CHAMP CLARK BRIDGE STEM & COMMUNITY OUTREACH SUCCESS



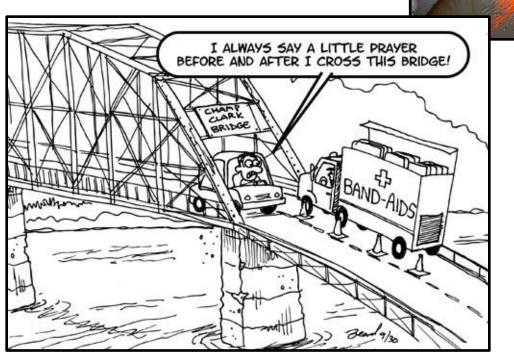
Project Location

- One of 16 vehicular bridges over the Mississippi River between Missouri and Illinois
- One of four vehicular bridges connecting Missouri and Illinois north of the St. Louis metropolitan area (Hannibal & Quincy)
- One way detour of 77 miles via Hannibal and 183 miles via Alton





K0932 04-01-09A SPAN 4 S SIDE L-10 2" HOLE ON INSIDE GUSS





WEIGHT

40

TONS

Other Project Needs







Choosing Design-Build

- TIGER Grant award had to be obligated by September 2017
- Guaranteed Budget
- Opportunity for Innovation
- Opportunity for faster construction schedule
- Provided IDOT an opportunity to participate in a Design-Build Project
- MoDOT's 12th Design-Build Project (first in the NE District)



Project Goals

- Meet or beat the project open to traffic date of November 1, 2019.
- Deliver a project on budget that supports everyday commuters and freight.
- Construct a safe, reliable, low maintenance Mississippi River Bridge that will provide at least a century of service.
- Minimize and mitigate construction impacts and maximize work zone safety to customers and workers.
- Deliver the project using a diverse workforce by use of innovative techniques.
- Demonstrate a commitment to quality.





RFP Requirements

- Contractor must participate in the Design Challenge for local high schools.
- Construct the winning design including a ribbon cutting ceremony.
- Develop bridge design or construction curriculum and meet with participating schools once a quarter.
- Facilitate, plan and schedule a STEM Summer Camp.
- Participate in two job fairs.



Champ Clark Bridge Missouri Department of Transportation Request for Proposals Job No. J3P2209B March 1, 2017

19 COMMUNITY OUTREACH

19.1 Design Challenge for Local High Schools

As part of the Environmental Assessment (EA), MoDOT has committed to preserving the existing Champ Clark Bridge with an interpretive panel on the history and engineering of the Champ Clark Bridge to be located at the Riverside Park in Louisiana, Missouri, MoDOT has chosen to partner with the local high schools to challenge the students to come up with a conceptual design for this panel.

Pike Lincoln Technical Center, Bowling Green High School, Clopton High School, Pittsfield High School, Hannibal High School, and Louisiana High School have indicated that they will participate in the design challenge. MoDOT is open to including other local schools up to and until the time of the start of the challenge if any additional schools choose to participate.

The design challenge is to take place in the spring semester of the 2017/2018 school year. The calendar of events that the schools have agreed to is included in Bock 5. This information has been shared with the schools.

The Contractor and MoDOT will partner together with the schools to conduct this challenge. The responsibilities of the contractor will include but are not limited to:

- 1. Participate in one on one meeting with each of the participating schools to review and comment on their conceptual design.
- Participate in one on one meetings with each of the participating schools to review and comment on their preliminary design.
- Participate in the students' presentation of their final designs for each of the participating schools.
- 4. Participate in the scoring of each of the participating schools design proposals.
- Facilitate the showcase assembly and announcement of the winning design. Location yet to be determined.
- Construct the winning design. Work with the school that produced the winning design as needed.
- Facilitate a ribbon cutting ceremony of the interpretive panel. All participating school teams should be included.

19.2 Science Technology Engineering Math (STEM) Outreach for Local Schools

Pike Lincoln Technical Center, Bowling Green High School, Clopton High School, Pittsfield High School, Hannibal High School, and Louisiana High School have indicated that they will participate in the STEM Outreach program for the Project. MoDOT is open to including other local schools if any additional schools choose to participate.

