



Winona Bridge Project
Bridge No. 5900
Public Meeting
May 2, 2016

We all have a stake in **A**  **B**





Welcome

Mr. Mark Peterson

Mayor of Winona

Executive Director Winona County Historical Society



Photo Courtesy of Mr. Al Mueller



Outline

- Introductions
- Project Goals
- New Bridge - Quick Recap
- Bridge No. 5900 Background
- Cost Growth Information
- Local Officials Feedback
- Options
- Section 106 - Historical
- Option Hybrids
- Open Discussion
- Potential Next Steps
- Questions ?





Introductions



Photo Courtesy of Mr. Juan Roque





Winona Involvement

June 2012: Winona City and Community Leaders Officially Call for New Two-Lane Span. Gov. Mark Dayton and U.S. Rep. Tim Walz also Voice Support for New Two-Lane Span, Express Frustration at Project's Pace.

Source: Winona Daily News, August 4, 2013

Result: Public Meeting in September 2012 to Announce Project Scope including new Bridge



Project Goals – May 2013

- Start Construction on the New Mississippi River Bridge as Expeditiously as Possible.
- Move Traffic to the New Bridge as Expeditiously as Possible to Minimize the Likelihood of Detours Related to Bridge Maintenance Work on the Existing Structure.
- Keep the River Crossing Open During Construction.



Project Goals - Responses

- Selected Project for First use of Construction Manager General Contractor (CMGC).
- Moved up Start of Construction:
 - Previously: Construction Starting in 2015.
 - Currently: July 2014 to March 2015.
 - Open new bridge by end of 2016.
- Assigned New Project Management Team.
- Our Construction Staging Approach will not Close the River Crossing During Construction.



Winona Bridge CMGC Project

○ WHY CMGC?

1. To meet the goal of opening the new bridge by the end of 2016, it was the only procurement method.
 - a. Break Project into Work Packages.
 - b. Overall Master Construction Schedule (fluid).
 - c. Streamline Plan Reviews and Advertisements.
 - d. Coordinate Early with Construction Team.

2. For the Rehabilitation of the Through Truss.
 - a. Recent Significant Bid Overruns on Similar Work.
 - b. Contractor Means and Methods.



Winona Bridge CMGC Project

April 2013 (Design-Bid-Build)

- Construction Limits not finalized.
- Geometric Layout – several iterations underway.
- According to Project Management team – R/W delaying project.
- Municipal Consent discussions with City not initiated.
- Environmental Assessment (EA) – no timeline.
- Final Design Consultant Contracts not started.
- Start of Construction – March 2015 ????



Winona Bridge CMGC Project

May 2013 (CMGC)

- Construction Limits finalized.
- Geometric Layout finalized.
- R/W not on critical path.
- Municipal Consent scheduled – obtained August 19, 2013.
- Environmental Assessment (EA) obtained January 27, 2014.
- Final Design Consultant Contracts all executed in time.
- Start of Construction – July 2014 to March 2015.
 - Started in July 2014.
 - Slowed down by flooding.



Winona Bridge CMGC Project

Need to look at the entire “Body of Work”



Winona Bridge CMGC Project

Why is this important?

Bridge 5900 Inspection Report Conditions



Winona Bridge CMGC Project

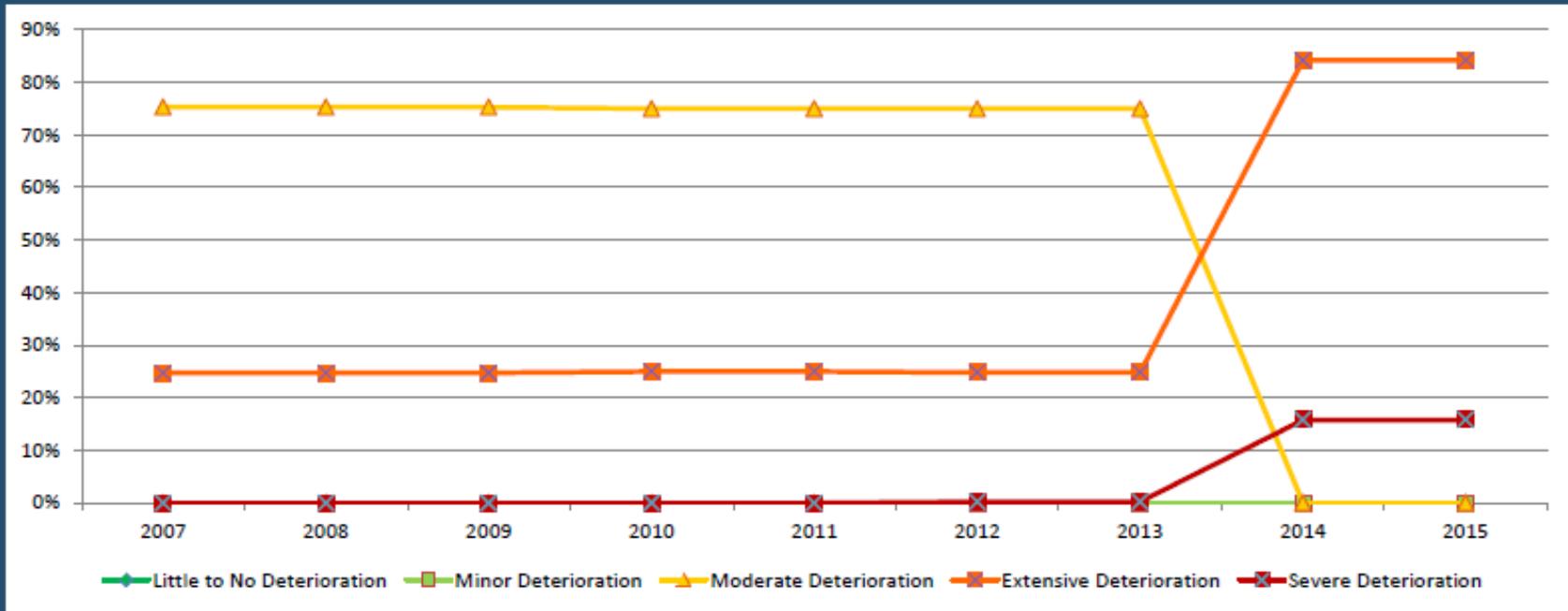
Why is this important?



