



Red Wing Bridge Project



Project Advisory
Committee (PAC)
Meeting #2
June 21, 2012

Your Destination...Our Priority



RED WING BRIDGE ALTERNATIVES ANALYSIS & EVALUATION PROCESS

PRIORITY 1

Bridge Concepts

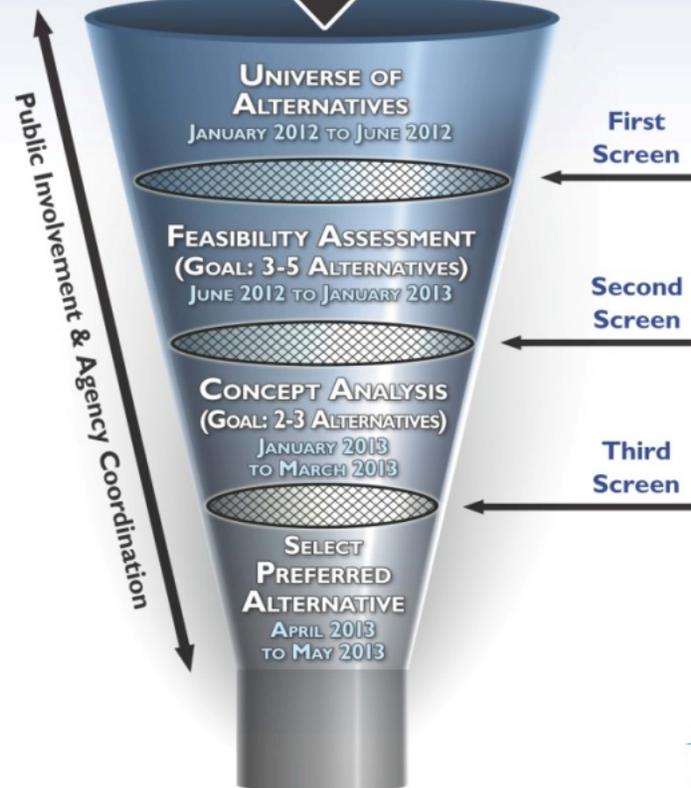
River Bridge & Hwy 61 Overpass

- Rehabilitation
- Replacement

PRIORITY 2

Roadway Concepts

- Maintain Existing Connection
- At-Grade Hwy 61 Connection
- New Grade-Separated Hwy 61 Connection





Possible Improvement Alternatives

Two Basic Categories

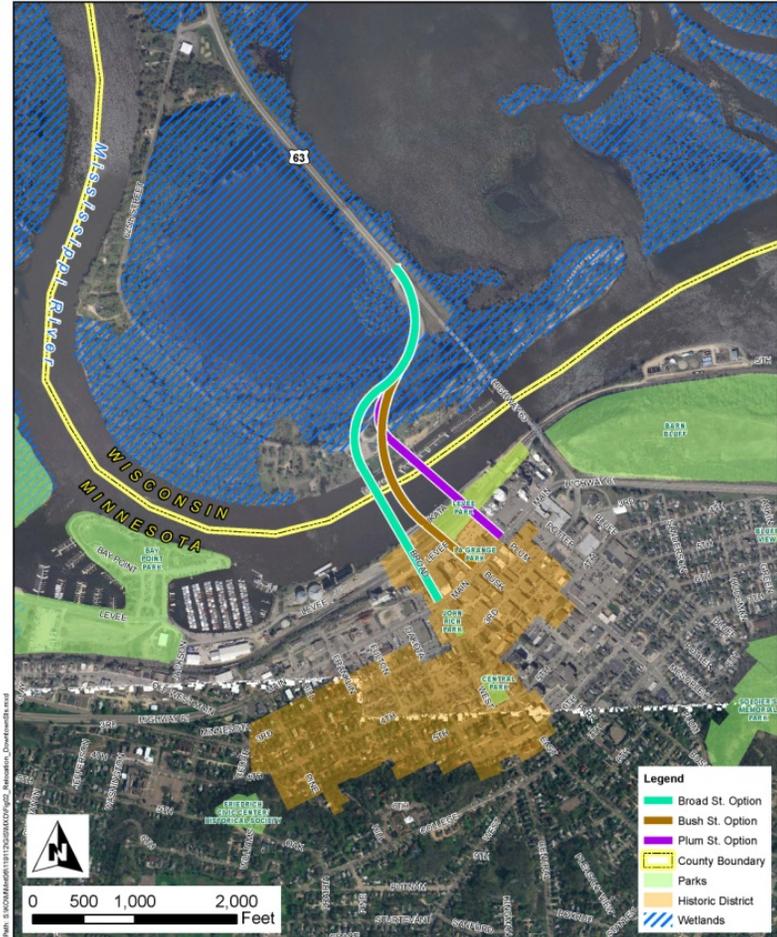
- Existing Corridor Alternatives (Rehabilitation and/or Replacement)
- New Corridor Alternatives
 - Bench Street
 - Plum Street
 - Bush Street
 - Broad Street





	DRAFT	Project: MNT06 119112 Print Date: 3/19/2012	RED WING BRIDGE PROJECT Bench Street Option	Figure 1
		Map by: SEH Projection: Geospatial MARS NAD83 F Source: City of Red Wing, MNDOT, Goodhue County, and SEH.		

