



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

**Arkansas Division**

September 5, 2013

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In Reply Refer To:  
HDA-AR

Mr. Scott Bennett, Director  
Arkansas State Highway and  
Transportation Department  
Little Rock, Arkansas 72203-2261

Subject: Arkansas River Str. & Apprs. (Broadway Bridge)  
Pulaski County, AHTD Job Number 061275

Dear Mr. Bennett:

As requested in Mr. Lynn Malbrough's letter of August 22, 2013, we have determined that this project will have no significant impact on the environment.

The attached finding of no significant impact (FONSI) is based on the results of the environmental assessment (EA). The EA has been independently evaluated and determined to adequately and accurately discuss environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. You may proceed to final design. If you have any questions or would like to discuss, please contact me at 501-324-6430.

Sincerely,

Randal Looney  
Environmental Coordinator

Enclosure

**FEDERAL HIGHWAY ADMINISTRATION  
FINDING OF NO SIGNIFICANT IMPACT  
ARKANSAS RIVER STR. & APPRS. (BROADWAY)(LR/NLR)(F)  
FAP NUMBER BRN-9253(63)  
AHTD JOB NUMBER 061275  
PULASKI COUNTY, ARKANSAS**

The Arkansas State Highway and Transportation Department (AHTD) has completed the assessment of the proposed project and The Federal Highway Administration (FHWA) issues a Finding of No Significant Impact (FONSI) for the Arkansas River Str. & Apprs. (Broadway Bridge) Project between Little Rock and North Little Rock, Arkansas.

Upon consideration of the FHWA approved Environmental Assessment (EA), public comments, and other considerations as contained in the following discussion, the FHWA has determined that the proposed bridge replacement project will have no significant impact on the environment and hereby issues a FONSI pursuant to 23 CFR 771(a).

This FONSI is based on FHWA's independent evaluation. The information contained in the EA has been determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. No impacts identified would cause any significant adverse effects to the human or natural environment.

### **Purpose and Need**

The purpose and need of the proposed bridge, as outlined in the EA, is to ensure that the Highway 70 bridge over the Arkansas River (Broadway Bridge) in Pulaski County will continue to safely provide for the current and future transportation needs of this corridor. The project is proposed due to deterioration of the existing structure, increasing maintenance costs, increasing traffic volumes and the bridge's functional obsolescence. These considerations warrant replacement of the existing Broadway Bridge crossing the Arkansas River between the Cities of Little Rock and North Little Rock, Arkansas.

### **Project History**

In March of 2010, the AHTD requested the Broadway Bridge be listed in the Central Arkansas Regional Transportation Study's (CARTS) Fiscal Years 2012-2013 Transportation Improvement Program (TIP) for funding in Fiscal Year 2013. The CARTS TIP was incorporated into the Arkansas Highway Commission's State TIP (STIP) that went into effect in April 2010.

The EA, approved August 7, 2012, evaluated five alternatives:

- No Action.
- Alternative 1 consisting of a five-lane arterial bridge with plate girder design having a 16-foot shared use path on the eastern side of the bridge. The bridge would be built on existing alignment with the bridge to be demolished before construction of the new bridge.
- Alternative 2 consisting of a five-lane arterial bridge with plate girder design having a 16-foot shared use path on the eastern side of the bridge. The new bridge would be built on an offset alignment with the old bridge demolished after construction of the new bridge.
- Alternative 3A consisting of a five-lane arterial bridge with plate girder design with no shared use path, on an offset alignment. The existing Broadway Bridge would be converted to a pedestrian/bicycle facility to be utilized and maintained by the Cities of Little Rock and North Little Rock.
- Alternative 3B consisting of a five-lane arterial bridge with a plate girder design and a steel arch over the navigation channel, all on an offset alignment. The existing Broadway Bridge would be converted to a pedestrian/bicycle facility to be utilized and maintained by the Cities of Little Rock and North Little Rock.

After a Location Public Hearing (LPH) was held August 23, 2012, the Cities of Little Rock and North Little Rock deemed Alternatives 3A and 3B not feasible due to higher than expected rehabilitation and maintenance costs. Considering information contained in the EA, the comments received at the LPH, and the cities decision to drop the rehabilitation, Alternative 1 (shown in Figure 1) was identified as the Preferred Alternative by the Interdisciplinary Staff on October 17, 2012. Appendix A contains the Disposition of Comments for the LPH.

After passage of a 1/2 cent sales tax, Pulaski County agreed to provide additional funding of \$20 million to the project. In response to this additional funding commitment, the AHTD incorporated arches into the modified Preferred Alternative design that was shown at the Design Public Hearing (DPH) held March 28, 2013. The bridge design included a clear roadway width of 52 feet that consisted of four 11-foot travel lanes, 4-foot shoulders and a barrier separated 16-foot shared use path that would run the full length of the bridge. The new bridge would be approximately 1,767 feet long with steel plate girder approach units; two 448 feet basket-handle, network, tied arches spanning the river; and utilizing a concrete deck supported by steel substructure. The modified Preferred Alternative shown at the DPH is illustrated in Figure 2. This design was proposed with four color options at the meeting. Comments received at the meeting showed a preference for a lighter colored structure (Appendix A).



Figure 1. Location and Design of Alternative 1 identified as the Preferred Alternative.

At the DPH, a draft *De Minimis Section 4(f) Evaluation* for both city parks was available for review and comment. A copy of each approved *De Minimis Section 4(f) Evaluation* is located in Appendix B of this document.

The Arkansas Highway Commission approved a motion on July 24, 2013 supporting Pulaski County's designation to call the Broadway Bridge "America's Bridge" and the addition of enhancements, such as plaques and flag poles, that will be paid for by Pulaski County when private funding becomes available. The enhancements will be reviewed by the AHTD, FHWA, the Cities and Pulaski County before final adoption.

### **Design Modifications**

The design shown at the DPH is illustrated in Figure 2 and design modifications since the LPH are discussed below:

- Construction cost increased from \$63.7 to \$76.7 million due to the addition of the two basket-handle, network, tied arches to the plate girder structure.
- The original dimensions of the bridge changed from a 1,765 feet long by 81 feet wide structure to 1,767 feet long by 107 feet wide structure. The bridge is wider

because the sloped network tied arches need additional width to accommodate the angle of arch support lean and to allow taller vehicles (trucks) safe clearance. The approach spans on both sides of the river will still be of a plate girder design with mechanically stabilized earth (MSE) walls.

- The typical bridge cross-section changed from a 5-lane bridge to a 4-lane bridge. Coordination with the Cities and Metroplan resulted in the decision to drop the dedicated LaHarpe Boulevard exit lane and remove access from eastbound Riverfront Drive onto southbound Broadway. The bridge cross-section now consists of four 11-foot lanes, 4-foot shoulders and a concrete barrier protected 16-foot shared use path.
- The pedestrian/bicycle ramp location on the north side of the river was moved further north between the levee and Riverfront Drive due to concerns of impacts to Riverfront Park expressed by North Little Rock. Overlooks will be placed on both access ramps. As requested, a lockable gate will be installed on the down gradient side of the North Little Rock overlooks to provide a means to control pedestrian/bicyclist traffic entering the park during special events.
- The Robinson Center design team requested an opportunity to coordinate the materials, driveway locations, lighting and design changes to the area immediately west and north of the Robinson Center that will be part of the Center's hardscapes and landscape. Modifications to the MSE walls on the south side of the bridge will closely match the brick of Little Rock City Hall and the Robinson Center. The demolition of the bridge from Broadway Street to the Doubletree Hotel is planned as part of the Broadway Bridge demolition to remove it early in the project timeline, accommodating both the Robinson Center and AHTD construction timeframe.

The design modifications were incorporated into the modified Preferred Alternative as shown in Figure 2.

### **Potential Impacts**

- The proposed project will require no residential or business relocations. An existing gas line on the bridge will be relocated prior to construction. A large municipal water line, telephone lines and other communication lines are currently planned to be upgraded and placed on the new structure or an adjacent bridge.



Figure 2.  
Modified Preferred Alternative

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- The FHWA, in consultation with the State Historic Preservation Officer, has determined the proposed actions will have no effect upon any properties protected under Section 106 of *The National Historic Preservation Act of 1966* (Appendix C). Two National Register of Historic Places (NRHP) structures in the project area are the Little Rock City Hall and the Robinson Center. A shipwreck that is eligible for inclusion to the NRHP was identified in the project area. Efforts to minimize impacts to all three structures were made throughout the project development and will be included in the final plans.
- The McClelland-Kerr Arkansas River Navigation System could be affected by the project during demolition and construction of the new structure. Coordination with the United States Coast Guard (USCG) and United States Army Corp of Engineers (USACOE) will be necessary before and during all phases of construction and during the permitting process.
- The proposed action will have minor impacts on parks owned by the Cities of Little Rock and North Little Rock. The AHTD will acquire 0.14 acre of the 33 acre Julius Breckling Riverfront Park, owned and operated by the City of Little Rock. The AHTD will acquire 0.43 acre of the 14.3 acre Riverfront Park, owned and operated by the City of North Little Rock. The *De Minimis Section 4(f) Evaluations* prepared for this project concluded that the park functions, protected features, qualities and activities will not be impaired by the project. The Cities of Little Rock and North Little Rock approved the *De Minimis Section 4(f) Evaluations* which are provided in Appendix B.
- Land and Water Conservation Grant Section 6(f) funding was used on the Julius Breckling Riverfront Park. The AHTD will provide 0.014 acre of replacement property for the acquisition of this park property.
- The project is located in an area that is designated as “in attainment” for all transportation pollutants. Therefore, the conformity procedures of *The Clean Air Act*, as amended, do not apply. Computer analyses for similar projects indicate that the predicted worst-case carbon monoxide concentrations for the modified Preferred Alternative do not exceed the National Ambient Air Quality Standards.
- In accordance with the *Title 23 Code of Federal Regulations Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise*, a study was conducted to assess the potential noise impacts associated with the proposed project. Noise predictions have been made for this project utilizing the FHWA’s TNM 2.5 (Traffic Noise Model) procedures. These procedures

indicated that noise levels are below the FHWA noise criteria beyond the project's proposed right of way limits and no sensitive receptors are currently impacted. Any increases in roadway noise levels will not be the result of the proposed project, but instead a result of traffic volume increases during the planning period (Year 2025). Therefore, any noise level increases will occur independently of this proposed project, and no project related noise impacts are anticipated. In compliance with Federal guidelines, local authorities will not require notification.

