

**LEAD AGENCIES**

**IOWADOT** **Illinois Department of Transportation** **U.S. Department of Transportation Federal Highway Administration**

**PARTNERS**

City of Bettendorf      City of Moline  
 City of Davenport      City of Rock Island  
 Bi-State Regional Commission

**I74Mississippi RIVER BRIDGE**

**2019 Iowa Transportation Conference**  
 September 11, 2019

- Existing Bridge & Project Need
- Project Overview & Design Solution
- Innovations & Special Feature
- Status & Construction Activities
- Trivia Time?
- Questions

**I74Mississippi RIVER BRIDGE**

**I74Mississippi RIVER BRIDGE**

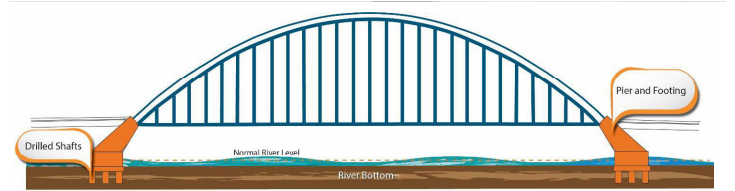
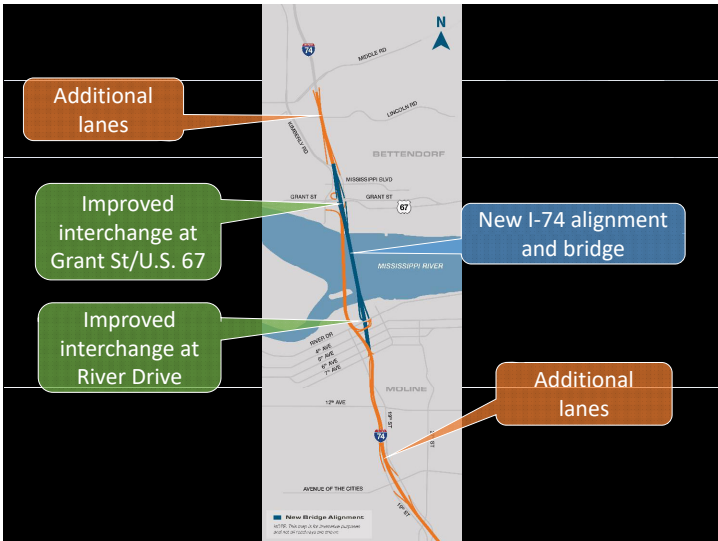
**Existing Bridges & Project Need**

Eastbound bridge opened in 1960

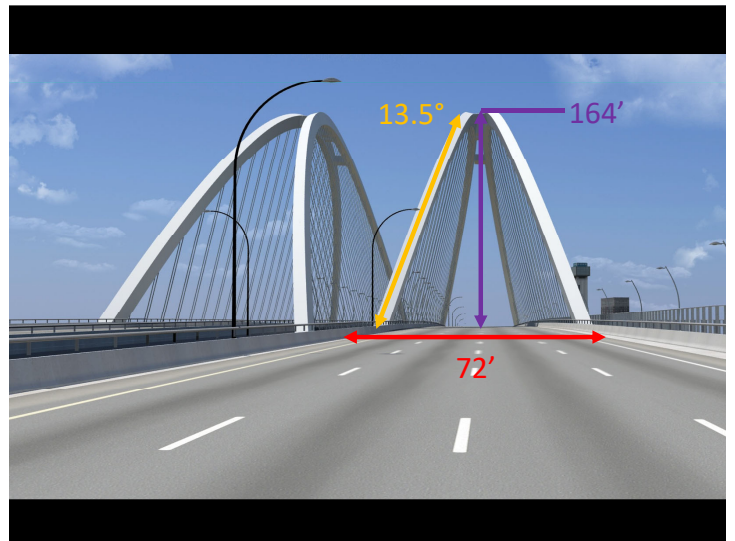
Westbound bridge opened in 1935

Narrow width, lack of shoulders, continuous need for repairs

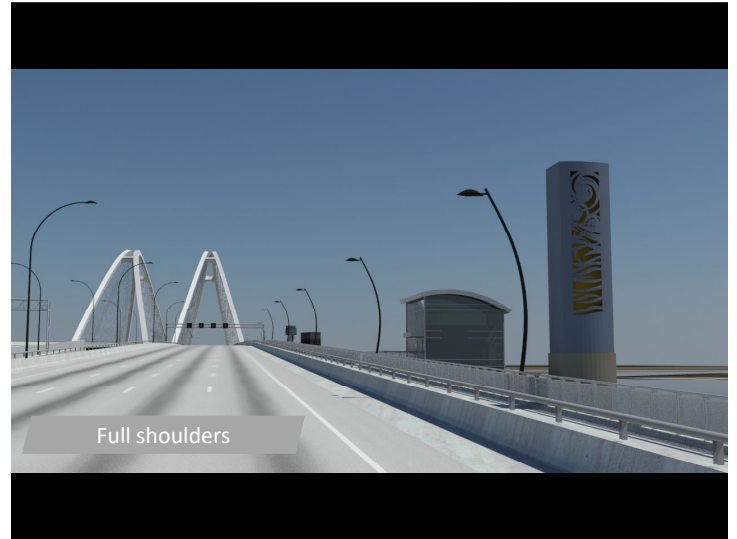
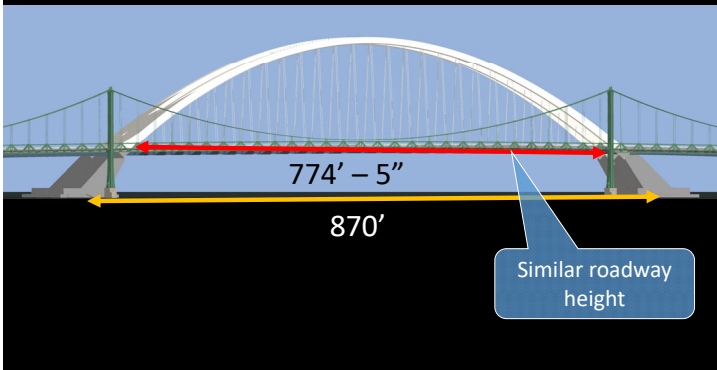
74,000 ADT (2016)