BOOK 2

Massman Proposal Commitments

- Host three Job Fairs and/or networking events in the Louisiana area
- Host a monthly project update for the community
- Construct an overlook in Riverside Park
- Present three aesthetic retaining wall treatments and three color options for the community to vote on
- Use local businesses for office set up, janitorial service, catering and lumber



Champ Clark Bridge Job Fair - Carpenters - Structural Steel Ironworkers - Laborers - Cement Masons - Operators To apply for available positions visit www.careers.massman.net

MASSMAN

Massman Proposal

Commitments



Commitment to Community and Diversity

Massman is committed to:
✓ Community involvement
✓ Workforce diversity
✓ Use of local businesses
✓ Monthly job presentations and tours
✓ Project Facebook page
✓ Local/regional workforce



For the Champ Clark Bridge project, Massman participated in MoDOT's November 2016 Champ Clark Career Fair (pictured below), along with DBE mixers and other outreach methods.





The Champ Clark project team is soliciting public votes to determine the appearance of a new retaining wall on the Missouri side of the new Champ Clark Bridge.

WE WANT Your vote

This highly-visible project component will be the first thing visitors to Missouri will see; we are soliciting community input on its appearance.

Voting will begin Friday, January 12, 2018, and ends Saturday, January 27, 2018.

Vote at www.surveymonkey.com/r/ChampClarkWall or paper ballots will be available at the project office:

120 South Main Street, Louisiana, MO 63353

Please join us at the project office for a Saturday Champ Clark Bridge update on Saturday, January 27, 2018 at 10 am.



Champ Clark Bridge Replacement BRIDGE February 6, 2018 · 3

Nearly 600 people weighed in on our public survey to select the texture and color for the new retaining wall.

It will be built near the bluff on the south side of the new bridge will be rosemary-colored and ledgestone patterned. An example of what the selected options will look like is below. Construction on the wall is expected to begin this spring.





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Champ Clark Bridge Replacement

@champclarkbridgereplac ement

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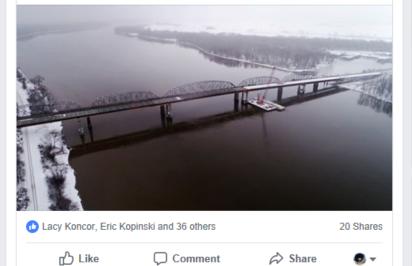
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ZOUI, HAS DEEN CANCELEU.

"The focus this month is to set deck panels on the new bridge, but because of the winter weather, it has been challenging," said Missouri Department of Transportation Project Director, Keith Killen, PE.

...

The next update is scheduled for Saturday, February 23rd at 10 am at Riverview Park, weather permitting.





History of the Champ Clark Bridge

The Champ Clark Bridge, built in 1928, is named after James Beauchamp Clark, a former Speaker of the...

See More

Community

- 2. Invite your friends to like this Page
- 1,118 people like this
- 1,191 people follow this



See All



Summer Camps

The Champ Clark Bridge project team is facilitating a summer STEM Camp on July 10, 2018, for local students interested in engineering and potential careers in the construction industry.



STEM CAMP JULY 10, 2018

The project team will give a presentation on the design and construction progress and lead students on a tour of the site.

Massman Construction Co. will provide personal protective equipment and safe access to observation areas where students can view construction progress and have questions answered by team members.

Students will also engage in hands-on engineering activities related to the construction of the new bridge and learn more about the construction industry and the different elements of a major river crossing.