- Field inspections found no evidence of underground storage tanks (USTs) in the project area. An asbestos inspection will be conducted well prior to demolition of any structures.
- No special floodplain hazard areas will be impacted by this project, however floodplain crossings will occur. The project will not support incompatible use and development of the floodplain. Adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the job. None of the encroachments will constitute a significant floodplain encroachment or a significant risk to property and life.
- In accordance with *Executive Order 11990*, special considerations were taken in developing and evaluating the alternatives to avoid and minimize wetland impacts associated with this project. The modified Preferred Alternative will not result in any impacts to wetlands.
- Pursuant to Section 7(c) of *The Endangered Species Act of 1973*, the project area was evaluated for the potential occurrence of threatened and endangered species. Distributional records maintained by the Arkansas Natural Heritage Commission and the Fish and Wildlife Service identified the Interior Least Tern (*Sterna antillarum athalassos*) as the only listed species known to inhabit the area. There are no known nesting sites within the project area. The project area is highly urbanized and any terns utilizing the area are likely adapted to human activities; therefore, the project is not likely to adversely affect listed species.
- The existing bridge is the nesting site of migratory birds. These birds include, but are not limited to, swallows and phoebes. The birds and their habitat are protected under the *Migratory Bird Treaty Act*. Demolition of the bridge and other construction activities could disrupt nesting activities. A Special Provision will be used to limit impacts to migratory birds.

- City of Little Rock and Pulaski County parking areas will be temporarily impacted during construction by the project due to their location underneath and adjacent to the construction area.

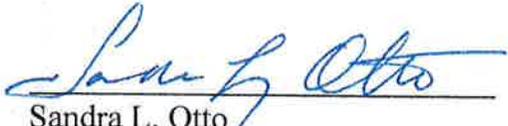
### **Commitments**

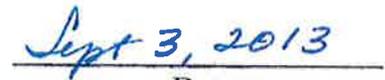
- 1) The Julius Breckling Riverfront Park, owned and operated by the City of Little Rock, will be impacted by acquisition of 0.14 acre. Commitments to reduce harm to the park can be found in *De Minimis Section 4(f) Evaluation*.
- 2) Approximately 0.014 acre of Julius Breckling Riverfront Park enhanced with LWCF Section 6(f) funds will be replaced by other suitable property.
- 3) Riverfront Park, owned and operated by the City of North Little Rock, will be impacted by the acquisition of 0.43 acre. Commitments to reduce harm to the park can be found in the *De Minimis Section 4(f) Evaluation*.
- 4) During construction, if hazardous materials or USTs are identified or accidentally uncovered by any AHTD personnel, contracting company(s), or state regulatory agency, the AHTD will determine the type, size, and extent of the contamination according to the AHTD's response protocol. The AHTD, in consultation with the Arkansas Department of Environmental Quality, will decide the type of containment, remediation, and disposal methods to be employed for that particular type of contamination.
- 5) The design measures to minimize floodplain impacts include: (1) avoiding longitudinal floodplain encroachments; (2) sufficient bridging and/or drainage structures to minimize adverse effects from backwater; (3) sufficient bridging and/or drainage structures to minimize increases in velocity; (4) minimizing channel alterations; (5) adequate and timely erosion control to minimize erosion and sedimentation, and (6) using AHTD's Standard Specifications for controlling work in and around streams to minimize adverse water quality impacts. The final project design will be reviewed to confirm that the design is adequate and that potential risk to life and property are minimized.
- 6) The AHTD will comply with all requirements of *The Clean Water Act*, as Amended, for the construction of this project. This includes *Section 401: Water Quality Certification*, *Section 402: National Pollutant Discharge Elimination Permit* (NPDES), and *Section 404: Permits for Dredged or Fill Material*. An Individual 404 Permit will be required from the USACOE for construction of this project.

- 7) Coordination and construction commitments with the USCG will be required due to construction over the McClellan-Kerr Arkansas River Navigation System. These USGC commitments are navigational height requirements, navigational channel bridge span width, placement of navigation lighting, placement of piers, removal of existing piers and dolphins, navigational traffic controls, USCG notifications, and other related items concerning navigation and safety.
- 8) Coordination with the Robinson Center design architects concerning the rehabilitation of the Robinson Center has been ongoing. The following commitments have been made with the Robinson Center design team: further coordination concerning timing and construction logistics to coincide with the rehabilitation of the Robinson Center; addition of faux brick work on the MSE walls to match the brick work on the Robinson Center and Little Rock City Hall on the Little Rock side; sidewalk and entrance modifications to closely match the proposed design of the Robinson Center; and removal of the Doubletree bridge to facilitate installation of a new access to the Robinson Center along Garland Avenue.
- 9) Plan modifications for the North Little Rock side of the project include overlooks placed on the shared use access ramp and a lockable gate installed on the down gradient side of the North Little Rock overlook to provide a means to control pedestrian/bicyclist traffic entering the park during special events. Addition of faux brick work will be installed on the MSE walls to complement the existing brick at Dickey Stephens Park.
- 10) A Special Provision will be added to the contract delineating an environmentally sensitive area in the location of the shipwreck to be avoided during construction of the bridge and removal of the southeast dolphin of the Broadway Bridge.
- 11) A Special Provision will be included in the contract to address potential impacts to migratory birds. The Special Provision includes restrictions on the timing of construction and demolition activities as well as details on the use of deterrent measures to prevent nesting activities.
- 12) City of Little Rock and Pulaski County parking will be restored once the bridge and its approaches are completed.

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Based upon the EA, additional information included in this document, and the Disposition of Public Comments for the LPH and DPH, FHWA concludes that no additional environmental documentation is required for this project.

  
\_\_\_\_\_  
Sandra L. Otto  
Division Administrator  
FHWA, Arkansas Division Office

  
\_\_\_\_\_  
Date

**APPENDIX A**

**COMMENTS AND RESPONSES  
FROM THE LOCATION PUBLIC HEARING  
AND  
THE DESIGN PUBLIC HEARING**

# LOCATION PUBLIC HEARING DISPOSITION OF PUBLIC COMMENTS

**Job 061275**

**Arkansas River Str. & Apprs. (Broadway) (LR/NLR) (Hwy. 70)  
Pulaski County**

A Public Officials Meeting and a Location Public Hearing were held Tuesday, August 23, 2012 for discussion of a proposed Arkansas River Bridge replacement on Highway 70 commonly known as the Broadway Bridge. The officials' meeting was held from 10:00 a.m. to 12:00 p.m., and the public meeting was held from 4:00 to 7:00 p.m. at the Arkansas Transit Authority in North Little Rock, Arkansas. Officials and the public were invited to discuss and view possible design ideas, fill out comment forms and discuss options for the new bridge. The Environmental Division was present to address public input concerning alternatives brought forward in the Environmental Assessment. Copies of the Environmental Assessment and other general project information were available.

Comment forms providing a general information summary were distributed to the attendees and written comments were received from a total of 42 individuals. The comment forms solicited comments for three specific questions and provided space for general comments on the architectural finishes shown in the bridge renderings. A summary of the written comments are as follows:

### **Comment Form Question 1 – Do you feel there is a need for the proposed bridge replacement on Hwy. 70 (Broadway Bridge) over the Arkansas River?**

Of the 42 respondents who responded to the above question, 32 individuals checked yes, 5 answered no and 5 had no response. There was no response space for comments to this question.

### **Comment Form Question 2 – Which Alternative would you prefer? Why?**

On the comment form there were five boxes to check, these alternatives were: Alternative 1 (Preferred Alternative), Alternative 2, Alternative 3A, Alternative 3B and No Action. The 43 commenter's preferences are tabulated below in Table 1:

Alternative 1	9
Alternative 2	13
Alternative 3A	3
Alternative 3B	9
No Action	4
Multiple Responses	3
No Response	1
Made own Alternative Response	1

Comments and responses regarding why a particular alternative was preferred are as follows:

*Alternative 1 (Preferred Alternative).*

**Comment:** Alternative 1 has less construction impacts on Dickey Stephens Park.

**Response:** Comment noted.

**Comment:** Two commenter's wanted the Broadway Bridge to maintain its present location in relationship to Broadway Street, City Hall, and the Robinson Auditorium.

**Response:** The Preferred Alternative minimizes impacts to City Hall and the Robinson Center.

**Comment:** Old bridge needs to be torn down.

**Response:** The Preferred Alternative will remove the bridge, approaches, and piers completely.

**Comment:** Cleaner lines and less maintenance costs in the long run. Out with the old in with the new.

**Response:** Comment noted.

**Comment:** Alternative 1 appears to be the simplest and least costly. My concerns are that the bridge be constructed on time and within budget and meets the needs of the cities it connects in the future.

**Response:** Comment noted.

**Comment:** Would like more aesthetics such as lighting. See the Pike Avenue roundabout for great aesthetics/lights.

**Response:** Lighting is proposed for the new bridge.

**Comment:** The bridge needs to stay in its current location but due to structural deficiencies it needs to be replaced. It needs to have good pedestrian access and transport across. I think there needs to be a strong effort to incorporate mass transit into the scheme though, probably on the same side as the pedestrian/bike path.

**Response:** The Preferred Alternative will be on the same location with adequate pedestrian facilities and the ability to accommodate future trolley traffic.

*Alternative 2.*

**Comment:** Consider adding bicycle safe railing along the top of the western barrier to provide a safe barrier if cyclists decide to use the vehicular roadway to cross the bridge.

**Response:** The modified Preferred Alternative has a 4.5' tall railing along the western barrier for safety.

**Comment:** Two commenter's were concerned about the amount of time the Broadway Bridge would be closed. They preferred the shorter three months with Alternative 2.

**Response:** Straighter alignment was preferred by the AHTD, Pulaski County and the Cities of Little Rock and North Little Rock. Time initiatives will be added to the contract to expedite the completion of the project.

**Comment:** Alternative 2 will cost the cities less in maintenance in the long run and has the best appearance. I also believe it does a good job at combining vehicle and pedestrian travel.

**Response:** Comment noted.

**Comment:** I don't think the old bridge is an asset. I like brand new facilities, and the railing.

**Response:** Comment noted.

**Comment:** Alternative 2 provides a new fully functional structure, eliminates city maintenance of a deteriorating century-old bridge, disrupts traffic for only three months and is within five million dollars of the lowest cost solution.

**Response:** Comment noted.

**Comment:** Ramp to Broadway Bridge (south) avoids intersection at ballpark, gets rid of existing Broadway Bridge maintenance and safety concerns, graceful curves to Broadway serve as reminders for drivers to slow down.

**Response:** The on ramp from Riverfront Drive onto Broadway Bridge was dismissed due to cost constraints.

**Comment:** I vote for Alternative 2 unless more money becomes available and some of the upgrades mentioned by Pulaski county Judge Buddy Villines can be implemented. If changes can be made my priorities would be: More distance, some sort of attractive barrier between the pedestrian /bike lanes and the vehicular traffic; widening the pedestrian/bike lanes by as many feet as possible; enhancing the appearance of the bridge.

**Response:** Pulaski County was able to commit money to the project that will go towards the installation of the double basket handle design bridge. Barriers will have concrete bases with attractive fencing that matches the outside barrier fencing along both sides of the bridge.

**Comment:** Cleaner, open structure, better views of river and open feeling crossing. New pedestrian path will be more used than old decrepit structure.