Winona Bridge CMGC Project

Why is this important

Through Truss - Bottom Chord Element Condition Ratings





New Bridge - Quick Recap





New Bridge - Quick Recap

- Goal: Open by end of 2016.
- Started in July 2014.
- Slated to Open Between Labor Day and Thanksgiving.
- On-Budget in an Extremely Aggressive Schedule.





Bridge No. 5900 Background





Bridge No. 5900 Background

The State's only surviving example of a cantilevered through-truss





Bridge No. 5900 Background

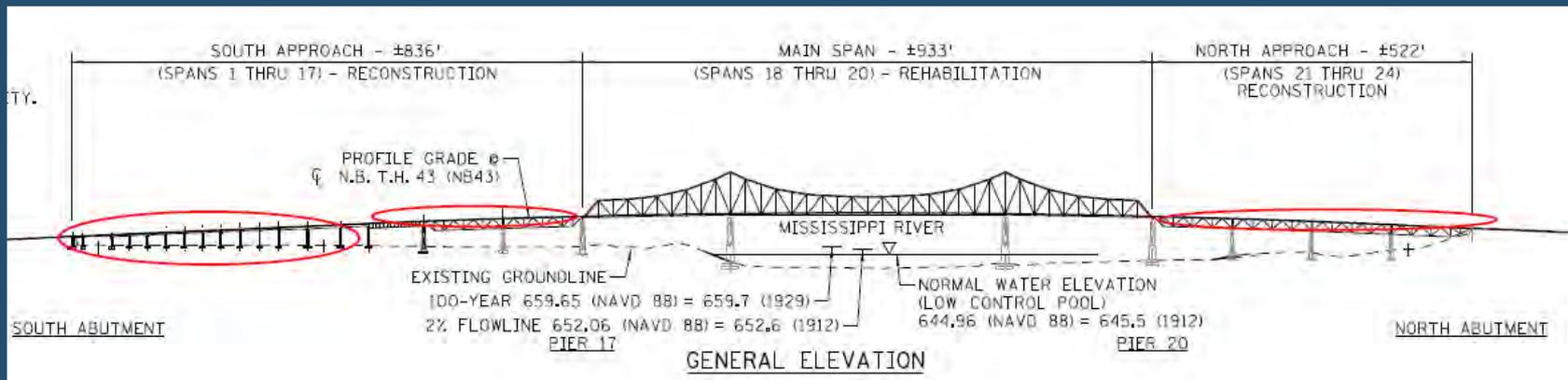




Bridge No. 5900 Background



New South Approach Spans; Rehab Main Truss Spans; New North Approach Spans





Bridge No. 5900 Background Through-Truss





Bridge No. 5900 Background Deck Trusses





Bridge No. 5900 Background Concrete Beam Approach Spans

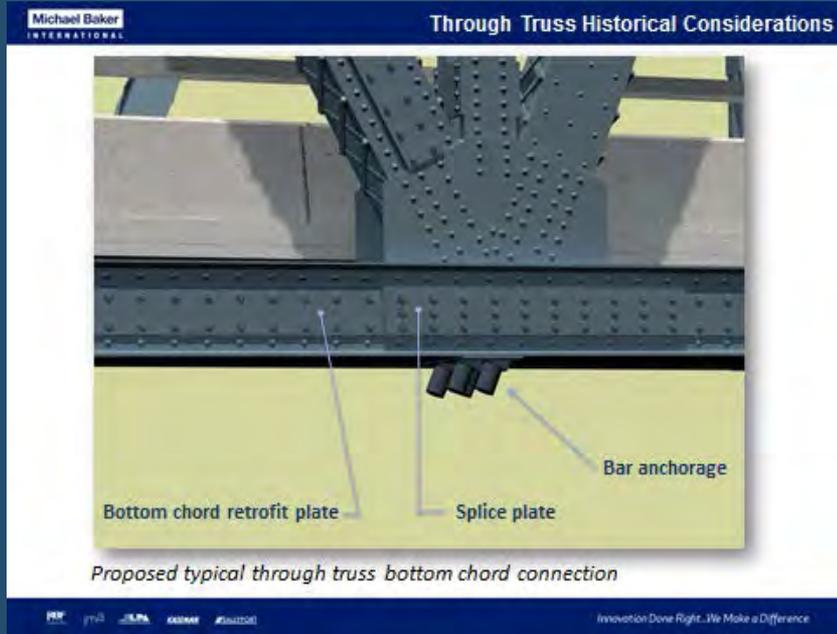




Cost Growth Information



Cost Growth Information



<http://www.dot.state.mn.us/winonabridge/work-package5-costs.html>





Cost Growth Information

- Current Approved Option #1 (Historical Full Build) is Projected to be \$20 million over Budget (construction costs).
 - \$20 million overrun for Bridge No. 5900.
 - Through-Truss Current Investment is approx. \$33.9 million as compared to \$13.4 million in Preliminary Design.
- \$10 million overrun in Overall Project Engineering Costs.
- Total Project Projected Cost Overrun: \$30 million.
- Cost Projections Based on Pricing from Estimating Team and Contractor (Construction Manager General Contractor).
- Budget set in 2009.
 - \$142 million for Engineering and Construction.
- Cost Overrun Summary Handout.
- Hit the “*Pause Button.*”
- State Chapter 152 Bonding Program Expires June 30, 2018.





Local Officials Feedback





Local Officials Feedback



CITY HALL
207 Lafayette Street
P.O. Box 378
Winona, MN 55987-0378
FAX 507/457-8293

February 22, 2016

Terry Ward
20 W 12th Street
Saint Paul, MN 55155

Dear Mr. Ward:

Attached is a resolution passed unanimously by the Winona City Council on February 18, 2016 regarding the bridge project in Winona and the anticipated cost overruns for the historic bridge. The Council has taken a quick and strong position on this because we hope every effort will be made to keep this project going, the funds to rehabilitate it found, and the project completed as planned and on schedule.

We look forward to continuing to work with you to help make this project something we can all be proud of.

Thank you.

Sincerely,


Mark F. Peterson