Bench Street



	DRAFT	Project: MNT06 119112 Print Date: 3/19/2012	RED WING BRIDGE PROJECT Downtown New Location Options	Figure 2
		Map by: SEH Projection: Geospatial MARS NAD83 F Source: City of Red Wing, MNDOT, Goodhue County, and SEH.		

Plum, Bush, and Broad Street



New Crossing Location Memorandum: Federal Agency Comments

- FHWA
 - Clarify that new crossing location options may need to be revisited to address specific Federal regulations
- US Coast Guard
 - “the proposed new alignments will not be acceptable from a navigational standpoint due to proximity of the bend in the river.”
 - “a new companion bridge located immediately upstream of the existing Red Wing Highway Bridge would satisfy the reasonable needs of navigation.”





Traffic Tasks

- River Crossing Daily Traffic Volume
 - MnDOT 2010 Adjusted AADT = 11,700
 - May 2012 WisDOT Adjusted Count = 13,700
 - Unadjusted MnDOT Counts = 12,500 – 14,500
- Currently reaffirming appropriate base traffic volume
- Next step – conduct traffic operations analysis





Truck Traffic

- Approximately Nine Percent of Total Traffic
- Changes in Regional/Inter-Regional Freight Movement
- Frac Sand Operations





Two vs. Four Lane Need

- Traffic Volume Thresholds:
 - MnDOT = TBD (12,000 to 14,000)
 - WisDOT = 10,000+ (Corridors 2030 Connectors Route)
- Review of River Crossings in MN and WI
- Other Important Factors:
 - Cost
 - Feasibility
 - Existing bridge condition
 - Seasonal and daily variability

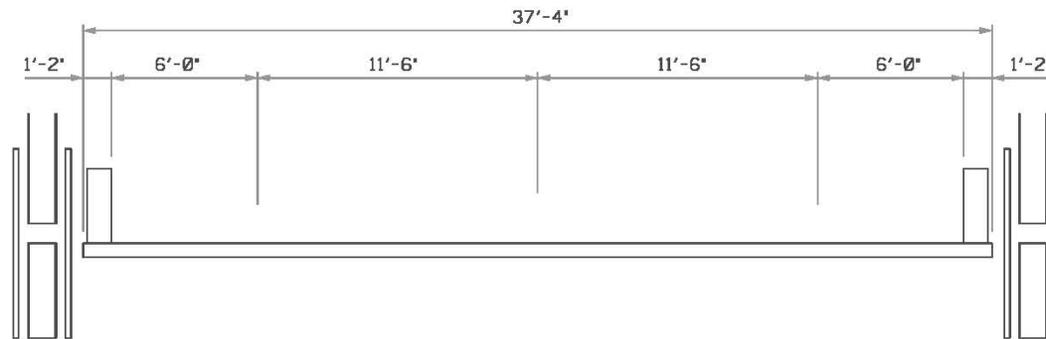
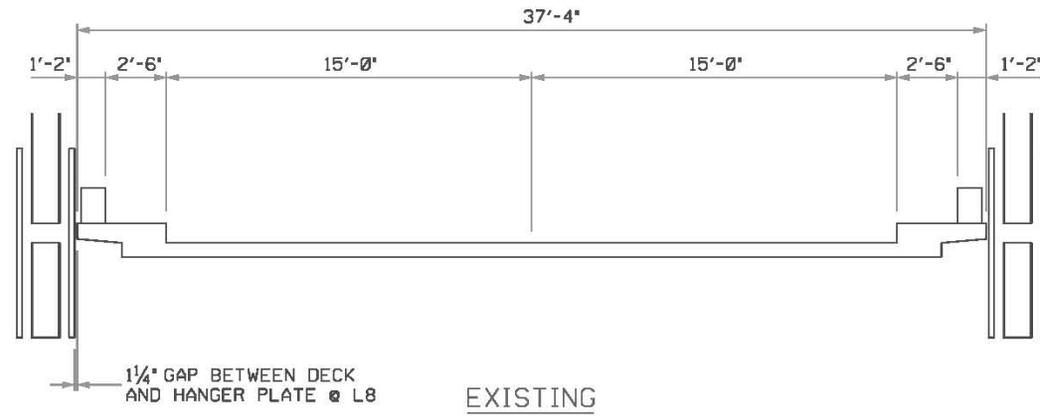