**Response:** Comment noted.

**Comment:** Two commenter's felt that leaving the existing bridge for pedestrian use was not needed.

**Response:** During project development, the Cities of Little Rock and North Little Rock expressed a desire to keep the existing Broadway Bridge for pedestrian use. An engineering consultant firm hired by Metroplan provided a detailed study of the expected rehabilitation and maintenance costs. The rehabilitation cost estimate of \$16 - \$24 million was considered by the cities to be too costly for keeping the existing bridge for use as a pedestrian bridge.

**Comment:** Two commenter's liked leaving the old bridge while the new bridge was being built to help with the traffic congestion.

**Response:** The existing Broadway Bridge is considered structurally deficient due to the condition of the deck, superstructure, and substructure and is considered functionally obsolete due to its existing roadway width and its deficient access ramps. The bridge has become

impractical to maintain with the AHTD's maintenance forces as maintenance costs have continued to increase.

*Alternative 3A.*

**Comment:** It seems hard to justify 6.1 million dollars extra for the arch on Alternative 3B. Although it would look nice, 6.1 million dollars is a lot of money.

**Response:** Comment noted.

**Comment:** Retaining the existing bridge for ped/bike use provides for many more opportunities to create attractive and functional places along the route in combination with safer widths for combined or separated bikes and pedestrians.

**Response:** The existing Broadway Bridge is considered structurally deficient due to the condition of the deck, superstructure, and substructure and is considered functionally obsolete due to its existing roadway width and its deficient access ramps. Maintenance of the existing bridge with the AHTD's maintenance forces is not considered prudent as maintenance costs have continued to increase.

*Alternative 3B.*

**Comment:** Two commenter's requested consideration for a wider shared use path. One requested a minimum 20' wide path, while the other requested a 24' wide path.

**Response:** The width of the proposed shared use path was established based on the 2012 edition of the *Guide for the Development of Pedestrian Facilities* published by the American Association of State Highway and Transportation Officials (AASHTO). This document recommends a range of 10' to 14' for the width of a shared use path. The AASHTO *Guide* also recommends a minimum of 11' for two-way bike traffic to pass side-by-side and allow room for simultaneous pedestrian traffic.

For shared used paths that extend onto an elevated bridge structure, the AASHTO *Guide* recommends that 2' be added to each side of the path. This additional room allows for a shy distance to the barrier and allows needed maneuvering space to avoid people who stop on the bridge to "admire the view". The AASHTO *Guide* does indicate that the shy distance can be decreased to 1' when a smooth barrier is installed or even be eliminated under extremely constrained conditions. Using the recommendations outlined in the AASHTO *Guide*, the total width (including shy distance of 2' each side) of the shared use path for the bridge ranges from 14' to 18'. The proposed value of 16' falls within this acceptable range.

**Comment:** Of the choices, I strongly prefer Broadway as a pedestrian bridge and then build an iconic bridge at Chester Street.

**Response:** The purpose and need of this project is to provide an Arkansas River crossing along Broadway Street. Any proposed bridge project that does not serve the Broadway corridor would not serve the purpose and need for the Broadway Bridge replacement project and would require more extensive environmental studies to analyze all potential new bridge location options in the Central Business District. A Chester Street Bridge would not be in the current study area, and although a new bridge in a different location may be justified, it would not serve the existing need for replacement of the aging Broadway Bridge.

**Comment:** I like saving the existing bridge and converting it to a ped/bike bridge with the arch-Little Rock's version of a High Line (Like in NYC).

**Response:** During project development, the Cities of Little Rock and North Little Rock expressed a desire to keep the existing Broadway Bridge for pedestrian use. An engineering consultant firm hired by Metroplan provided a detailed study of the expected rehabilitation and maintenance costs. The rehabilitation cost estimate of \$16 - \$24 million was considered by the cities to be too costly for keeping the existing bridge for use as a pedestrian bridge.

**Comment:** Entrance and egress following a seismic event.

**Response:** The proposed structure and its related approaches will be constructed to meet seismic standards.

**Comment:** I don't believe that we have looked at utilizing the existing bridge to its fullest extent. Example: If the entire old bridge were encased in 6-24 inches of concrete with reinforcing could this not essentially be a new bridge. You could build a new bridge over the existing bridge. This would maintain historic character and get a brand new bridge. The structure could be an arch suspension on each side of existing that would carry the load required and utilize the existing structure also, which in turn would lighten the members required to carry the new road and walks. I hear that once you refurbish the old bridge you still have a cost to maintain. That is not correct; if you refurbished the old bridge correctly it would be no more cost that maintaining a new bridge.

**Response:** Adding 6 - 24 inches of concrete and reinforcing steel would significantly increase the debt load of the bridge and reduce its carrying capacity.

**Comment:** Alternative 3B avoids traffic nightmares during construction, retains aesthetic appeal of original, historic bridge, which is a gateway to Little Rock and North Little Rock, creates pedestrian bridge/plaza at very little incremental increase in cost, while improving pedestrian access to Dickey-Stephens, Robinson, etc. Current bridge is seen as dangerous to pedestrians.

**Response:** Alternative 3B does meet the purpose and need for the Broadway Bridge replacement project. However, Alternative 1 was selected as the Preferred Alternative due to location, lower environmental impacts, and a more direct route for traveling motorists.

**Comment:** For purposes of maximum long distance view of this special Arkansas River location, it is essential that the road beds be at the same elevation. For the same reason, the side barriers on the roadway should be of open design and not a solid (view obscuring) wall.

**Response:** The open rail design will be used on the modified Preferred Alternative.

**Comment:** Provides for pedestrian/bicycle traffic on existing bridge, separated from other vehicles and is most compatible with the historic design of the bridge.

**Response:** The modified Preferred Alternative will still provide separation of ped/bike traffic and the double arch will mimic the existing Broadway Bridge arch.

**Comment:** I like retaining the old bridge as a pedestrian /bike space which would also convert to event use. Need shade structures at many places along the bridge to ensure use in summer.

**Response:** During project development, the Cities of Little Rock and North Little Rock expressed a desire to keep the existing Broadway Bridge for pedestrian use. An engineering consultant firm hired by Metroplan provided a detailed study of the expected rehabilitation and maintenance costs. The rehabilitation cost estimate of \$16 - \$24 million was considered by the cities to be too costly for keeping the existing bridge for use as a pedestrian bridge.

*No Action.*

**Comment:** The Broadway Bridge and the Robinson Auditorium form a duality of depression era structures that remind us that useful projects can be accomplished by the American people even in a time of economic hardship.

**Response:** Efforts to minimize impacts to historic sites in the area has been recognized throughout the project.

**Comment:** Four commenter's suggested building Chester Street Bridge first. Less disruption of traffic, plus it would give them another much-needed crossing.

**Response:** The purpose and need of this project is to provide an Arkansas River crossing along Broadway Street. Any proposed bridge project that does not serve the Broadway corridor would not serve the purpose and need for the Broadway Bridge replacement project and would require more extensive environmental studies to analyze all potential new bridge location options in the Central Business District. A Chester Street Bridge would not be in the current study area, and although a new bridge in a different location may be justified, it would not serve the existing need for replacement of the aging Broadway Bridge.

### **Comment Form Question 3 -Please provide comments on the architectural finishes shown in the bridge renderings.**

Comments related to the architectural finishes shown in the bridge renderings were elicited and taken into account when decisions were made related to the designation of design of the Preferred Alternative. Representative comments received at the hearing are provided below.

- Renderings are adequate.
- The bridge needs paint, not a dull boring appearance! Give it some style; make it exciting, yet functional.
- The brick is nice on North Little Rock side.
- Are there "Architectural" finishes? Weak.
- I prefer the architectural finishes on Alternative 2, but out of Alternative 3A and 3B, I prefer 3B.
- I like the railing and light pylons on piers, could use even more decorative lights, features.

**Comment:** Five commenter's thought the provided designs were boring aesthetically.

**Response:** Comment noted.

**Comment:** A use of color on the finishes will make more of a monumental aesthetic statement which has great potential as a major landmark in Arkansas.

**Response:** The bridge will be painted a color scheme that matches existing AHTD structures currently in use.

**Comment:** I like 3A vs. 3B because the arch would remain on the pedestrian bridge and would “read” better to people as you drive on the bridge without the arch and helps retain the historical element of the arch.

**Response:** Comment noted.

**Comment:** Consider taller concrete “monuments” and add arches perpendicular to the deck. If money is available, an extra dosed bridge (similar to cable stayed bridge but with shorter pylons) would provide iconic design.

**Response:** Comment noted.

**Comment Form Question 4 – What is your main concern for the proposed bridge replacement project?**

Individuals were asked to select their main concern for the proposed bridge replacement project. These options were: Cost, Pedestrian/Bicycle Facilities, Time to Completion, Appearance and Other (please specify). A tabulation of the 50 project concerns are shown below in Table 2.

Cost	1
Pedestrian/Bicycle Facilities	8
Time to Completion	8
Appearance	15
Other	7
Multiple Responses	9
No Response	1
Response page missing	1

Comments and responses regarding a particular concern are as follows:

**Comment:** Seismic safety.

**Response:** The Preferred Alternative will be constructed to meet AHTD Seismic Design Specifications.

**Comment:** Reduce overall life cycle cost to the public by simply transferring maintenance cost of an old bridge to the cities (Little Rock and North Little Rock) increases the overall life cycle cost to the public.

**Response:** The Preferred Alternative will include removal of the existing bridge. No additional costs for the bridge upkeep will be incurred by any party.

**Comment:** Appearance best with one bridge left standing.

**Response:** Comment noted.

**Comment:** Use what we have. No concern for history or the energy required to (1) Build the existing structure (2) Tear down the existing structure (3) Fill in landfills.

**Response:** Comment noted.

**Comment:** Alternative transit such as trolley travel was mentioned as an alternative mode of transportation in the future.

**Response:** The Preferred Alternative will be constructed to accommodate future trolley traffic.

**Comment:** Design will still have bottleneck problem at the north Broadway intersection.

**Response:** The Broadway and Broadway intersection will be improved through the addition of additional turning lanes, wider shoulders, improved ADA crossings, pedestrian and bicycle crossings and enhanced signalization.

**Comment:** That it will forever destroy the opportunity to create a destination at the west end of downtown. This is a unique opportunity to do something wonderful. Don't pass it up.

**Response:** Comment noted.

**At the Location Public Hearing, two oral comments were received; these oral comments are included in the Location Public Hearing packet.** Relevant portions of these comments are included below with responses.

*Gary Reiteiss.*

**Verbal Comment:** I am for Alternative 1, just the look of the bridge, the straight alignment across the river and the lowest long term maintenance cost and a couple of years of being inconvenienced are well worth the price for those advantages.

**Response:** Alternative 1 was chosen as the Preferred Alternative because replacing the bridge on the existing alignment would result in the straightest alignment and minimize impacts to the parks, trails, and historic structures near the bridge.