Mayor





Local Officials Feedback



April 21, 2016

Terry Ward
MnDOT – District 6
2900 48th St NW
Rochester, MN 55901

Dear Mr. Ward,

The Winona Area Chamber of Commerce encourages the Minnesota Department of Transportation – District 6 to continue its work with the City of Winona and other stakeholders to assure a timely, on schedule completion of the Highway 43 Bridge project.

It has always been, and remains today, the position of the Winona Area Chamber that at the end of the bridge project there are 4 lanes of bridge traffic over the river. There is no reason for the project at this late stage to deviate from the planned 4 lanes of crossing; indeed anything less would be dismaying when considering the land that has been acquired, the businesses that have been displaced and the realignment of the intersection to support the planned 4 lanes.

We would like to commend you for being accessible to the business community during the construction project thus far. You and your office have been very responsive to the concerns of the business community. We appreciate the hard work that your team and Ames Construction have put into the project. We pledge our support to you and the Winona City Council to continue to support your efforts to bring the project to a successful and timely conclusion resulting in the two-bridge crossing that the community has come to expect.

Sincerely,

A handwritten signature in black ink that reads 'Della D. Schmidt'.

Della D Schmidt
President/CEO
Winona Area Chamber of Commerce





Options





Options

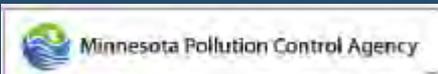
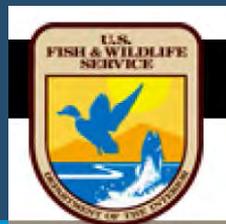


o Developed by MnDOT Project Team Based on Feedback from Public and Project Partners and Previous Commitments.

- Federal Highway Administration (FHWA)
- Minnesota's Historical Preservation Office (MnHPO)
- Environmental Permitting Agencies
- Winona City Staff / Council
- Elected Officials
- Emails / Phone Calls



US Army Corps of Engineers





Options

Milestone Dates:

- January 26, 2016
 - Visualizations for Option #1 - Historical Full Build.
- February 16, 2016: Budget Projections Presented to Council.
 - “*Pause Button*”
 - *FHWA Peer Review*
- March 25, 2016
 - Visualizations for Option #2 - Non-Historic Approach Span.
 - 5+ weeks after February 16, 2016
- April 4, 2016
 - City Council Update on Options.
- April 22, 2016
 - Visualizations for Option #2S - Steel Plate Girders for Deck Truss Spans.





