



THE VILLAGE OF
LONG GROVE

Robert Parker Coffin
Covered Bridge Future

Overview

- ▶ Evaluation History
- ▶ Johnson Laskey Architect's Findings
- ▶ Repair Option
- ▶ Replacement Option ("Federal Option")
- ▶ Decision Flowchart

History

- ▶ December 2013
 - Johnson Laskey Architects (JLA), along with H.W. Lochner, retained to assess bridge and recommend repairs
- ▶ February 2013
 - JLA completes Phase I Feasibility Study / Assessment
- ▶ June 2014
 - JLA completes Phase II Preliminary Repair Plan
- ▶ August 2014
 - JLA finalizes Phase II Preliminary Repair Plan

Johnson Laskey Architects Findings

▶ Phase I Feasibility Study

- Bridge Superstructure is in Satisfactory Condition with Minor Deterioration Noted
 - Repainting and minor steel repairs needed
- Deck Condition is in Very Good Condition with No Problems Noted
 - Deck replaced in 2004
- Substructure in Poor Condition with Advanced Deterioration Noted
 - Limestone Abutments need repair
 - Poor Drainage
- Timber Cover deteriorating. Repair not addressed by JLA.

Johnson Laskey Architects Findings (Cont.)

▶ Phase II Preliminary Repair Plan

- Recommendation: FULL RESTORATION IN PLACE
 - Repaint, replace steel members, replace bolted connections with rivets, replace deteriorated limestones at abutment, install drainage system behind stone abutment, minor superstructure repairs, refinish, paint, replace timber decking and sidewalk, replace broken granite thresholds, replace metal tire plates, replace broken approach bricks, replace electric service and lamps
- Replacement of sidewalk Railing NOT Included
- Repair of timber cover NOT reviewed or included

Options

▶ FULL RESTORATION IN PLACE

JOHNSON LASKEY ARCHITECTS: ENGINEER'S OPINION OF PROBABLE COST

RPC COVERED BRIDGE FULL RESTORATION IN-PLACE
PREPARED BY JOHNSON LASKEY ARCHITECTS
AUGUST 2014 PRELIMINARY REPAIR PLAN REPORT

PAY ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	VALUE
1	ABUTMENT REPAIRS	1.0	L. SUM	\$110,000.00	\$110,000.00
2	STEEL SUPERSTRUCTURE REPAIRS	1.0	L. SUM	\$90,000.00	\$90,000.00
3	CLEAN AND REPAINT STEEL	1.0	L. SUM	\$75,000.00	\$75,000.00
4	STRIP SEAL JOINTS / GRANITE THRESHOLD REPAIRS	1.0	L. SUM	\$15,000.00	\$15,000.00
5	WOOD COVERT STABILIZATION	1.0	L. SUM	\$5,000.00	\$5,000.00
6	ROADWAY PAVER BRICK REMOVAL / REPLACEMENT	1.0	L. SUM	\$15,000.00	\$15,000.00
7	TIMBER DECK REPLACEMENT	1.0	L. SUM	\$25,000.00	\$25,000.00
8	ELECTRICAL REMOVAL AND REPLACEMENT	1.0	L. SUM	\$5,000.00	\$5,000.00
9	MOBILIZATION	1.0	L. SUM	\$20,000.00	\$20,000.00
SUB-TOTAL:					\$360,000.00
CONTINGENCY (20%):					\$72,000.00
SUB-TOTAL CONSTRUCTION COSTS:					\$432,000.00
PHASE I (PLANNING / PERMITTING) ENGINEERING:					\$25,000.00
PHASE II (DESIGN) ENGINEERING:					\$75,000.00
PHASE III (CONSTRUCTION) ENGINEERING:					\$30,000.00
SUB-TOTAL ENGINEERING COSTS:					\$130,000.00
GRAND TOTAL PROJECT COSTS:					\$562,000.00

Detailed Description:

1. This OPC is a reproduction of the OPC prepared by Johnson Laskey Architects, presented in their "Preliminary Repair Plan" dated August 2014.
2. This OPC does not include architectural design fees or prevention services.
3. These costs have not been vetted by Gewalt Hamilton Associates, Inc.
4. **Funding is 100% local.**

Project Grand
Total: \$562,000

Local Funds:
\$562,000

Federal Funds:
\$0

One Lane,
Covered Bridge
Remains

Options (Cont.)