Summer Camp



School Visits



Job Site Tour for Students



Job Site Tour for Students



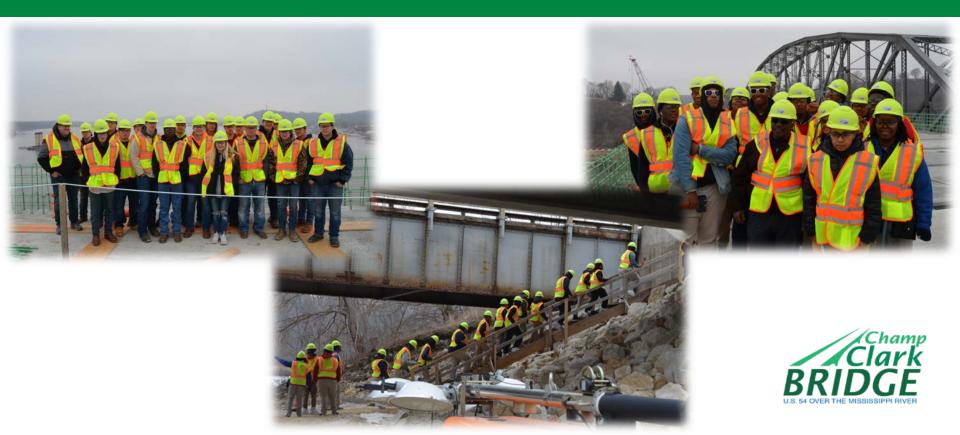
School Visits



Construction Career Day



Construction Career Day



Design Challenge – Why?

Environmental Assessment Commitment:

- If a viable reuse plan is presented for the bridge. FHWA, MoDOT, IDOT, and the SHPO will evaluate the plan to determine whether the Champ Clark Bridge can be preserved. If the bridge cannot be preserved, MoDOT will:
- Remove name plates and donate them to the City of Louisiana
- Take archival photographs and prepare a history of the bridge
- Prepare an interpretive panel on the history and engineering of the Champ Clark Bridge for installation in Riverside Park in Louisiana
- Prepare a short documentary video of the Champ Clark Bridge



Design Challenge – How?

- Invited area schools to participate from both States
- Structured the Challenges to Match Design-Build Format
- Developed a simple Request for Proposals
- Provided Constructability & Maintainability Guidelines
- Provided a realistic budget Why?
 - Because we are going to build the winning design!
 - To provide the students with real world challenges.



Design Challenge











The Missouri Department of Transportation is seeking teams of students from local high schools to design an interpretive panel depicting the history of the Champ Clark Bridge.

DESIGN **Challenge**

The selected team's panel design will be constructed in Riverside Park overlooking the new Champ Clark Bridge.

We are looking for many types of strengths for this design challenge, including engineering capabilities, artistic creativity, historical research abilities, and mathematical skills.

The design challenge will take place over the course of the spring 2018 semester. If you are innovative, creative, and hard-working, please see your school sponsor to express your interest.



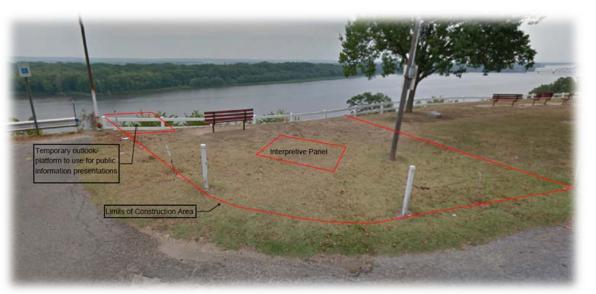
Design Challenge Goals

- Delight the community with a design that best represents the history of the Champ Clark Bridge.
- Deliver a design that can be constructed on budget.
- Design a constructible and easily maintainable interpretive panel.



Design Challenge Location & Budget

- Budget = \$7,500.00
- Location Riverview Park, Louisiana, MO





Design Challenge - Schedule

- Jan. 11, 2018 Intro to Challenge
- Jan. 29, 2018 Issue RFP
- 1 on 1 Meetings:
 - Week of Feb. 20th
 - Week of March 19th
- April 6, 2018 Final Requests for Clarifications
- Week of April 9th, 2018 Presentations made & Proposals Due
- April 18th, 2019 Showcase & Announcement Ceremony
- Week of April 23rd, 2018 Debrief Meetings

Janu	lary						Febr	uary					
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Design Challenge – Scoring Categories

- Design & Use of Innovation (25 points)
- Historic Representation (20 points)
- Constructability (15 points)
- Maintainability (10 points)
- Price Allocation (20 Points)
- Oral Presentation (10 Points)

- We wanted to see the students creativity
- This is the "WHY" for the challenge!
- Ensure we can build it
- Ensure the City can maintain it
- Verifying accuracy & reasonableness
- A lesson in presentations for the students