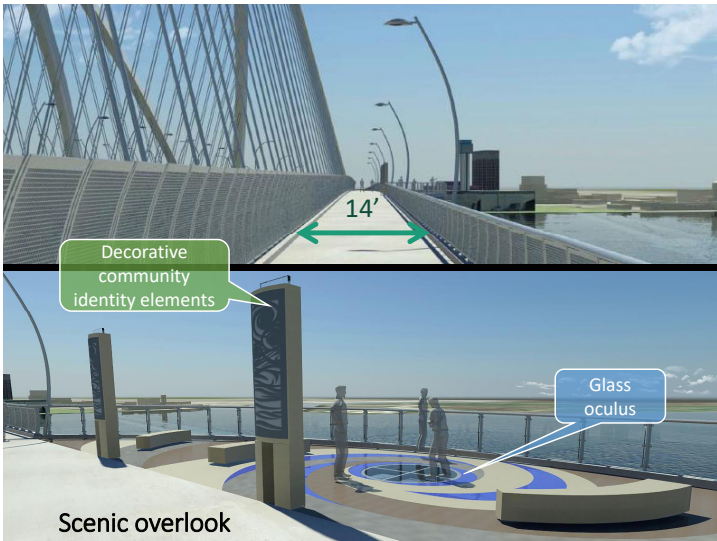
Let's Build a **BRIDGE**



Bridge elevation comparison



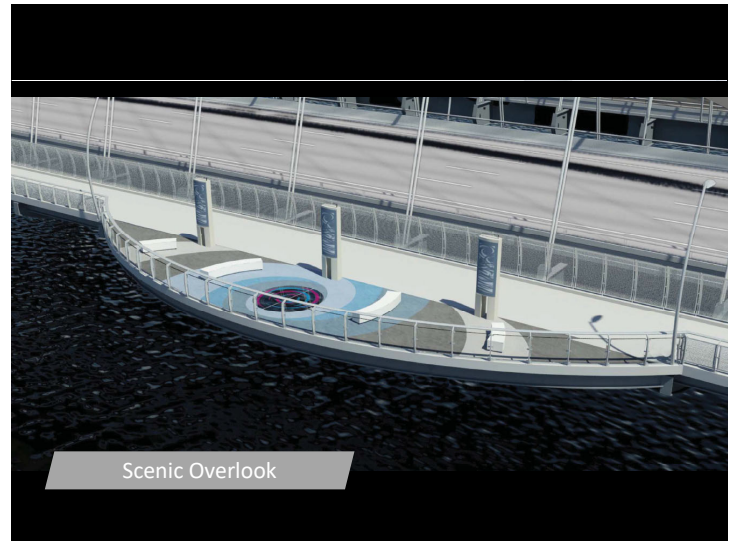
Full shoulders



Decorative community identity elements

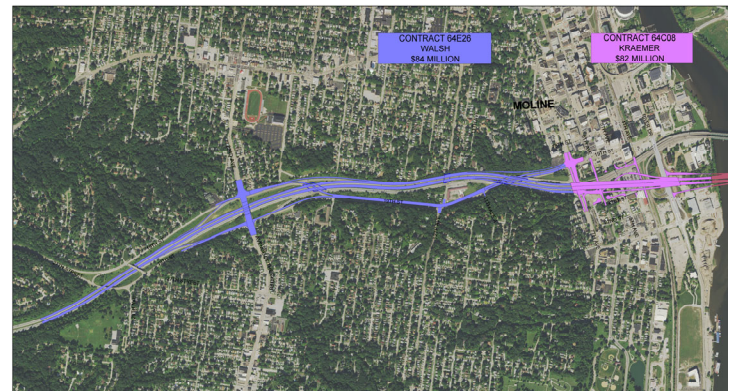
Glass oculus

