		
53	1960	Sheridan	Rd	1917	Yes	2002
54	2200	Sheridan	Rd	1914		
55	2244	Sheridan	Rd	1916		
56	2693	Sheridan	Rd	1928		
57	1180	St Johns	Ave	1923		
58	1192	St Johns	Ave	1922		
59	1371	Waverly	Rd	1915		
60	1415	Waverly	Rd	1936	Yes	2004
61	1426	Waverly	Rd	1910		
62	1442	Waverly	Rd	1920		
63	338	Woodland	Rd	1940		
64	427	Woodland	Rd	c. 1915		

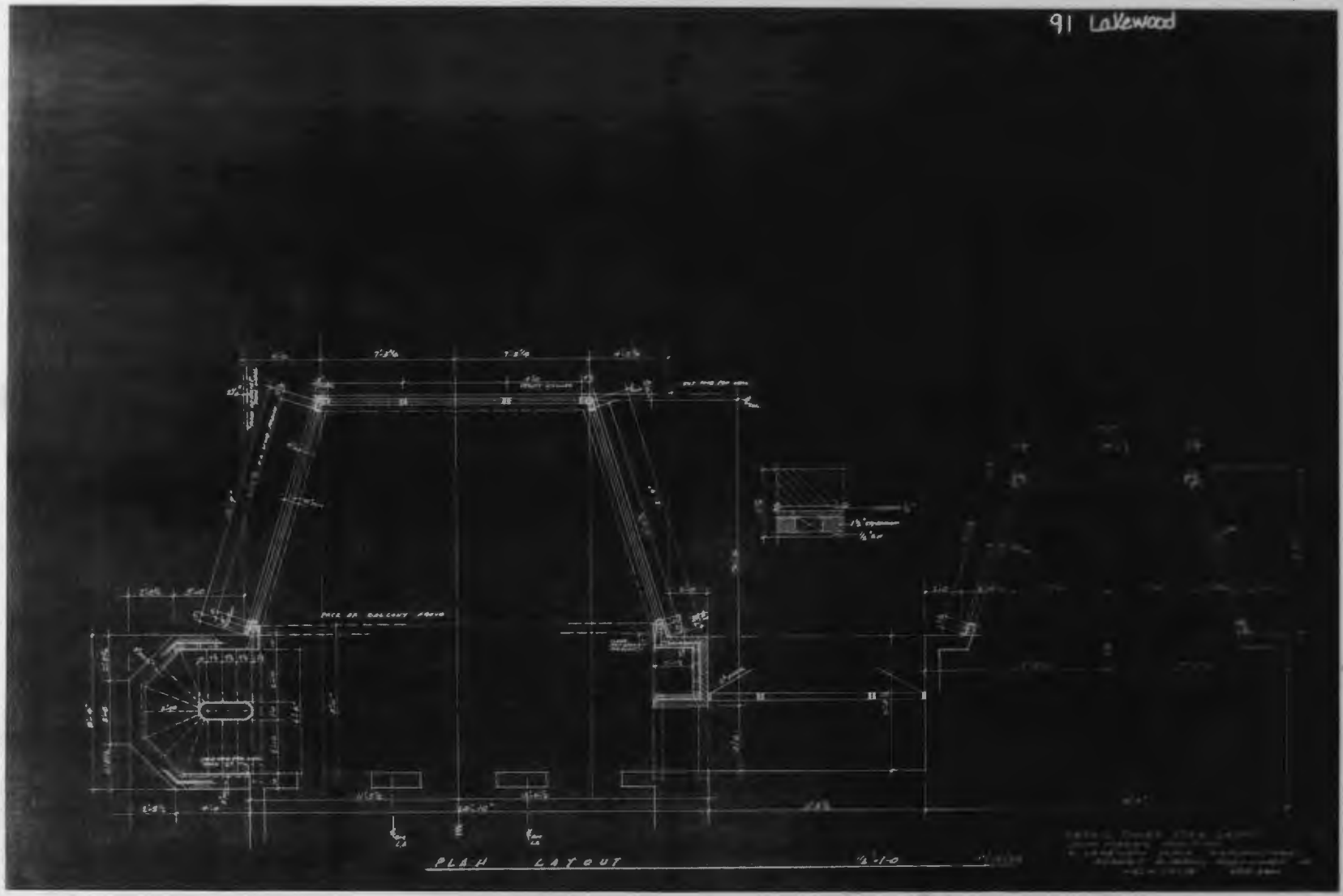
91 LaKewood Pl.

MR. & MRS. L. MARKS RESIDENCE
ADDITION & REMODELING
91 LAKEWOOD PLACE HIGHLAND PARK, ILLINOIS

ROBERT A. DREW & ASSOCIATES, INC.

drawn by
approved by
revisions
date

PLANS APPROVED


91 Lakewood
PLAN LAYOUT

Section 106: Feedback and Comments – Central Avenue Bridge

To: Historic Preservation Commission

From: Nusrat Jahan, Planner

Date: 10/13/2016

Property Location: Central Avenue between Lake Avenue and Dale Avenue.

Petitioner: City of Highland Park

Historical Status: Bridge designated on National Register of Historic Places

Project Architect: Ciorba Group, Inc
Consulting Engineers
Chicago, IL

Figure1: Central Avenue Bridge

Central Avenue Spandrel Bridge

The Central Avenue Bridge was built by the City in 1935. It is a 111-foot single span reinforced concrete arch slab bridge. It is a one lane bridge over a ravine that connects two sides of Central Avenue near Lake Avenue by Central Park. The width of the driving lane is 13.5 feet with a 2.5-foot wide sidewalk on the south side of the bridge.

The existing Central Avenue Bridge is in poor structural condition and requires replacement. This is documented in the inspection report of the existing Central Avenue Bridge provided by the City's engineering consultant, Ciorba Group. The City of Highland Park applied for and received federal grant funding for the replacement of the bridge. Use of federal funding requires that the City follow the federal guidelines, including feedback specified by Section 106. Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties and afford local authorities a reasonable opportunity to comment on such undertakings.

Several phases are involved in the federal process:

Phase I Engineering: In this phase, also known as preliminary engineering, conceptual plans are developed. Also in this phase several items are investigated, including historical items.

Phase II Engineering: In this phase, also known as final design, plans and specifications are developed for use in obtaining competitive bids from qualified contractors.

Phase III - Construction: In this phase a contract is awarded to the low responsible bidder for construction of proposed improvements.

This project is currently in Phase I. This includes processing the project through the Illinois Department of Transportation (IDOT). IDOT has included the Central Avenue Bridge in its Historical Bridge List as a primary example of a Concrete Arch Deck with Filled Spandrel Bridge. The Central Avenue Bridge does not have a local landmark status. However, IDOT has determined the bridge is eligible for listing on the National Register of Historic Places (NRHP)[1]. The bridge would be considered a contributing feature of the Linden Park Place-Belle Avenue Historic District, which is listed on the NRHP. To address any historical issues that may be associated with the project, IDOT requires a *Section 106/Section 4(f) Report* and feedback and comments from the local Highland Park Historic Preservation Commission (HPC) regarding the project. A draft copy of the 106/Section 4(f) Report is attached.

Proposed Improvements

The City Engineer indicated that since the project is in Preliminary Engineering stage, some design items such as the bridge railing and other items that are visible to the public are not yet determined. The aesthetic treatments can be added to the proposed bridge to compliment or mimic the historic nature of the existing bridge, however the City Engineer feels the discussion should include public involvement. He has provided the following summary of the proposed project on the Central Avenue Spandrel Bridge:

> Studies completed to date indicate the best alternative to address the bridge structural deficiencies is to completely remove and rebuild the bridge structure.

---

[1] http://historic-bridges.isas.illinois.edu/structure_list.html

- The proposed bridge will be widened to accommodate one lane of traffic in each direction. This meets federal requirements for minimum geometric standards. Federal funding is **not provided** if the bridge is reconstructed with one lane for traffic.

The application materials state the following two alternatives for the complete replacement of the structure.

Figure 2: Standard Design

Figure 3: Aesthetically Enhanced Design

STANDARD IDOT DESIGN: The first alternative, shown in attached Exhibit 2, shows the standard IDOT bridge design. This has vertical, plane concrete parapet walls with a steel railing mounted to the top of the concrete parapet. The conceptual design can be seen in **Figure 2**.

AESTHETICALLY ENHANCED DESIGN: The second alternative, shown in attached Exhibit 3, shows an aesthetically enhanced bridge design. The parapet wall is dressed up with a stamped pattern to improve its appearance. Please note that federal guidelines require that the concrete parapet meet current crash worthy criteria. This parapet shown in Exhibit 3 meets this criteria. The conceptual design can be seen in **Figure 3**.

A façade is proposed to mimic the arch design of the original bridge. The façade is purely aesthetic and offers no structural support. Structural components are achieved by standard design elements such as steel beams and concrete abutments.

Purpose of Section 106

The website of the Advisory Council on Historic Preservation (ACHP) provides good summary information about Section 106. It plays an important role in the federal historic

preservation program[2]. Section 106 requires federal agencies to consider the effects on historic properties of any project carried out by them or that receives federal financial assistance and provide the Advisory Council on Historic Preservation an opportunity to comment on these projects prior to making a final decision. The successful completion of Section 106 reviews depends heavily on strong federal participation. The Office of Federal Agency Program works closely with federal agencies to identify opportunities for improving their preservation programs and compliance strategies. The ACHP has provided training to federal, state, and local agencies and the public on the requirements of Section 106. Courses are offered for practitioners with different levels of knowledge and experience about Section 106[3].

RECOMMENDATION

The Historic Preservation Commission is asked to discuss the proposed modification to the Central Avenue Spandrel Bridge and respond to the following items as required by Section 106:

- Indicate any objections to the project
- Indicate any further comments regarding the proposal
- Indicate whether additional public involvement is required for *historical* issues

ATTACHMENTS

- Central Avenue Bridge –Narrative
- Central_Draft_106 Section 4(f)_Report
- Ciorba Group Consulting Engineers –Project Memo
- Existing Areal View- Exhibit 1
- Proposed Plan and Elevation, Standard IDOT Design –Exhibit 2
- Proposed Plan and Elevation – Enhanced Design- Exhibit 3

[2] http://www.achp.gov/OFAPFactSheet2011.pdf
[3] http://www.achp.gov/106select.html

To: Andy Cross, Senior Planner

From: Emmanuel Gomez, City Engineer

Date: 09/16/2016

Re **Highland Park Historic Preservation Commission**
Central Ave Bridge Replacement

REQUEST FOR FEEDBACK FROM HIGHLAND PARK HPC

The Illinois Department of Transportation (IDOT) is requesting feedback and comments from the Highland Park Historic Preservation Commission (HPC) regarding the project.

BACKGROUND INFORMATION

The existing bridge that carries Central Avenue over an unnamed ravine is in poor structural condition and requires replacement. The City of Highland Park applied for and received federal grant funding for the replacement of the bridge. The project limits are from Dale Avenue to Lake Avenue. The attached aerial exhibit, Exhibit 1, provides a visual representation of the project.

Use of federal funding requires that the City adhere to federal guidelines. These include processing the project through the Illinois Department of Transportation (IDOT). Several phases are involved in the federal process. These include:

- Phase I Engineering: In this phase, also known as preliminary engineering, conceptual plans are developed. Also in this phase several items are investigated, **including historical items**.
- Phase II Engineering: In this phase, also known as final design, plans and specifications are developed for use in obtaining competitive bids from qualified contractors.
- Phase III - Construction: In this phase a contract is awarded to the low responsible bidder for construction of proposed improvements.

This project is currently in Phase I. At this stage of the project structural deficiencies have been analyzed and alternates have been considered for proposed improvements. Primarily conceptual designs have been developed from studies complete to date.

HISTORICAL INFORMATION

The structure was constructed in 1935.

The City of Highland Park has not designated this bridge to have historical significance.

IDOT has included the Central Avenue Bridge in its Historical Bridge List as a primary example of a Concrete Arch Deck with Filled Spandrel Bridge. IDOT has also determined the bridge is eligible for listing on the

National Register of Historic Places (NRHP). The bridge would be considered a contributing feature of the Linden Park Place-Belle Avenue Historic District, which is listed on the NRHP.

To address any historical issues that may be associated with the project, IDOT requires a Section 106/Section 4(f) Report. A draft report for this project was prepared and submitted to IDOT. One comment received is to obtain feedback and comments from the Highland Park Historic Preservation Commission (HPC) regarding the project. A copy of the draft 106/Section 4(f) Report is attached.

TECHINICAL INFORMATION

General

The Central Avenue Bridge is assigned a structural number (S.N.) by IDOT. The S.N. is 049-6544. The bridge type is a 111 ft. single span reinforced concrete arch slab bridge carrying one lane of traffic over a ravine. The bridge is located in the northeast quadrant of the City, and is approximately 0.2 miles east of US Route 41. There is an 80 ft soldier steel H-pile retaining wall with concrete laggings built in 2008 on the northeast side of the bridge. The 2011 Average Annual Daily Traffic (AADT) is 2000. The bridge is rated for loads of 10 ton/axle and40 tons (80,000 lbs) of gross vehicle loading. The 111 ft. reinforced concrete arch bridge has a total width of 20.36 ft. measured from back to back of the parapet walls with a net lane width of 13. 5 ft. There is a 2.5 ft wide sidewalk on the south side of the bridge. The overall length of the bridge is 111 ft. along the north parapet and 92 ft. along the south parapet. There is a residential gravel driveway entrance on the southeast end of the bridge.

Bridge Condition

The bridge is in poor structural condition. The concrete parapet rails are cracked vertically at 18 locations and are leaning out towards the ravine. The parapet wall base is spalled and its reinforcing bars are exposed causing decaying corrosion. In 2014 the City of Highland Park mobilized a contractor to perform emergency repairs at the northeast quadrant of the bridge to install a concrete encased steel soldier pile system so as to prevent wall from falling into the ravine.

Routine Bridge Inspections by the City and State revealed worsening bridge structural conditions. The attached Bridge Technical Memo of December 17, 2016 provides additional information.

Proposed Improvements

Studies completed to date indicate the best alternative to address the bridge structural deficiencies is to completely remove and rebuild the bridge structure.

The proposed bridge will be widened to accommodate one lane of traffic in each direction. This meets federal requirements for minimum geometric standards. Federal funding is not provided if the bridge is reconstructed with one lane for traffic.

Two alternatives for the complete replacement of the structure are attached.

STANDARD IDOT DESIGN: The first alternative, shown in attached Exhibit 2, shows the standard IDOT bridge design. This has vertical, plane concrete parapet walls with a steel railing mounted to the top of the concrete parapet.

AESTHETICALLY ENHANCED DESIGN: The second alternative, shown in attached Exhibit 3, shows an aesthetically enhanced bridge design. The parapet wall is dressed up with a stamped pattern to improve its appearance. Please note that federal guidelines require that the concrete parapet meet current crash worthy criteria. This parapet shown in Exhibit 3 meets this criteria.

A façade is proposed to mimic the arch design of the original bridge. The façade is purely aesthetic and offers no structural support. Structural components are achieved by standard design elements such as steel beams and concrete abutments.

DRAFT
SECTION 106 / SECTION 4(f)
DOCUMENTATION OF ADVERSE EFFECT

CENTRAL AVENUE
OVER RAVINE

Job No.: P-91-342-15

Strucure No.: 049-6554

City of Highland Park

Lake County, Illinois

APRIL 2016

CIORBA GROUP | Consulting Engineers

SECTION 106/ ~~PROGRAMMTIC~~ SECTION 4(F) EVALUATION

Central Avenue Bridge over Ravine
City of Highland Park in Lake County, Illinois
Existing Structure No. 049-6554

U.S. Department of Transportation
Federal Highway Administration

The Federal Highway Administration (FHWA) has determined that this project meets all requirements for processing under the Nationwide Programmatic Section 4(f) evaluation for historic bridges approved on December 23, 1989. This determination is based on the attached documentation which has been independently evaluated by FHWA and determined to adequately and accurately discuss the Section 4(f) considerations of this project. Accordingly, FHWA gives Section 4(f) approval under the Nationwide Programmatic Section 4(f) Evaluation for the proposed replacement of the Central Avenue Bridge over Ravine (Structure No. 049-6554), which is eligible for listing on the National Register of Historic Places. This documentation also satisfies the requirements of 36 CFR 800.11 (e).