*Glen Schwarz.*

**Verbal Comment:** It should not be destroyed; it should be fixed up and made to last 1,000 years. I do like the alternative of building a 7<sup>th</sup> bridge to connect Little Rock and North Little Rock. We've had 6 bridges for 50 years and it is time that we get an entirely new bridge that connects, a little bit further west, parts of both Little Rock and North Little Rock. So keep the current bridge and build a new one.

**Response:** The existing Broadway Bridge is considered structurally deficient due to the condition of the deck, superstructure, and substructure and is considered functionally obsolete due to its existing roadway width and its deficient access ramps. Maintenance of the existing bridge with the AHTD's maintenance forces is not considered prudent as maintenance costs will continue to increase.

**Subsequent to the Location Public Hearing, six letters were received.** Relevant comments are included below with responses.

*Correspondence from Jim McKenzie, Executive Director, Metroplan.*

**Comment:** Inclusion of a 5<sup>th</sup> lane to the bridge deck. Early in the design process, Metroplan asked AHTD to consider the feasibility of including a local two-lane roadway connecting La Harpe and Riverfront on the river span. The purpose of this suggestion was to postpone the need for a fourth river crossing in the Mid-town /Chester area.

**Response:** Budget constraints necessitated the elimination of the 5<sup>th</sup> lane in order to construct the single basket handle arch desired by community leaders. They felt that the demand for the 5<sup>th</sup> lane would be handled by the future Chester Street Bridge. The addition of the 5<sup>th</sup> lane increased the complexity of designing a new exit ramp on to Highway 10 (La Harpe Boulevard) due to impacts to the nearby Entergy substation.

**Comment:** Adequacy and design of the pedestrian and bicycle space on the bride deck. The designs presented reflect the use of a low volume, shared use path design standard that typically assumes level ground without constraining fencing. We believe that this is the incorrect standard to apply on this project. We have attached a detailed analysis of our concerns and recommendations in this area (Attachment 1). We consider this a life safety issue for cyclist in particular.

**Response:** The width of the proposed shared use path was established based on the 2012 edition of the *Guide for the Development of Pedestrian Facilities* published by the American Association of State Highway and Transportation Officials (AASHTO). This document recommends a range of 10' to 14' for the width of a shared use path. The AASHTO *Guide* also recommends a minimum of 11' for two-way bike traffic to pass side-by-side and allow room for simultaneous pedestrian traffic. The width proposed exceeds this by an additional 2'. The shared use path is provided to encourage cyclists and pedestrians to utilize this path which is separated from vehicular traffic. Experienced cyclists that elect to utilize the shoulder area along the travel way are accepting the responsibility of this decision much like they will once they enter the street network within the downtown area where no bike lanes are provided and cyclist travel with vehicular traffic. Efforts to move the cyclists to the shared use path will include directional signage, street painting and signal crossings.

**Comment:** Bridge Design Speed and Pedestrian Safety-The current bridge has four 10' lanes with no shoulder or shy zones. The peak speeds across the bridge significantly exceed the posted speed limit on the bridge and on the surface streets onto which the bridge empties. South Broadway in Little Rock has the highest incidence of pedestrian/auto accidents in the metropolitan area. The intersection of Broadway and Broadway sees significant pedestrian traffic for events at Dickey-Stephens Park, many of whom are young children. The proposed new structure will consist of four 11' through lanes with 3' shy zones on each side and appears to be consistent with a 40 mile an hour design speed which is well above the posted speed limits on each end of the bridge. The wider bridge will induce even higher speeds from motorists.

At Broadway and Broadway in North Little Rock, the intersection design that have been presented to date have been high speed, high volume highway intersections that have no business in the middle of an urban grid. We suggest an intersection design consistent with the suggestions of Mr. Dan Burden (Attachment 2). Any final design for this intersection should have the final

sign-off from the North Little Rock Traffic Engineer with pedestrian safety and appropriate scale being the primary criteria.

**Response:** The new design will have 4' shoulders instead of 3' shy zones. The design speed of 40 mph is used to determine geometric constraints and design requirements for the facility. The posted speed could be reduced below the design speed to curtail speeding. Adequate space will be available for a bicyclist who chooses to use the shoulders. The AASHTO *Guide* does indicate that the shy distance can be decreased to 1' when a smooth barrier is installed or even be eliminated under extremely constrained conditions.

The Broadway/Broadway intersection improvement will include ADA compliant wheelchair ramps, additional traffic signage indicating that vehicles should yield to pedestrians and audible pedestrian signals with countdown timers that are not currently present at the existing intersection and that will improve pedestrian safety. Signal phasing will improve flow through the intersection. Once the intersection construction is complete, there will be a dedicated left turn phase for the northbound to westbound connection. During this phase when the left turn phase is underway, pedestrian access across the west side of the intersection will be restricted. It is important to note, that the peak traffic for pedestrians typically occurs after rush hour traffic has subsided. Therefore, with the exception of special events that might overlap with rush hour traffic, daily conflicts at this intersection should not be prevalent. The design presented at the Location Public Hearing is extremely comparable to the designs presented by Metroplan.

*Collective correspondence from Pulaski County Judge Buddy Villines, Mayor Mark Stodola and Mayor Pat Hays.*

**Comment:** We propose that the current arch-truss Broadway Bridge be replaced with a 21<sup>st</sup> Century version. We recommend a twin inclined arch bridge which provides both form and function.

**Response:** The modified Preferred Alternative will have a double basket-handle arch bridge, which was approved by Pulaski County, the City of Little Rock, and the City of North Little Rock.

*Correspondence from North Little Rock Mayor Patrick H. Hay.*

**Comment:** My desire is that the current Broadway Bridge be replaced, that any future bridge be located in the same right of way. The existing bridge be demolished and the replacement bridge be constructed at the same place. Efforts be made by the AHTD to expedite construction of the replacement bridge in a way and/or manner that minimizes the loss of use of this crossing of the Arkansas River. The replacement bridge be of an arch truss type, and the same utilize twin inclined arches. Also, that there be a 20' bike ped access on at least one side of the replacement bridge.

**Response:** The modified Preferred Alternative will have a double basket-handle arch and a 16' shared use path.

*Letter from June Freeman.*

**Comment:** I do not care for any of the design proposals for the replacement bridge. I say “replacement” because I believe that the current Broadway Bridge needs to be removed when a decision is made about what is to take its place. I am in favor of building a new span at Chester Street. If the parties that are making the final decision agree that one of the designs prepared by the AHTD must be accepted. I prefer some version of Alternative 2. Maintaining the old bridge will be costly and I do not consider it an architecturally significant span. I believe in separate sections for bikers and pedestrians. Give each group its own lane!

**Response:** The 16’ shared use path will allow bikers and pedestrians the ability to cross the bridge without the fear of a vehicle impacts.

*Letter from Eldridge P. Douglas.*

**Comment:** The controversy as to the repair/replacement of the Broadway Bridge has gone on long enough. The attached pasted up photograph, I believe, is an answer to the situation. Copy the design of the south structure to the north side. By replacing only one half of the present bridge, the Cities can rehabilitate part, and the public will be without a bridge for far less time. Why destroy a perfectly sound structure? Save the money to use on the “Chester Street Bridge”. See attached letter.

**Response:** The AHTD has estimated the costs for rehabilitation of the Broadway Bridge for vehicle traffic to be \$37 million. Rehabilitation of the structure was discarded as an alternative because it would result in a bridge that does not have the desired pedestrian/bicycle facilities; would function poorly as a future River Rail route; would leave a 90-year old bridge in place with substandard clearance over La Harpe Boulevard; and have only a 15-year rehabilitation life cycle after a substantial expenditure of funds.

*Letter from Ken Wasson.*

**Comment:** I wish to voice my support of keeping the Broadway Bridge in place and in opposition to tearing it down. See attached letter.

**Response:** Alternative 1 was chosen as the Preferred Alternative because replacing the bridge on the existing alignment would result in the straightest alignment and minimize impacts to the parks, trails, and historic structures near the bridge.

**A total of two e-mails were received concerning the Location Public Hearing.** Relevant portions of these e-mails are included below with responses.

*E-mail from Mark Stodola, Mayor of Little Rock.*

**Comment:** It is our understanding that the twin arch truss bridge components can be constructed off site and moved into place when complete which will help in reducing the time the bridge will be unavailable to the traveling public. I would urge the AHTD to expedite construction and thereby minimize any delay (e-mail attached).

**Response:** The AHTD, FHWA, Garver Engineers and the selected contractor will utilize A+B+C bidding methods to expedite the completion of the new bridge, its approaches and its intersection improvements. A+B+C bidding methods reward the contractor for completing the project in the

shortest timeframe possible. The contractor will submit the total bid for the contract items (A Component) plus the product of the number of site use days (i.e. the number of calendar days the Contractor will close a lane/and or shoulder, not to exceed the maximum allowed) times the daily road user cost (B Component). The contractor will receive an incentive or penalty (C Component) calculated by multiplying the difference between the number of site use days assessed and the number that were bid times the daily road user cost. The maximum number of site use days for which an incentive will be paid is usually set to limit the incentive to 3% - 5% of the estimated contract amount.

*E-mail from Kevin Christian.*

**Comment:** I am very much in favor of utilizing the existing bridge in some manner. I live in North Little Rock, and work downtown in Little Rock, so I frequently cross the bridge. I believe that if the current bridge is demolished, it will be a decision our community will regret in subsequent years. Therefore, I urge the department to choose an alternative that preserves the existing bridge, whether it is used for automobile traffic or for pedestrian traffic.

**Response:** The existing Broadway Bridge is considered structurally deficient due to the condition of the deck, superstructure, and substructure and is considered functionally obsolete due to its existing roadway width and its deficient access ramps. Maintenance of the existing bridge with the AHTD's maintenance forces is not considered prudent as maintenance costs will continue to increase.

# DESIGN PUBLIC HEARING DISPOSITION OF PUBLIC COMMENTS

## Job 061275 Arkansas River Str. & Apprs. (Broadway) (LR/NLR) (Hwy 70) Pulaski County

A Public Officials Meeting and an Open Forum Design Public Hearing for this project was held on Thursday, March 28, 2013, from 4:00 p.m. to 7:00 p.m. at the Arkansas Transit Authority in North Little Rock, Arkansas. The proposed design was displayed on an aerial photograph, depicting design features on an approximate scale of 1":100'. In addition, computer generated renderings for four alternatives illustrating potential color schemes were displayed. Representatives of Garver and HNTB, the design consultant and sub-consultant, respectively, along with various AHTD Divisions and District 6 personnel were present to explain the proposed design and to answer questions. Copies of the Environmental Assessment and other general project information were available.