Discussion of Options

Options and Agency Interactions Handout





Local Officials Feedback





Local Officials Feedback



CITY HALL

207 Lafayette Street
P.O. Box 378
Winona, MN 55987-0378
FAX 507/457-8293

April 5, 2016

Mr. Terry Ward, PE, MSISE, PMP
Winona Bridge
Project Manager
MnDOT District 6

Dear Mr. Ward,

The Winona City Council wishes to thank you for your review of the options regarding Work Package #5, Bridge No. 5900 (Existing Bridge) at last night's pre-council workshop. The council very much desires a quick resolution to the final design of this project so that work can proceed in a timely fashion. Of note from last night's meeting are the following:

- The entire city council was present and engaged in the discussion.
- A few members of the public and city staff were present as well.
- The consensus position of the entire city council is to request that MnDOT focus efforts on delivering a project aligned with Options #1 (Historic Full Build) and #2 (Through Truss Historical Full Build with Non-Historic Approach Spans) as presented.
- The council also expressed support for a hybrid plan that incorporated components of both Options #1 and #2, should that be necessary.
- The council was unanimous in rejecting all other options presented and requests that MnDOT not expend further resources planning for them.
- The council expressed a strong desire to ensure that at the end of the project there are a total of 4 lanes of bridge traffic over the river.
- The council agrees to the timeline expressed in the meeting and is looking forward to public comments from the May 2, 2016 public hearing.

The council appreciates the continued hard work undertaken by you and MnDOT staff on finding a solution on the rehabilitation on the historic Winona Bridge. The council firmly believes that a solution that preserves the historic qualities of the through truss structure benefits the community and the state. We look forward to continuing the process of preserving and protecting this vital structure. If I can be of any further assistance please do not hesitate to contact me.

Sincerely,

Stephen T. Sarvi
City Manager
City of Winona





Discussion of Options

Options Evaluation Criteria

- Purpose and Need for the Project
 - *The purpose of the project is to provide a structurally sound bridge-crossing of the Mississippi River Channel at Winona, Minnesota that maintains access to Latsch Island and the Wisconsin Highway system, with adequate capacity to safely accommodate existing and future transportation needs within the design life of the bridge, while maintaining traffic to the maximum extent possible during construction.*
- Public Feedback
- Historical Context (National Register Eligibility)
- Cost





Discussion of Options

Options Status

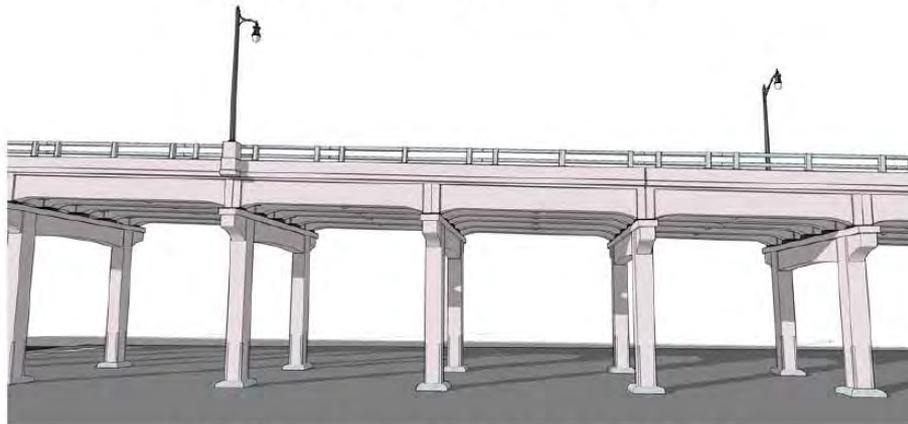
- Option #1 - Historical Full Build: The Current Approved Option and Still Being Pursued.
- Option #2 - Through-Truss Historical Full Build with Non-Historic Approach Spans: Being Pursued along with Hybrids between #1 and #2.
- Options #3 (Removal), #4 (Pedestrian Facility) and #5 (Through-Truss 20-year fix) considered but not supported and not currently being pursued.



Option #1 – Historical Full Build



EXISTING - LOOKING EAST - PIERS 7 THROUGH 11



PROPOSED - LOOKING EAST - PIERS 7 THROUGH 11

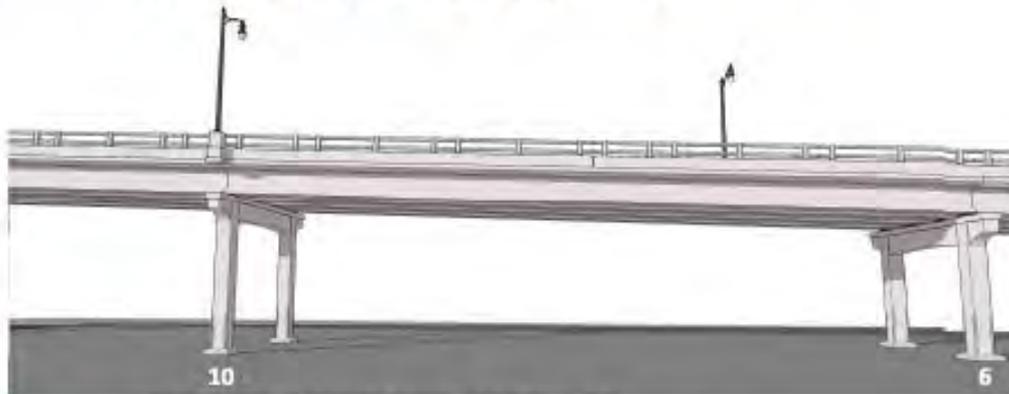


Top: Option #1 - Historical Full Build
 Bottom: Option #2 – Non-Historic Approach Spans



EXISTING - LOOKING EAST - PIERS 7 THROUGH 11

Approx. 30' spans.



