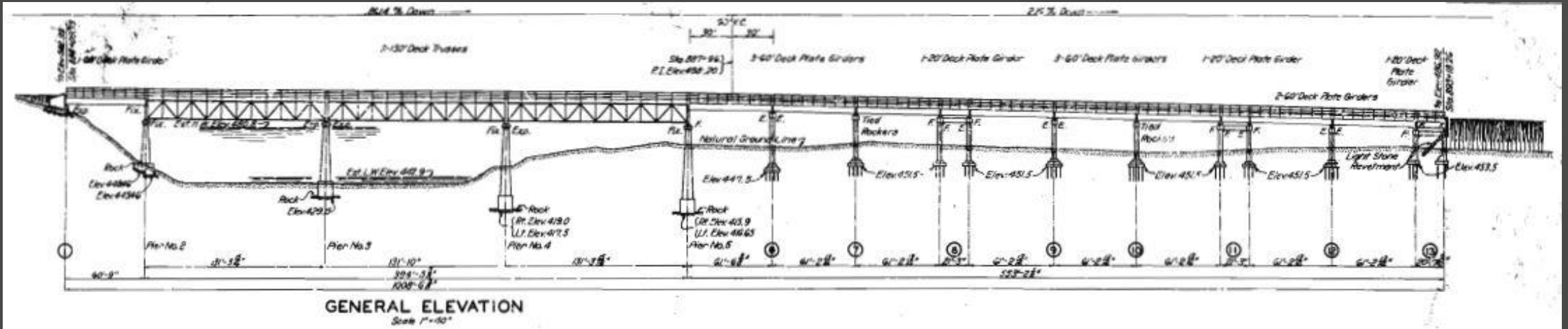




Public Meeting – August 21, 2021

# Historic Route 66 State Park Bridge Rehabilitation





# Existing Bridge Profile



*Highway 66 Bridge over Meramac River between Eureka and St. Louis, Mo.*

BL 50





# Main Truss Spans

## CDG Inspection Findings

### Floorbeams

- Remove and replace

### Ends of Trusses

- Remove and replace vertical cross frames and top/bottom lateral bracing
- Cut-off ends of bottom chord and end diagonals and replace in-kind
- Remove and replace top chord and end vertical member in-kind

### Interior Truss Sections

- Remove and replace select plates and bracing members
- Remove and replace limited rivets

### Bearings

- Remove and replace rocker bearings
- Rehab or remove and replace fixed bearings



# Approach Spans CDG Inspection Findings

## Floorbeams

- Remove and replace

## Ends of Approach Spans

- Remove and replace vertical cross frames and top/bottom lateral bracing

## Interior Approach Span Sections

- Remove and replace select plates and bracing members
- Remove and replace limited rivets