RECONSTRUCTION (FEDERAL OPTION) “BEST CASE SCENARIO”

PRELIMINARY ENGINEER'S OPINION OF PROBABLE COST

ROBERT PARKER COFFIN BRIDGE REPLACEMENT - FEDERAL OPTION
LONG GROVE, IL
5000.000

Date: April 8, 2015
Prepared by: Geoffrey Perry, P.E.

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PRELIMINARY ENGINEER'S OPINION OF PROBABLE COST - COMPLETE 80 / 20 MATCH FOR ALL PHASES

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	VALUE	FEDERAL FUNDING (80%)	LOCAL FUNDING (20%)
REMOVAL OF EXISTING STRUCTURE	1.00	EACH	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
STRUCTURE EXCAVATION	240.00	CJ. YD.	\$30.00	\$7,200.00	\$5,760.00	\$1,440.00
COFFERDAMS	2.00	EACH	\$30,000.00	\$60,000.00	\$48,000.00	\$12,000.00
CONCRETE STRUCTURES (ABUTMENTS)	80.00	CJ. YD.	\$80.00	\$64,000.00	\$51,200.00	\$12,800.00
ABUTMENT STONE FACADE	1.00	L. SUM	\$30,000.00	\$30,000.00	\$24,000.00	\$6,000.00
CONCRETE SUPERSTRUCTURE (DECK)	36.40	CJ. YD.	\$850.00	\$30,940.00	\$24,752.00	\$6,188.00
TIMBER PLANK VENEER	2,400.00	SQ. FT.	\$25.00	\$60,000.00	\$48,000.00	\$12,000.00
STEEL DRIVING PLATES, 12 INCH WIDE	240.00	FOOT	\$100.00	\$24,000.00	\$19,200.00	\$4,800.00
FURNISHING AND ERECTING STRUCTURAL STEEL	1.00	L. SUM	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
PIN-CONNECTED PONY TRUSS TRAFFIC BARRIER	2.00	EACH	\$50,000.00	\$100,000.00	\$80,000.00	\$20,000.00
REINFORCEMENT BARS, EPOXY COATED	15,280.00	POUND	\$1.50	\$22,920.00	\$18,336.00	\$4,584.00
PILING	500.00	FOOT	\$75.00	\$37,500.00	\$30,000.00	\$7,500.00
DECORATIVE METAL RAILING	45.00	FOOT	\$200.00	\$9,000.00	\$7,200.00	\$1,800.00
TIMBER BRIDGE COVER	1.00	L. SUM	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
ROADWAY APPROACH IMPROVEMENTS	1.00	L. SUM	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
BRICK PAVEMENT	1,600.00	SQ. FT.	\$50.00	\$80,000.00	\$64,000.00	\$16,000.00
GRANITE CURBS	160.00	LIN. FT.	\$75.00	\$12,000.00	\$9,600.00	\$2,400.00
STEEL-BACKED TIMBER GUARDRAIL	160.00	LIN. FT.	\$150.00	\$24,000.00	\$19,200.00	\$4,800.00
STEEL-BACKED TIMBER GUARDRAIL END SECTIONS	4.00	EACH	\$4,500.00	\$18,000.00	\$14,400.00	\$3,600.00
ADDITIONAL BRIDGE ITEMS (WALL DRAIN, ETC.)	1.00	L. SUM	\$80,000.00	\$80,000.00	\$64,000.00	\$16,000.00
SITE RESTORATION	1.00	L. SUM	\$30,000.00	\$30,000.00	\$24,000.00	\$6,000.00
SUB-TOTAL CONSTRUCTION COSTS:				\$1,289,560.00	\$1,031,648.00	\$257,912.00
PHASE I ENGINEERING (10% OF CONSTRUCTION COSTS):				\$128,956.00	\$103,164.80	\$25,791.20
PHASE II ENGINEERING (10% OF CONSTRUCTION COSTS):				\$128,956.00	\$103,164.80	\$25,791.20
PHASE III ENGINEERING (12% OF CONSTRUCTION COSTS):				\$154,747.20	\$123,797.76	\$30,949.44
GRAND TOTAL:				\$1,702,219.20	\$1,361,775.36	\$340,443.84