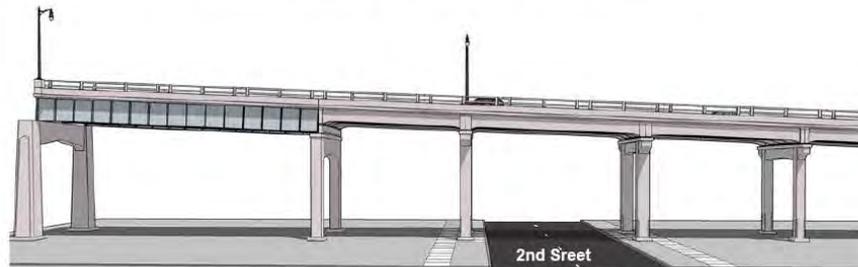
PROPOSED - LOOKING EAST - PIERS 6 and 10

Approx. 130' spans.

Option #1 – Historical Full Build



EXISTING - LOOKING EAST - PIERS 11 THROUGH 15



PROPOSED - LOOKING EAST - PIERS 11 THROUGH 15



Top: Option #1 - Historical Full Build Bottom: Option #2 - Non-Historic Approach Spans



EXISTING - LOOKING EAST - PIERS 11 THROUGH 15



PROPOSED - LOOKING EAST - PIERS 10 THROUGH 15





Option #1 – Historical Full Build



PROPOSED - LOOKING SOUTHWEST

Kimley»Horn

2

Exhibit

JANUARY 26, 2016
N.B. T.H. 43 OVER MISSISSIPPI RIVER
WINONA, MINNESOTA
PROPOSED TRANSVERSE SECTION





Option #2 – Non-Historic Approach Spans



PROPOSED - LOOKING SOUTHWEST

Kimley»Horn

1

Exhibit

MARCH 31, 2018

LEG. T.A. 43 OVER MISSISSIPPI RIVER
MNCHA, MINNESOTA



Option #1 – Historical Full Build



ORIGINAL LIGHT FIXTURE (HISTORIC PHOTO)



PROPOSED STERNBERG LIBERTYVILLE FIXTURE

NOTE: SPECIFIC LIGHT POLES IN DEVELOPMENT



Option #2 – Non-Historic Approach Spans



Options – Existing Conditions



PROPOSED - LOOKING WEST - PIERS 8 THROUGH 13



EXISTING - LOOKING WEST - PIERS 8 THROUGH 13

Kimley»Horn

6
EXHIBIT

JANUARY 26, 2016
N.B. TR. 43 OVER MISSISSIPPI RIVER
BENONA, MINNESOTA
PROPOSED TRANSVERSE SECTION





Option #2 – Potential Cost Savings

- 1) Concrete Beams and Longer Span Lengths on Existing Concrete Spans: Approx. \$2 million.
- 2) Deck Trusses to Concrete Spans: Approx. \$6-\$8 million
- 1) + 2) above = \$8-\$10 million minus \$1 million for engineering and mitigation = \$7-\$9 million.
- Cost of Steel Plate Girders: Approx. \$1 million (steel prices projected to rise).





Winona Bridge Project



Section 106 Process

Your Destination...Our Priority



OVERVIEW

- ▶ Section 106 Process
- ▶ Partners- agencies & organizations
- ▶ Section 106 Review Components
 - Archaeology
 - Architecture
 - Historic Bridge
 - New Bridge



Section 106 Partners

- Federal Highway Administration (FHWA)
 - MnDOT Cultural Resources Unit (CRU) – delegated agent
- Other Federal agencies (e.g., Corps)
- MnDOT
 - District 6, Bridge Office, Environmental Stewardship
- Minnesota Historic Preservation Office
- City of Winona
- Tribes
- Public



Section 106 Process

- Section 106 requires federal agencies to take into account the effects of their undertakings on historic properties
- Federal funding or permits invokes Section 106 of the National Historic Preservation Act
- FHWA is the lead federal agency responsible for compliance with Section 106



Section 106 Process

- As allowed in the Section 106 regulations, FHWA delegates review authority to professionally qualified staff in MnDOT's CRU
- CRU makes all Section 106 determinations and findings on behalf of FHWA. MnHPO reviews and provides comments on all Section 106 determinations and findings.
- FHWA is legally responsible for all findings and determinations made by CRU.