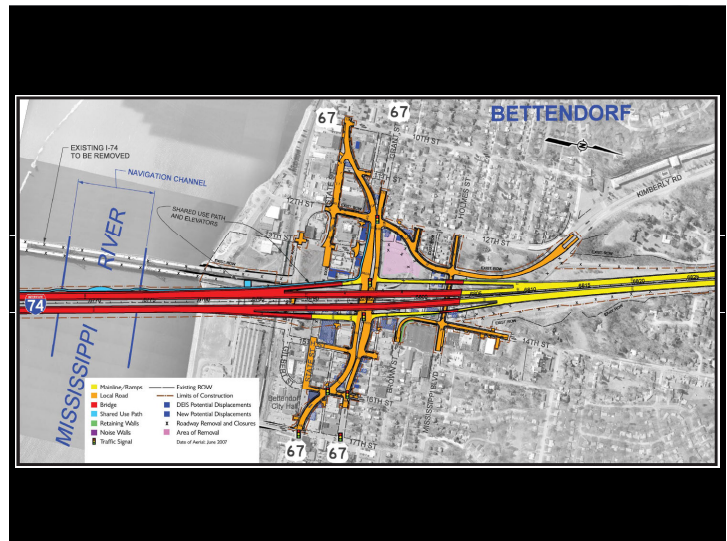
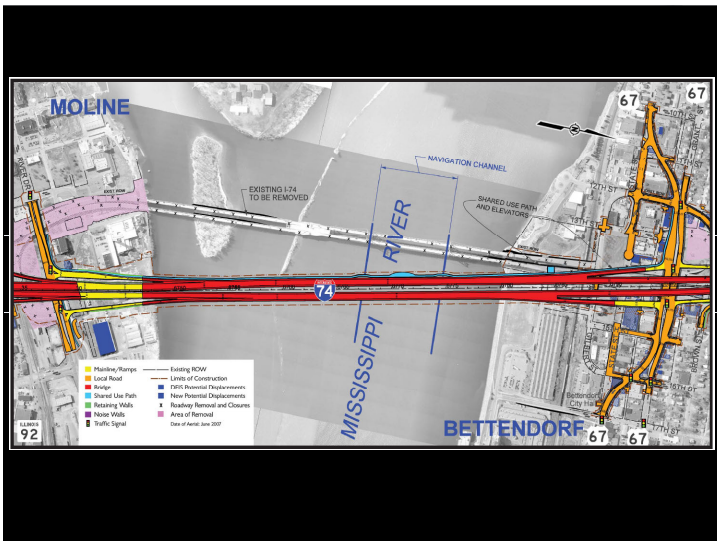
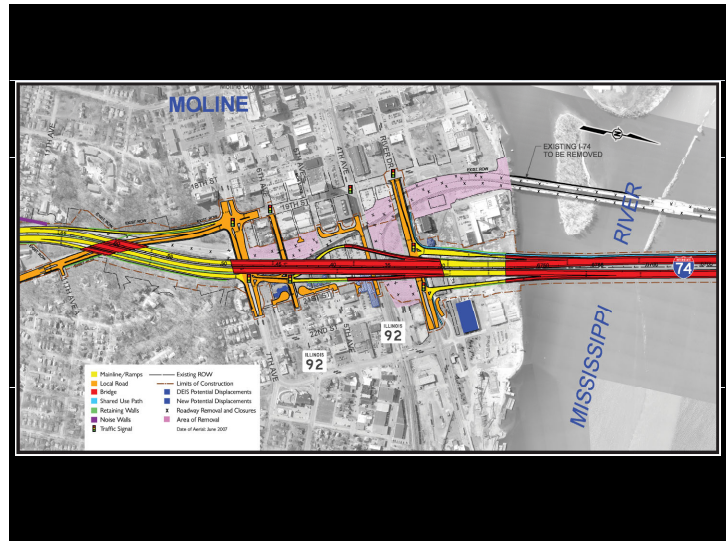
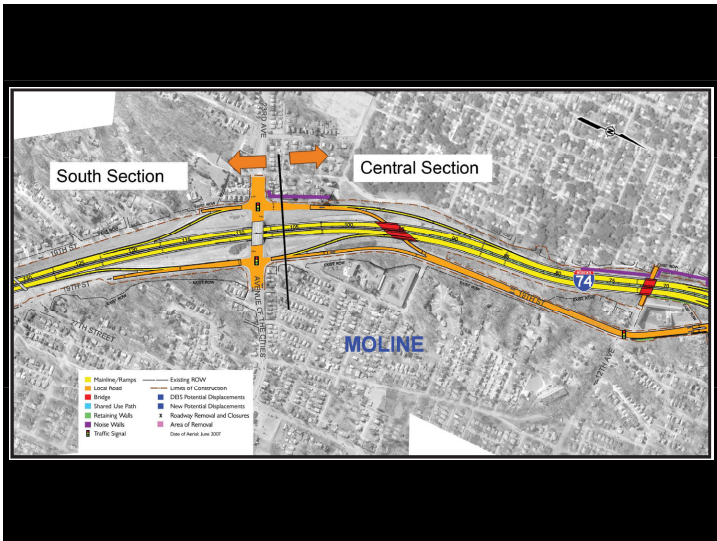
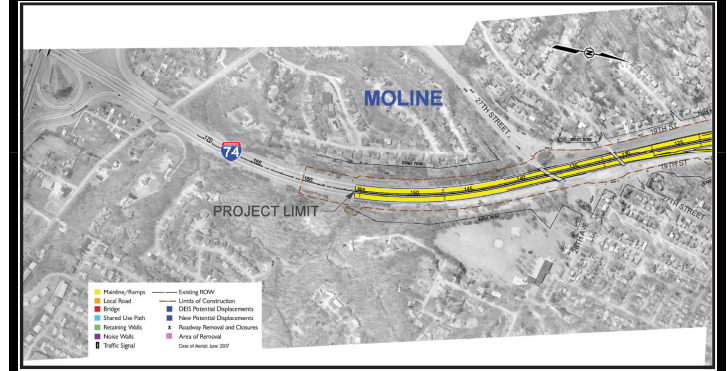
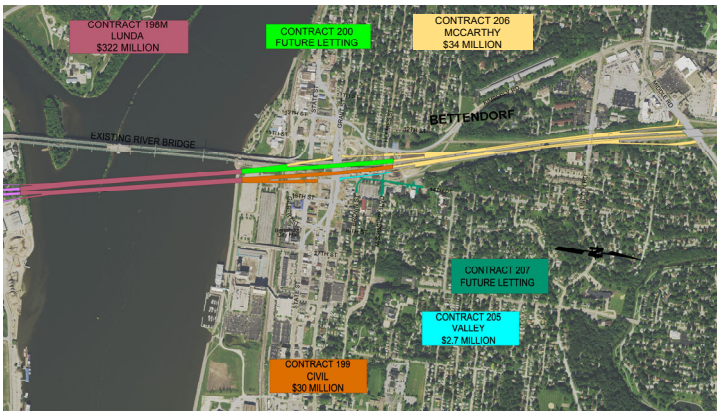
Scenic overlook