Required Documents

	Champ Clark Bridge Historic Bridg	e Preservation E	Design Challenge	9			(10)				
Champ Clark Bridge	DB 901 - PRICE ALLOCATI	BRIDGE									
DB-902 - Mainte	Design Team:	Clark									
	Item	Quantity	Unit	Price/Unit	Price		Comments	TIDGE			
	Materials							R THE MISSISSIPPI RIVER			
Design Team:	Plywood				S	-					
	Treated Lumber				S	-					
ltem	Rebar				S	-		omments			
	Concrete				S	-					
Materials	Steel				S	-					
Brick	Steel				S	-					
Sidewalk	Wood Screws				S	-		_			
Bridge	Paint				S	-					
Plexiglass	Plexi-glass				S	-					
Designed Concrete					S	-					
Birds					S	-					
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	(Design Team to add rows as needed)				S	-		-			
			Subtot	al of Materials:	\$	-					
	Labor										
	Laborer				S	-		7			
	Carpenter				S	-					
	Operator				S	-		Champ Clark			
	Iron Worker				S	-		Clark			
	Cement Mason				S	-					
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				TOTAL PRICE:	\$	-					

Design Challenge - Communication

- Each team had access to a SharePoint site
- All information, forms, and data are shared on the site
- A question and answer forum was set up
 - Members of the Champ Clark Team answered the questions
 - Questions and answers were available for everyone to see
 - Questions can lead to changes in the RFP in the form of addendums
- Addendums to the RFP
 - RFP is revised, highlighted, and all teams are notified



Design Challenge - One on One Meetings

- Two 1 on 1 meetings were set up with each team for discussion with a third and final meeting for the presentation.
- What are these meetings for?
 - To see the design progress: conceptual, preliminary, to final
 - Provide feedback and insight to the design
 - Encourage the students be creative and innovative
 - Reign teams back in when needed
- Final Meeting (Presentation)
- All questions have been asked from the teams
- Sell us your design and clarify any questions we had
- The teams were scored at this time on their oral presentation



Design Challenge - One on One Meetings

Final Meeting (Presentation)

- All questions have been asked from the teams
- Time for the students to sell their design and clarify any questions we had
- The teams were scored at this time on their oral presentation

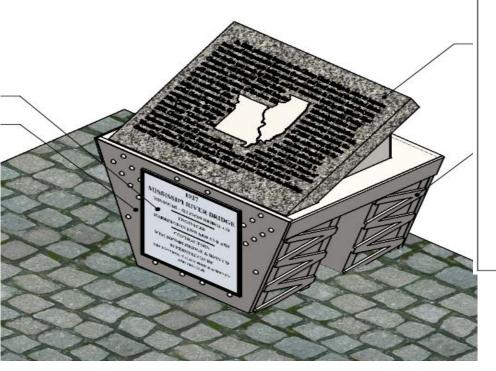


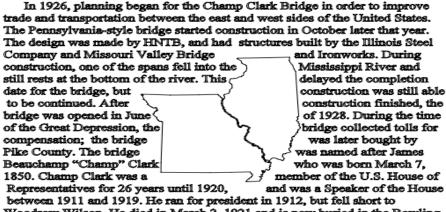


Design Challenge Showcase



Design Challenge Winning Design





Woodrow Wilson. He died in March 2, 1921 and is now buried in the Bowling Green City Cemetery in Bowling Green, Missouri.



Design Challenge Winning Design





Design Challenge Winning Design

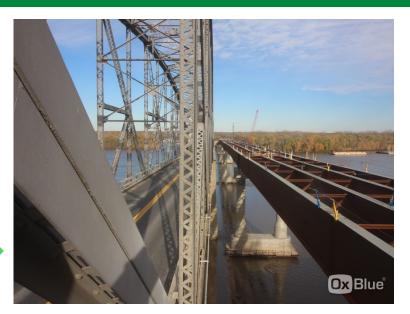


Hannibal teams 3D printed model



Stay Connected

- ChampClarkBridge.com
- Champ Clark Bridge Replacement Facebook Page
- MoDOT Northeast District Facebook Page
- Ox Blue Project Camera









https://youtu.be/RHJ-eJiqKuA