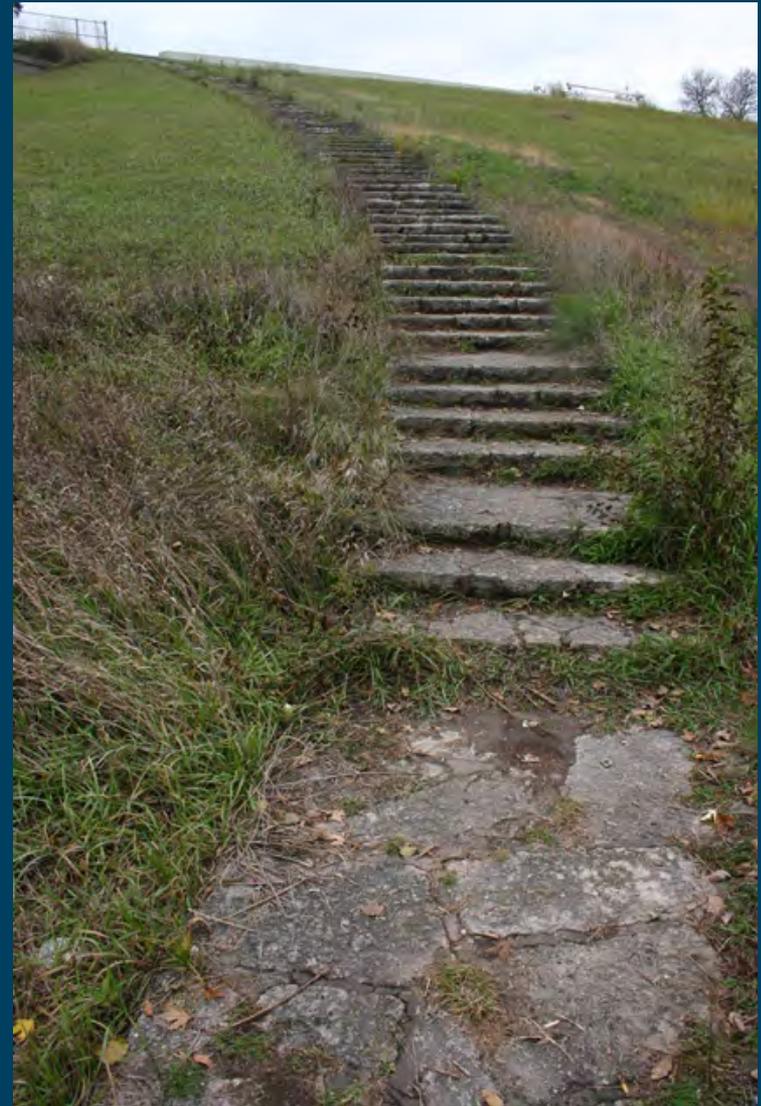
Section 106 Process

Are historic properties present in project area?

- Archaeological survey
- Architectural survey

If yes, then effects (direct or indirect) to those properties are determined.

- No Adverse
- Adverse



Section 106 Process - Archaeology

- Surveyed proposed construction limits
- Few parcels recently surveyed once right-of-way acquired
- No sites that meet the National Register criteria were identified



Section 106 Process - Architectural

- Surveyed all properties over 50 years in age
- Identified 34 properties listed on or eligible for the National Register

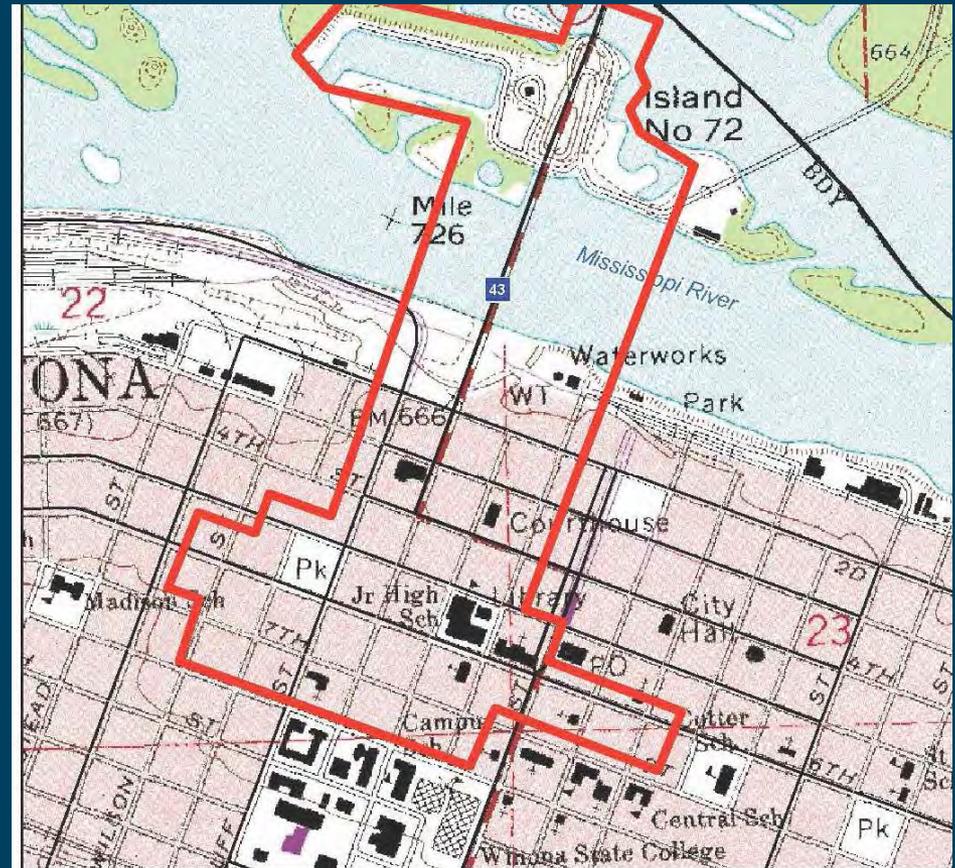


Figure 1
Winona TH 43 Bridge Study
Architectural History Evaluation
S.P. 8503-46 2011

Location Map and Architectural History APE —

LR Landscape Research LLC



Section 106 Process-Finding

- MnDOT's preferred alternative
 - Rehabilitate existing bridge and building new parallel bridge
- MnDOT CRU found No Adverse Effect; SHPO concurred.
- Formal Programmatic Agreement executed for entire project.