Comment forms providing a general information summary were distributed to the attendees and written comments were received from a total of 35 individuals. The comment forms solicited comments for three specific questions and provided space for general comments. A summary of the written comments is as follows:

### **Comment Form Question 1 – Please provide comments on the overall design and look of the bridge.**

Comments regarding the aesthetic nature of the bridge were included on 19 of the 35 comment forms received. These comments ranged from favorable to unfavorable.

Favorable Comments – Attendees provided the following eleven (11) favorable responses:

Looks great. (Two responses)

Nice look.

Bridge is attractive and functional.

Bridge looks fine.

I like the design overall. The narrow spans were a nice touch.

Very attractive – a good choice. I appreciate the accommodation for walkers and bikers.

The bridge design is quite lovely.

The bridge design is aesthetically pleasing.

Looks good.

I much prefer the look of the double basket-handle design to the side by side alternatives previously shown at the last public hearing. It provides a modern feel referencing traditional design of the current bridge.

Though not the landmark, statement-making bridge design I would have hoped for, this design is at least a sensible compromise that is both (somewhat) forward thinking and referential to the site's past.

Conditionally Favorable Comments – Attendees provided the following five (5) conditionally favorable responses:

The basket handle span is very elegant and the cable system gives it refinement. However, the concrete piers are very clunky and do not relate well to the structure above.

The basket weave design is quite nice; particularly given the fact the feature is authentic in its structural purpose. However, I feel the piers should be simplified so as not to compete with the elegant, main structure above.

I think that the arch design is nice but it still doesn't make Little Rock look more appealing.

It's a great look! It's not worth the extra \$20 million when the county jail is overflowing and county roads are crumbling.

I love the arches. I'd rather have plain square abutments.

Unfavorable Comments – Attendees provided the following three (3) unfavorable responses:

I would have loved for the bridge to be red, white and blue.

How the bridge looks from the human eye is really not important to me. I prefer that you choose the most cost efficient path which I was told is the silver and grey.

Color is irrelevant.

In summary, of the 19 responses received regarding the overall look and design of the proposed bridge, 11 (58%) were favorable, 5 (26%) were conditionally favorable, and 3 (16%) were unfavorable.

Other responses regarding the overall bridge design and features are summarized as follows:

**Comment:** Several responses requested consideration for “bump-outs” or overlook areas to be added to the main bridge.

**Response:** The basket-handle design doesn’t lend itself to the incorporation of the overlook areas due to the inclination of the cable hangers.

**Comment:** Consider adding bicycle safe railing along the top of the western barrier to provide a safe barrier if cyclist decide to use the vehicular roadway to cross the bridge.

**Response:** The Department has taken this comment into consideration and will add the railing along the western barrier in an effort to provide a symmetric appearance along the roadway.

**Comment:** Several responses requested consideration for a wider shared use path. Many requested a minimum 20’ wide path, while others requested a 24’ wide path.

**Response:** The width of the proposed shared use path was established based on the 2012 edition of the *Guide for the Development of Pedestrian Facilities* published by the American Association of State Highway and Transportation Officials (AASHTO). This document recommends a range of 10’ to 14’ for the width of a shared use path. The AASHTO *Guide* also recommends a minimum of 11’ for two-way bike traffic to pass side-by-side and allow room for simultaneous pedestrian traffic.

For shared used paths that extend onto an elevated bridge structure, the AASHTO *Guide* recommends that two additional feet be added to each side of the path. This additional room allows for a shy distance to the barrier and allows needed maneuvering space to avoid people who stop on the bridge to “admire the view”. The AASHTO *Guide* does indicate that the shy distance can be decreased to 1’ when a smooth barrier is installed or even be eliminated under extremely constrained conditions.

Using the recommendations outlined in the AASHTO *Guide*, the total width (including shy distance of 2’ each side) of the shared use path for the bridge ranges from 14’ to 18’. The proposed value of 16’ falls within this acceptable range.

**Comment:** A comment was received expressing concern that the incorporation of the plaques and monuments honoring Medal of Honor recipients could create increased congestion due to pedestrian stopping along the shared use path to view the displays.

**Response:** On July 24, 2013, a motion passed with a unanimous vote by the AHTD Commission to accept Pulaski County Judge Buddy Villines’ proposal for enhancement of the Broadway Bridge. Funding for the enhancements will be through private donations collected by Pulaski County. One of the proposed enhancements would include displays on pedestals and on the railings of the bridge. Once plans are available, each proposed enhancement will be reviewed for conformance with the existing facilities. Any issues identified, such as congestion, will be addressed through coordination with FHWA, Pulaski County and the Cities of Little Rock and North Little Rock.

**Comment:** Several comments requested consideration for bike lanes to be added along both sides of the roadway. Responders indicated that it is likely that an experienced cyclist will choose to ride along the roadway for convenience in lieu of using the shared use path. The responders requested that the shoulder area, currently set at 4', be widened to 5' to 6' in order to provide a bike lane along each side of the roadway.

**Response:** Wider bike lanes paralleling the highway were dismissed due to the conflict between cyclists traveling south and motorists attempting to exit onto westbound La Harpe Boulevard. The shared use path provided encourages cyclists of all skill levels to use the shared use path. Striped bicycle lanes will be provided in the shared use path to designate an area where bicyclists can use the facility with pedestrians. The bicycle and pedestrian traffic were consolidated on the east side as requested by Metroplan and the Cities of Little Rock and North Little Rock. This provides an overall safer facility for all modes of travel.

**Comment:** Several comments were received requesting that the travel lanes be reduced in order to provide more space for bike lanes along the roadway.

**Response:** Broadway Bridge is being designed using a design speed of 40 mph. The width of the traffic lanes was established based on recommendations outlined in *A Policy on Geometric Design of Highways and Streets* published by AASHTO. This document recommends that 11' lanes be provided as a minimum for urban arterial, a roadway designation in which Broadway falls. This document indicates that 10' lanes be used only in constrained areas where the design speed is less than 35 mph. Therefore, a reduction in the lane width below 11' would be in opposition to the minimum requirements outlined by AASHTO.

**Comment:** A comment was received indicating that the shared use path being located on only the east side makes it awkward for southbound traffic.

**Response:** Bicycle traffic will have the opportunity to cross over to the southbound lanes at the Markham Street traffic signal. Improved pedestrian signals and signage will be added at these locations to facilitate cyclists using the intersection.

**Comment:** Comments regarding the radius transition in the vicinity where the pedestrian ramps connect to the shared use path on the east side. These comments requested that the radius be increased to provide more area for the connection.

**Response:** This area should be considered an intersection where north and south bound cyclist interact with east and west bound cyclists on the pedestrian ramps. Both the north and south pedestrian connections provide minimum radii of 30' which meets the AASHTO guidelines. In addition, the aerial ramps near the connections to the main bridge are supported by a single column foundation. On the north pedestrian connection, the column foundation is located near the landside toe of the North Little Rock levee. If a larger radius was used, an additional column support would be required to support the widened structure. The requirements established by the U.S. Army Corps of Engineers does not allow the additional column support as would be located within the envelope of the levee section which could lead to future maintenance issues with the levees.

**Comment:** A request was made by the city of North Little Rock to add an overlook area along the North pedestrian ramp. In addition, the city requested that a gate be added near the top of the pedestrian ramp to allow the city to restrict access into the park area on the North Little Rock side.

**Response:** The Department has considered these requests and will incorporate these features into the final plans.

**Comment:** Comments were received to incorporate electrical conduits for the possible inclusion of LED aesthetic lighting in the future.

**Response:** The number and size of the electrical service that will be required for the future LED lighting system is dependent on the number of fixtures utilized. Since there are no design plans available for the installation of aesthetic lighting, the amount of conduits that will be needed is unknown. In addition, the electrical conduits are typically placed within the roadway barriers. The barrier along the east side consists of only a one-foot tall concrete curb which will not provide space for any additional conduits beyond the ones required for the navigation lighting. Therefore, the future aesthetic lighting conduits along the east side will have to be placed beneath the overhangs of the bridge deck. Given that the east set of conduits have to be attached beneath the deck, the conduits on the west side can likewise be attached in a similar fashion.

**Comment Form Question 2 – Please provide comments on the architectural colors shown in the bridge renderings.**

<b>Alternate 1 (Tan/Brown)</b>	<b>Alternate 2 (Blue/Taupe)</b>	<b>Alternate 3 (Silver/Grey)</b>	<b>Alternate 4 (White)</b>	<b>Comments</b>
		X	X	Best colors for lighting bridge
	X		X	Blue is nice but not taupe, white should be selected if bridge is to be lit
		X	X	White first choice, silver second
		X	X	White first choice, silver second
		X		Silver/Grey is best
		X		Silver/grey is favorite
X		X		Alt. 1&3 mesh best with city's latest projects
		X		
		X		
		X		
	X		X	Prefer blue/taupe or white
		X	X	White first choice, silver second
			X	
	X			
X			X	Tan/brown best, white second
			X	White is best for lighting
X	X			Prefer arches be one solid color
			X	
	X	X		Blue/taupe first, silver/grey second
	X			Blue/taupe first, white last
				Not fond of any, consider red arches
	X			
	X			
	X			
		X	X	White first choice, silver second
		X		Silver is most efficient to maintain
X				The color is the least of my concerns
	X	X		Silver is best, blue second
		X	X	White first choice, silver second
			X	White is nice
X			X	White first, tan second
<b>5</b>	<b>10</b>	<b>15</b>	<b>14</b>	<b>Totals</b>

**Comment Form Question 3 – Do you have any comments concerning impacts to Riverfront Park in Little and North Little Rock? A draft De Minimus 4(f) is available for viewing**

**Comment:** During construction would be difficult, but looks like it doesn't really change much from what already exists.

**Response:** During construction, temporary detours will be provided to route the pedestrian traffic around the construction zone.

**Comment:** Please consider a gate at the top of the NLR pedestrian/bike ramp for park closures and also an observation platform near the top of ramp.

**Response:** These items will be incorporated into the final plans.

**Comment:** The project should better tie the two parks together.

**Response:** Comment noted

**Comment:** I wish that on the North Little Rock side you had a staircase that led from the park to the bridge (where the ramp connects), so that you wouldn't have to go all the way to the foot of the pedestrian bridge to get on the bridge.

**Response:** The addition of stairs on the North Little Rock side would have to be supported on the levee. The U.S. Army Corps of Engineers does not allow the construction of this type of element on top of the levee due to maintenance concerns.

**Comment:** Just keep the bike trail in there.

**Response:** Comment noted

**Comment:** Can we restrict some traffic during rush hours? We don't want anyone to get run over.

**Response:** There are no plans to restrict any mode of travel.

**Comment:** The direct access to the River Trail is a big plus.

**Response:** Comment noted

**Comment:** I fear that this bridge will degrade the historic neighborhoods in NLR and the fine old buildings on the LR side. I also fear that pedestrians will have a harder time crossing the Markham/Broadway and Broadway/Broadway intersections.