_____ _____

Date For Federal Highway Administration

Summary of Comments on Central_Draft_106_4f_Report_2016-04-18 - EL Comments.pdf

Page: 2

Number: 1 Author: lande Subject: Inserted Text Date: 6/30/2016 2:14:19 PM
Programmatic

TABLE OF CONTENTS

LIST OF APPENDICES

1. INTRODUCTION

The purpose of this report is to analyze the potential adverse effects of replacing the bridge carrying Central Avenue over a Ravine approximately 0.1 miles west of Lake Michigan in Highland Park, Illinois. This bridge is listed in the ~~IDOT~~ Historic ~~Bridges of Illinois~~ as a primary example of a Concrete Arch Deck with Filled Spandrel Bridge and has been determined to be eligible for listing on the National Register of Historic Places (NRHP), and therefore, it is protected under Section 106 of the National Historic Preservation Act of 1966. The report contains information describing the existing bridge features, its current condition, project's purpose and need, and alternatives considered to avoid adverse effects on the existing bridge while taking measures to provide the best possible safety options for the improvements.

Highland Park, IDOT and the Federal Highway Administration (FHWA) understand that removing this bridge would constitute an adverse effect to the historic structure pursuant to 36 CFR 800.5. ~~The bridge is near~~ the Linden Park Place-Belle Avenue Historic District which is listed on the ~~National Register of Historic Places~~. Future coordination and consultation among IDOT, FHWA and the Illinois State Preservation Officer (SHPO) will develop measures to mitigate the project's adverse effects on the historic property. The mitigation measures will be incorporated into a Memorandum of Agreement (MOA) for this undertaking.

Section 4(f) also applies to projects with adverse effects on bridges listed on or eligible for inclusion in the NRHP. The proposed Central Avenue Bridge project proposes to remove the existing structure and replace with a new structure, an undertaking that will cause an adverse effect. The Nationwide Programmatic 4(f) Evaluation is applicable to this project because it meets the following criteria:

1. The bridge is to be removed with Federal funds.
2. The project will affect a historic bridge structure which is eligible for inclusion on the NRHP.
3. The bridge is not a National Historic Landmark.

Page: 4

Number: 1 Author: lande Subject: Inserted Text Date: 6/30/2016 2:30:56 PM
(MUN 3115)

Number: 2 Author: lande Subject: Inserted Text Date: 6/30/2016 2:22:10 PM
Illinois Department of Transportation (IDOT)

Number: 3 Author: lande Subject: Inserted Text Date: 6/30/2016 2:22:17 PM
Bridge List

Number: 4 Author: lande Subject: Inserted Text Date: 7/1/2016 2:09:42 PM
, identified as Structure Number (SN) 049-6554,

Number: 5 Author: lande Subject: Inserted Text Date: 6/30/2016 2:23:59 PM
This portion of Central Avenue serves as a boundary for

Number: 6 Author: lande Subject: Inserted Text Date: 6/30/2016 2:26:36 PM
NRHP

Number: 7 Author: lande Subject: Inserted Text Date: 6/30/2016 2:27:38 PM
Historic

Number: 8 Author: lande Subject: Inserted Text Date: 6/30/2016 2:31:45 PM
it

Number: 9 Author: lande Subject: Comment on Text Date: 6/30/2016 2:33:44 PM
Move this sentence and following criteria down to make it its own paragraph.

Number: 10 Author: lande Subject: Sticky Note Date: 6/30/2016 2:36:11 PM
Numbers 4 & 5 are missing.
4. The FHWA Division Administrator determined that the facts of the project match those set forth in the Alternatives, Findings, and Mitigation sections of the Nationwide Programmatic 4(f) Evaluation.
5. Agreement among FHWA, SHPO, and the Advisory Council on Historic Preservation (ACHP) has been reached through procedures pursuant to Section 106 of the National Historic Preservation Act of 1966.

2. DESCRIPTION OF THE UNDERTAKING

2.1 Project's Purpose and Need

Central Avenue is an east-west route in Highland Park, Illinois, with an Average Daily Traffic (ADT), as of 2016, of approximately 300 vehicles per day (vpd). In the section under consideration, it serves as a local road used to access private residences and Central Park. At the bridge location, Central Avenue narrows to a single lane width and crosses over a ravine. The existing Central Avenue over Ravine Bridge ~~(Structure #049-6554)~~ was constructed in 1935, and is currently classified as "structurally deficient" and "functionally obsolete".

The existing bridge is a concrete arch deck with filled spandrel bridge with an out to out of parapet width of 20.35ft. The bridge carries one 13.5 foot wide lane and a 2.5 foot wide sidewalk on the south side. A bridge inspection completed in September 2014 documented several deficiencies in the structure. A Master Structure Report from the Illinois Structures Information Management System (SIMS) provides structure rating on a scale of 0 to 9 (9 – new; 0 – closed to traffic) based on the latest inspection. The deck and superstructure are both rated as a 4 – Poor Condition due to the deteriorated condition of the arch and the chloride contaminated soffit area which classifies the bridge as structurally deficient. The Deck Geometry is rated as a 2 – Intolerable, thus categorizing the bridge as functionally obsolete. The same ~~Report~~ provides a "Sufficiency Rating" between 0 and 100 with a value of less than 50 justifying removal and replacement. The Central Avenue over Ravine Bridge currently rates at 33 (See Appendix B).

2.2 Identification of Historic Properties Affected by the Project

The IDOT Cultural Resources Unit received an Environmental Survey Request for the project and indicated that ~~the Central Avenue Bridge~~ (SN 049-6554) is included on the ~~Historical~~ Bridge List as a primary example of a Concrete Arch Deck with Filled Spandrel Bridge (See Appendix D). It ~~was also~~ determined eligible for listing on the National Register of Historic Places (NRHP). The bridge would be considered a contributing feature of the Linden Park Place-Belle Avenue Historic District, which is listed on the NRHP (See Appendix C).

The Central Avenue Bridge is not currently recognized by the City of Highland Park as having historic significance. The Linden Park Place-Belle Avenue Historic District has been recognized by the City as ~~having~~ historic significance since 1997.

Page: 5

Number: 1 Author: lande Subject: Comment on Text Date: 7/1/2016 3:03:39 PM
To get a better idea of traffic, do we know how many people visit that park on average?

Number: 2 Author: lande Subject: Inserted Text Date: 7/1/2016 3:02:30 PM
three

Number: 3 Author: lande Subject: Inserted Text Date: 7/1/2016 3:02:40 PM
on Central Avenue

Number: 4 Author: lande Subject: Cross-Out Date: 7/1/2016 2:09:59 PM

Number: 5 Author: lande Subject: Cross-Out Date: 7/1/2016 2:03:14 PM

Number: 6 Author: lande Subject: Comment on Text Date: 7/1/2016 2:08:43 PM
Just to be clear, I'm looking at the 9/29/2014 BCR, and there is no rating for the deck due to the structure type. You make it sound here like it was rated that as well when it wasn't. Perhaps, mentioning how the deck is not separate from the superstructure with this structure type would be helpful here.

Number: 7 Author: lande Subject: Inserted Text Date: 7/1/2016 2:05:56 PM
report

Number: 8 Author: lande Subject: Cross-Out Date: 7/1/2016 2:10:11 PM

Number: 9 Author: lande Subject: Cross-Out Date: 7/1/2016 2:10:14 PM

Number: 10 Author: lande Subject: Cross-Out Date: 7/1/2016 2:10:21 PM

Number: 11 Author: lande Subject: Comment on Text Date: 7/1/2016 2:30:41 PM
Please provide some supplemental information here, such as:

IDOT has established the Illinois Historic Bridge Inventory as a list of historic bridges in Illinois. This listing was developed in consultation with the SHPO and FHWA to establish a list of structures with historic significance. This bridge was included on this list and deemed eligible for listing on the NRHP under Criterion C for its engineering/design by the SHPO and the Keeper of the National Register of Historic Places as an excellent example of an early twentieth century concrete arch deck bridge with filled spandrels.

Number: 12 Author: lande Subject: Inserted Text Date: 7/1/2016 2:10:49 PM
As such, the bridge was

Number: 13 Author: lande Subject: Inserted Text Date: 7/1/2016 2:11:00 PM
also

Number: 14 Author: lande Subject: Comment on Text Date: 7/1/2016 3:17:22 PM
What does this mean? Please explain. Do you mean that it is currently not recognized as a local landmark?

Number: 15 Author: lande Subject: Comment on Text Date: 7/1/2016 2:22:39 PM
It's been recognized nationally since 1983 since that's when it was listed on the NRHP.

2.3 Description of Historic Property Affected by the Project

The Central Avenue over Ravine Bridge is a concrete arch deck with filled spandrel bridge. It carries a single lane of traffic over a span of approximately 50ft and with a rise of 20ft. The concrete spandrels at the north and south face of the bridge retain the embankment, the fill and wearing surface. The spandrels extend approximately 30ft from the springing of the arch resulting in a total approximate length of the bridge of 111ft along the north parapet and 92ft along the south parapet. There is a soldier pile retaining wall at the north east end of the bridge, built in 2008.

The IDOT Historic Bridge Inventory indicates that there are ~~22~~ 1 Concrete Arch Deck with Filled Spandrel Bridges in Illinois that are listed on the IDOT Historic Bridges of Illinois (See Appendix D).

3. THE UNDERTAKING'S EFFECTS ON HISTORIC PROPERTY

Various alternatives were analyzed to determine the most beneficial improvements for the Central Avenue over Ravine Bridge. The following alternatives were considered:

1. No Action Alternative
2. Rehabilitation Alternative
3. New Alignment Alternative
4. Removal Alternative

Alternatives Analysis

1) No Action Alternative – Maintain the existing bridge with no major repairs or improvements to the existing Central Avenue over Ravine. The deteriorating condition of the bridge superstructure, as indicated by spalling and delamination at the underside of the arch as well as on the spandrel wall, will continue if no action is taken leading to load posting limits and ultimate closure of the bridge. If the bridge were to be closed, the ~~existing traffic directed to the residences on Lake Avenue or to Central Park could use Laurel Ave, south of Central Avenue, to access their property.~~ In addition, the south parapet is leaning away from the roadway, indicating that the spandrel wall is leaning away from the bridge centerline. If nothing is done, it could eventually spall off and fall which would endanger the public safety.

2) Rehabilitation Alternative – Rehabilitate the existing bridge to alleviate the structural deficiencies of the bridge. Bridge rehabilitation could be achieved with the use of formed concrete repair or by lining the underside of the arch with a steel or concrete barrel. However these will be temporary and ultimately not cost effective solutions. The concentrated areas of efflorescence at the center of the arch on the north and

Page: 6

Number: 1 Author: lande Subject: Inserted Text Date: 7/1/2016 2:35:08 PM
18

Four have been demolished. And three more are proposed for replacement (including this one). Only 61 bridges of this type remain throughout the state.

Number: 2 Author: lande Subject: Sticky Note Date: 7/1/2016 2:38:08 PM
Add a separator line/space between section heading and first sentence.

Number: 3 Author: lande Subject: Sticky Note Date: 7/1/2016 2:55:59 PM
Please include cost estimates in the alternatives to give us an idea of the costs of each. How doe we know the bridge is not suitable for rehab if we do not know what engineering it would take and how much it will cost?

Number: 4 Author: lande Subject: Sticky Note Date: 7/1/2016 3:14:46 PM
What will the detour time be if it was closed?

Number: 5 Author: lande Subject: Inserted Text Date: 7/1/2016 2:43:51 PM
three residences and Central Park at the east end of Central Avenue would have to use Lake Avenue, by way of Laurel Avenue, which is one block south of Central Avenue, to access their property.

Number: 6 Author: lande Subject: Comment on Text Date: 7/1/2016 2:46:03 PM
Statement too general. Please elaborate. How much does it lean away? Is it definite that the spandrel wall is leaning away from the centerline? Because the way it is written makes it appear that you're guessing.

Number: 7 Author: lande Subject: Comment on Text Date: 7/1/2016 2:54:18 PM
See above comment. How do we know these aren't cost effective solutions if no cost estimates are included?

south end of the underside of the arch ring indicate that the wearing surface has failed and water is penetrating through the fill and into the concrete. The fill would likely need to be replaced to reduce the deterioration which is not cost effective.

In addition to being structurally deficient, the structure is also considered functionally obsolete since it only consists of one lane. To address this, the bridge deck would need to be widened to allow for a second traffic lane plus shoulders and sidewalks in each direction. This would not be cost effective and would likely impact the historical aspects of the bridge.

3) New Alignment Alternative – Avoid the existing bridge and construct a replacement bridge on new alignment. This alternative was not considered feasible due to the substantial impact this would have on adjacent properties.

4) Replacement Alternative – Removal and replacement of the existing bridge. Since the existing bridge is in a deteriorated condition and only consists of one lane, removal and replacement of the bridge is the most practical and cost effective alternative. The Central Avenue over Ravine Bridge has a Sufficiency Rating of 33 (See Appendix B). A rating below 50 is justified for removal and replacement.

   If this alternate is chosen, the existing traffic directed to the residences on Lake Avenue or to Central Park could use Laurel Ave, south of Central Avenue, to access their property during construction. The proposed bridge would be designed in accordance with current AASHTO Bridge Design Loading Standards.

4. MITIGATION MEASURES

Mitigation measures of this undertaking will be developed through consultation among Highland Park, IDOT, FHWA and SHPO. A Memorandum of Agreement (MOA) executed by FHWA, SHPO and IDOT stipulates measures to mitigate the project's adverse effects on the historic property. A copy of the executed MOA is included in Appendix E (TO BE PROVIDED AT A FUTURE DATE).

5. SUMMARY OF PUBLIC VIEWS

The project geometry is being developed for this project. Public outreach will be initiated upon sufficient project development.

Page: 7

Number: 1 Author: lande Subject: Highlight Date: 7/1/2016 2:54:58 PM

Number: 2 Author: lande Subject: Comment on Text Date: 7/1/2016 3:02:00 PM

Does it matter that there's only one lane as it's at the end of a dead-end street with three houses and a park and relatively low ADT.

Number: 3 Author: lande Subject: Sticky Note Date: 7/1/2016 3:11:20 PM

More explanation, details, and consideration for this alternative must be discussed. What precisely would have to be done to accomplish this?

Number: 4 Author: lande Subject: Sticky Note Date: 7/1/2016 3:11:40 PM

Are you planning a total replacement? Or are you keeping the abutments?

Number: 5 Author: lande Subject: Sticky Note Date: 7/1/2016 3:13:11 PM

Once again, too vague. You need to explain more thoroughly why this is the preferred option. Also please discuss the type of bridge you want to put in here and how much land around it would be impacted by its removal.

Number: 6 Author: lande Subject: Sticky Note Date: 7/1/2016 3:16:41 PM

Have you reached out to the Highland Park Historic Preservation Commission and sought their comments on the project? The community has a very active preservation program and their comments should be included in the report. Has there been a public meeting on the project? What was the public feedback?
Both should be mentioned here and proof included in an appendix in the report.