Section 106 Process – Next Steps

- If the preferred alternative is changed, then additional evaluation of effects is conducted.
 - All appear to cause an Adverse Effect to the bridge
 - The finding would go to MnHPO for review and concurrence, and to consulting parties, and the public for their review and comment.
 - Mitigation would be developed and implemented.
- If preferred alternative remains the same, no additional Section 106 review is needed.



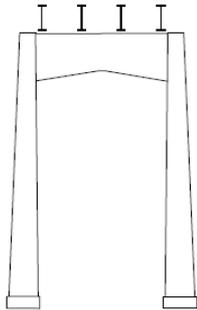


Options - Piers



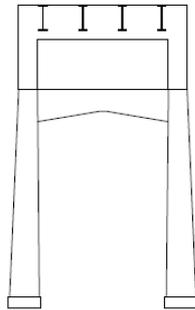
Options - Piers

P1



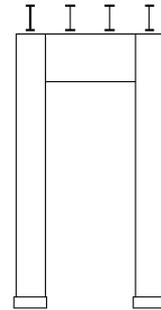
OPTION 1

P2



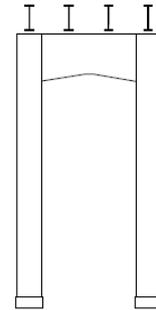
OPTION 2

P3



OPTION 3

P4



OPTION 4





Options – Hybrids Between Option #1 and #2

Hybrids: 2CP1 etc.

Coding:

Option 2, Concrete (C) or Steel (S) beams, Pier # 1-4.





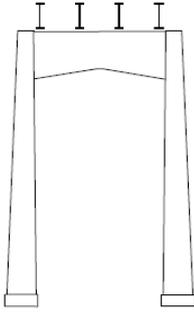
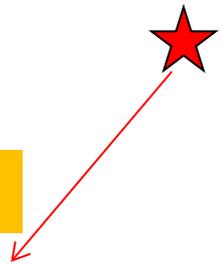
Options - Hybrids



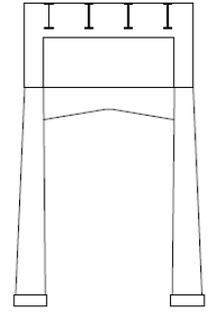
Options - Hybrids

Piers
Similar to
Existing.