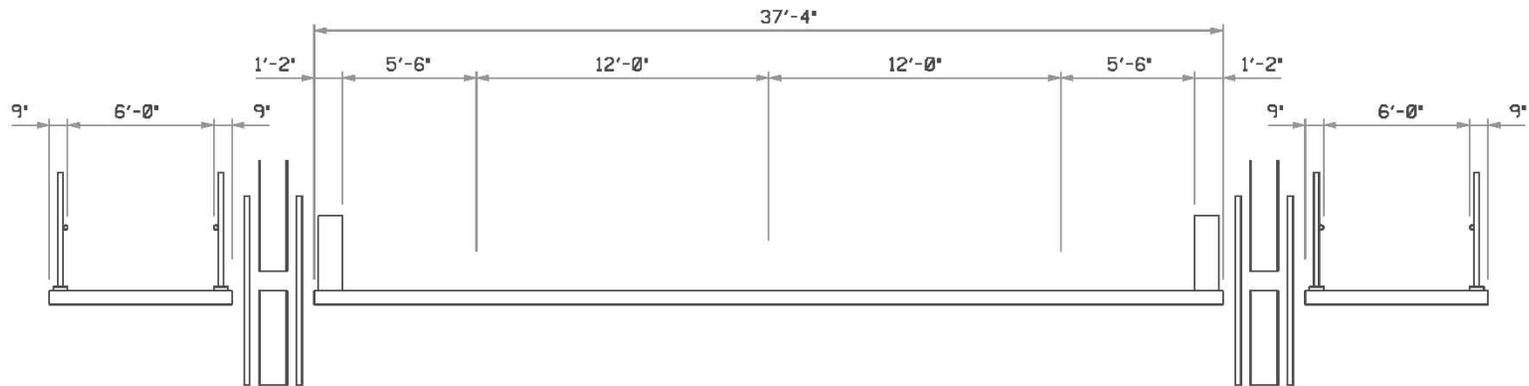
River Crossing Alternatives

- Rehabilitate Existing Bridge
 - Sub-option: add cantilevered sidewalk on both sides
- New Two Lane Bridge
- Rehabilitate Existing and Construct New Parallel Bridge
- New Four Lane Bridge