Appendix A

Project Location Map

Location Map

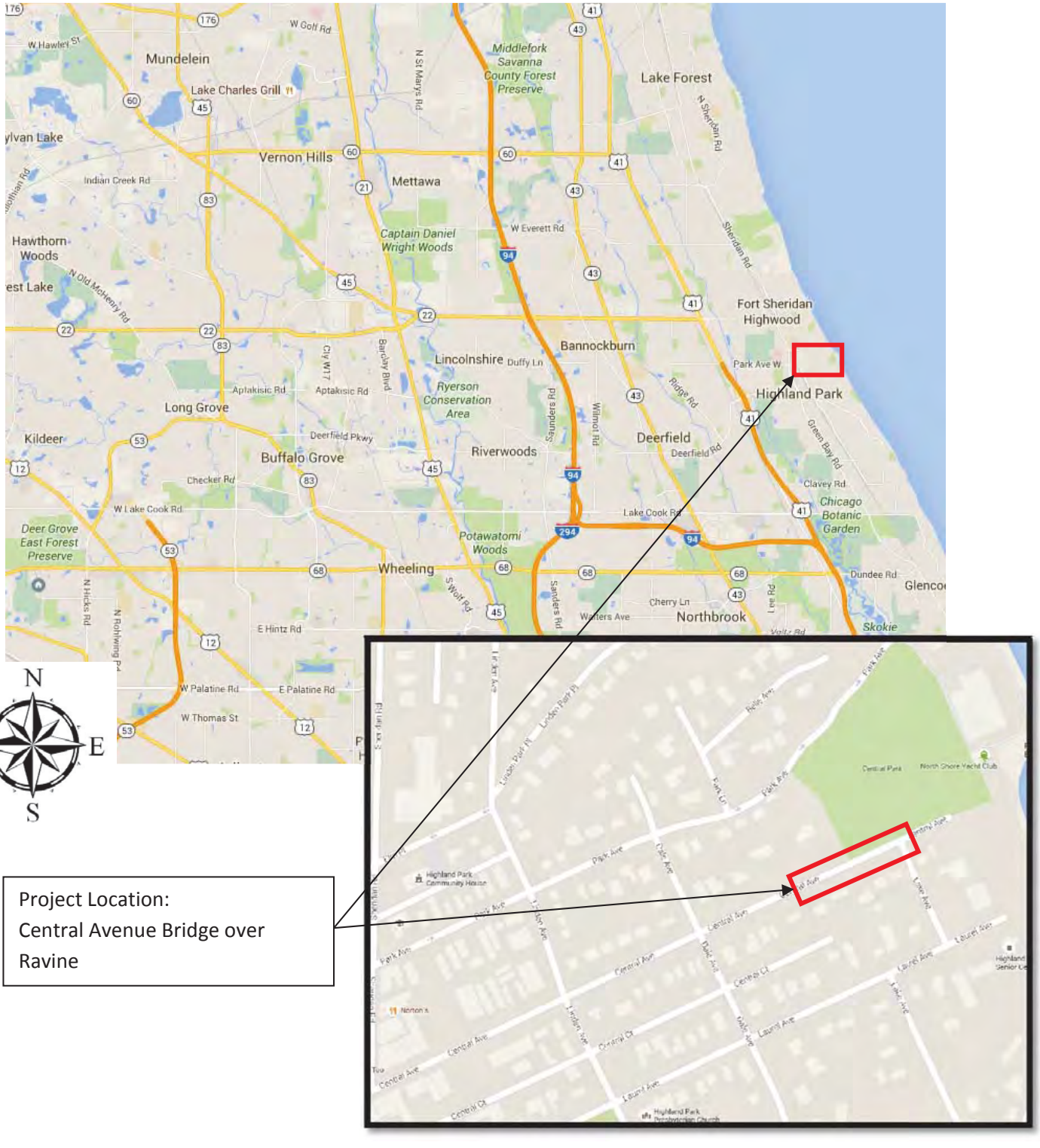
Central Avenue Bridge Replacement, Highland Park

Lake County, Illinois

Township 43N, Range 12E, Section 23

P-91-342-15

SN 049-6554



Page: 9

Number: 1 Author: lande Subject: Sticky Note Date: 7/1/2016 3:18:43 PM
Please include an aerial map as well clearly marking the location of the bridge (not the wide box shown below).

Appendix B

Bridge Master Structure Report and Bridge Photos

Illinois Department of Transportation
Structures Information Management System
Structure Summary Report

Date: 03/21/2016
Page: 1

Structure Number: 049-6554 **District:** 1

Inventory Data

Facility Carried: CENTRAL AVE
Feature Crossed: RAVINE
Bridge Remarks:
Bridge Status: 1 OPEN - NO RESTRICT
Status Remarks:
Maint County: 049 LAKE
Maint Responsibility: 04 MUNICIPALITY
Service On/Under: 1 HIGHWAY 5 / WATERWAY
Reporting Agency: 4 MUNICIPALITY
Main Span Matl/Type: 1 CONCRETE / 11 ARCH - DECK, FILLED SPANDREL
Nbr Of Main Spans: 1 **Nbr Of Approach Spans:** 0
*****Approaches*****
Near #1 Matl/Type: /
Near #2 Matl/Type: /
Far #1 Matl/Type: /
Far #2 Matl/Type: /
Median Width/Type: 0 Ft. / 0 None
Guardrail Type L/R: 0None / 0 None
Toll Facility Indicator: 0 No Toll
Latitude: 42.18895719 **S** **Longitude:** 87.78993930 **S**
Deck Structure Type: A CIP CON NRMLLY FORM
Sidewalks Under Structure: 0 None

Bridge Name: CENTRAL AVE BRIDGE
Location: 0.1 W LAKE MICHIGAN
Status Date: 04/1988
Maint Township: 96 MORAINE

Rated By: 2 IDOT
Inventory Rating: 0.540(19)
Operating Rating: 0.900(32)
Design Load: 99 UNKNOWN
Deck Structure Thickness: 0 **SD:** Y **FO:** Y

Sufficiency Rating: 33.0
HBP Eligible: Yes
Replaced By: 049-6595
Replaces: -
Last Update Date: 07/05/2012
Parallel Structure: None
Multi-Level Structure Nbr:
Skew Direction: N None **Skew Angle:** 0 **D**
Structure Flared: No
Historical Significance: Yes
Border Bridge State:
Bdr State SN:
Bdr State % Responsibility: 0
Structural Steel Wt 0
Substructure Material:

Rate Method: 0
Load Rating Date: 04/13/2015

Structure Length: 111.0
AASHTO Bridge Length: 99.9
Length of Long Span: 51.0
Bridge Roadway Width: 16.2
Appr Roadway Width: 20.0
Deck Width: 19.5
Sidewalk Width Right: 2.7
Sidewalk Width Left: 0.0
Navigation Control: 0 No
Navigation Horiz Clear: 0
Navigation Vert Clear: 0
Culvert Fill Depth: 0.0
Number Culvert Cells: 0
Culvert Opening Area: 0.0
Culvert Cell Height: 0.00
Culvert Cell Width: 0.00

Railroad Crossing Info
Crossing 1 Nbr:
Crossing 1 Nbr:
RR Lateral Underclear: 0.0
RR Vertical Underclear: 0 **Ft** 0 **In**

Key Route On Data

Key Route Nbr: MUNICIPAL STREET 3115
Appurtenances Main Route 02595
Inventory County: 049 LAKE
Township/Road Dist 96 MORAINE
Municipality 2595 HIGHLAND PARK
Urban Area: 1051 1051
Functional Class: 7 LOCAL
**** CLEARANCES **** **South/East** **North/West**
Max Rdwy Width: 0.0
Horizontal: 0.0 0.0
Lateral:

Station: 0.4400
Segment:
Linked: Y
Natl. Hwy System: Not on NHS
Inventory Direction:
Curr AADT Yr/Count: 2015 / 1500
Est Truck Percentage: 3
Number Of Lanes: 1
One Or Two Way: 3 1LN2WAY
Bypass Length: 0
Future AADT Yr/Cnt: 2032 / 2226
Designated Truck Rte: NONE
Special Systems: No

Key Route Under Data

Station:
Segment:
Linked:
Natl. Hwy System:
Inventory Direction:
Curr AADT Yr/Count: /
Est Truck Percentage:
South/East **North/West**
Number Of Lanes:
One Or Two Way:
Bypass Length:
Future AADT Yr/Cnt: /
Designated Truck Rte:
Special Systems:

*** Marked Route On Data ***

	Designation		Kind	Number
Route #1:	1	Mainline	5 Municipal Streets	
Route #2:	1	Mainline		
Route #3:	1	Mainline		

*** Marked Route Under Data ***

Designation	Kind	Number

Illinois Department of Transportation
Structures Information Management System
Structure Summary Report

Structure Number: 049-6554 **District: 1**

Data Related to Inspection Information

*** Inspection Intervals ***				*** Maximum Allowable Posting Limits ***				Bridge Posting Level:	
Routine NBIS:	24 MOS	**Underwater:**	0 MOS	**One Truck At A Time:**	0	**Combination Type 3S-1:**	Tons	L	Legal Load Only
		Special:	N	**Single Unit Vehicles:**	LL Tons	**Combination Type 3S-2**	Tons		

Inspection/Appraisal Information

Inspection Date: 09/29/2014 **Inspection Temperature:** 73Deg. F

Deck:	N	NOT APPLICABLE					**Single Unit Vehicles:**	Tons
Superstructure:	4	POOR CONDITION - ADVANCED DETERIORATION					**Combination Type 3S-1:**	Tons
Substructure:	5	FAIR CONDITION - MINOR SECTION LOSS, CRACKS					**Combination Type 3S-2:**	Tons
Culvert:	N	NOT APPLICABLE					**One Truck At A Time:**	0
Channel and Protection:	4	POOR CONDITION - ADVANCED DETERIORATION	**Deck Wearing Surf:**	N	N/A - NO DECK		**Last Paint Type:**	
Structural Evaluation:	4	MINIMUM ADEQUACY TO BE LEFT IN PLACE	**Deck Membrane:**	N	N/A			
Deck Geometry:	2	INTOLERABLE - HIGH PRIORITY FOR REPLACEMENT	**Deck Protection:**	N	N/A			
Underclearance-Vert/Lat.:	N	NOT APPLICABLE	**Total Deck Thick:**	0.0				
Waterway Adequacy:	9	SUPERIOR TO PRESENT DESIRABLE CRITERIA	**Last Paint Date:**					
Approach Roadway Align:	3	INTOLERABLE - HIGH PRIORITY FOR CORRECTION						
Bridge Railing Appraisal:	2	Doesn't Meet Standards						
Approach Guardrail:	111	Does Not Exist Does Not Exist Does Not Exist						
Pier Navig Protection:	N	N/A						

Underwater Inspection/Appraisal Information

Inspection Date:
Temperature: **Inspection Method:**
Appraisal Rating:

Scour Critical Information

Rating: 8 CALCULATED SCOUR ABOVE FOOTING **Evaluation Method:** B Rational Analysis
Analysis Date: 07/13/1992

Miscellaneous

Microfilm Data Recorded: No

Construction Information

Year: 1935 Original Reconstructed
Route: **Sta:** **Sta:**
Section Nbr:
Contract Nbr:
Fed Aid Pr#: 00000000000000
Built By: 4 CITY

STRUCTURE PHOTOS

Photo 1: South Elevation.

Photo 2: Top of bridge looking west showing wearing surface.

Photo 3: Severe cracking at the north parapet.

Photo 4: Separation between the south parapet and the sidewalk.

Photo 5: Underside of the arch looking west.

Photo 6: Underside of the arch looking east

Photo 7: Efflorescence at the underside of arch at the south end.

Photo 8: Spalling at the south elevation spandrel wall.

Photo 9: Spalling at the north elevation.

Photo 10: Scour at the west foundation.

Photo 11: Deterioration at the northeast wingwall and footing interface.

Appendix C

Correspondence & Documentation

Page: 19

Number: 1 Author: lande Subject: Sticky Note Date: 7/1/2016 3:00:37 PM

The proof of marketing needs to be included in this appendix. Per the regulations, the bridge must be marketed to the public. Has that been done yet? I have an example of the language that should be used. It will be attached to the email with these edits.

Illinois Department of Transportation

Memorandum

To:	Salmon Danmole	Attn:	Gary Galecki
From:	Maureen Addis	By:	Brad Koldehoff
Subject:	Historic Bridge Coordination		
Date:	March 1, 2016		

Lake County
Highland Park
MUN 3115 (Central Avenue)
Bridge over Unnamed Ravine
Structure # 049-6554
Section # 15-00123-00-BR
IDOT Sequence # 19776

We have received an Environmental Survey Request for the above-referenced project involving a Concrete Arch Deck with Filled Spandrel bridge (S.N. 049-6554), which is included on the Historical Bridge List as a primary example of this bridge type. As such, this bridge was formally determined eligible for listing on the National Register of Historic Places (NRHP). Furthermore, the bridge would be considered a contributing feature of the Linden Park Place-Belle Avenue Historic District, which is listed on the NRHP. For both of these reasons, the bridge is accorded protection under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800).

Based on the submitted information, the current plans are to replace this bridge; however, its replacement would constitute an Adverse Effect. **FHWA policy requires that all reasonable measures be taken to avoid the demolition of this bridge**. Rehabilitation of the existing structure must be considered. If rehabilitation is not feasible, an attempt must be made to avoid the structure by construction of the replacement bridge on a new alignment. If there is no feasible or prudent alternative to demolition, a Section 106/4(f) report will be required in order to begin coordination with the Illinois State Historic Preservation Officer (SHPO).

As a side note, due to the situation of this bridge, as well as its location, condition, low ADT, and historic status, it should be noted that the SHPO will likely strongly pursue the preservation in place or rehabilitation option.

Please submit information regarding on the chosen course of action (i.e. plans of the repairs/rehabilitation, new alignment, or the Section 106/4(f) report) to our office in order to initiate SHPO consultation.

Brad H. Koldehoff, RPA
Cultural Resources Unit
Bureau of Design and Environment

BK:el

Appendix D

Historical Documentation for Existing Central Avenue over Ravine Bridge

IDOT - Historic Bridges of Illinois

http://historic-bridges.isas.illinois.edu/structure_list.html

Str Nbr	Dist	Maint Co	Maint	MntAgcy	Facility Carried	Feature Crossed	Location	Mat-Type	Hist	Group	Const	Recon
006-3003	3	BUREAU	3	COUNTY	CH 4	PLOW HOLLOW CREEK	1 MI S TISKILWA	111	0	3A	1943	0
015-3133	7	COLES	9	TWSP/R.D.	TR 193(OLD IL. 130)	EMBARRAS RIVER	SO. LAKE CHARLESTON	111	1	1P	1907	0
015-3137	7	COLES	9	TWSP/R.D.	TR 197	STREAM	1 MI S COLES AIRPORT	111	4	2A	1909	0
016-1038	1	COOK	1	IDOT	BRIDLE PATH	POPLAR CR	1.37 M S I90	111	3	1P	1906	0
016-6196	1	COOK	4	MUNICIPAL	HAYES DR	JACKSON PK LAGOON	6300 S & 1900 E	111	7	1P	1902	0
024-3005	7	EDWARDS	3	COUNTY	FAS-2815	INDIAN CREEK	1 MI W BONE GAP	111	3	3P	1938	0
034-4804	6	HANCOCK	9	TWSP/R.D.	TR 180	ROCK CREEK	1.25 SW BURNSIDE	111	4	1A	1908	0
040-3087	7	JASPER	9	TWSP/R.D.	TR-186A	BRUSH CREEK	0.75 MI E NEWTON	111	3	1P	1909	0
045-0056	1	KANE	4	MUNICIPAL	GALENA BLVD	FOX RIVER, W CHANNEL	STOLP ISLAND	111	2	2	1926	1996
045-0057	1	KANE	4	MUNICIPAL	GALENA BLVD	FOX RIVER, E CHANNEL	STOLP ISLAND	111	2	1P	1910	1997
045-6000	1	KANE	4	MUNICIPAL	BENTON STREET	FOX RIVER E. BRANCH	300 FT W ILL RTE 25	111	2	2	1924	1996
045-6001	1	KANE	4	MUNICIPAL	BENTON STREET	FOX RIVER W. BRANCH	1200 FT W ILL RTE 25	111	2	2	1924	1996
045-6005	1	KANE	4	MUNICIPAL	DOWNER PLACE	FOX RIVER E. BRANCH	400 FT W ILL RTE 25	111	2	2	1924	0
045-6006	1	KANE	4	MUNICIPAL	DOWNER PLACE	FOX RIVER W. BRANCH	1000 FT W ILL RTE 25	111	2	2	1924	0
049-6554	1	LAKE	4	MUNICIPAL	CENTRAL AVE	RAVINE	0.1 W LAKE MICHIGAN	111	3	3P	1935	0
060-0061	8	MADISON	1	IDOT	US 67	LITTLE PIASA CREEK	9.3 M S JERSEYVILLE	111	4	3A	1939	0
092-0098	5	VERMILION	1	IDOT	OLD DAM RD:SBI 1 SPR	LITTLE VERMILION R	.5 MI S GEORGETOWN	111	3	2	1917	0
099-6455	1	WILL	4	MUNICIPAL	LANDAU AV	SPRING CREEK	0.25 MI N JACKSON ST	111	4	1A	1911	0
099-6458	1	WILL	4	MUNICIPAL	OHIO ST	SPRING CREEK	.125 MI N JACKSON ST	111	3	1P	1912	0
099-6459	1	WILL	4	MUNICIPAL	ABE STREET	SPRING CREEK	0.25 MI N JACKSON ST	111	4	1A	1911	0
099-6460	1	WILL	4	MUNICIPAL	GARNSEY AV	SPRING CREEK	0.25 MI N JACKSON ST	111	4	1A	1911	0
101-0093	2	WINNEBAGO	3	COUNTY	PECATONICA RD.	GROVE CREEK	0.5 MI S US 20	111	3	3P	1927	0

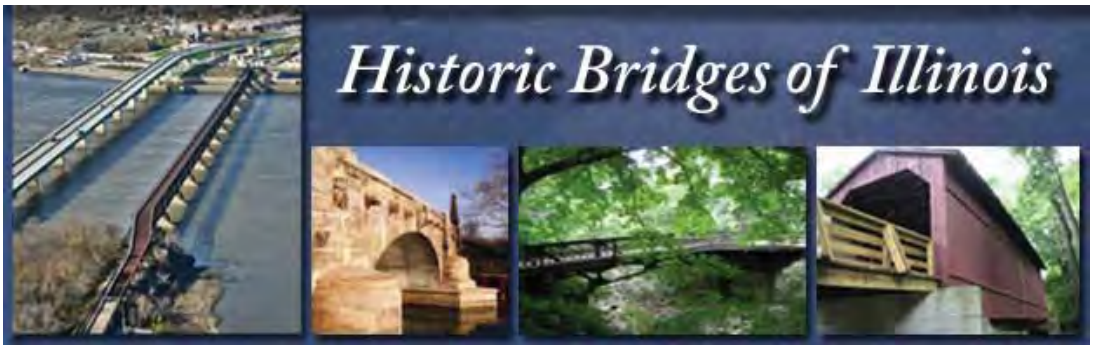
Historic Bridge Categorization and Description Table

The bridge types shown in the table below are included on the Historic Bridge Survey compiled by the Illinois Department of Transportation. The table provides information in regard to the manner in which specific bridge types are grouped within the Historic Bridge Survey, as well as a description of each bridge type included. To be included among the structures of the Historic Bridge Survey, the structure must be at least 50 years old and of historic significance.