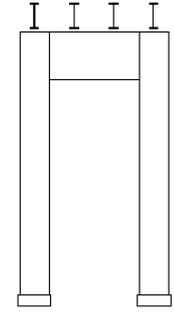
P1



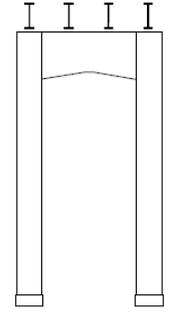
OPTION 1



OPTION 2



OPTION 3



OPTION 4





Options - Hybrids

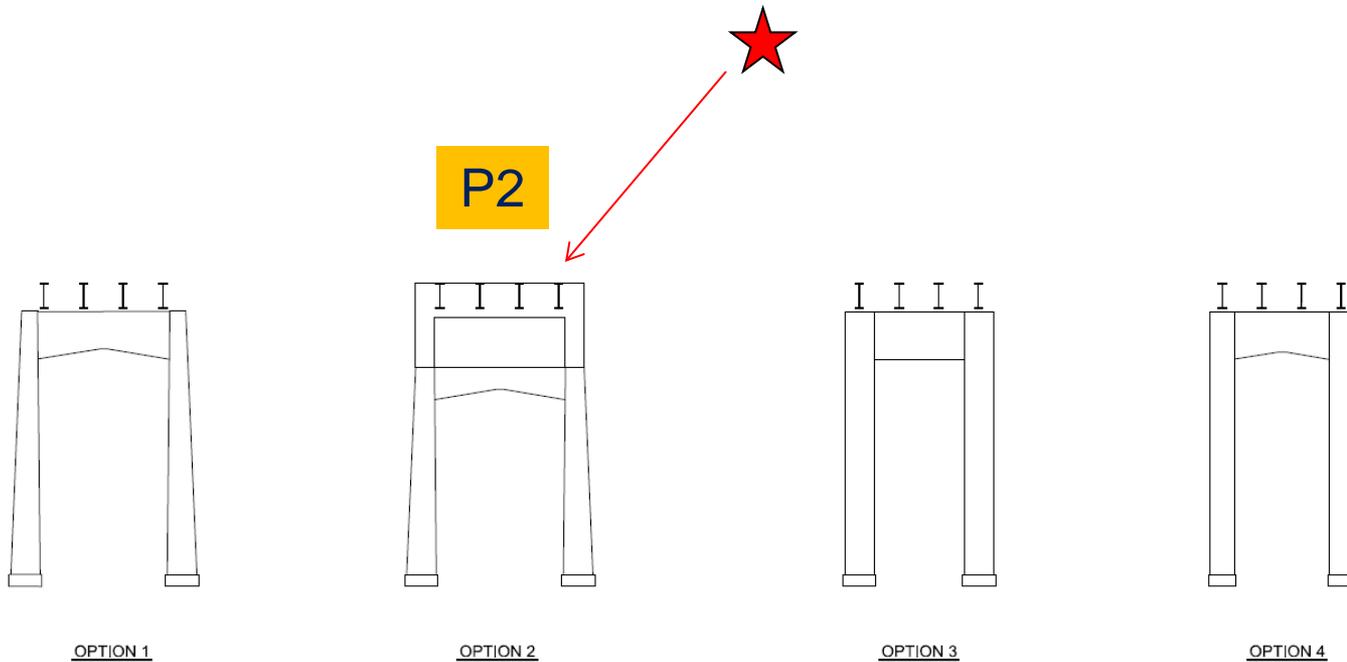
2SP1

Steel Plate Beam Girders.

Pier Column and Caps
Reconstructed to Match
Existing



Options - Hybrids





Options - Hybrids

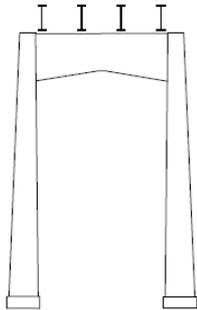
2CP2 or 2SP2

Prestressed Concrete or
Steel Plate Girder Beams.

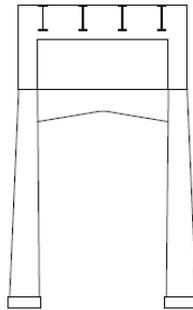
Pier Caps Reconstructed.



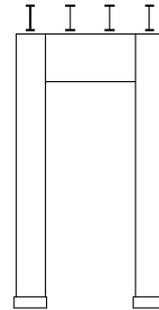
Options - Hybrids



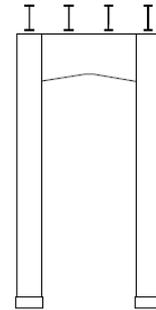
OPTION 1



OPTION 2



OPTION 3



OPTION 4





Options - Hybrids

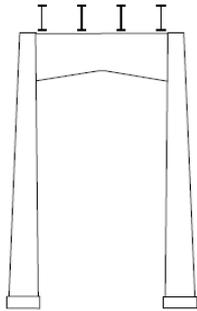
2SP3

Steel Plate Beam
Girders.

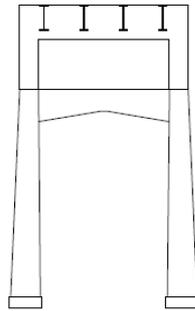
Pier Column and Caps
Reconstructed to
Rectangular for Cost
Efficiency.



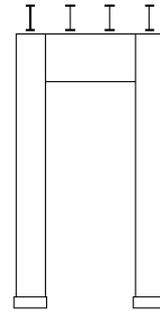
Options - Hybrids



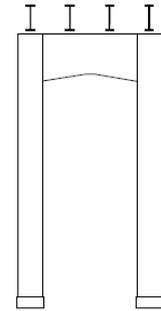
OPTION 1



OPTION 2



OPTION 3



OPTION 4





Options - Hybrids

2SP4

Steel Plate Beam
Girders.

Pier Column and Caps
Reconstructed with
Taper.





Options - Hybrids

Modernized Deck Trusses
(minimal savings).

\$1 million savings in
Construction currently
estimated but Engineering
and potential Steel Price
increases could offset.





Options - Hybrids

Deck Truss Facia

Pier Configuration Challenges.



INTERIOR GIRDERS - FEDERAL STANDARD GRAY (26134)
ASSUMES THREE 60" GIRDERS, EQUAL SPACING BETWEEN TRUSSES
FOR ILLUSTRATIVE PURPOSE: COLOR SELECTED TO BE VISIBLE IN THIS GRAPHIC.





Open Discussion

Community Feedback Time





Potential Next Steps





Potential Next Steps

- May 16th Council Meeting (if desired by council).
- June 2016 Final Design Team / CMGC Inspections.
- Discussions with FHWA, MnHPO, City of Winona, Public Feedback Continue.
- Early June – Likely Eliminate Some Options.
- Construction Work Package #5
 - Through-truss Full Historical Rehabilitation
 - Approach Span Removals
 - Letting Date: August 3, 2016
 - Cost Estimate: \$38 million
- Construction Work Package #6
 - Construct Approach Span Option
 - Letting Date: Spring 2017
 - Cost Estimate: \$20-\$27 million Depending on Scope of Work.



Questions?

