



**MAIN STREET OVER DAN RIVER
DR. MARTIN LUTHER KING JR.
MEMORIAL BRIDGE
REHABILITATION**

**Danville River District Meeting
Presentation | December 12, 2024**

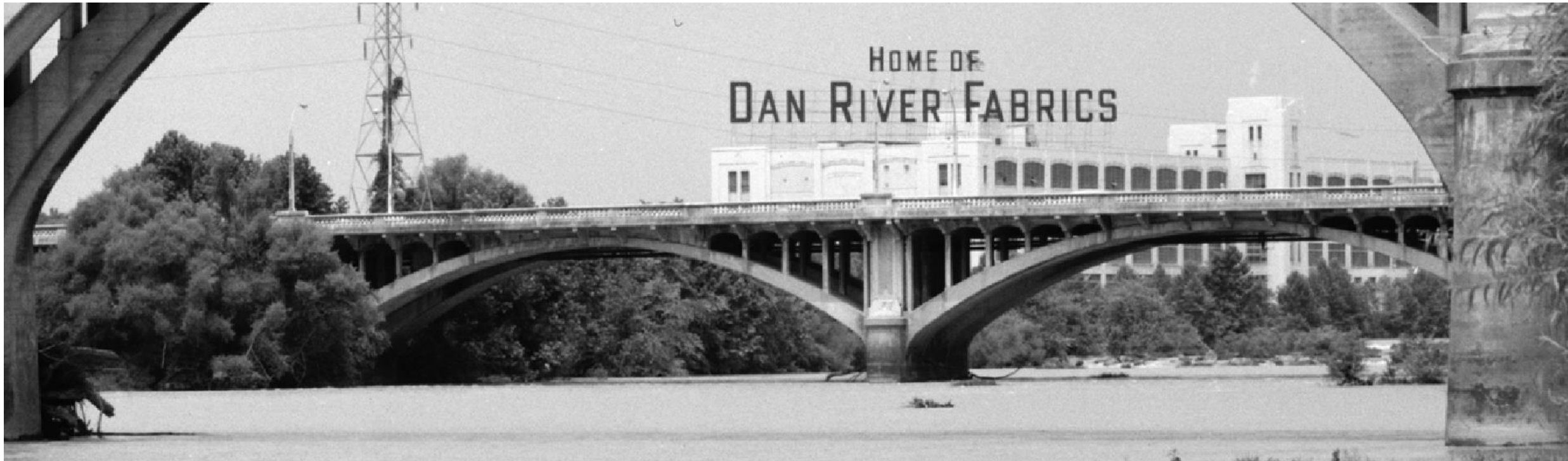


Location Map



From Google Maps

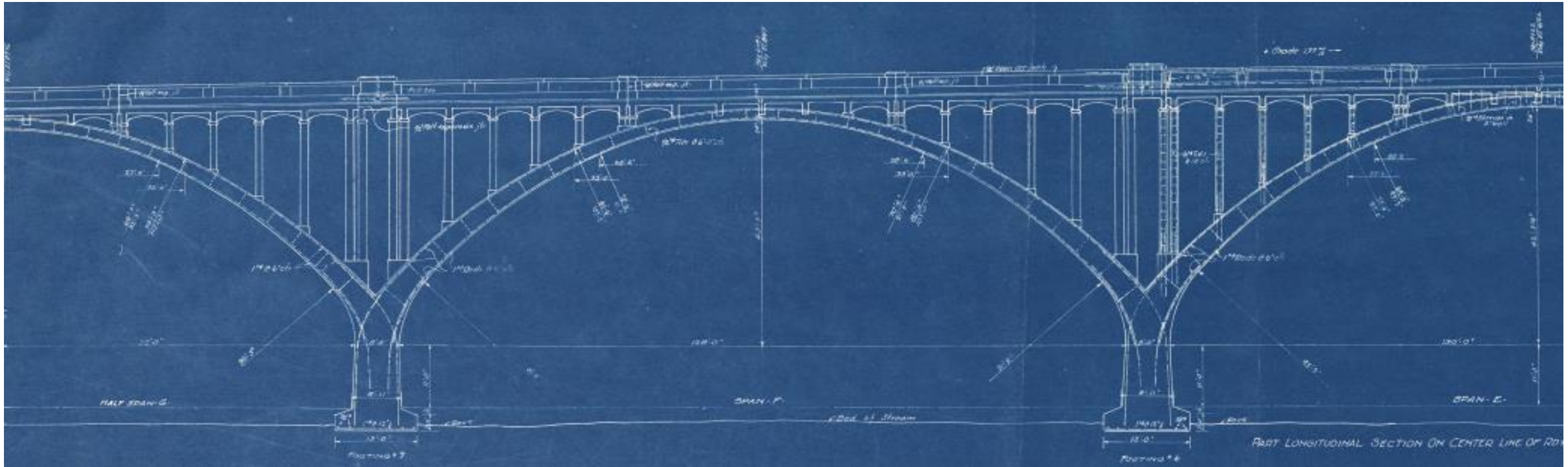
Original Bridge



Main St. Bridge looking under Worsham St. Bridge
From the Library of Congress

Original Bridge

Original Main St. plans not available - WRA obtained plans from the Library of Virginia for the Worsham St. Bridge (torn down 2009) which was designed and built same time by same EOR (Daniel B. Luten) and was of similar design to the pre-modified Main St. Bridge over Dan River.