Numerical Coding	Bridge Type	Bridge Type Division		Bridge Type Description
		Group	Period of Construction	
101	Concrete - Slab	1	Early Examples 1916 and Prior	A one span bridge, or a bridge consisting of a series of simple spans, having a superstructure composed of a cast-in-place concrete slab strengthened through the use of steel or iron reinforcement bars.
		2	Middle Examples 1917 to 1926	
		3	Late Examples 1927 and Later	
103	Concrete - Deck Girder (Load Path Non-Redundant System)	1	Historically Significant and 50 years or more in age	A one span bridge, or a bridge consisting of a series of simple spans, having a superstructure composed of cast-in-place concrete strengthened through the use of steel or iron reinforcement bars. The main load carrying members of the superstructure consist of two cast-in-place reinforced concrete beams, with one located near each side of the superstructure below the portion of the superstructure that is in direct contact with traffic loads.
104	Concrete - Tee Beam	1	Early Examples 1922 and Prior	A one span bridge, or a bridge consisting of a series of simple spans, having a superstructure composed of cast-in-place concrete strengthened through the use of steel or iron reinforcement bars. The main load carrying members of the superstructure consist of multiple (three or more) cast-in-place reinforced concrete beams located below the portion of the superstructure that is in direct contact with traffic loads.
		2	Middle Examples 1923 to 1929	
		3	Late Examples 1930 and Later	
107	Concrete - Rigid Frame	1	Early Examples 1934 and Prior	A one span bridge having a superstructure composed of a cast-in-place concrete slab strengthened through the use of steel or iron reinforcement bars. The superstructure is constructed integrally with the upper portion of the substructure in a manner that ensures that the connection between the superstructure and substructure will function in a rigid manner to support traffic loads.
		2	Late Examples 1935 and Later	
111	Concrete - Arch-Deck, Filled Spandrel	1	Early Examples 1916 and Prior	A one span bridge, or a bridge consisting of a series of simple spans, having a superstructure composed of cast-in-place concrete and strengthened through the use of steel or iron reinforcement bars. The main load carrying member of the superstructure consists of an arched slab that bears on and thrust against the lower portion of substructure units located at each span end. A vertical concrete wall is constructed on each side of the arched slab for the entire distance between substructure units. The area above the arched slab and between the vertical walls is filled with earthen material. A pavement is constructed on top of the fill material to carry traffic.
		2	Middle Examples 1917 to 1926	
		3	Late Examples 1927 and Later	

Page: 23

Number: 1 Author: mjohnson Subject: Polygon Date: 2/27/2015 9:48:10 AM -06'00'



Home
Description Table
Technical Information
Project Coordination
Historical Bridge List
Search by County

Historic Bridge Survey: Technical Information

In April of 2004, the 1990 MOU was superseded by a Programmatic Agreement (PA) signed by the IDOT, IHPA and FHWA. The present PA is effective for 5 years from the date of its ratification and will be review for extension and/or modification. The PA established that:

- The IDOT, in consultation with the IHPA, would establish a "primary" and "secondary" list of structures with historic significance, which was to "be known as the Historic Bridge Survey". 1
- The FHWA had submitted the documentation needed to obtain a "Determination of Eligibility" from the Keeper of the National Register of Historic Places (NRHP) for all primary structures included on the HBS.
- Bridges not on the HBS will "be considered to have no historic value and may be repaired or replaced without" coordination with the IHPA.
- Bridges on the HBS would receive "routine maintenance consisting of repair or replacement in kind of existing structural and architectural elements".
- Documentation of repairs or rehabilitation of HBS structures would be maintained by the IDOT and periodically reviewed by the IHPA.
- If a "primary" HBS structure is lost, an analogous "secondary" HBS structure should be designated as a replacement for the lost "primary" structure, and another analogous structure should be added as a "secondary" to the HBS. 2
- If demolition of a "primary" or "secondary" HBS structure is required for overriding safety concerns, documentation of the need to remove the structure must be submitted to and approved by the IHPA. A Memorandum of Agreement establishing how adverse effects will be resolved must be executed
- The HBS would be periodically updated by IDOT with IHPA consultation
.
- Public meetings for bridge projects should include information as to whether or not the structure is considered historic.
- Bridges listed on the NRHP, due to nomination by the public, shall be added to the HBS.
- HBS structures to be demolished must be recorded in accordance with the Historic American Engineering Record Standards. 3

The following items, the majority of which are derived from data contained in the Illinois Structure Information System (ISIS), are included within the HBS for each structure listed:

Structure Number	(ISIS Items 3A and 8A)
District	(ISIS Item 2)
Facility Carried	(ISIS Item 7)
Feature Crossed	(ISIS Item 6)
Location Description	(ISIS Item 9)
Bridge Type	(ISIS Items 43A and 43B)
Group	(No Related ISIS Items)
Year Built	(ISIS Item 27A)
Year Rebuilt	(ISIS Item 106)
NHRP Code	(Somewhat Related to ISIS Item 37)

Except for "Group" and NRHP "Code", the items listed for HBS structures are the same as those provided in the ISIS in accordance with direction provided by the IDOT Structure Information and Procedure Manual.

The "Group" designation for HBS structures provides information relative to "primary" (P) or "alternate" (A) status of the bridge, as well as the period of time within which the structure was built. The designation of "alternate" is a substitution for the term "secondary"

Page: 24

Number: 1 Author: mjohnson Subject: Rectangle Date: 2/27/2015 9:42:59 AM -06'00'

Number: 2 Author: mjohnson Subject: Rectangle Date: 2/27/2015 9:43:31 AM -06'00'

Number: 3 Author: mjohnson Subject: Rectangle Date: 2/27/2015 9:44:03 AM -06'00'

used in the PA with the IHPA and FHWA for addressing historic bridge issues. Each bridge type included on the HBS is "divided" into one, two or three groups. Bridges "divided" into more than one group have each group established to include only those structures constructed within a specified time period. For example, a specific bridge type may have three groups, with the first group including all bridges constructed in 1900 or prior, the second group including all bridges constructed in 1901 through 1920, and the third group including all bridges constructed after 1920. In this example, a secondary or "alternated" structure on the HBS of a specific bridge type built in 1911 could then have a "Group" designation of "2A" on the HBS..

The "Code" designation for HBS structures provides information for the bridges that are individually listed on the NRHP; the bridges that located within a National Register Historic District (NRHD); and the bridges that are presently not old enough for inclusion on the NRHP, which are identified by "**".

When using the ISIS to determine whether or not a structure is included on the HBS, the only indicator is ISIS Item 37 (Historical Significance Indicator). Bridges on the HBS are coded "1" through "7" for ISIS Item 37. If a bridge with historic significance is included as a "secondary"/"alternate" structure on the HBS, ISIS Item 37 will be coded either "4" or "6". The "primary" examples on the HBS have ISIS Item 37 coded "1", "2", "3", "5" or "7". This correlation between ISIS Item 37 coding and the status of a bridge on the HBS as either a "primary" or "secondary" example is not presented in the Structure Information and Procedure (SIP) Manual. A recommendation has been made that future revisions to the SIP Manual for Item 37 include revisions that explain the correlation between the applied codes and the HBS.

To the casual observer, the designation of bridges as historic appears to be somewhat arbitrary. However, a significant amount of time, effort and interagency coordination went into the development of the HBS. A recommendation has been made that the SIP Manual be revised to include information in the appendix relative to the process used for assigning historic significance to bridges of the HBS.

HISTORY KEPT YES ☐ NO ☒	**ILLINOIS HIGHWAY INFORMATION SYSTEM** **STRUCTURE INFORMATION AND PROCEDURE MANUAL**		
NBIS REQUIRED YES ☒ NO ☐	ITEM NAME **HISTORICAL SIGNIFICANCE INDICATOR**	ITEM NO.	37
		PAGE	1 of 1
		EFF. DATE	07/01/07
	ISIS		
RESPONSIBLE FOR UPDATE	**Central Bureau of Planning**		
STRUCTURES	**All**		
UPDATE SCREENS	**(8) Historical Significance**		
INQUIRY SCREENS	**(2) Inventory Data 2**		

DESCRIPTION AND PURPOSE OF ITEM

This item identifies bridges that are historically significant, either through structural design or through association with important events or circumstances.

CODE AND SCREEN ENTRY INSTRUCTIONS

The updating of this item is the responsibility of the Central Office Bureau of Program Planning, Data Management Unit (Structures), in cooperation with the Bureau of Design and Environment, Historic Structures. Any additions should be directed to either office.

A one-digit field.

Enter the appropriate code for all structures.

Code	Description
0	Bridge has been determined ineligible for inclusion on National Register of Historic Places.
1	Bridge is listed individually on the National Register of Historic Places.
2	Bridge is listed on the National Register of Historic Places as contributing to an historic district so listed.
→ 3	Bridge has been determined eligible for inclusion on the National Register of Historic Places (on the primary list of bridges on the Illinois Historic Bridge Survey).
• 4	Bridge has been determined eligible for inclusion on the National Register of Historic Places (on the alternate list of bridges on the Illinois Historic Bridge Survey).
5	Bridge is of historic interest but too recent to be eligible for inclusion on the National Register of Historic Places; will be determined eligible when it becomes 50 years old. (on primary list)
6	Bridge is of historic interest but too recent to be eligible for inclusion on the National Register of Historic Places; will be determined eligible when it becomes 50 years old. (on alternate list)
7	Bridge has been determined eligible for inclusion on the National Register of Historic Places and is located in a National Register historic district but not mentioned in the district nomination.

Appendix E

Memorandum of Agreement

TO BE PROVIDED

CIORBA GROUP | Consulting Engineers

PROJECT MEMO

To: Edgar Joves PE, Civil Engineer, Public Works Department
City of Highland Park

From: Nita Gjurgjiali EI, Inspection Team Leader
Checked by: Brett Sauter PE, SE, Project Manager

Date: 12/17/2015

Reference: Central Ave over Ravine Inspection, SN 049-6554

Project No.: 20349.01

On Wednesday November 4th, 2015 Ciorba Group performed a visual and arm's length overall bridge inspection for the structure carrying Central Ave over a Ravine. The last NBIS inspection was performed on September 29th, 2014.

Existing Condition of the Bridge Based on Ciorba's Inspection

The existing bridge is a closed reinforced concrete spandrel arch (Photo 1).The arch ring is the primary vertical load carrying element that supports the fill material, wearing surface and the live load. The spandrel walls are also considered primary members that retain the fill material and support the bridge parapets. The condition rating of the superstructure composed of these two elements is in poor condition overall with a condition rating of 4.

The arch exhibits severe deterioration. There are areas of spalling and delamination at the underside of the arch as well as the spandrel walls (Photos 5, 6, 8, 9). The spalled areas at the underside of the arch expose the primary reinforcing steel which show section loss. At the center of the arch on the north and south end of the underside of the arch ring, there are concentrated areas of efflorescence and the concrete is deteriorating (Photo 7). The efflorescence indicates that the wearing surface has failed and water is penetrating through the fill and into the concrete. The areas that have been patched when the bridge was rehabilitated in 2008 are also delaminated and spalled with efflorescence (Photo 5, 6).

The spandrel walls are in poor condition overall. The walls exhibit areas of delamination, spalling and cracking at both the north and south elevations (Photo 8, 9). The south parapet is leaning away from the roadway which indicates that the spandrel wall is leaning away from the centerline of the bridge.

The wearing surface, which is made out of bituminous material, shows cracks that have been sealed (Photo 2). The north and south parapets exhibit severe vertical cracks spaced throughout the length of the bridge (Photo 3). In addition, there are areas of spalling and exposed reinforcement with section loss on the parapets. The retrofit concrete parapet on the northeast side constructed in 2014 is in good condition. At the south parapet, there is separation noted between the south parapet and the sidewalk throughout the length of the bridge varying in width on average of ½ inch (Photo 4). This is an indication that the south parapet is leaning away from the roadway. The separation between the parapet and the sidewalk exposes the fill material which

allows for water to penetrate into the fill material easily.

The substructure is in fair condition overall. Due to scour, the footing for the west abutment is moderately exposed and deteriorated (Photo 10). The footing for the east abutment is also exposed with embankment erosion at the northeast wingwall showing deterioration between the wingwall and footing interface (Photo 11).

Based on this inspection, Ciorba agrees with the recommendation given in the 2014 Abbreviated Bridge Condition Report (BCR) prepared by the City of Highland Park for a complete replacement. Rehabilitation of the structure is not feasible due to the bridge type and deteriorated condition. In addition, the structure is not only structurally deficient but also functionally obsolete with the appraisal rating of 2 for the deck geometry due to the bridge width accommodating a single lane for a two lane approach roadway.

Photos from the most recent inspection showing the current condition of the structure are attached below. The latest master structure report and Abbreviated BCR is also attached.

Photo 1: South Elevation.

Photo 2: Top of bridge looking west showing wearing surface.

Photo 3: Severe cracking at the north parapet.

Photo 4: Separation between the south parapet and the sidewalk.

Photo 5: Underside of the arch looking west.

Photo 6: Underside of the arch looking east

Photo 7: Efflorescence at the underside of arch at the south end.

Photo 8: Spalling at the south elevation spandrel wall.

Photo 9: Spalling at the north elevation.

Photo 10: Scour at the west foundation.

Photo 11: Deterioration at the northeast wingwall and footing interface.