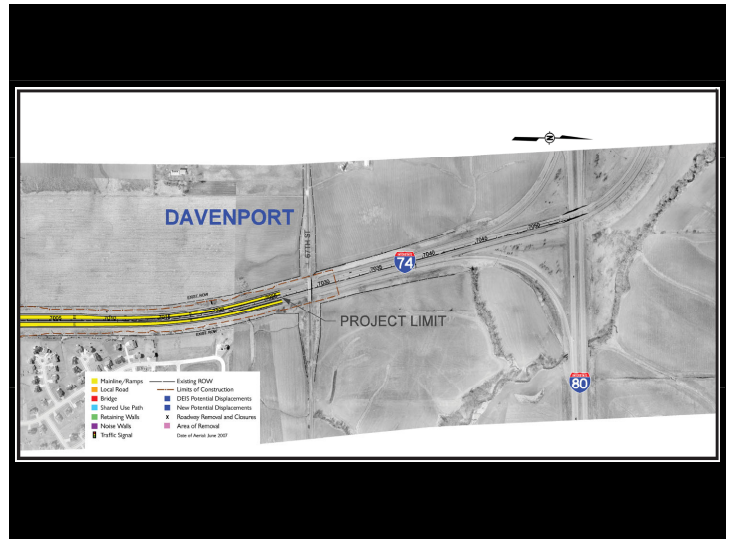
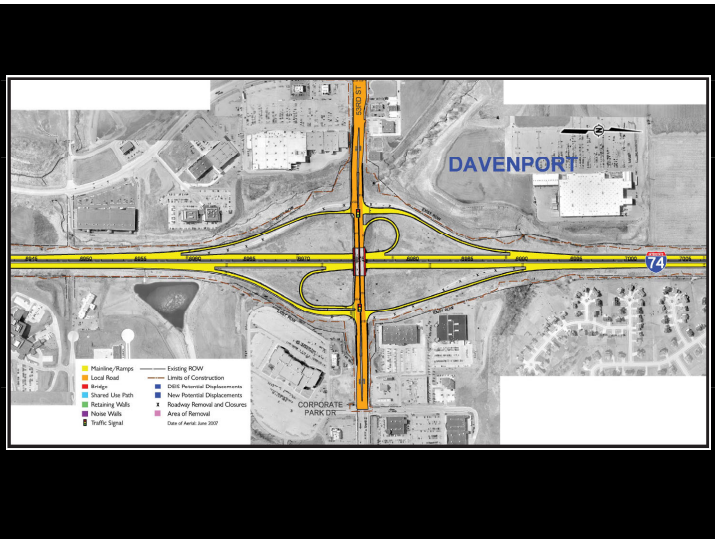
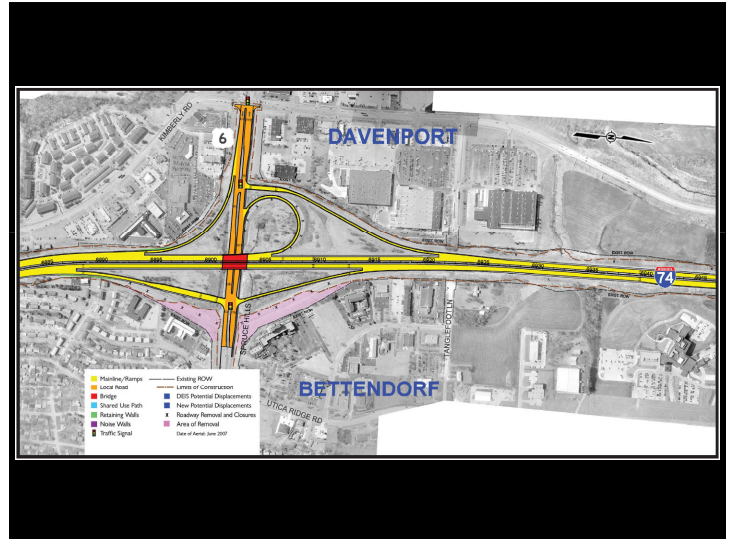
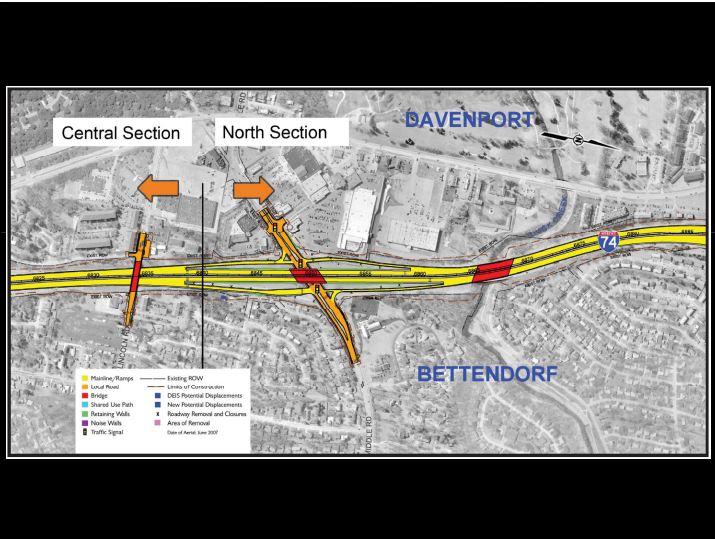