**Response:** The intersection improvements will add several enhancements that are not currently employed at the existing intersection and that will improve pedestrian safety. The first of these has to do with the signal phasing at the Broadway and Broadway intersection. Once the intersection construction is complete, there will be a dedicated left turn phase for the northbound to westbound connection. During this phase when the left turn phase is underway, pedestrian access across the west side of the intersection will be restricted. Other improvements for both intersections will include ADA compliant wheelchair ramps, additional traffic signage indicating that vehicles should yield to pedestrians and audible pedestrian signals with countdown timers.

**Comment:** You need connections on both sides to the River Trail, but think about bike community – they use streets and go to work/business places.

**Response:** Experienced bicyclists will still be able to use the main lanes for their commutes, even though the safety factor will be lower for such an option. The best

option for the commuting bicyclist would be to use the shared use facility with its wider, striped lanes, and protection barrier.

**Comment Form – Please provide any additional comments below.**

**Comment:** Video detection should be used at every signal. Accessible pedestrian signals and countdown pedestrian signals (APS/CPS) for every crosswalk with audible sound.

**Response:** These APS/CPS features are planned into the final intersection designs.

**Comment:** I appreciate the overall design and the thought taken to consider pedestrian travel and access. However, I would strongly urge a wider pedestrian area to 20' to give comfortable space to bikers, runners, and walkers. Also, be sure to put some more thought and coordination with Robinson Auditorium in terms of delivery truck access. Currently there is very little space for deliveries and trucks often block lanes on Broadway.

**Response:** Using the recommendations outlined in the AASHTO *Guide*, the total width (including shy distance of 2' each side) of the shared use path for the bridge ranges from 14' to 18'. The proposed value of 16' falls within this acceptable range.

The Robinson Center design team plans to renovate Garland Street, north of the Robinson Center and the Doubletree Hotel, as a viable delivery truck access.

**Comment:** This bridge has to include LED lighting on the super nice steel structure, in white, this would look fantastic in concert with other potential bridge lighting of other structures.

**Response:** On July 24, 2013, the AHTD Commission passed a motion to accept Pulaski County Judge Buddy Villines' proposal for enhancement of the Broadway Bridge that would include the addition of LED lights to the bridge.

**Comment:** Simplify any feature (railing, etc.) or ornamentation in deference to the main structure. The bridge begs for ornamental (LED) lighting of the structural frame.

**Response:** Comment noted. On July 24, 2013, the AHTD Commission passed a motion to accept Pulaski County Judge Buddy Villines' proposal for enhancement of the Broadway Bridge that would include the addition of LED lights to the bridge.

**Comment:** You need to design a better bridge.

**Response:** Comment noted.

**Comment:** People will still be walking, hopefully bicycling, but driving cars the way we do today! I doubt it. And if this bridge is going to be a Memorial Bridge honoring veterans from all states – with plaques or honors along the walkway, there will not be enough space. Veterans and friends will be stopping to read and looking for their honorees, many in wheelchairs, and that together with regular pedestrians and bicyclists

will make the part allocated for pedestrians too narrow. I hope you will be able to widen that part.

**Response:** See response to previous comment regarding the width of the shared use path.

**Comment:** I think the expenditures for cyclist ramps are excessive. Have we now spent \$50 million on cyclist crossing in Little Rock?

**Response:** Comment noted.

**Comment:** It would be nice to have LED lighting to enhance the bridge at night.

**Response:** On July 24, 2013, the AHTD Commission passed a motion to accept Pulaski County Judge Buddy Villines' proposal for enhancement of the Broadway Bridge that would include the addition of LED lights to the bridge.

**Comment:** If you are designing this bridge to last 50 years, I think a case could be made for expanding the width of the shared use path from 16'. I personally would support such an expansion but I understand that the additional funding for the expansion might not be easy to find, so I'm not going to insist on it, especially since your 16' design is a great improvement over the existing two sidewalks.

**Response:** Comment noted.

**Comment:** Like the design better than the utility design used so often in Arkansas. Paint it and put some lights on it. Make it passable for small cruise ships in the future. Should have reworked I-30 Bridge before starting this project. I-30 needs work on every section from I-40 interchanges to 9<sup>th</sup> street in LR.

**Response:** Comment noted. I-30 work is planned as a part of the Connecting Arkansas Program but the I-30 project is scheduled for the latter phases of that 10 year program. The condition of the Broadway Bridge demands that its replacement occur now rather than waiting for the I-30 work to be completed.

**Comment:** 16' shared bike/ped path is not safe or sufficient, especially since outside "shy" zone will render usable travel cross-section of only 13'-14'. Need benches and weather remediation. Needs trees. Needs shade and rain canopies. Need bike/ped option for west side of bridge. If total width of bridge cannot be widened, then reduce vehicle lanes to 10' or 10.5' to pick up enough feet to place a bike path on west side.

**Response:** See previous responses regarding width of shared use path and the vehicular lane width.

**Comment:** I am in favor of an 18' or 20' shared use path. If that is not possible, please include 5' bike lanes where the 4' shoulders are currently planned. This can be accomplished by reducing each travel lane to 10.5'. This would still give vehicles plenty of room even buses. Traffic-savvy cyclists will use the shoulder anyway, so they should be accommodated.

**Response:** See previous responses regarding width of shared use path and the vehicular lane width.

**Comment:** My biggest concern is getting to work. I realize it has been stated that the Main Street Bridge is underused. If you have some people try to go from NLR to LR in rush hour traffic, you will find (1) the trolley (2) one way street (Scott) (3) River Market traffic (4) E-Stem school traffic. I hope you can find a solution for people trying to go to work while you are removing and building the bridge. Two years is a long time for traffic situations.

**Response:** Traffic congestion during construction of the new bridge is a very real concern. A Traffic Management Plan (TMP), which is required for all major AHTD projects, is being developed to address the traffic detours, traffic flow routes, pedestrian access, traffic control planning, travel demands and traveler information. This process involves input from the traffic divisions of Little Rock and North Little Rock, as well as coordination with Central Arkansas Transit Authority, emergency medical personnel, state police, and other affected parties. The TMP will seek to develop the best overall traffic control plan possible that satisfies the needs for all transportation system users and meets the allotted budget for personnel and equipment resources assigned to the traffic flow operation.

Continued coordination with the City of Little Rock will revise the signal timing plans for the downtown grid, remove on-street parking along the detour route (4th Street and 6th Street) to provide additional lane capacity, add a dual left turn at the intersection of 4th Street and Scott Street, and extend the two-way movements on Scott Street to 6th Street (currently Scott Street is one-way south of 5th Street). The City of North Little Rock provided input on their preferred route which was implemented. Finally, a discussion at the TMP meeting requested that the Central Arkansas Transit Authority delay the start time of the trolley routes so as not to coincide with rush hour traffic.

**Comment:** Building the bridge is daunting to commuters. Can you contact Chamber of Commerce, ABA, AMA and other similar organizations to ask if they can stagger their work staffs (and themselves) to enter and leave Little Rock at different times over the course of morning and evenings?

**Response:** As stated previously, the TMP will evaluate the impacts that the bridge being out of service will cause and develop the best strategy to address the issues.

**Comment:** Pedestrian access to Dickey Stephens Ballpark looks very good.

**Response:** Comment noted.

**Comment:** The 16' part of the bridge as long as we are constructing this, and we want it to last for 100 years, should be done right. We will have the elderly, veterans, bicyclists, and pedestrians using this bridge. Being that some of the users will want to get to the other side – and others will be enjoying the plaques, names and information about the wars – there will be loitering and standing going on. 16' is not wide enough for all this going on, along with baby strollers, dogs on leashes, and trailer bikes. If we are going to build this bridge, then we need to accommodate all forms of transportation and not just cars and trucks. This could be a large economic impact for our area – build to accommodate this.

**Response:** Using the recommendations outlined in the AASHTO *Guide*, the total width (including shy distance of 2' each side) of the shared use path for the bridge ranges from 14' to 18'. The proposed value of 16' falls within this acceptable range.

On July 24, 2013, a motion passed with a unanimous vote by the AHTD Commission to accept Pulaski County Judge Buddy Villines' proposal for enhancement of the Broadway Bridge. Funding for the enhancements will be through private donations collected by Pulaski County. One of the proposed enhancements would include displays on pedestals and on the railings of the bridge. Once plans are available, each proposed enhancement will be reviewed for conformance with the existing facilities. Any issues identified, such as congestion, will be addressed through coordination with FHWA, Pulaski County and the Cities of Little Rock and North Little Rock.

A July 24, 2013, Motion by the AHTD Commission, after a presentation by Pulaski County Judge Buddy Villines, passed unanimously to accept the Judge's proposal for enhancement of the Broadway Bridge. Funding for enhancements will be the Judge's responsibility and will be reviewed by the AHTD, FHWA, Pulaski County and the Cities of Little Rock and North Little Rock before implementation.

**Comment:** I do not believe that money is a serious consideration. The interchange at I-630/I-430 was originally scoped at \$70M – it is now \$175M and counting. A few more million to build a bridge that will function as well and as gracefully as the one we have now is not an issue, regardless how it is presented for public consumption. What I really wish at this point is that this project would be removed from AHTD's list. Let the cities and perhaps private money figure it out.

**Response:** Comment noted.

**Comment:** Insure enough conduits for future lighting and control panel. Turnouts on ramps from Riverfront park, both sides of the river. Railing on parapet on west side. The history of a bridge at this location (Broadway Bridge was a bridge dedicated to Veterans. This should be the same but more than just a sign.

**Response:** See previous comments regarding LED lighting, conduit installation, modifications to pedestrian ramps, railing on west barrier and AHTD's position on the veteran monuments.

**Comment:** You have come a long way. Thank you for the public consideration.

**Response:** Comment noted.

**Comment:** In reality, a multi-use trail needs 2 lanes (for two people walking or cycling side-by-side, approximately 6-8' wide each way) and a center passing lane for faster traffic to go around a lane (most people forget this detail which causes a lot of user conflicts if not addressed), also 6-8' wide. So your single, multi-use trail needs to be 18'-24' wide, 2 8' lanes + 1 center passing lane (6') at a minimum would be ideal – 22' wide.

I ride the River Trail all the time for several years and have observed all the behaviors and user conflicts. The biggest mistake is not planning for passing.

**Response:** See previous response concerning the width of the shared use path.

Subsequent to the Design Public Hearing on March 28<sup>th</sup>, 2013, the following comments were received:

**Bicycle Advocacy of Central Arkansas (BACA), Little Rock Bicycle Friendly Community Committee (LRBFCC) and North Little Rock Bicycle Friendly Community Committee (NLRBFCC) provided the following comments:**

**Comment:** Cyclist accustomed to riding in street traffic will very likely use the shoulder next to the motor vehicle lanes as bike lanes, so please design the bridge to accommodate those cyclists safely. While maintaining the current 16' multi-use path, BACA (Bicycle Advocacy of Central Arkansas), the Little Rock and North Little Rock Bicycle Friendly Community Committees formally ask AHTD to:

1. Design 5' bike lanes along the entire length of the project, both northbound and southbound.
2. Modify the LaHarpe off-ramp to decrease exit speeds and the distance of conflict between through bicycle traffic and exiting motor vehicle traffic.
3. Implement appropriate traffic engineering (such as striping, bike lane colorization, warning/yield signs) at LaHarpe off-ramp to minimize the danger for through cyclists.
4. Install a metal railing along the west side of the bridge at a safe height for bicycle traffic.