Illinois Department of Transportation
Structures Information Management System
Structure Summary Report

Structure Number: 049-6554 **District:** 1

Inventory Data

Facility Carried: CENTRAL AVE
Feature Crossed: RAVINE
Bridge Remarks:
Bridge Status: 1 OPEN - NO RESTRICT
Status Remarks:
Maint County: 049 LAKE
Maint Responsibility: 04 MUNICIPALITY
Service On/Under: 1 HIGHWAY 5 / WATERWAY
Reporting Agency: 4 MUNICIPALITY
Main Span Matl/Type: 1 CONCRETE / 11 ARCH - DECK, FILLED SPANDREL
Nbr Of Main Spans: 1 **Nbr Of Approach Spans:** 0
Approaches
Near #1 Matl/Type: /
Near #2 Matl/Type: /
Far #1 Matl/Type: /
Far #2 Matl/Type: /
Median Width/Type: 0 Ft. / 0 None
Guardrail Type L/R: 0None / 0 None
Toll Facility Indicator: 0 No Toll
Latitude: 42.18895719 **S** **Longitude:** 87.78993930 **S**
Deck Structure Type: A CIP CON NRMLLY FORM
Sidewalks Under Structure: 0 None

Bridge Name: CENTRAL AVE BRIDGE
Location: 0.1 W LAKE MICHIGAN
Status Date: 04/1988
Maint Township: 96 MORAINE

Sufficiency Rating: 33.0
HBP Eligible: Yes
Replaced By: 049-6595
Replaces: -
Last Update Date: 07/05/2012
Parallel Structure: None
Multi-Level Structure Nbr:
Skew Direction: N None
Skew Angle: 0 **D**
Structure Flared: No
Historical Significance: Yes
Border Bridge State:
Bdr State SN:
Bdr State % Responsibility: 0
Structural Steel Wt 0
Substructure Material:
Rated By: 2 IDOT
Inventory Rating: 0.540(19)
Operating Rating: 0.900(32)
Design Load: 99 UNKNOWN
Deck Structure Thickness: 0 **SD:** Y **FO:** Y

Structure Length: 111.0
AASHTO Bridge Length: 99.9
Length of Long Span: 51.0
Bridge Roadway Width: 16.2
Appr Roadway Width: 20.0
Deck Width: 19.5
Sidewalk Width Right: 2.7
Sidewalk Width Left: 0.0
Navigation Control: 0 No
Navigation Horiz Clear: 0
Navigation Vert Clear: 0
Culvert Fill Depth: 0.0
Number Culvert Cells: 0
Culvert Opening Area: 0.0
Culvert Cell Height: 0.00
Culvert Cell Width: 0.00
Rate Method: 0
Load Rating Date: 04/13/2015
Railroad Crossing Info
Crossing 1 Nbr:
Crossing 1 Nbr:
RR Lateral Underclear: 0.0
RR Vertical Underclear: 0 **Ft** 0 **In**

Key Route On Data

Key Route Nbr: MUNICIPAL STREET 3115
Appurtenances Main Route 02595
Inventory County: 049 LAKE
Township/Road Dist 96 MORAINE
Municipality 2595 HIGHLAND PARK
Urban Area: 1051 1051
Functional Class: 7 LOCAL
**** CLEARANCES **** **South/East** **North/West**
Max Rdwy Width: 0.0
Horizontal: 0.0 0.0
Lateral:

Station: 0.4400
Segment:
Linked: Y
Natl. Hwy System: Not on NHS
Inventory Direction:
Curr AADT Yr/Count: 2015 / 1500
Est Truck Percentage: 3
Number Of Lanes: 1
One Or Two Way: 3 1LN2WAY
Bypass Length: 0
Future AADT Yr/Cnt: 2032 / 2226
Designated Truck Rte: NONE
Special Systems: No

Key Route Under Data

Station:
Segment:
Linked:
Natl. Hwy System:
Inventory Direction:
Curr AADT Yr/Count: /
Est Truck Percentage:
South/East **North/West**
Number Of Lanes:
One Or Two Way:
Bypass Length:
Future AADT Yr/Cnt: /
Designated Truck Rte:
Special Systems:

*** Marked Route On Data ***

	Designation		Kind	Number
Route #1:	1	Mainline	5 Municipal Streets	
Route #2:	1	Mainline		
Route #3:	1	Mainline		

*** Marked Route Under Data ***

Designation	Kind	Number

Structure Number: 049-6554 **District: 1**

Data Related to Inspection Information

***** Inspection Intervals *****

Routine NBIS: 24 MOS **Underwater:** 0 MOS **Special:** N

***** Maximum Allowable Posting Limits *****

One Truck At A Time: 0
Single Unit Vehicles: LL Tons
Combination Type 3S-1: Tons
Combination Type 3S-2 Tons

Bridge Posting Level: L Legal Load Only

Inspection/Appraisal Information

Inspection Date: 09/29/2014 **Inspection Temperature:** 73Deg. F

Deck:	N	NOT APPLICABLE
Superstructure:	4	POOR CONDITION - ADVANCED DETERIORATION
Substructure:	5	FAIR CONDITION - MINOR SECTION LOSS, CRACKS
Culvert:	N	NOT APPLICABLE
Channel and Protection:	4	POOR CONDITION - ADVANCED DETERIORATION
Structural Evaluation:	4	MINIMUM ADEQUACY TO BE LEFT IN PLACE
Deck Geometry:	2	INTOLERABLE - HIGH PRIORITY FOR REPLACEMENT
Underclearance-Vert/Lat.:	N	NOT APPLICABLE
Waterway Adequacy:	9	SUPERIOR TO PRESENT DESIRABLE CRITERIA
Approach Roadway Align:	3	INTOLERABLE - HIGH PRIORITY FOR CORRECTION
Bridge Railing Appraisal:	2	Doesn't Meet Standards
Approach Guardrail:	111	Does Not Exist Does Not Exist Does Not Exist
Pier Navig Protection:	N	N/A

Deck Wearing Surf:	N	N/A - NO DECK
Deck Membrane:	N	N/A
Deck Protection:	N	N/A
Total Deck Thick:	0.0	
Last Paint Date:		

**** Actual Posted Limits ****

Single Unit Vehicles: Tons
Combination Type 3S-1: Tons
Combination Type 3S-2: Tons
One Truck At A Time: 0
Last Paint Type:

Underwater Inspection/Appraisal Information

Inspection Date:
Temperature: **Inspection Method:**
Appraisal Rating:

Scour Critical Information

Rating: 8 CALCULATED SCOUR ABOVE FOOTING **Evaluation Method:** B Rational Analysis
Analysis Date: 07/13/1992

Miscellaneous

Microfilm Data Recorded: No

Construction Information

Year: 1935 Original Reconstructed
Route: **Sta:** **Sta:**
Section Nbr:
Contract Nbr:
Fed Aid Pr#: 00000000000000
Built By: 4 CITY

CONTENTS

ABBREVIATED BRIDGE CONDITION REPORT

ROUTE: **MUNICIPAL ST (Central Av Bridge over ravine)**

SECTION NO. _____

COUNTY: **LAKE**

EXISTING CONDITIONS:

STRUCTURE NO. **049-6554**

LENGTH: **111 Feet**

SUPERSTRUCTURE TYPE: **REINFORCED CONCRETE ARCH BRIDGE**

SUBSTRUCTURE TYPE: **SPREAD FOOTING**

BRIDGE POSTING: **10 Tons/Axle (40 Tons – 80,000 lbs Gross)**

SUFFICIENCY RATING: 33, (S-107 - 07/05/2012 Update)

PROPOSED CONDITION STATEMENT:

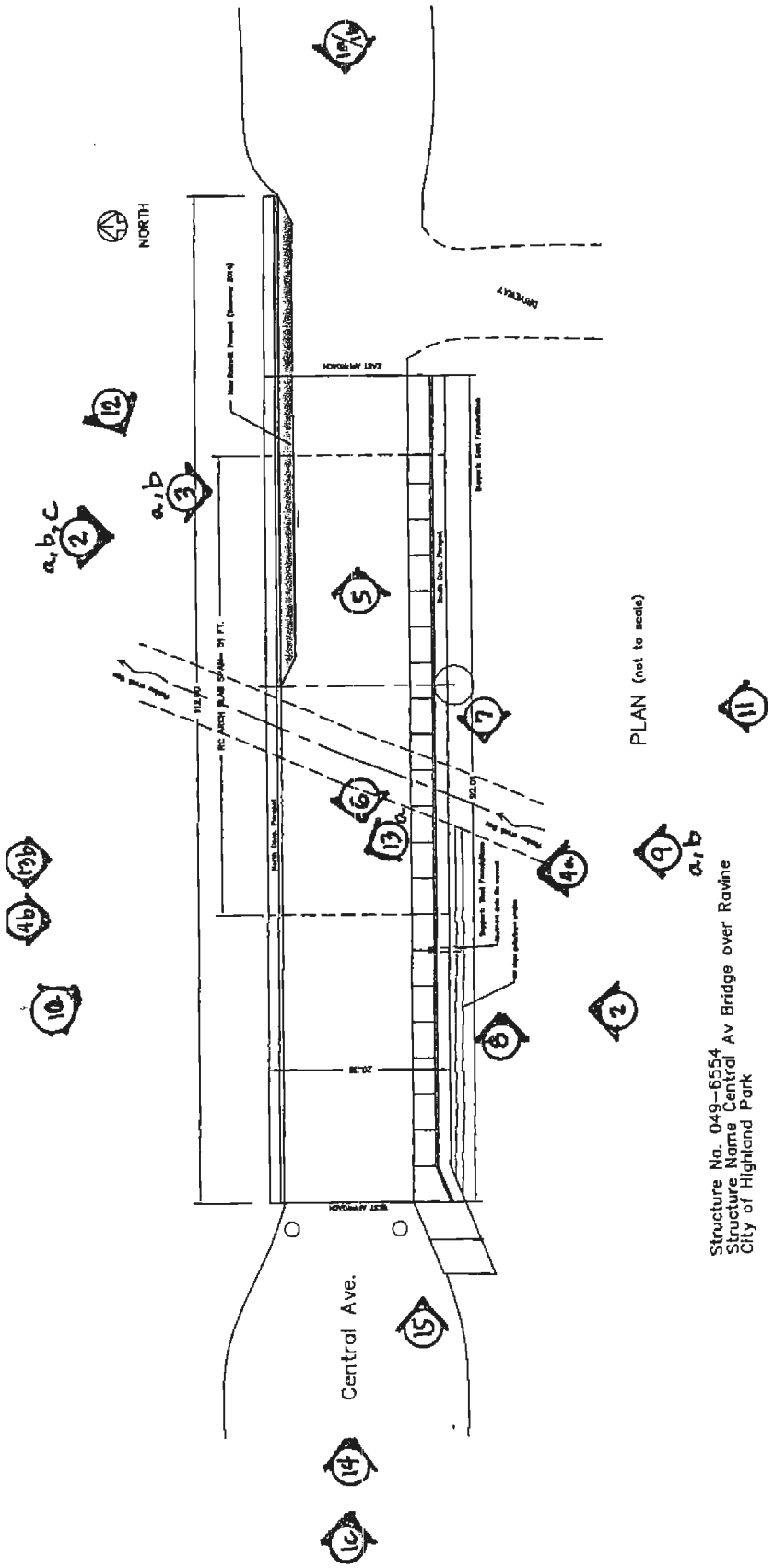
REPLACE THE EXISTING ONE LANE CONCRETE ARCH BRIDGE WITH A NEW SINGLE SPAN TWO (2) LANE MULTI-STEEL BEAM BRIDGE ON AN IMPROVED HORIZONTAL & VERTICAL ALIGNMENTS CONFORMING TO CURRENT AASHTO's BRIDGE DESIGN LOADING STANDARDS.

REHABILITATION STATEMENT:

REHABILITATION OF THE CONCRETE ARCH BRIDGE IS NOT ECONOMICALLY FEASIBLE SINCE THE BRIDGE IS BEYOND REPAIR DUE TO MULTIPLE SUPERSTRUCTURE CONCRETE CRACKS, DELAMINATIONS & SPALLS WITH WORSENING CORROSION OF REINFORCING BARS. THE BRIDGE BUILT IN 1935 USED SUBSTANDARD MATERIALS & CONSTRUCTION METHODOLOGY. THE DECK GEOMETRY, APPROACH ROADWAY ALIGNMENT, BRIDGE RAILINGS, AND APPROACH GUARDRAIL ARE EITHER INTOLERABLE, INADEQUATE, AND/OR DO NOT MEET STANDARDS.

Location Map:

Inspection Plan-Central Av Bridge (Photo Images Directions Orientation)



Central Avenue Bridge over Ravine, S.N. 049-6544

Location & General Description of the Bridge:

S.N. 049-6544 is a 111 ft. single span reinforced concrete arch slab bridge carrying one lane of traffic over a ravine (see Images Ctrl 1a & 1b). The structure was constructed in 1935, located in the northeast quadrant of the City, and is approximately 0.2 miles east of US Route 41 (see Location Map). There is an 80 ft soldier steel H-pile retaining wall with concrete laggings built in 2008 on the northeast side of the bridge. The bridge with current AADT Yr/Count of 2011/2000 is rated with Legal Loads, 10 ton/axle (40 tons-80,000 lbs Gross).

The 111 ft reinforced concrete arch bridge has a total width of 20.36 ft back to back of parapet walls with a net lane width of 13. 5 ft. There is a 2.5 ft wide sidewalk on the south side of the bridge. North and south bridge concrete spandrels retained bridge embankment fill including the existing asphalt wearing surface. The overall length of the bridge is 111 ft along the north parapet and 92 ft along the south parapet. There is a residential gravel driveway entrance on the southeast end of the bridge.

The bridge parapet concrete rails are cracked vertically on 18 locations and are leaning out towards the ravine with wall base generally spalled and its reinforcing bars decaying or gone due to corrosion. City of Highland Park mobilized a contractor this summer of 2014 for emergency installation of northeast parapet wall on concrete encased steel soldier pile system so as to prevent wall from falling to the ravine.

Bridge Condition Inspection Notes:

The existing bridge wearing surface course and approach pavements are built with hot mix asphalt material. The bridge was rehabilitated in 2008, when some spalled concrete arch slab span was repaired.

The City of Highland Park contracted in 2008 B.L. & A.-Bollinger, Lach, and Associates Inc. to do the City's Bridge Master Plan and Biennial Bridge Inspections. B.L. & A. noted the following bridge condition deficiencies:

- Single lane bridge.
- Concrete parapets are highly deteriorated.
- Footings exposed.
- Faces of spandrel walls and edge of superstructure concrete arch slab have cracks and many areas of deteriorations.
- Embankment at southwest spilling into the ravine.

Following the bridge bi-ennial inspections in 2010, 2012, and 2014, the bridge condition now reflects additional deficiencies on the following bridge element sections (tabulated below), see also the attached bridge rating sheet plans and bridge elements level inspection summary report on page 29.

- North and south parapet walls bases have deteriorated.
  The bridge parapet concrete rails are leaning out towards the ravine with wall base generally spalled and reinforcing bars decaying or gone due to corrosion. (see images Ctrl 2a & 2b - before and after patching).
- Reinforced concrete arch slab have many areas of concrete spalls, cracks and deterioration observed on the soffit and edges with exposed rebars showing severe section loss due to rust (see images Ctrl 02c to Ctrl 10).
- With increased southwest embankment erosion, footings are exposed, and the storm surface runoff created deep gully undermining the wingwall foundations (see images Ctrl 6, 7, and 12).
- Faces of north and south spandrel walls show more delaminations, loose spalls, and disintegrating concrete conditions causing the emergency patching on the northeast section of the bridge.
- East abutment/foundation is also exposed with some embankment erosion on the northeast wingwall.
- Southwest bridge storm inlet is clogged requiring pressure wash clearing. Two (2 ea) east storm manhole outfall dissipators on the ravine are leaning and collapsing.
- Retrofit concrete parapet was constructed in summer 2014 to reinforce failing bridge concrete rail parapet.

Bridge Deficiencies: See page 29 for Bridge Element Level Inspection Summary (11/16/2014)

Span	Delaminations	2008 Rehab Patched Area	Conc. Cracks/ Rusted Rebar
Concrete Arch Span Bottom Deck	145 SF	22 SF	18 FT / 22 FT
North Concrete Spandrel Wall	167 SF	68 SF	XX FT / XX FT
South Concrete Spandrel Wall	107 SF	0 SF	XX FT / XX FT
SUM	409 SF	90 SF	18 FT / 22 FT

There are longitudinal and transverse cracking on the bridge span and approach wearing surfaces. The City had crack hot sealed these in past routine maintenance programs. The gap cracks between distressed north/south parapets base and bridge spandrel walls have widened increasing bridge runoff seepage to the bridge walls. This has caused large area concrete spalls, delaminations, and disintegrations. Last Spring 2014, the damages became larger creating 7 to 8 ea. 7" dia. holes on the northeast parapet base and bridge spandrel walls. It also caused rapid dis-integration of old concrete wall mix making it more loose and converting sections to honey combed consistencies. (See Images Ctrl 02, 02a, & 02b).

The existing 2.5 ft wide south sidewalk is sub-standard. There is no guardrail separating it from the vehicular lane. There is also no guardrail on the bridge west and southeast approaches.

The sub-structure west abutment/foundations is being exposed or undermined due to the embankment erosion. Storm runoff from the Central Avenue sub-watershed discharges to the clogged southwest inlet outflow pipe creating overflow runoff gully right by the wingwall and southwest abutment foundations. This should be re-investigated and pressure washed up to the drainage shutoff so as to prevent future embankment collapse. The substructure patched areas in previous bridge rehabilitation appears to be in good condition. Bridge suspended arch slab damaged areas sounded hollow. Delaminations, spalls and concrete cracks must be removed and re-sounded for future bridge alternative concrete repairs if this is even possible due to numerous concrete dis-integration, honey comb, longitudinal cracks, and exposed reinforcing bars severe corrosions.