Scenic Overlook

Interchange ramps and local roadway improvements





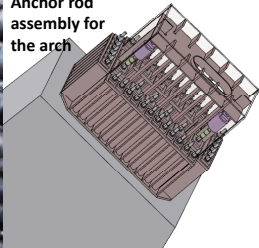


# Stainless Steel

Stainless steel in select locations:

- Arch anchor rods
- Bridge expansion joints
- Superstructure

Anchor rod assembly for the arch



Designed to withstand barge impacts



Stainless steel reinforcement in deck

# Concrete

Various types of concrete are used:

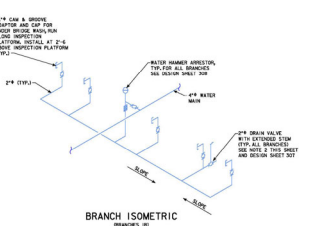
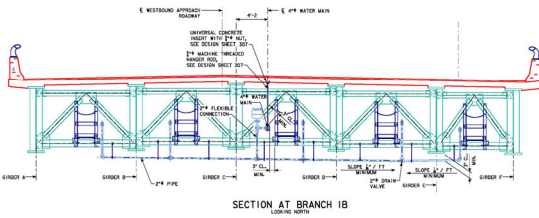
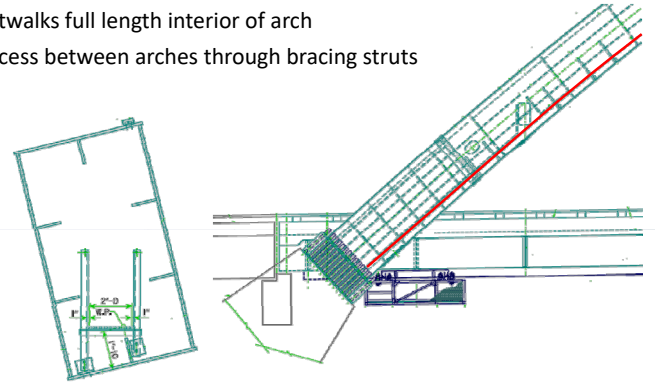
- High-performance in select locations
- High-strength
- Self-consolidating



Inspection/Maintenance Walkway and Traveler

Arch Rib Walkway:

- Catwalks full length interior of arch
- Access between arches through bracing struts



Maintenance waterline



LED lighting



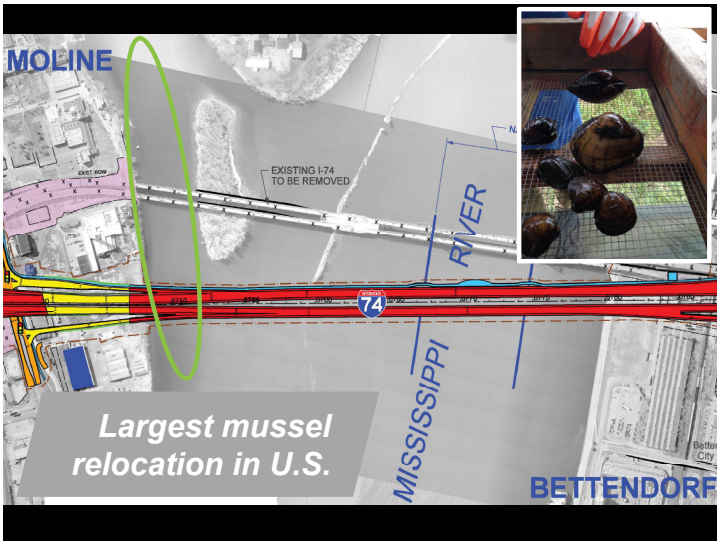
Multi-use path



Scenic overlook



City-funded hospital-size elevator



Largest mussel relocation in U.S.