Portion of Worsham Street Plans

Current Bridge

All aspects of the bridge were replaced above the arches in early 2000's, recreating the original architectural aspects of the bridge.



Main Street Bridge over Dan River (Martin Luther King Memorial Bridge)



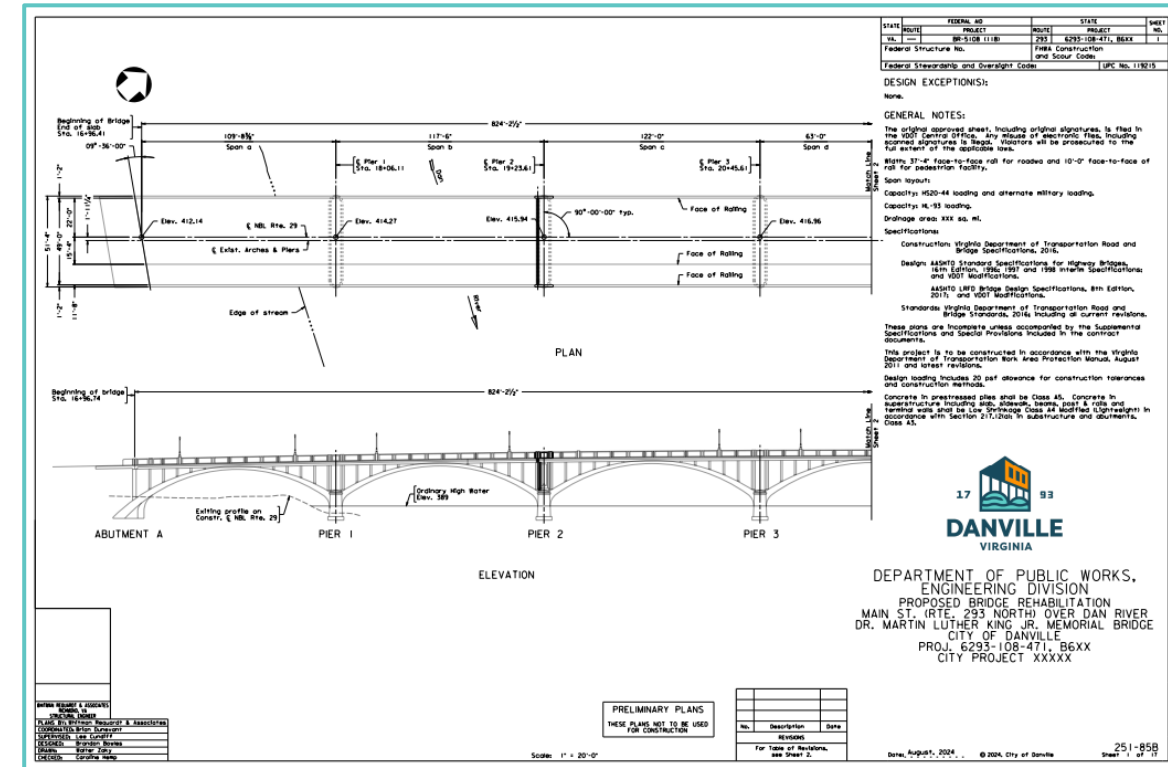
Close up of Original Arch Remaining and newer bridge element above the arch



Close up of Original Arch Remaining and newer bridge element above the arch

Proposed Repairs

- Maintain Architectural Features
- Concrete Surface Repairs
- Add Bridge Joints
- Coat Concrete Railings



Proposed Repairs



- Design intent is to maintain all current architectural features of the structure.
- Perform Concrete Surface Repairs as part of routine maintenance of the structure
 - Will primarily be on older portions of the structure.
- Add several of the joints that were eliminated in early 2000's to improve performance of the structure.

Joints

- New joints will be like the existing joints on the bridge.
- A new line of columns will be required at each joint but will be added like they would have been originally.



Existing Joint From Above



Existing Joint From Below – Showing Two Adjacent Column Lines

Joints In Parapet / Railing

- Railings will be modified slightly to allow for the introduction of the joints and apply concrete color surface coating to the railings to provide uniform concrete appearance.



General View of Concrete Rail Showing Existing Joints

Proposed Repairs

- Apply arch sprayed zinc to all portions of the bridge that remain from the original structure (arches and bases of piers).



Application of Material – Final surface above



Example of Final Metalized Surface on similar structure



Thank you.