Several storm manhole outfalls under the bridge are also in bad conditions. The pipes are disconnected with the storm structures leaning toward the ravine stream.

With the foregoing bridge condition assessments and the super-structure NBI Rating of "4", the bridge sufficiency rating is downgraded to "33" by I.D.O.T.'s Bureau of Bridges & Structures as of December 2014. Public Works engineering believes that with most bridge elements crumbling and its safe functionalities compromised, the bridge is now going through its last stages of its useful life.

It would not be long until this structurally deficient superstructure will need immediate replacement.

The bridge current condition with its low assessment rating makes it eligible for Federal and State Highway Bridge Program Funding assistance. Before the bridge becomes unserviceable to vehicular traffic, the City staff is seeking the State Department of Transportation assistance to give consideration to this funding application so a bridge replacement can be programmed in the agency's funding supports to local government infrastructure improvements. The City is committed in restoring the bridge to current design standards and hence contributing its share for the bridge replacement cost.

Recommendations:

PROPOSED CONDITION STATEMENT:

REPLACE THE EXISTING ONE LANE CONCRETE ARCH BRIDGE WITH A NEW SINGLE SPAN TWO (2) LANE MULTI-STEEL BEAM BRIDGE ON AN IMPROVED HORIZONTAL & VERTICAL ALIGNMENTS CONFORMING TO CURRENT AASHTO's BRIDGE DESIGN LOADING.

REHABILITATION STATEMENT:

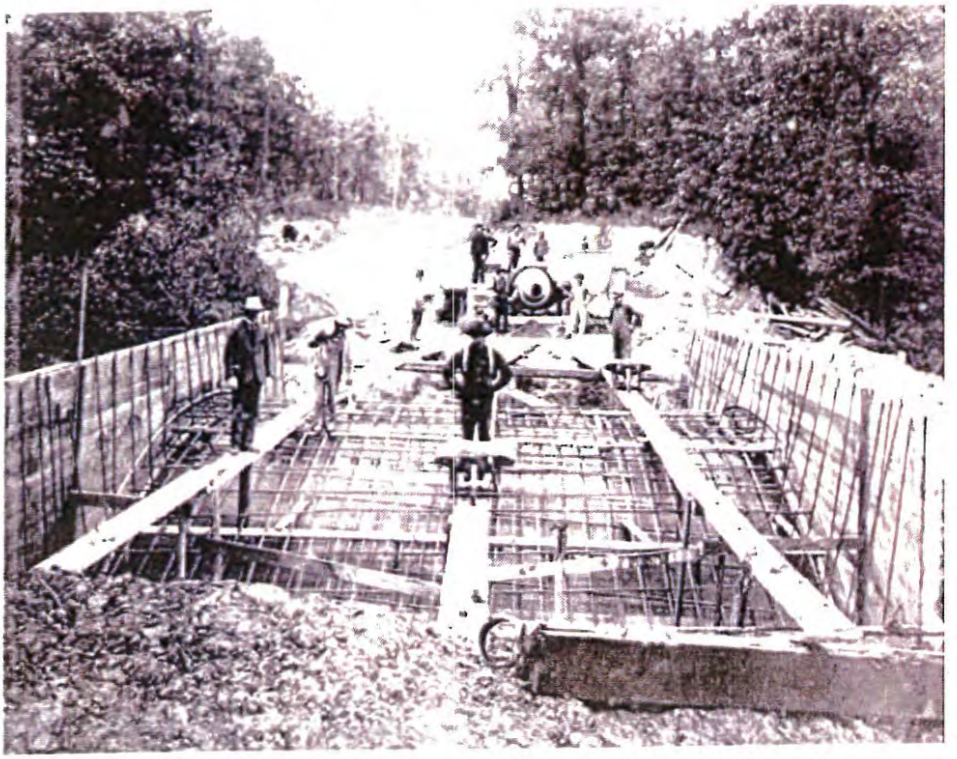
REHABILITATION OF THE CONCRETE ARCH BRIDGE IS NOT ECONOMICALLY FEASIBLE SINCE THE BRIDGE IS BEYOND REPAIR DUE TO MULTIPLE SUPERSTRUCTURE CONCRETE CRACKS, DELAMINATIONS & SPALLS WITH WORSENING CORROSION OF REINFORCING BARS. THE BRIDGE BUILT IN 1935 USED SUBSTANDARD MATERIALS & CONSTRUCTION METHODOLOGY. THE DECK GEOMETRY, APPROACH ROADWAY ALIGNMENT, BRIDGE RAILINGS, AND APPROACH GUARDRAIL ARE EITHER INTOLERABLE, INADEQUATE, AND/OR DO NOT MEET STANDARDS.

S.N. 049-6554-Central Av., Highland Park, IL
08/19/2014

Image Ctrl 01a - Central Av Bridge East Approach with emergency retrofit northeast wall, Sept. 2014

Image Ctrl 01b - Central Av Bridge East Approach, April 2014

Bridge



Title	Bridge
Description	Photo of bridgebuilding over a ravine in Highland Park.
ProperNames	Brand, Orson B., photographer
Participant	Highland Park Public Library
Creator	Brand, Orson B.
Date	-
Type	photograph
Format	paper
Source	Photographs of Highland Park, IL, Brand, Orson B., 18 x 23 cm.
City	Highland Park
State	Illinois
Country	United States

Photo Ctrl 01c – Central Av Bridge file original 1935 construction image

Image Ctrl 02 – South Bridge Elevations, August 2014

Ctrl 02a, NE Spandrel - before 09/09/2014 Ctrl 02b, NE Spandrel - after 09/14/2014

Images Ctrl 02c - Central Av, North Bridge Elevations, August 2014

Photo Ctrl 03a & Ctrl 03b – Central Av Bridge, East Arch/Foundations (August 2014)

Photo Ctrl 04a & Ctrl 04b – Central Av Bridge, West Arch/Foundations (August 2014)

Photo Ctrl 05- Central Av Bridge, East Arch Foundation Elevations, 08/19/2014

Photo Ctrl 06 – Central Av Bridge – West Arch Foundation Elevations, 08/19/2014

Photo Ctrl 07 – Central Av Bridge, Southwest Spandrel Wall/Foundations Scouring, 08/19/2014

Photo Ctrl 08 – Central Av Bridge, Southwest Arch Bridge Superstructure Condition, 08/19/2014

Photo Ctrl 09a-09b – Central Av Bridge, Midspan arch conditions South Elevations, 08/19/2014

Photo Ctrl 10 – Central Av Bridge, Midspan spandrel conditions North Elevations, 08/19/2014

Photo Ctrl 11 – Central Av Bridge South Elevations

Photo Ctrl 12 – Central Ave Bridge, NE Elevation

Photo Ctrl 13a – Central Av Bridge, Northwest Foundations Scouring

Photo Ctrl 13b – Central Av Bridge, Northwest Rotating Embankment Wall

Photo Ctrl 14 – Central Av Bridge, West Approach October 2013

Photo Ctrl 15 – Central Av Bridge, West Approach 09/29/2014

Central Ave Bridge Replacement Budgetary Estimate (Nov 24, 2014)
By: Edgar

ITEM #	ITEM DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION
1	Porous Granular Embankment	420	Cu. Yd.	$ 30.00	$ 12,600.00
2	Sub-Base Granular Material, Type B 4"	250	Sq. Yd.	$ 8.00	$ 2,000.00
3	Aggregate Base Course, Type 8"	40	Sq. Yd.	$ 16.00	$ 640.00
4	Bridge Approach Pavement, Std 2353	70	Sq. Yd.	$ 150.00	$ 10,500.00
5	PC Concrete Bridge Approach Shoulder Pavement	34	Sq. Yd.	$ 120.00	$ 4,080.00
6	Removal of Existing Superstructure	1	L. Sum	$ 40,000.00	$ 40,000.00
7	Concrete Removal	10	Cu. Yd.	$ 500.00	$ 5,000.00
8	Structure Excavation	400	Cu.Yd	$ 35.00	$ 14,000.00
9	Cofferdam Excavation	400	Cu.Yd	$ 45.00	$ 18,000.00
10	Cofferdams	1	Ea.	$ 48,000.00	$ 48,000.00
11	Floor Drains	4	Ea.	$ 500.00	$ 2,000.00
12	Protective Coat	353.36	Sq. Yd.	$ 2.00	$ 706.72
13	Class X Concrete (Concrete Structures)	433.44	Cu. Yd.	$ 650.00	$ 281,736.00
14	Furnishing and Erecting Structural Steel	60000	Lbs.	$ 5.00	$ 300,000.00
15	Stud Shear Connnectors	1050	L. Sum	$ 9.00	$ 9,450.00
16	Aluminum Railing, Type L	204	Lin. Ft.	$ 200.00	$ 40,800.00
17	Handrail Removal	204	Lin. Ft.	$ 5.00	$ 1,020.00
18	Painting Structural Steel	1	L.Sum	$ 45,000.00	$ 45,000.00
19	Reinforcement Bars	22500	Lbs.	$ 1.30	$ 29,250.00
20	Reinforcement Bars, Epoxy Coated	22500	Lbs.	$ 1.50	$ 33,750.00
21	Furnishing Metal Pile Shells 12"	2500	Lin. Ft.	$ 45.00	$ 112,500.00
22	Driving and Filling Shells	2500	Lin. Ft.	$ 4.70	$ 11,750.00
23	Name Plates	1	Ea.	$ 1,000.00	$ 1,000.00
24	Pipe Underdrains, Perforated Corrugated Steel Pipe 12"	84	Lin. Ft.	$ 100.00	$ 8,400.00
25	Concrete Barrier (Special)	56	Lin. Ft.	$ 300.00	$ 16,800.00
26	Approach Slab Removal	70	Sq. Yd.	$ 30.00	$ 2,100.00
27	Neoprene Expansion Joint 2"	69.44	Lin. Ft.	$ 155.00	$ 10,763.20
28	Elastomeric Bearing Assemblies, Type 1 & Type III	14	Each	$ 1,000.00	$ 14,000.00
29	Temporary Barrier Wall	308	Lin. Ft.	$ 300.00	$ 92,400.00
30	Latex Modified Conc. (Placement)	212.8	Sq. Yd.	$ 10.00	$ 2,128.00
31	Erecting Existing Steel Beams	0.56	L. Sum	$ 5,000.00	$ 2,800.00
32	Latex Modified Conc.	9.6096	Cu.Yd.	$ 1,200.00	$ 11,531.52
33	Drill & Grout Dowels	147.28	Ea.	$ 30.00	$ 4,418.40
		BUDGETARY ESTIMATE		TOTAL	$ **1,189,123.84**
				SAY	$ **1,210,000.00**

Illinois Department of Transportation
Structures Information Management System
Master Structure Report (S-107)

Date: 12/8/2014

Structure Number: 049-6554 **District:** 1

Inventory Data

Facility Carried:	CENTRAL AVE	Bridge Name:	CENTRAL AVE BRIDGE	Sufficiency Rating:	33.0	Structure Length:	111.0
Feature Crossed:	RAVINE	Location:	0.1 W LAKE MICHIGAN	HBP Eligible:	Yes	AASHTO Bridge Length:	99.9
Bridge Remarks:				Replaced By:	049-6595	Length of Long Span:	51.0
Bridge Status:	1 OPEN - NO RESTRICT	StatusDate:	04/1988	Replaces:		Bridge Roadway Width:	16.2
Status Remarks:				Last Update Date:	07/05/2012	Appr Roadway Width:	20.0
Maint County:	049 LAKE	Maint Township:	96 MORAINE	Parallel Structure:	None	Deck Width:	19.5
Maint Responsibility:	04 MUNICIPALITY			Multi-Level Structure Nbr:		Sidewalk Width Right:	2.7
Service On/Under:	1 HIGHWAY /	5 WATERWAY		Skew Direction:	None	Sidewalk Width Left:	0.0
Reporting Agency:	4 MUNICIPALITY			Skew Angle:	0 D	Navigation Control:	0 No
Main Span Matl/Type:	1 CONCRETE /	11 ARCH - DECK, FILLED SPANDREL		Structure Flared:	No	Navigation Horiz Clear:	0
Nbr Of Main Spans:	1	Nbr Of Approach Spans:	0	Historical Significance:	Yes	Navigation Vert Clear:	0
Approaches				Border Bridge State:		Culvert Fill Depth:	0.0
Near #1 Matl/Type:	/			Bdr State SN:		Number Culvert Cells:	0
Near #2 Matl/Type:	/			Bdr State % Responsibility:	0	Culvert Opening Area:	0.0
Far #1 Matl/Type:	/			Structural Steel Wt:	0	Culvert Cell Height:	0.00
Far #2 Matl/Type:	/			Substructure Material:		Culvert Cell Width:	0.00

Median Width/Type:	0 Ft. / 0 None			Rated By:	2 IDOT	Rate Method:	0
Guardrail Type L/R:	0 None / 0 None	Inventory Rating:	0.540 (19)	Load Rating Date:	02/18/2014	***Railroad Crossing Info***	
Toll Facility Indicator:	0 No Toll	Operating Rating:	0.900 (32)			Crossing 1 Nbr:	
Latitude:	42.18895719	Longitude:	87.78993930	Design Load:	99 UNKNOWN	Crossing 1 Nbr:	
Deck Structure Type:	A CIP CON NRMLLY FORM	Deck Structure Thickness:	0.0 SD: Y FO: Y			RR Lateral Underclear:	0.0
Sidewalks Under Structure:	0 None					RR Vertical Underclear:	0 Ft 0 In

Key Route On Data

Key Route Nbr:	MUNICIPAL STREET ✓ 3115	Station:	0.4400
Appurtenances	Main Route 02595	Segment:	
Inventory County:	049 LAKE	Linked:	Y
Township/Road Dist	96 MORAINE	Natl. Hwy System:	Not on NHS
Municipality	2595 HIGHLAND PARK	Inventory Direction:	
Urban Area:	1051	Curr AADT Yr/Count:	2011 / 2000
Functional Class:	7 LOCAL	Est Truck Percentage:	0
** CLEARANCES **	South/East North/West	Number Of Lanes:	1
Max Rdwy Width:	0.0	One Or Two Way:	3 1LN2WAY
Horizontal:	0.0 0.0	Bypass Length:	0
Min Vertical:	00 Ft 00 In 00 Ft 00 In	Future AADT Yr/Cnt:	2032 / 2226
10 Ft Vertical:	00 Ft 00 In 00 Ft 00 In	Designated Truck Rte:	NONE
Lateral:		Special Systems:	No

Key Route Under Data

		Station:	
		Segment:	
		Linked:	
		Natl. Hwy System:	
		Inventory Direction:	
		Curr AADT Yr/Count:	/
		Est Truck Percentage:	
	South/East North/West	Number Of Lanes:	
		One Or Two Way:	
		Bypass Length:	
	Ft In Ft In	Future AADT Yr/Cnt:	/
	Ft In Ft In	Designated Truck Rte:	
	Ft Ft	Special Systems:	

*** Marked Route On Data ***

	Designation	Kind	Number
Route #1:	1 Mainline	5 Municipal Streets	
Route #2:	1 Mainline		
Route #3:	1 Mainline		

*** Marked Route Under Data ***

	Designation	Kind	Number

Structure Number: 049-6554 **District:** 1

Data Related to Inspection Information

***Inspection Intervals ***

Routine NBIS: 24 MOS Underwater: 0 MOS
Fracture Critical: 0 MOS Special: N

*** Maximum Allowable Posting Limits ***

One Truck At A Time: 0
Single Unit Vehicles: LL Tons
Combination Type 3S-1: Tons
Combination Type 3S-2: Tons

Bridge Posting Level: L Legal Load Only

Inspection/Appraisal Information

Inspection Date: 09/29/2014 Inspection Temperature: 73 Deg. F

Deck:	N	NOT APPLICABLE
Superstructure:	4	POOR CONDITION - ADVANCED DETERIORATION
Substructure:	5	FAIR CONDITION - MINOR SECTION LOSS, CRACKS
Culvert:	N	NOT APPLICABLE
Channel and Protection:	4	POOR CONDITION - ADVANCED DETERIORATION
Structural Evaluation:	4	MINIMUM ADEQUACY TO BE LEFT IN PLACE
Deck Geometry:	2	INTOLERABLE - HIGH PRIORITY FOR REPLACEMENT
Underclearance-Vert/Lat.:	N	NOT APPLICABLE
Waterway Adequacy:	9	SUPERIOR TO PRESENT DESIRABLE CRITERIA
Approach Roadway Align:	3	INTOLERABLE - HIGH PRIORITY FOR CORRECTION
Bridge Railing Appraisal:	2	Doesn't Meet Standards
Approach Guardrail:	111	Does Not Exist / Does Not Exist / Does Not Exist
Pier Navig Protection:	N	N/A