## Outreach

- City/County Board presentations
- Speakers bureau
- Media outreach and interviews
- Newsletters
- Road closure and bike path detour announcements
- Eblasts
- Social media
- Webcams

## Stay connected!



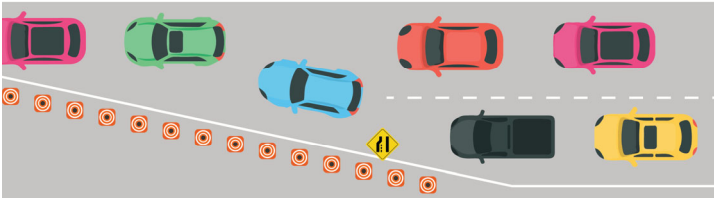
## I-74 Mississippi River Bridge Virtual Reality Experience

Try it today!

Visit [I74RiverBridge.com](http://I74RiverBridge.com) to find the nearest location.

## A ZIPPER MERGE IS THE WAY TO GO!

- 1 Use both lanes.
- 2 Resist the urge to merge early.
- 3 Each car in the right lane should allow one car to merge in front of them.



- Announced April 9, 2019
- Zipper merge reduces backups on ramp and River Drive (and potentially all the way to 19<sup>th</sup> Street)

RIVER TRAFFIC ADVISORY I74RiverBridge.com

# BOATER SAFETY IS NAUTI-COOL

MOLINE BETTENDORF

EXISTING BRIDGE

NAVIGATION CHANNEL

I-74

CONSTRUCTION ZONE

NO MERGE ZONE

NO MERGE ZONE

NO MERGE ZONE

SLOW DOWN, BE ALERT AND PAY ATTENTION!

I74Mississippi RIVER BRIDGE

## Traffic/Congestion Mitigation

- Coordination with other bridge projects
  - Centennial Bridge, Arsenal bridge, Rock Island viaduct, I-80, I-280
- Additional buses
  - Extra buses to run M-F beginning December 2018 through spring 2020 (free)
- Highway Helper
  - Emergency assistance truck along I-74
  - Begins fall 2018

I74Mississippi RIVER BRIDGE

### Status & Construction Activities

## Contractors

**I-74 MISSISSIPPI RIVER BRIDGE**  
Lunda Construction Co. - \$322 million

**IOWA WESTBOUND VIADUCT**  
Civil Constructors Inc. - \$30 million

**IOWA MAINLINE EXPANSION**  
McCarthy Improvement Co. - \$34 million

**IOWA RAMP AND RETAINING WALL**  
Valley Construction Co. - \$2.7 million

**ILLINOIS VIADUCT AND RAMPS**  
Kraemer North America - \$82 million

**ILLINOIS MAINLINE AND RAMPS**  
Walsh Construction Co. - \$84 million

## Arch Construction

Build the arch in connecting pieces





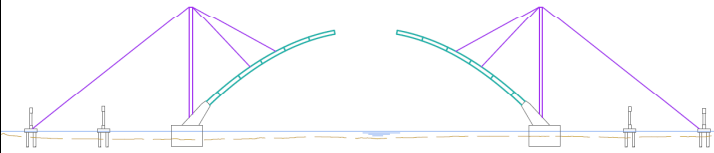
# Arch Construction



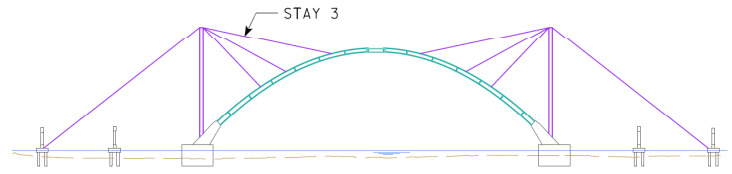
# Arch Construction



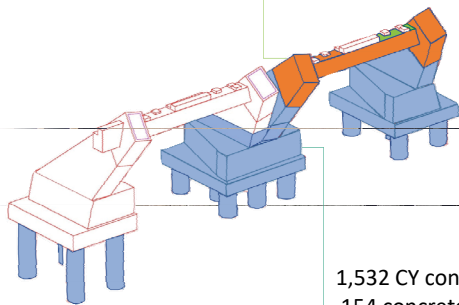
# Arch Construction



# Arch Construction

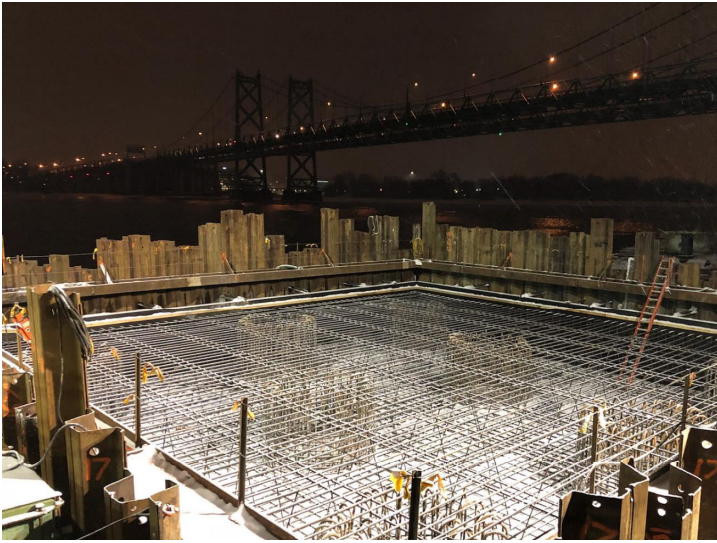


870 CY of concrete (arch ribs and crossbeam)  
87 concrete trucks



1,532 CY concrete (pedestal)  
154 concrete trucks





fabricated arch segments  
delivered by barge



BETTENDORF







### Trivia Fun

The EB and WB bridges are, respectively, same age as:

- A. Elvis, Jim Schnoebelen
- B. Dave Moeller, Kermit the Frog
- C. Charlie Brown, Charlie Purcell



### Trivia Fun

The River bridge has ?? arch segments?