## Bearings

- Remove and replace rocker bearings





# Substructure CDG Inspection Findings

## Approach Span Bents

- Repair extensive concrete and rebar deterioration

## Three (3) Truss Span River Bents

- Repair minor concrete and rebar deterioration

## Approach Span Bents (Bent 8B)

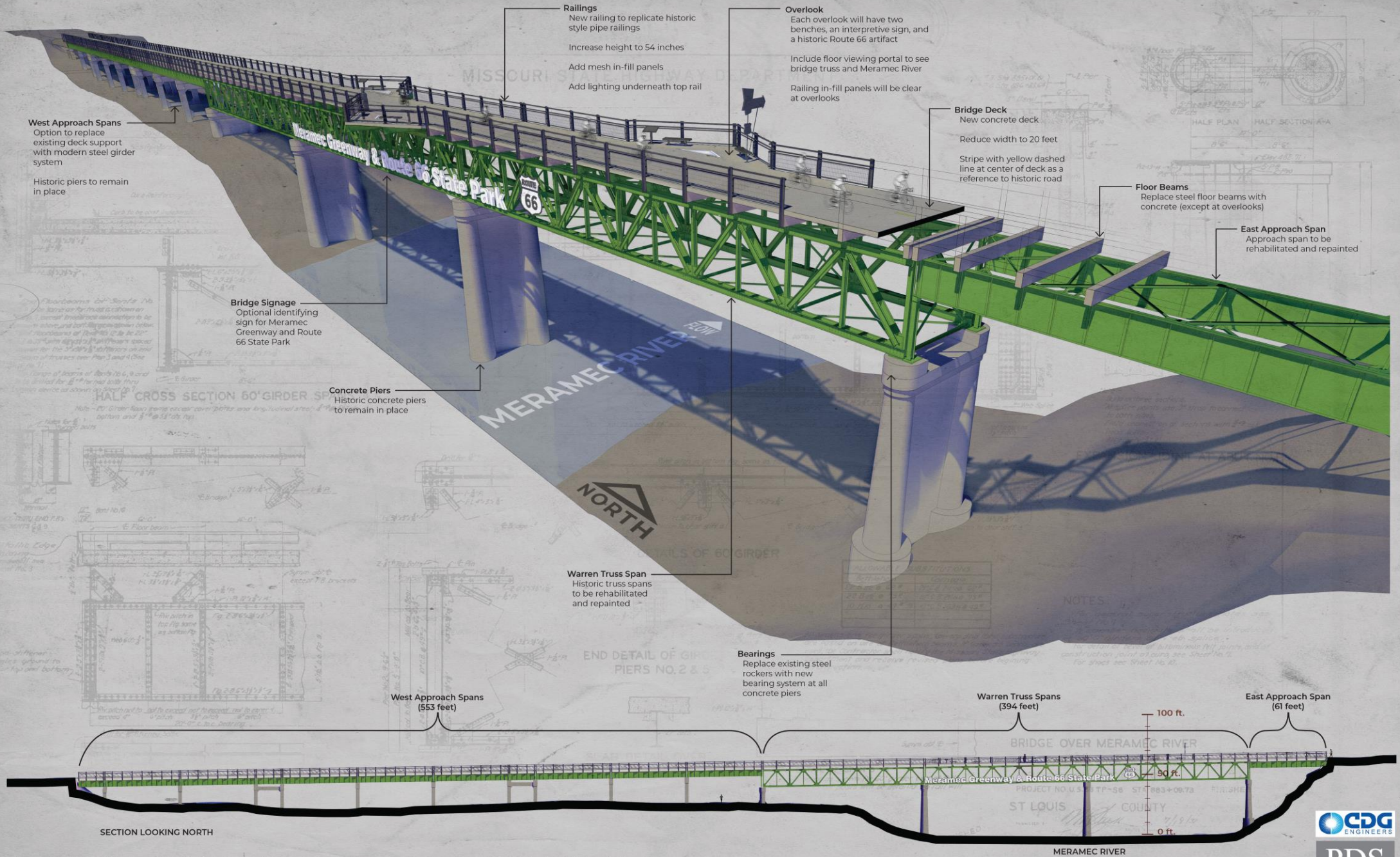
- Possible need for emergency repairs on west-side approach spans – loss of bearing support











**FUTURE PLANS FOR THE HISTORIC BRIDGE AT ROUTE 66 STATE PARK**





**ANTICIPATED OVERLOOK VIEWS**



# Summary of Option 2B

1. Bridge Deck:
  - a. Width: 20 foot clear.
  - b. No curb.
  - c. Concrete with yellow dashed centerline stripe.
2. Bridge Length:
  - a. Rehabilitate Full Length of Bridge.
3. Handrail:
  - a. Historic Pipe Rail with mesh in-fill.
  - b. 54" height with clear panels at overlooks for shorter viewers.
  - c. Lighting in handrail.
4. Overlooks:
  - a. Triangular in shape with floor panels to see truss/river below.
5. Signage:
  - a. Route 66 sign combined with Meramec Greenway and State Park alongside.
6. Color:
  - a. GRG Green.
7. Floor Beams (limited historic span rehab):
  - a. Remove and replace existing steel floor beams with concrete except at 3 overlooks where new steel floor beams will be utilized.
  - b. Height: Sized to maintain existing steel beam height.
  - c. Longer overhanging floor beams NOT needed.





# Option 2B Cont.

8. Rehab existing steel trusses, girders and bracing for 3 Truss Spans, single East Approach Span and easternmost West Approach Span.
9. For remaining West Approach Spans (west of Int. Bent 6).
  - a. Remove all existing structural steel (floorbeams, 60" girders & bracing).
  - b. Replace with 3 lines of new steel continuous plate girders.
  - c. Floor beams removed and not replaced (new bridge deck spans between new girders).
  - d. Use longer (and fewer) steel girder spans:
    - i. 60-60-80-60-60-80-80 (480') 36" deep PL Girder.
    - ii. 120-140-140-80 (480') 48" deep PL Girder.
    - iii. Remove or don't reuse some existing west approach bents.
10. West approach spans would look more modern and different (can add faux vertical web stiffeners along outside of exterior girders).
11. Estimated Total Cost of \$ 8.9 Million.





















# Next Steps

- Public Outreach and Fundraising

Glenn A. Smith, P.E.

314-781-7770

[GSmith@cdgengineers.com](mailto:GSmith@cdgengineers.com)