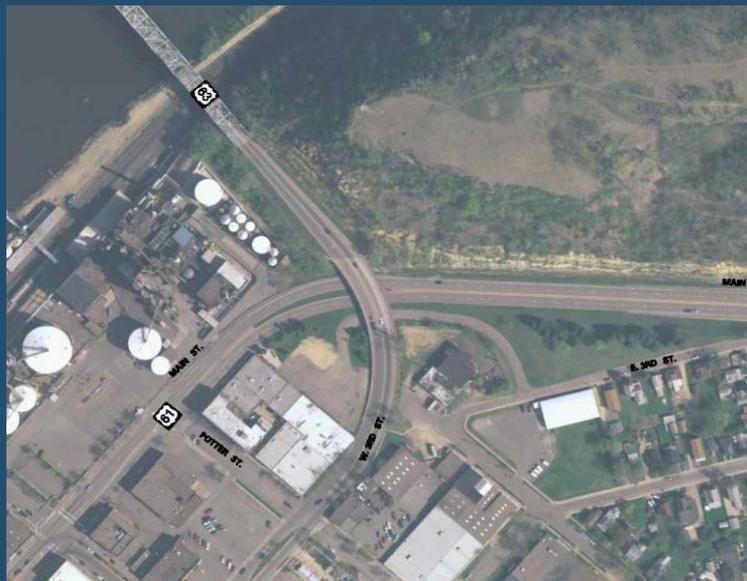


CONCRETE PARAPET (TYPE P-1, TL-2) FOR DESIGN SPEED LESS THAN 40 MPH

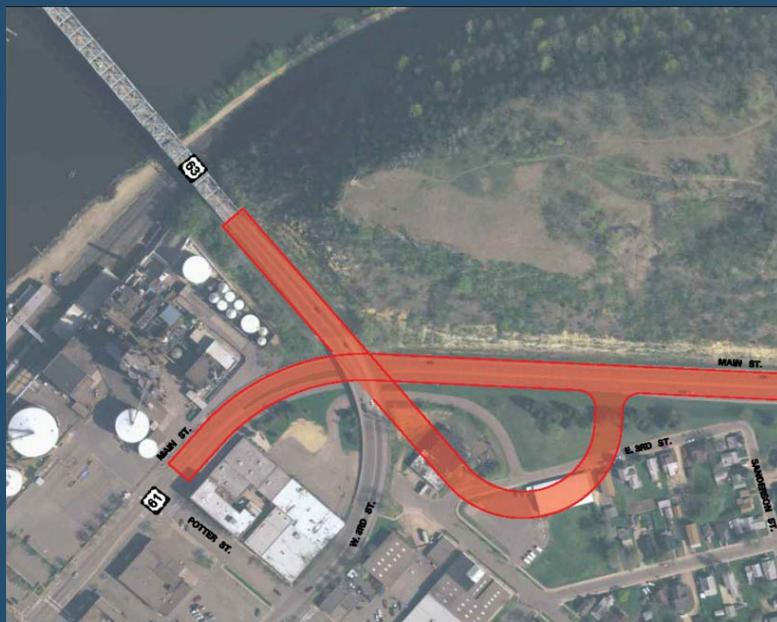


CONCRETE PARAPET (TYPE P-1, TL-2) FOR DESIGN SPEED LESS THAN 40 MPH WITH CANTILEVER SIDEWALK





Rehabilitate Bridge



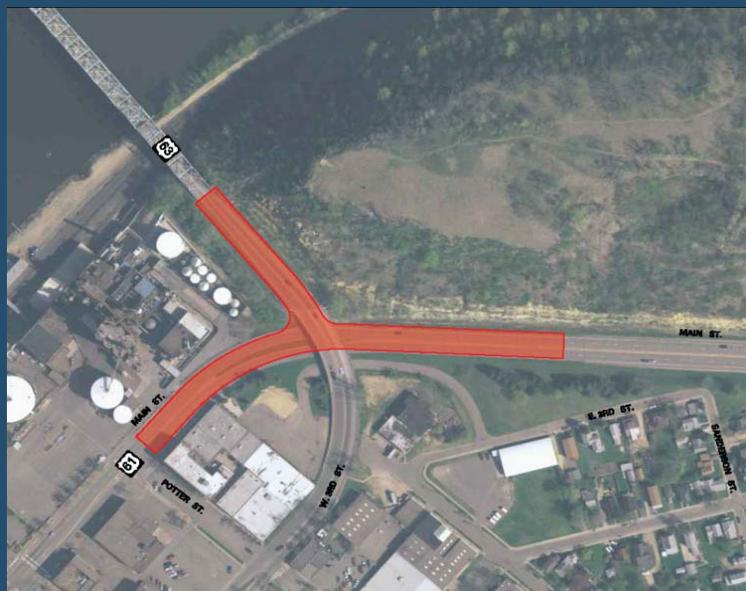
Button-hook



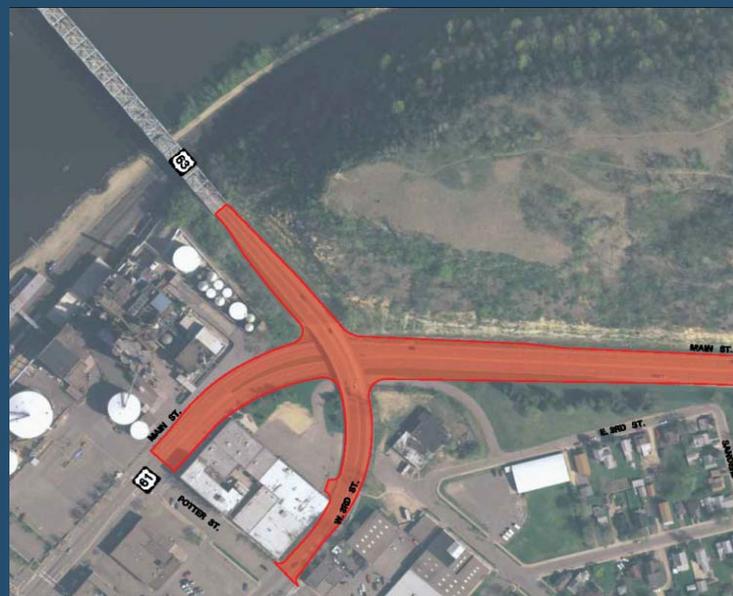
Button-hook with slip ramp



Roundabout



At-Grade Three-leg



At-Grade Four leg



Bridge 9103 Rehabilitation Study

- Newly updated Historic Bridge Process
- MnDOT, FHWA, SHPO
- First Steps:
 - Assess Existing Bridge Condition
 - Determine Evaluation Criteria based on Project Purpose and Need
 - Study Range of Alternatives
- Determine if there is a Feasible and Prudent rehabilitation alternative





Next Meeting

- Thursday, September 20th
- 1 – 3 p.m.
- Red Wing Public Library – Foot Room





Questions / Comments



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