- A. = Times ISU has beaten Iowa in Football
- B. = # Teams in Major League Baseball
- C. = # Team in National Football league



### Trivia Fun

The number of mussels relocated for the project is equivalent to:

- A. Population of Cedar Rapids, IA
- B. Capacity of Jack Trice Stadium
- C. # of lame engineering jokes made today
- D. Forecasted Volume of I-74 in 2035



### Project Challenges

- BIG Project
- Complex, highly technical
- Flooding impacts
- Multi-State Jurisdiction
- Accelerated Schedule
- Building in the river
- Leading edge design and innovations
- Highly visible



## Project Challenges

- BIG Project
- Complex, highly technical
- Flooding impacts
- Multi-State Jurisdiction
- Accelerated Schedule
- Building in the river
- Leading edge design and innovations
- Highly visible

I-74 Mississippi  
RIVER BRIDGE

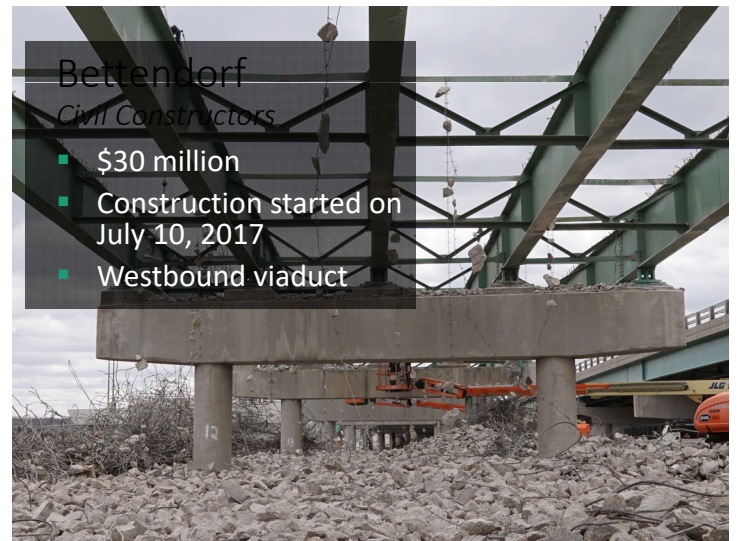


Questions?



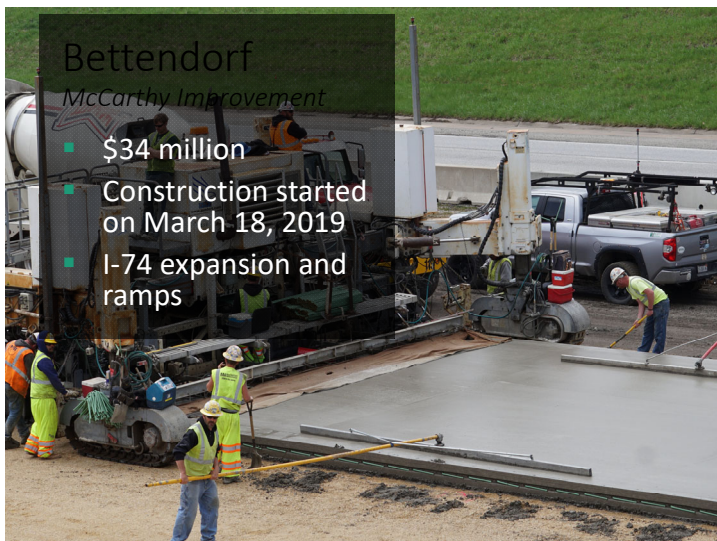
### River Bridge *Lunda Construction Co.*

- \$322 million
- Construction started on July 15, 2017
- Westbound bridge



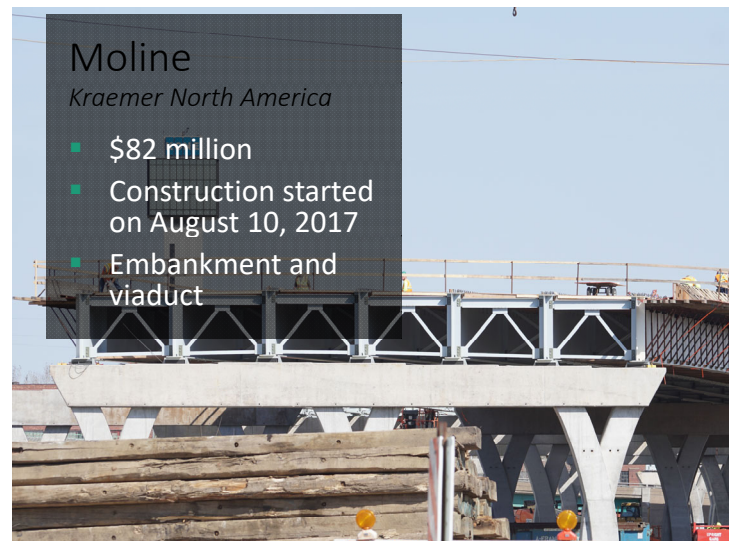
### Bettendorf *Civil Constructors*

- \$30 million
- Construction started on July 10, 2017
- Westbound viaduct



### Bettendorf *McCarthy Improvement*

- \$34 million
- Construction started on March 18, 2019
- I-74 expansion and ramps