**Response:**

1. Bike lanes were omitted and the shared used path provided to encourage cyclists of all skill levels to use the shared use path. Striped bicycle lanes will be provided in the shared use path to designate an area where bicyclists can use the facility with pedestrians.
2. The design criteria for the ramp calls for the design speed to be 10 mph less than the main facility. Therefore, a 30 mph design speed has been used for the development of the ramp geometry. The design speed dictates the maximum degree of horizontal curvature that be used for the ramp design.
3. Striping would be required only if the bike lanes were provided.
4. The metal railing will be added to provide a uniform appearance along both sides of the roadway.

### **Correspondence from Robinson Center Renovation Design Team**

Mr. David Porter, an architect with Polk, Stanley, Wilcox, submitted the following comments/requests:

1. The widened highway right of way along the east side of Broadway and the parallel connection of the new pedestrian and bike path with the new work on the west side of Robinson. We would like the opportunity to coordinate the materials, drive locations, lighting, etc. that will be part of the new exterior hardscapes and landscape of the Robinson project with your new road and walk work to assure a well thought out and seamless finished plan in this area.
2. The materials that form the roadbed and crosswalks at the intersection of Broadway and Markham. This is a significant intersection in the urban context of LR and there is opportunity for enhancement in the reconstruction. The use of brick pavers, stamped concrete or the like within the intersection or at the crosswalk would reflect this significance and also highlight the connection to City Hall.
3. The exit from east bound La Harpe Blvd. to Garland Street on the lower north side of Robinson Center. We are considering a new load in / load out layout for the Robinson renovation design at this lower level and request an opportunity to consider a revision to the current vehicular exit configuration off of La Harpe Blvd. into an exit from and entrance back onto La Harpe Blvd. from Garland. We understand the current bridge piers along La Harpe will be removed in this area, increasing the visibility and safety approaching this exit. We would like to coordinate with your work in restoring the edge of La Harpe where the bridge pier is removed to create a wider on and off lane that would allow a parallel merge lane for traffic coming back on La Harpe.
4. The timing of the demolition of the drawbridge to the Doubletree. We request that AHTD and Garver incorporate requirements into the bridge specifications for removal of the drawbridge as early as possible in the project. Construction Demolition is scheduled to begin on or about July 1, 2014 at Robinson Center. The removal of the drawbridge very soon thereafter will be critical to the Robinson construction schedule.
5. Coordination of the staging area along Broadway after bridge closure. As previously discussed, we would request the opportunity for the Robinson contractor to coordinate with the Bridge contractor for use of the section of Broadway from Markham to the Bridge for construction staging.
6. Pedestrian ramp from the Bridge to the park north of La Harpe. As this ramp is further designed and detailed we would like to have the opportunity to review the design and coordinate the work on the north side of Robinson to achieve the best possible public amenities and most desirable views. A widened connection of pedestrian ramp to the bridge that could accommodate benches or other pedestrian respite areas is a possible example.

**Responses:**

1. AHTD and Garver, the design consultant, have previously attended two meetings with the Robinson Center design team to discuss design concepts. AHTD and Garver will be available to continue the coordination effort as both designs progress towards final plans.

2. Again, AHTD is willing to coordinate the materials used on the Broadway project to deliver the best possible result. However, the Broadway Bridge project schedule demands that these decisions be made soon in order to be incorporated into the final plans. In addition, if the materials selected for use in this area cause a significant increase in the cost of the Broadway project, the city of Little Rock will be responsible for covering the additional cost.
3. The decision on where the loading ramp is to be located is critical to the bridge design. The Broadway Bridge design team needs this information as soon as possible.
4. The bridge plans and specifications can include a provision that requires the contractor to coordinate all of his work efforts with the Robinson Center contractor. A provision that requires the removal of the drawbridge by a certain date can be added.
5. Similar to Item 4, the bridge contractor will be required to coordinate his work with the Robinson Center construction team.
6. The pedestrian ramp configuration has progressed to a point where final plans are now being developed. AHTD can provide the Robinson Center team a copy of the preliminary ramp plans to allow the Robinson Center team to evaluate how they might tie to the pedestrian ramp.

## **Correspondence from Mayor Mark Stodola, City of Little Rock**

Mayor Mark Stodola submitted the following comments / requests:

### **Comments:**

1. Inasmuch as 3 bridges across the Arkansas River will already be lit with LED lighting, I would ask that you incorporate LED lighting design components into the Broadway Bridge. This should include not only the conduit for LED technology, but the LED components and lenses as well.
2. Please consider and design some rest area bump outs on the trail extension as it descends to the Arkansas River Trail on the south and east side of the river. Rest areas on the bridge itself would also be desirable.
3. I have consulted with the architects for the Broadway Bridge and with the electrical and design professionals who are currently handling the lighting of the 3 bridges across the river and all of them recommend painting the Broadway Bridge “white”. It is believed that it provides the greatest contrast with the skyline and the LED fixtures to be placed in white housings. I believe the “white” is the best choice available.
4. As for the 4 foot shy zones on both of the outside lanes going north and south, if there would be any way to add an extra 1 foot to make them 5 feet in width, it would be highly desirable. Also, please consider a design revision that would allow a stop off area for bicyclists on the west side of the Broadway Bridge going south in the shy zone, so in the likely event the shy zone is used by cyclists, they will have an opportunity to stop and wait for clearance to continue on to Markham street. This will greatly enhance the safety of everyone, particularly as vehicles elect to use the access ramp south onto La Harpe Boulevard.

### **Responses:**

1. On July 24, 2013, the AHTD Commission passed a motion to accept Pulaski County Judge Buddy Villines’ proposal for enhancement of the Broadway Bridge that would include the addition of LED lights to the bridge. Overlooks areas will be added to the pedestrian ramp. However, due to the unique nature of the network arch framing system with the inclined hangers, there is limited space available for the overlooks on the main spans.
2. Overlooks areas will be added to the pedestrian ramp. However, due to the unique nature of the network arch framing system with the inclined hangers, there is limited space available for the overlooks on the main spans.
3. Comment noted.
4. The shared use path was added along the east side to consolidate the north and south bound pedestrian and bike traffic into an area that is separated and protected from vehicular traffic. The inclusion of bike lanes along the roadway creates a dangerous conflict at the La Harpe exit ramp. Placing the bike lane adjacent to the travel way would encourage cyclist to use the bike lane in lieu of the safer shared use path.

## **Correspondence from Jim McKenzie, Executive Director, Metroplan**

Mr. Jim McKenzie submitted a letter summarizing his comments and concerns. A copy of the letter is included in the DPH packet.

### **Responses to his comments are as follows:**

#### 1) Connections to the Arkansas River Trail:

- 1) Comment noted.
- 2) Comment noted.
- 3) The Broadway Bridge design team is moving forward with the design of the pedestrian ramps. AHTD can provide the Robinson Center design team with a copy of the current concept to the pedestrian ramp for their evaluation.

While you are correct that the pedestrian ramp will not be a critical item for the completion of the bridge construction, its design needs to be completed within the same timeframe as the remainder of the bridge. Therefore, there is little opportunity to revise the ramp configuration without causing serious impacts on the Broadway design schedule.

#### 2) Roadway Design Speed

The design speed of 40 mph is used to determine the geometric constraints and design requirements for the facility. The posted speed can be reduced below the design speed to curtail speeding.

#### 3) Shoulders Create *Faux* Bike Lanes

The shared use path is provided to encourage cyclists and pedestrian to utilize this area separated from vehicular traffic. Experienced cyclists that elect to utilize the shoulder area along the travel way are accepting the responsibility of this decision much like they will once they enter the street network within the downtown area where no bike lanes are provided and cyclist travel with vehicular traffic.

#### 4) Safety Railing on West Parapet Wall

AHTD has considered this request and will add the pedestrian railing along to west barrier in an effort to provide visual consistency along both sides of the roadway.

#### 5) Incorrect Design Standard for Combined Bikeway and Pedestrian-way

The width of the proposed shared use path was established based on the 2012 edition of the *Guide for the Development of Pedestrian Facilities* published by the

American Association of State Highway and Transportation Officials (AASHTO). This document recommends a range of 10' to 14' for the width of a shared use path. The AASHTO *Guide* also recommends a minimum of 11' for two-way bike traffic to pass side-by-side and allow room for simultaneous pedestrian traffic.

For shared used paths that extend onto an elevated bridge structure, the AASHTO *Guide* recommends that two additional feet be added to each side of the path. This additional room allows for a shy distance to the barrier and allows needed maneuvering space to avoid people who stop on the bridge to “admire the view”. The AASHTO *Guide* does indicate that the shy distance can be decreased to 1' when a smooth barrier is installed or even be eliminated under extremely constrained conditions.

Using the recommendations outlined in the AASHTO *Guide*, the total width (including shy distance of 2' each side) of the shared use path for the bridge ranges from 14' to 18'. The proposed value of 16' falls within this acceptable range.

6) The Kill Zone at the La Harpe Off-Ramp

As stated previously, the shared use path is provided to allow both cyclist and pedestrians an avenue to cross the bridge away from vehicular traffic.

7) Broadway at Broadway Intersection

The intersection improvement will add several enhancements that are not currently present at the existing intersection and that will improve pedestrian safety. The first of these has to do with the signal phasing. Once the intersection construction is complete, there will be a dedicated left turn phase for the northbound to westbound connection. During this phase when the left turn phase is underway, pedestrian access across the west side of the intersection will be restricted. Other improvements include ADA compliant wheelchair ramps, additional traffic signage indicating that vehicles should yield to pedestrians and audible pedestrian signals with countdown timers.

It is important to note, that the peak traffic for pedestrians typically occurs after rush hour traffic has subsided. Therefore, with the exception of special events that might overlap with rush hour traffic, daily conflicts at this intersection should not be prevalent.

8) Bridge Color

Comment noted.

9) North Little Rock Underpass

The form liner and color system that will be employed is commonly used in other metropolitan areas and has proven to provide excellent maintenance-free performance.