Detailed Description:

- Does not include overhead / pole electric relocation by ComEd. We anticipate this will be no charge to the Village as part of the license agreement.
- This cost estimate assumes that all bridge elements will be eligible for 80/20 funding match, in their entirety.
- Decorative elements are highlighted yellow.

*Since Gewalt-Hamilton Associates Inc. Has No Control Over the Cost of Labor, Materials, or Equipment, or Over the Contractor's Methods of Determining Prices, or Over Competitive Bidding of Market Conditions, Opinions of Probable Costs, as Provided for Herein, Are to be Made on the Basis of Experience and Qualifications and Represent the Best Judgement as a Design Professional Familiar with the Construction Industry. Gewalt-Hamilton Associates, Inc., Cannot and Does Not Guarantee That Proposals, Bids, or The Construction Costs Will Not Vary From Opinions of Probable Cost Prepared for the Owner.

Project Grand
Total: \$1,702,219

Local Funds:
\$340,444

Federal Funds:
\$1,361,775

Two-Lane Bridge
14+ Clearance
Decorative
Elements Included

Options (Cont.)

RECONSTRUCTION (FEDERAL OPTION) “WORST CASE SCENARIO”

PRELIMINARY ENGINEER'S OPINION OF PROBABLE COST

ROBERT PARKER COFFIN BRIDGE REPLACEMENT - FEDERAL OPTION
LONG GROVE, IL
5000.000

Date: April 8, 2015
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PRELIMINARY ENGINEER'S OPINION OF PROBABLE COST - COMPLETE 80 / 20 MATCH FOR ONLY "STANDARD BRIDGE ITEMS"

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	VALUE	FEDERAL FUNDING	LOCAL FUNDING
REMOVAL OF EXISTING STRUCTURE	1.00	EACH	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
STRUCTURE EXCAVATION	240.00	CU. YD.	\$30.00	\$7,200.00	\$5,760.00	\$1,440.00
COFFERDAMS	2.00	EACH	\$30,000.00	\$60,000.00	\$48,000.00	\$12,000.00
CONCRETE STRUCTURES (ABUTMENTS)	80.00	CU. YD.	\$800.00	\$64,000.00	\$51,200.00	\$12,800.00
ABUTMENT STONE FACADE	1.00	L. SUM	\$30,000.00	\$30,000.00	\$24,000.00	\$6,000.00
CONCRETE SUPERSTRUCTURE (DECK)	36.40	CU. YD.	\$850.00	\$30,940.00	\$24,752.00	\$6,188.00
TIMBER PLANK VENEER	2,400.00	SQ. FT.	\$25.00	\$60,000.00		\$60,000.00
STEEL DRIVING PLATES, 12 INCH WIDE	240.00	FOOT	\$100.00	\$24,000.00		\$24,000.00
FURNISHING AND ERECTING STRUCTURAL STEEL	1.00	L. SUM	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
PIN-CONNECTED PONY TRUSS TRAFFIC BARRIER	2.00	EACH	\$50,000.00	\$100,000.00	\$16,000.00	\$84,000.00
REINFORCEMENT BARS, EPOXY COATED	15,280.00	POUND	\$1.50	\$22,920.00	\$18,336.00	\$4,584.00
PILING	500.00	FOOT	\$75.00	\$37,500.00	\$30,000.00	\$7,500.00
DECORATIVE METAL RAILING	45.00	FOOT	\$200.00	\$9,000.00	\$2,700.00	\$6,300.00
TIMBER BRIDGE COVER	1.00	L. SUM	\$150,000.00	\$150,000.00		\$150,000.00
ROADWAY APPROACH IMPROVEMENTS	1.00	L. SUM	\$150,000.00	\$150,000.00	\$120,000.00	\$30,000.00
BRICK PAVEMENT	1,600.00	SQ. FT.	\$50.00	\$80,000.00	\$5,120.00	\$74,880.00
GRANITE CURBS	160.00	LIN. FT.	\$75.00	\$12,000.00		\$12,000.00
STEEL-BACKED TIMBER GUARDRAIL	160.00	LIN. FT.	\$150.00	\$24,000.00	\$4,480.00	\$19,520.00
STEEL-BACKED TIMBER GUARDRAIL END SECTIONS	4.00	EACH	\$4,500.00	\$18,000.00	\$5,760.00	\$12,240.00
ADDITIONAL BRIDGE ITEMS (WALL DRAIN, ETC.)	1.00	L. SUM	\$80,000.00	\$80,000.00	\$64,000.00	\$16,000.00
SITE RESTORATION	1.00	L. SUM	\$30,000.00	\$30,000.00	\$24,000.00	\$6,000.00
SUB-TOTAL CONSTRUCTION COSTS:				\$1,289,560.00	\$684,108.00	\$605,452.00
PHASE I ENGINEERING (10% OF CONSTRUCTION COSTS):				\$128,956.00	\$103,164.80	\$25,791.20
PHASE II ENGINEERING (10% OF CONSTRUCTION COSTS):				\$128,956.00	\$103,164.80	\$25,791.20
PHASE III ENGINEERING (12% OF CONSTRUCTION COSTS):				\$154,747.20	\$123,797.76	\$30,949.44
GRAND TOTAL:				\$1,702,219.20	\$1,014,235.36	\$687,983.84