Insp by (Name): JovesE
Insp by (Name): PasquesiJ

Utilities Attached: N N/A; N N/A; N N/A

Deck Wearing Surf: N N/A - NO DECK
Deck Membrane: N N/A
Deck Protection: N N/A
Total Deck Thick: 0.0
Last Paint Date:

** Actual Posted Limits **

Single Unit Vehicles: Tons
Combination Type 3S-1: Tons
Combination Type 3S-2: Tons
One Truck At A Time: 0

Last Paint Type:

Inspection Remarks:

1. BRIDGE N&S PARAPET WALL BASES HAVE DETERIORATED. FOOTING EXPOSED AND FACES O F SPANDREL WALLS HAVE MANY CONCRETE SPALLS.2. NE PARAPET WALL RETROFIT REPAIRE D IN SUMMER 20143. SW STORM INLET CLOGGD. THIS REQUIRES PRESSURE WATER/AIR CLE

Underwater Inspection/Appraisal Information

Inspection Date:
Temperature:
Inspection Method:
Inspected By:
Inspected By:
Appraisal Rating:
Inspection Remarks:

Scour Critical Information

Rating: 8 CALCULATED SCOUR ABOVE FOOTING
Evaluation Method: B Rational Analysis
Analysis Date: 07/13/1992
Analysis By: JOE PASQUESI

Miscellaneous

Fracture Critical Members: No
Microfilm Data Recorded: No

Construction Information

Year:	1935 Original		Reconstructed	
Route:		Sta:		Sta:
Section Nbr:				
Contract Nbr:				
Fed Aid Pr #:	00000000000000			
Built By:	4 CITY			

Proposed Improvement

Cost Estimate Year: 2000 Length: 144
Type of Work: 31 REPLACEMENT DUE TO SUBSTANDARD CAPACITY OR GEOMETRICS
Done By: 1 Contract
Remarks:

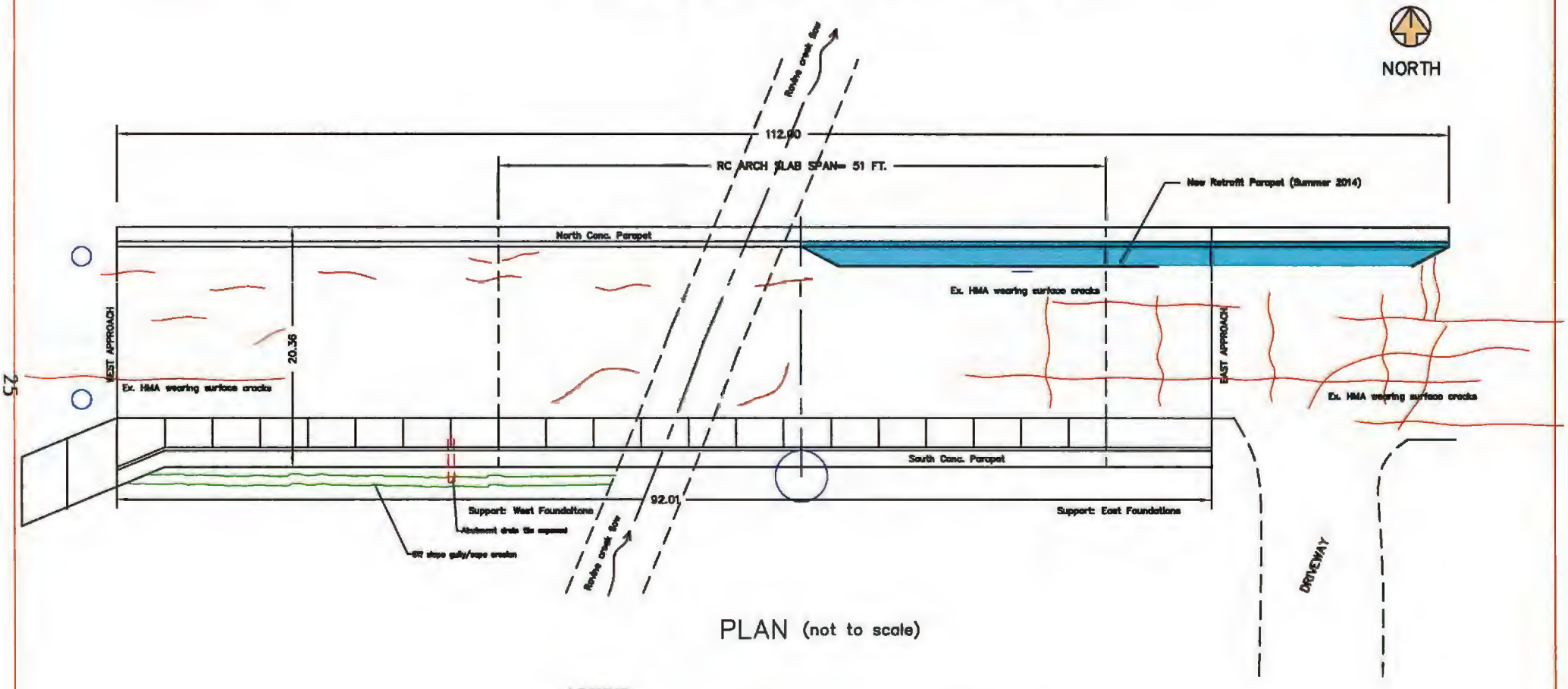
*** Costs In Dollars ***

Bridge Cost:	190
Roadway Cost:	19
Total Project Cost:	285

Structure No. 049-6554 Structure Name Central Av Bridge over Ravine	Posting: _____Tons	Bridge Skew Angle: _____	Inspection Date: 10/01/2014 Inspected By: EJoves

City of Highland Park
Sht. 1 of 4

RATING SHEET – CONCRETE ARCH SLAB/SPANDREL – SIMPLE SPAN
PLAN VIEW, REINFORCED CONCRETE ARCH BRIDGE



PLAN (not to scale)

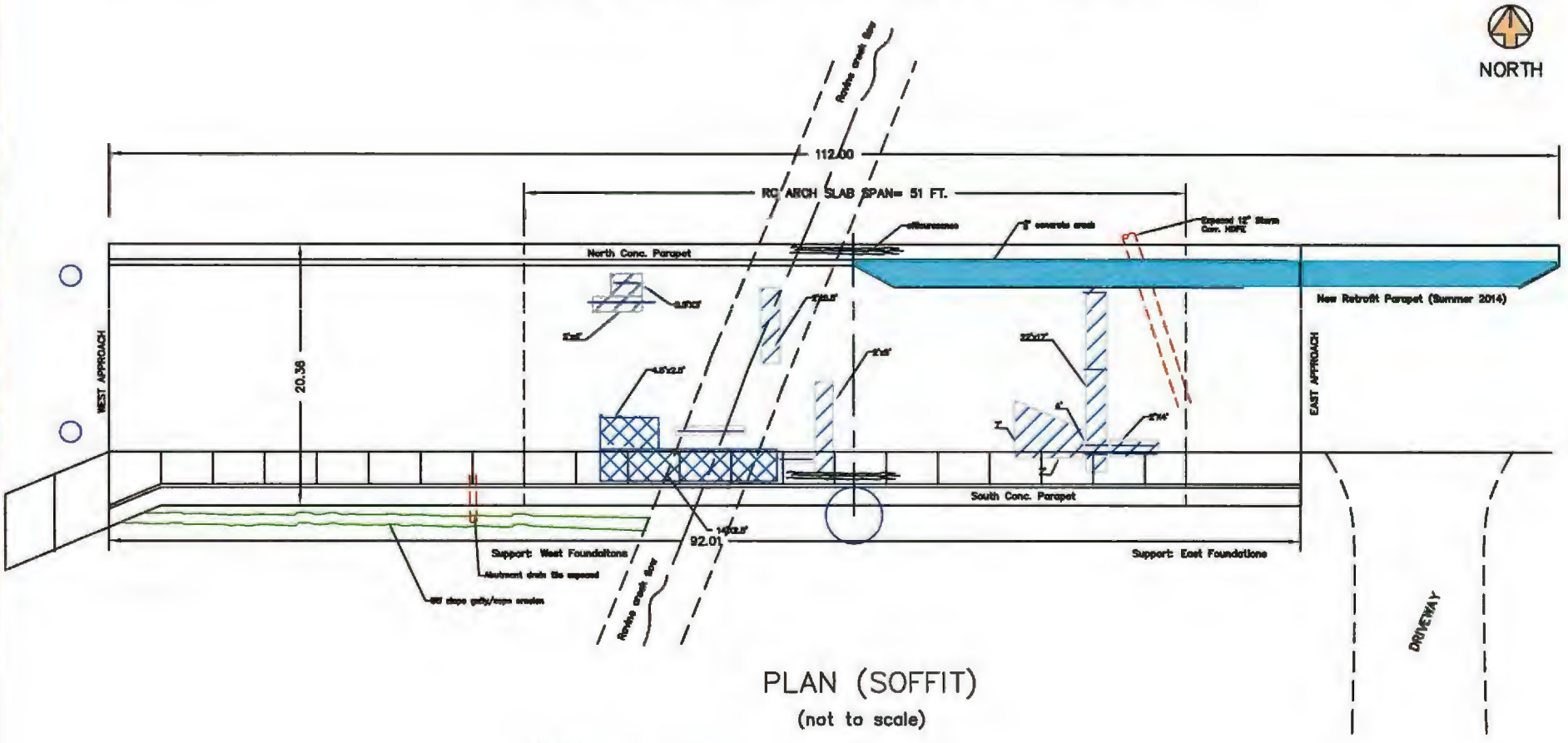
LEGEND:

Delaminations | Patches | Exposed Rebars

Structure No. 049-6554 Structure Name Central Av Bridge over Ravine	Posting: _____Tons	Bridge Skew Angle: _____	Inspection Date: 09/29/2014 Inspected By: JPasquesi/EJoves

City of Highland Park
Sht. 2 of 4

RATING SHEET – CONCRETE ARCH SLAB/SPANDREL – SIMPLE SPAN
PLAN VIEW, SOOFIT ARCH CONCRETE SUPERSTRUCTURE



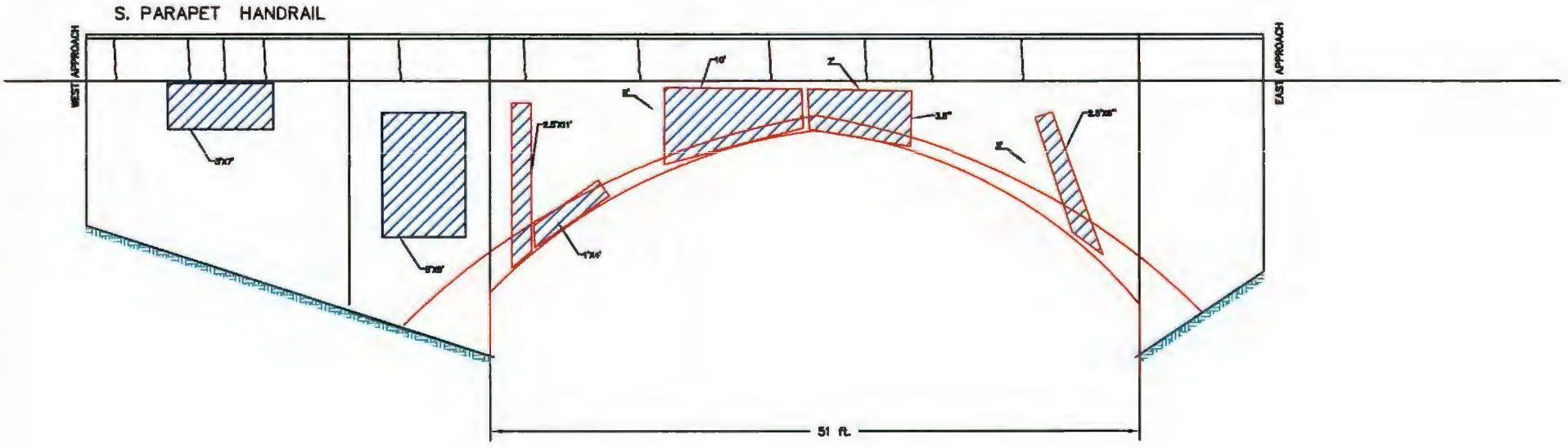
PLAN (SOFFIT)
(not to scale)

LEGEND:
Delaminations
Patches
Exposed Rebars

Structure No. 049-6554 Structure Name: Central Av Bridge over Ravine	Posting: _____Tons	Bridge Skew Angle: _____	Inspection Date: 09/29/2014 Inspected By: Edgar Joves , Joe Pasquesi

City of Highland Park
Sht. 3 of 4

RATING SHEET – CONCRETE ARCH SLAB/SPANDREL – SIMPLE SPAN
VIEWED LOOKING NORTH



S. ELEVATION (not to scale)

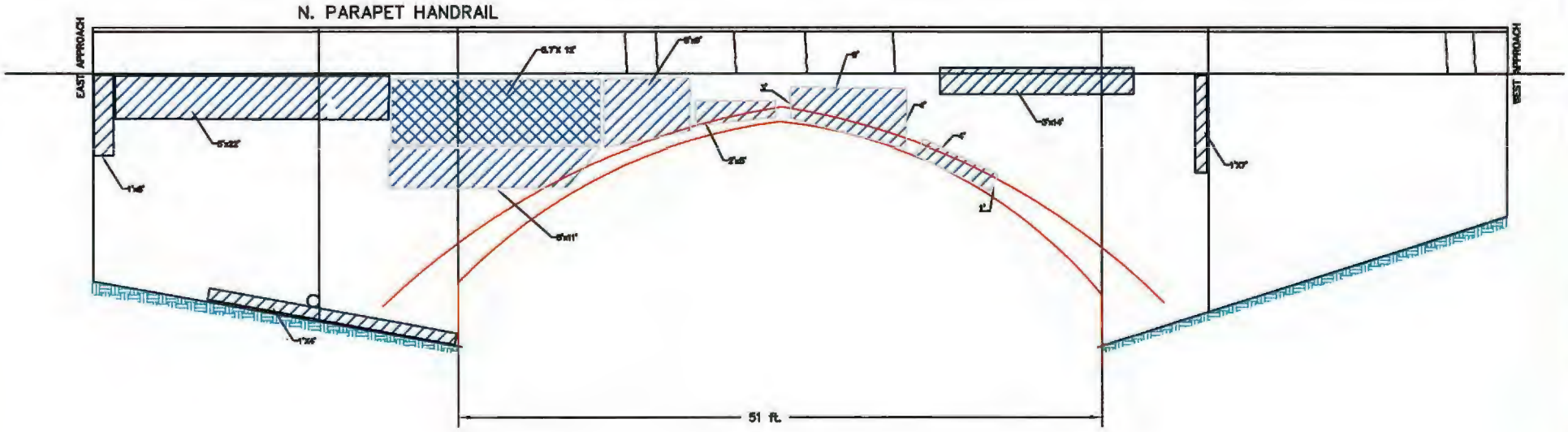
LEGEND:

Support: _____ Delaminations Patches Exposed Rebars Support: _____

Structure No. 049–6554 Structure Name: Central Av Bridge over Ravine	Posting: _____Tons	Bridge Skew Angle: _____	Inspection Date: 09/29/2014 Inspected By: Joe Pasquesi, Edgar Joves

City of Highland Park
Sht. 4 of 4

RATING SHEET – CONCRETE ARCH SLAB/SPANDREL – SIMPLE SPAN
VIEWED LOOKING SOUTH



N. ELEVATION (not to scale)

LEGEND:

Support: _____ Delaminations Patches Exposed Rebars Support: _____

Bridge Inspection Form
Pontis Format

S.N. 049-6554, Central Ave Bridge (RC Arch Slab Superstructure)
Insp Date: 10/1/2014
Insp. By: Edgar Joves
Calc By: Edgar Joves
Chkd By:
Span #

Date: 11/16/2014
Date:
Summary

Facility Carried: Central Avenue
Feature Crossing: Upstream ravine
Location: Highland Park, Illinois

Design Loads: 10 Tons/axle;

Elem	Description	Env	Qty	Units	Quantity in Condition States				Comments
					1	2	3	4	
144	Concrete Arch Slab Superstructure	2	1,045	SF		805	90	145	
331	Concrete Handrail	2	204	SF			56	148	
x-csw	Concrete Spandrel Wall	2	840	SF		566	274		
218	Concrete Wingwalls	1	1,850	SF		1,586	264		
8361	Abutment/Foundation Scour	1	2	EA		1	1		

Illinois Department of Transportation

Routine Inspection Report

SN: 049-6554	District: 1	Spans: 3	Appr. Spans:	Skew:	ADT:	Truck Pct:
ADT Un:	Maint. Co: Lake	Twsp: Moraine			Status: Open-No Restrict	
Facility Carried: Central Ave			Feature Crossed: Ravine			
Location: 1.6 Mi North of Lake-Cook	Municipality: Highland Park		Team/Sub Section: /		Insp/Rte:	
Bridge Name: Central Ave. Bridge			Material & Type: Conc/Arch-Deck Filled Spandrel			
Insp. Intervals Routine: 24	Fracture Critical: 0	Underwater: 0	Special:		Element Level:	
90 – Inspection Date: 9 / 29 / 2014			90C – Temp. (°F): 73 °F		90B1 – In Depth: ☐	
Is Delinquent: ☐	Reason:					
90A – Agency Program Manager: Edgar Joves			90A3 – Consultant Program Manager: Joel Ihde			
90A1 – Team Leader: Edgar Joves			90A2 – Inspector: Joe Pasquesi			
90B– Inspection Remarks:						

Previous Inspection: Single lane bridge concrete parapets are highly deteriorated. Footing exposed, faces of spandrel walls and edge of concrete arch have many areas of deterioration. Existing concrete is generally sound. Embankment at southwest spilling into ravine.