### Moline *Kraemer North America*

- \$82 million
- Construction started on August 10, 2017
- Embankment and viaduct



## Moline Walsh Group

- \$84 million
- Construction started on January 29, 2018
- I-74 expansion and local road reconstruction

## Iowa Future Lettings

### EASTBOUND VIADUCT

Tentative December 2019 letting \$41.4 million

### BETTENDORF ELEVATOR

Tentative Fall 2019 letting \$2.3 million

### RIVER BRIDGE REMOVAL

Tentative September 2020 letting \$21 million

### LANDSCAPING

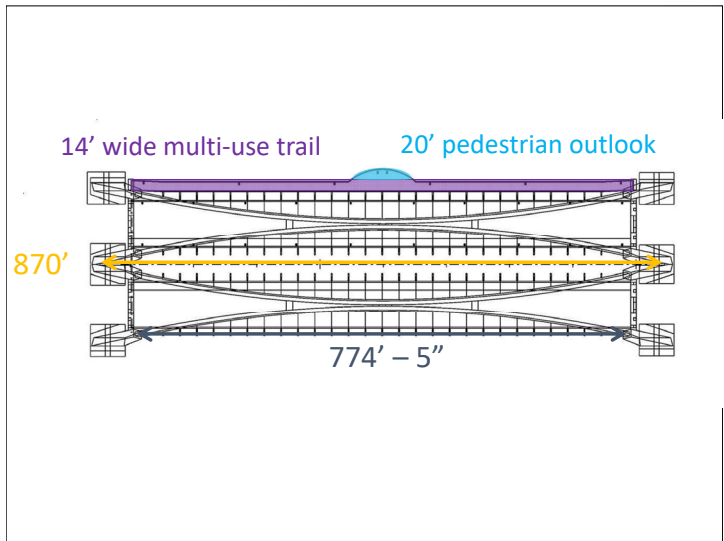
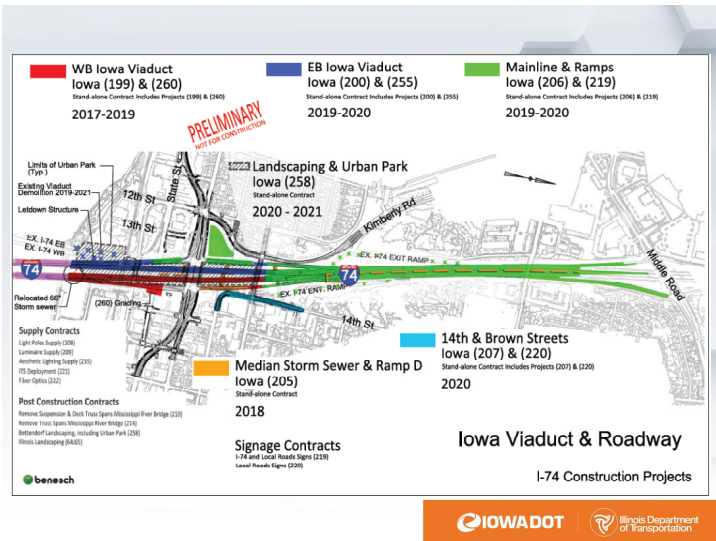
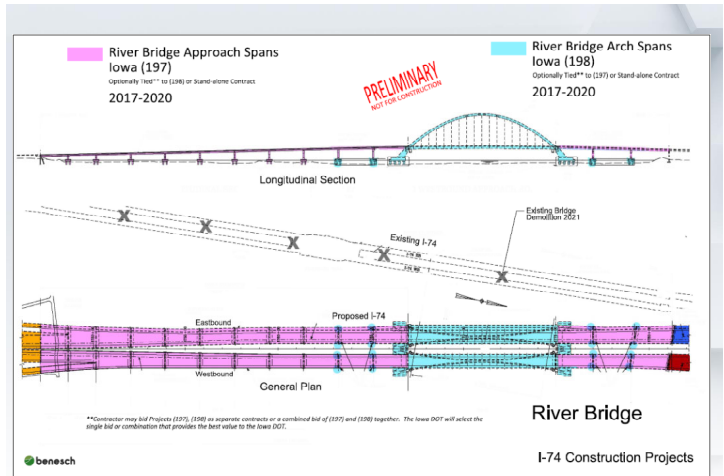
Tentative October 2020 letting \$6.2 million



## Illinois Future Lettings

### LANDSCAPING

Tentative November 2020 letting \$1.5 million



# Project Partners

## LEAD AGENCIES



## PARTNERS

City of Bettendorf  
City of Davenport

City of Moline  
City of Rock Island

Bi-State Regional Commission

Scott County

Rock Island County