Detailed Description:

- Does not include overhead / pole electric relocation by ComEd. We anticipate this will be no charge to the Village as part of the license agreement.
- This cost estimate assumes that only standard bridge elements will be eligible for 80/20 funding match, and the decorative element "upcharge" will be the responsibility of the Village. **Funding Match to be determined by "Federal Ruling" as part of Phase I Engineering.**
- Decorative elements are highlighted yellow.
- Funding: Items split 80/20 are NOT highlighted. Items 100% local responsibility highlighted red. Items that are split by "upcharge" are highlighted blue. (Standard Traffic Barrier = \$10,000 / Ea.; Standard Handrail = \$75 / ft.; Standard Guardrail = \$35 / ft.; Standard End Sections = \$1,800 / ea)

*Since Gewalt-Hamilton Associates Inc. Has No Control Over the Cost of Labor, Materials, or Equipment, or Over the Contractor's Methods of Determining Prices, or Over Competitive Bidding of Market Conditions, Opinions of Probable Costs, as Provided for Herein, Are to be Made on the Basis of Experience and Qualifications and Represent the Best Judgment as a Design Professional Familiar with the Construction Industry. Gewalt-Hamilton Associates, Inc., Cannot and Does Not Guarantee That Proposals, Bids, or The Construction Costs Will Not Vary From Opinions of Probable Cost Prepared for the Owner.