Resources

Time to Inspect (H:M):	1:00	:	Traffic Control:		Boat:		Waders:		Snooper:		
Ladder:		Manlift:		Bucket Truck:		Other:					

Inspector's Appraisals

	Prev	New	Comments
58 – Deck Condition:	N	N	
59 – Superstructure Cond:	5	4	Condition of reinforcing bars at the previously patched super structure bottom slab could not be assessed. More concrete delaminations and rusted rebars are visible on concrete arch-slab.
60 – Substructure Cond:	5	5	
62 – Culvert Condition:	N	N	
61 – Channel Condition:	4	4	
71 – Waterway Adequacy:	9	9	
72 – Approach Rdwy Align:	3	3	
111 – Pier Navig Protection:	N	N	

90B – Inspection Remarks:

1. Bridge N&S parapet wall bases have deteriorated. Footing exposed & faces of spandrel walls have many concrete spalls.
2. NE Parapet Wall Retrofit repaired in Summer 2014

Additional Inspection Data

	Prev	New
36A – Bridge Railing Adequacy:	2	2

Rail Types: _____

	Prev	New		Prev	New		Prev	New
Approach Guardrail Adequacy: 36B – Transitions:	1	1	36C – Guardrail:	1	1	36D – Ends:	1	1

	Prev	New		Prev	New		Prev	New
108A – Wearing Surface Type:	N	N	108B – Type of Membrane:	N	N	108C – Deck Protection:	N	N
108D – Total Deck Thickness (In.):	vari	vari						

	Prev	New
59A – Paint Date (Mo/Yr):	__ / ____	/
59B – Paint Type:	- - - - - - - -	
59C – Utilities Attached:	- - -	

Color: Fascia – _____; Inter. – _____;Railing – _____

		Prev	New
Weight Limit Posting:	70A2 – Single Unit Vehicles:	I	T Tons
	70B2 – Combination Type 3S-1 (3 or 4 axles):	I	T Tons
	70C2 – Combination Type 3S-2 (5 or more axles):	I	T Tons
	70D2 – One Truck at a Time:	—	

Joint Openings (In.) _____

90B – Inspection Remarks Continued:

3. SW storm inlet clogged. This requires pressure water/air clearing.
4. 2 east storm manhole outfalls dissipators on ravine stream banks are collapsing.
5. Retrofit RC parapet constructed on NE bridge summer 2014.

	Signature	Date
Inspection Team Leader:	Edgar Jaw	9 / 29 / 2014
Consultant Program Manager:	[signature]	10/2/14
Agency Program Manager:	Edgar Jaw	10/23/14

EXISTING ℄ CENTRAL AVENUE

EX ROW

EXISTING SN 049-6554

EX ROW

CENTRAL PARK

N

51'

16'

CENTRAL AVENUE

115

14

16'

115+00

116

117

16'

46'

17'

49'

50'

52

16'

EX ROW

UNNAMED RAVINE

EX ROW

EX ROW

EXISTING PEDESTRIAN BRIDGE (TO REMAIN)

LAKE AVENUE

8'

8'

EXISTING ℄ LAKE AVENUE

0 20' 40'

GRAPHIC SCALE

LOOKING EAST

LOOKING NORTH

DATE: 9/9/2016
FILENAME: N:\PRO\X0220348.000\0220348.01\RoseArey\Exhibits\X0220348.01-20ScalePNP_Historic_Society.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

CENTRAL AVE OVER RAVINE

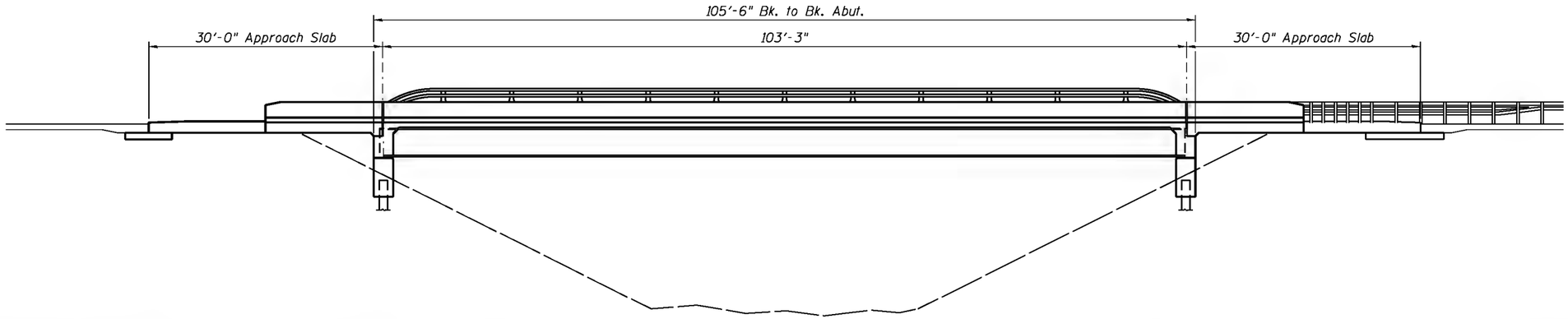
EXISTING AERIAL VIEW

SCALE: 1" = 20'

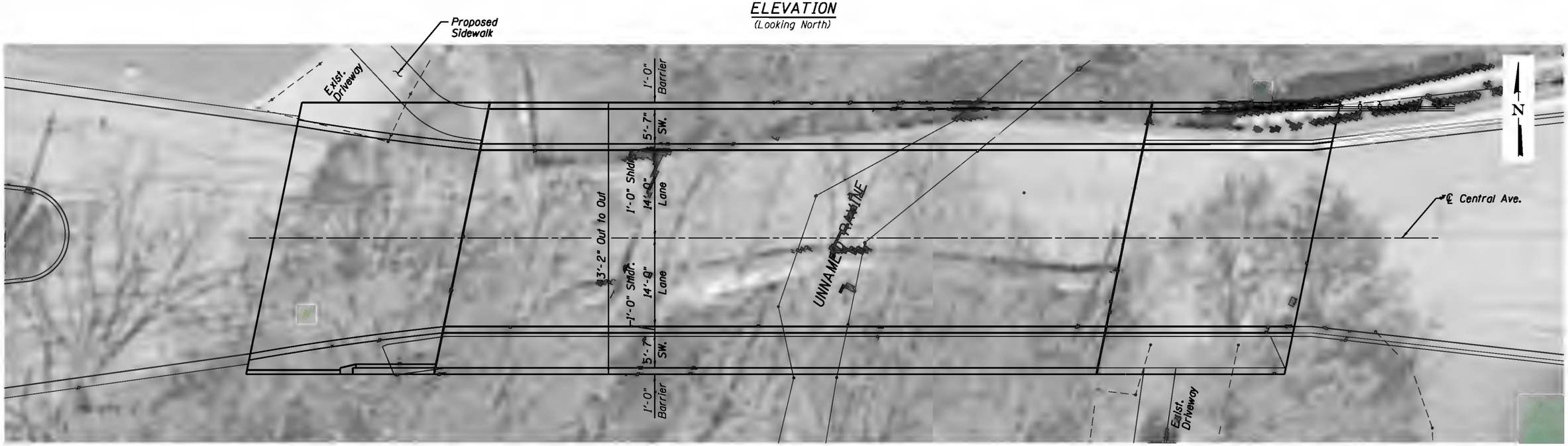
DRAWN BY: SBA

DATE: 9/9/2016

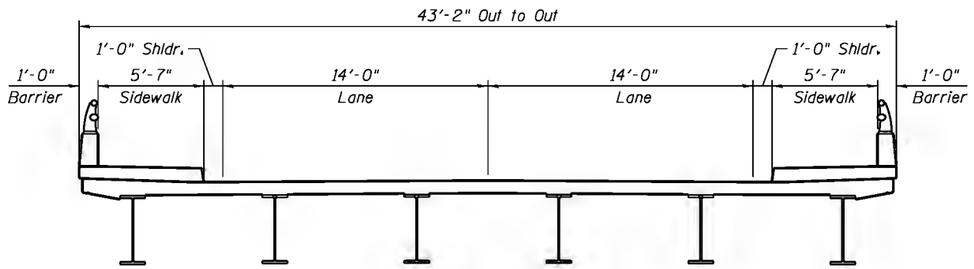
CHECKED BY: BWS



ELEVATION
(Looking North)



PLAN



PROPOSED CROSS SECTION
(Looking East)

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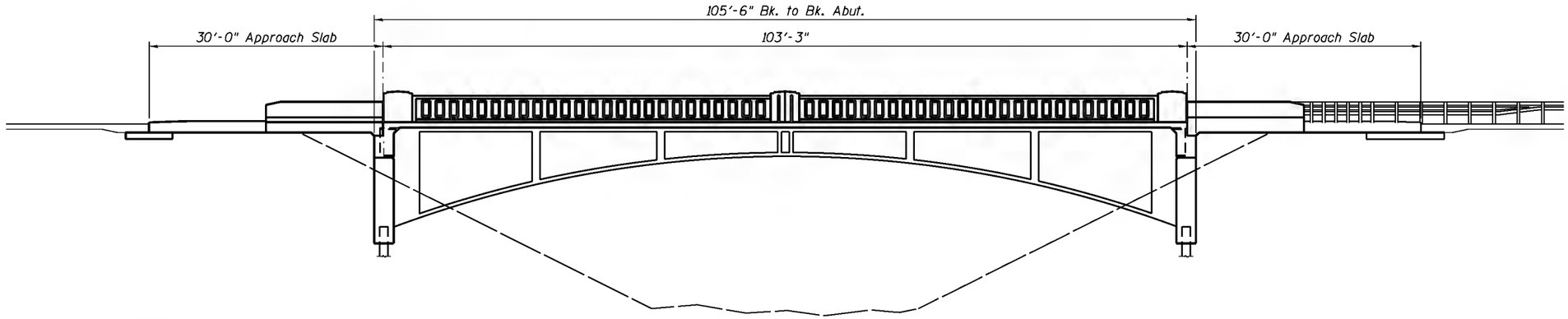
CENTRAL AVE OVER RAVINE

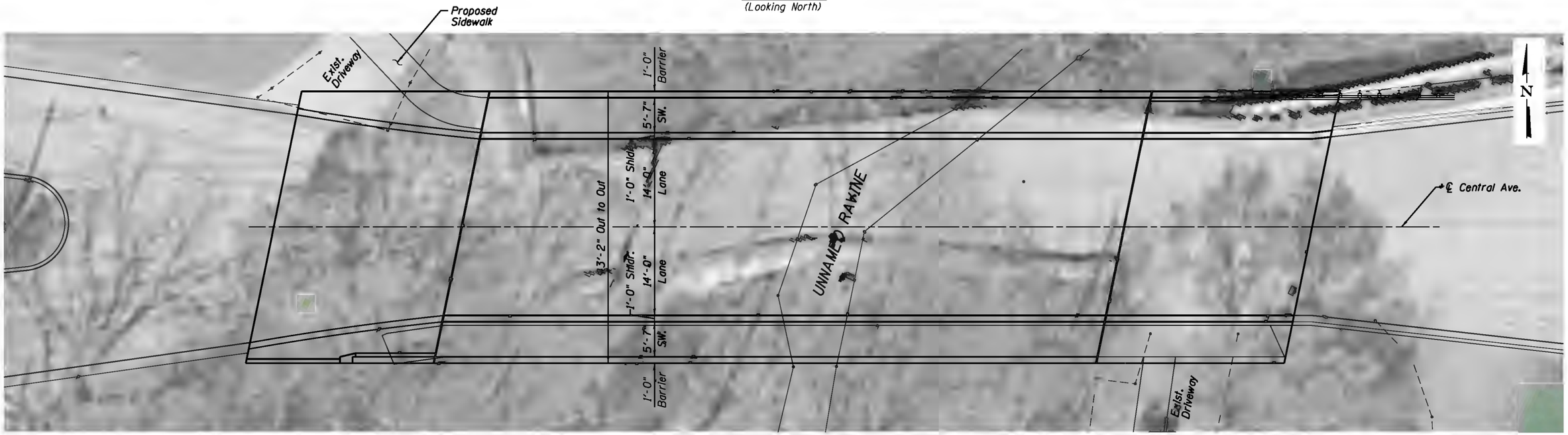
STANDARD IDOT BRIDGE
PROPOSED GENERAL PLAN & ELEVATION

SCALE: 1/8" = 1'-0"
DATE: 9/16/2016
DRAWN BY: SBA
CHECKED BY: BWS

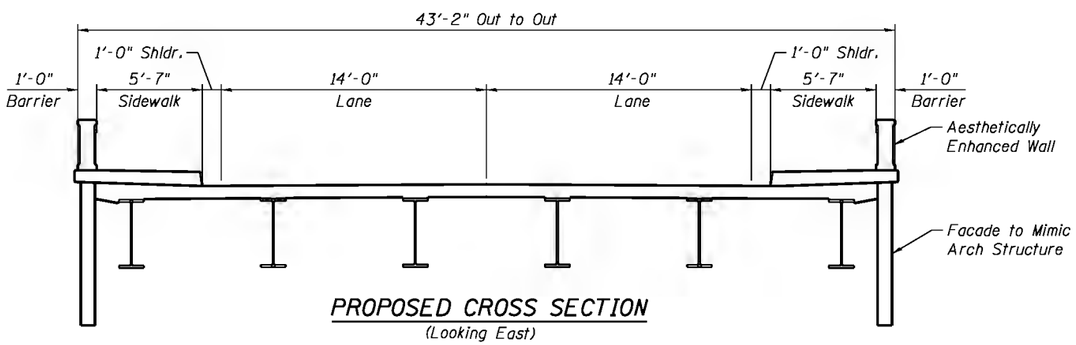
DATE: 9/16/2016
FILENAME: N:\PROJ\00220349.000\00220349.011\roadway\Exhibits\00220349_Exhibit 2_Hilario_Society.dgn



ELEVATION
(Looking North)



PLAN



PROPOSED CROSS SECTION
(Looking East)

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CENTRAL AVE OVER RAVINE

ENHANCED BRIDGE AESTHETICS
PROPOSED GENERAL PLAN & ELEVATION

SCALE: 1/8" = 1'-0"
DRAWN BY: SBA
DATE: 9/16/2016
CHECKED BY: BWS

DATE: 9/16/2016
FILENAME: N:\PROJ\00220349.000\220349.01\Roadway\Exhibits\00220349_Exhibit 3_Historic_Society.dgn