Project Grand
Total: \$1,702,219

Local Funds:
\$687,984

Federal Funds:
\$1,014,235

Two-Lane Bridge
14+ Clearance
Decorative
Elements Included

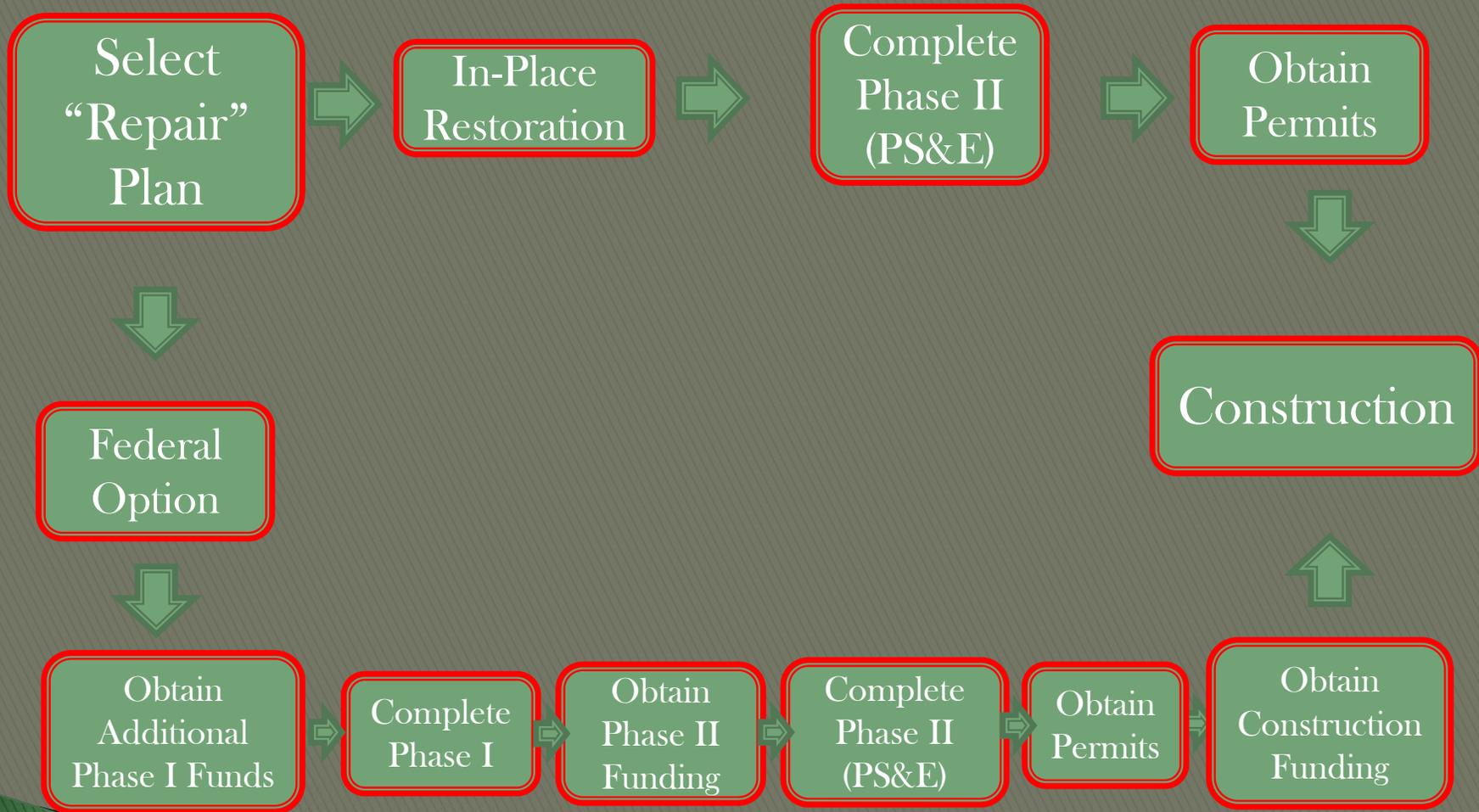
Options Summary

- ▶ Full Restoration In-Place
 - Local Funds: \$562,000
 - No Federal Match
 - One Lane, Covered Bridge remains
- ▶ Federal Option – Best Case Scenario
 - Local Funds: \$340,444
 - Federal Funds: \$1,361,775
 - New Bridge is 2 lanes with 14'+ vertical clearance
 - Decorative Elements Identified and mimicked
- ▶ Federal Option – Worse Case Scenario
 - Local Funds: \$687,984
 - Federal Funds: \$1,014,235
 - Same elements as above

Additional Remarks

- ▶ Gewalt Hamilton has not verified the costs of the Full Restoration In-Place Option
 - JLA was 44% below Gewalt Hamilton's Estimate for the Federal Option
- ▶ Long Grove has secured funding for Phase I of the Federal Option
 - Approval based on \$650,000 construction cost (JLA Figure)
 - Gewalt Hamilton will pursue additional funds (\$64k) to complete Phase I based on our construction estimate.
 - Response to additional funding request anticipated 4 weeks after funds are requested.

Decision Flowchart



Questions