**APPENDIX B**

**DE MINIMIS SECTION 4(F) EVALUATIONS**

**FOR**

**LITTLE ROCK AND NORTH LITTLE ROCK RIVERFRONT PARKS**

**EVALUATION AND DOCUMENTATION OF A  
DE MINIMIS FINDING TO SECTION 4(F) PROPERTY  
FOR PUBLIC PARKS, RECREATION LANDS, AND  
WILDLIFE AND WATERFOWL REFUGES**

AHTD Job Number 061275  
FAP Number BRN-9253(63)  
Arkansas River Str. & Apprs. (Broadway)(LR/NLR)  
Pulaski County

Riverfront Park  
City of Little Rock

July 2013

Federal Highway Administration

Arkansas State Highway and Transportation Department

## **What is Section 4(f)?**

Section 4(f) is part of a law that was passed to protect public parks, recreation areas, wildlife/waterfowl refuges, and important historic sites from being harmfully affected by transportation projects.

## **Does Section 4(f) Apply to Riverfront Park?**

Julius Breckling Riverfront Park (Riverfront Park) in Little Rock (LR), Arkansas is an important public park for the metropolitan area. Due to the project proximity and immediate park areas adjacent to the bridge, a Section 4(f) would apply to the park. Figure 1 shows a typical section of Riverfront Park, looking west towards the Broadway Bridge and the Arkansas River.



Figure 1  
LR Riverfront Park

After we do an evaluation like this one, some Section 4(f) impacts can be recognized as “*de minimis*,” which means relatively minor. We will present information to prove that there are only minor impacts to Riverfront Park. We can have a *de minimis* finding on projects that meet the conditions shown in Table 1.

<b>Table 1</b>	
<b>When Can We Use A <i>De Minimis</i> Finding on Section 4(f) Properties?</b>	<b>Does It Apply To This Project?</b>
Did we specially design the project to protect Riverfront Park as much as possible? Did we use mitigation and enhancement where it was suitable?	Yes
Did the official(s) with authority over Riverfront Park have a chance to consider this information and agree that the project will not greatly harm the things that make Riverfront Park important?	Yes
Did the public have an opportunity to review and comment on the effects of the project on Riverfront Park and the things that make it important to them?	Yes

**What is the proposed bridge project?**

The Arkansas State Highway and Transportation Department (AHTD) and the Federal Highway Administration (FHWA) proposes to replace the existing Highway 70 Bridge (Broadway Bridge) crossing the Arkansas River between the cities of LR and North Little Rock, Arkansas (Figure 2). The proposed bridge will consist of a double, basket-handle, network tied arch bridge having a length of 1,767 feet and a total width of 73 feet, within a total project length of 3,015 feet. The typical cross-section across the main span of the bridge will consist of four 11-foot travel lanes with 4-foot shoulders; and a 16-foot multiuse path (Figure 3, Section B).

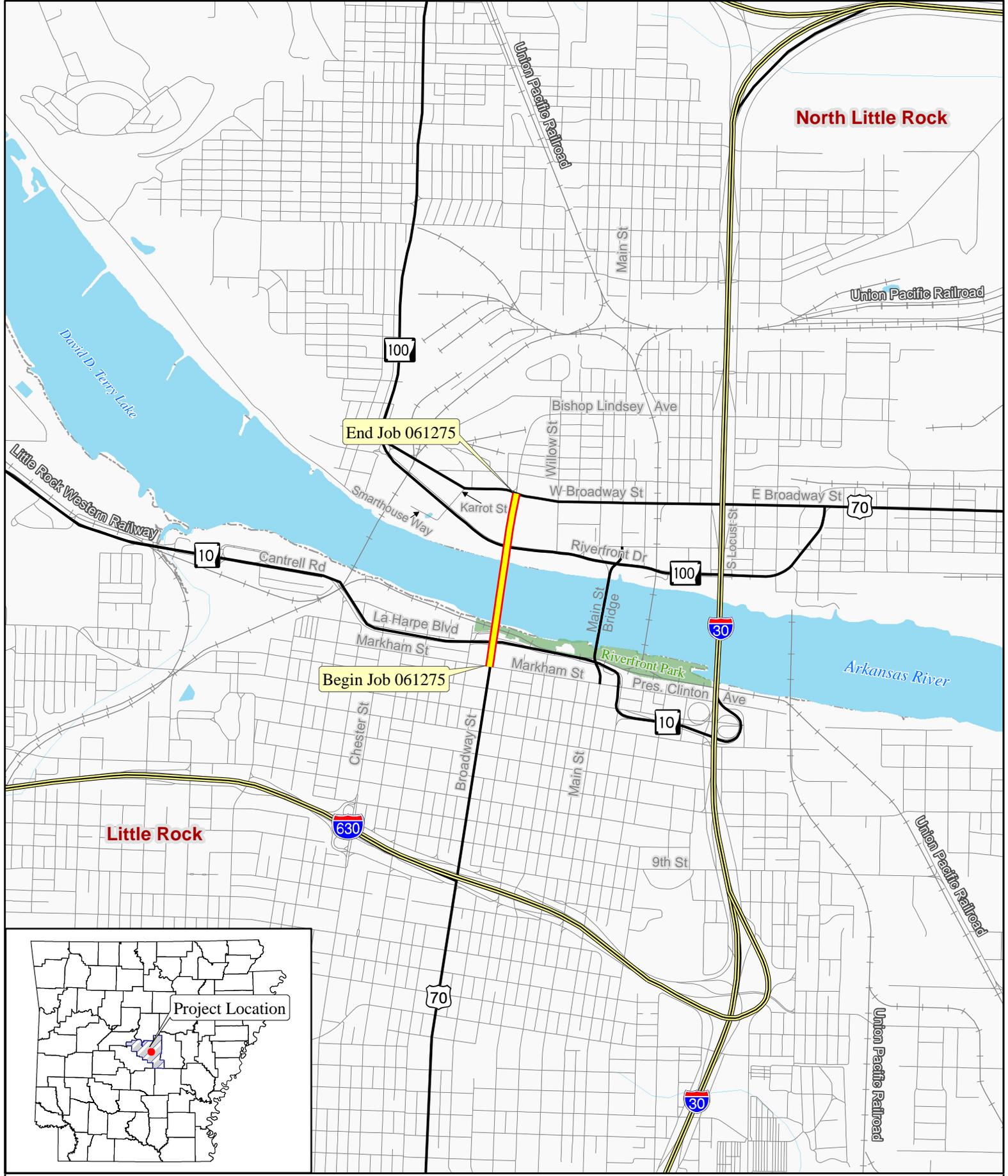
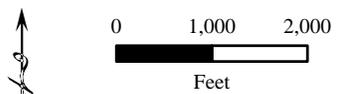


Figure 2  
Project Location

 Project Location



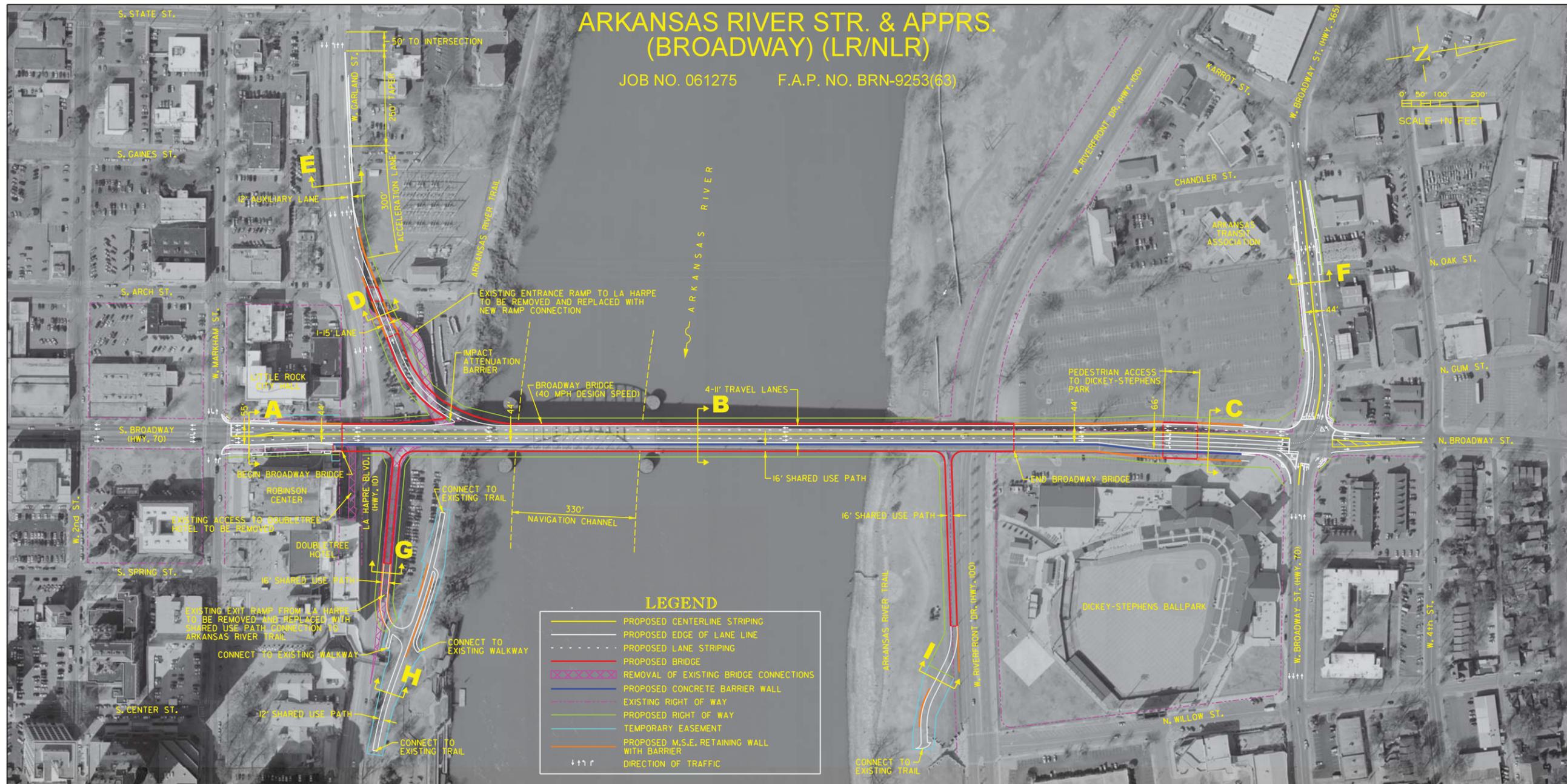
Improvements to Riverfront Park include:

- The Arkansas River Trail in Riverfront Park will be impacted by the demolition and reconstruction of the bridge and will require complete reconstruction. The reconstructed trail will match the design, size, color and texture found in the existing trail system.
- The existing exit ramp from LaHarpe Boulevard onto northbound Broadway will be removed and replaced with an elevated 16-foot shared use path on piers accessing Riverfront Park from the bridge. Elevated viewing platforms will be constructed on both sides of the shared use path along the uppermost part of the access. This will allow pedestrians and bicyclists the opportunity to rest and enjoy the view without interference to traveling pedestrians and bicyclists.
- The sides of the shared use path will consist of a mechanically stabilized earth (MSE) retaining wall to minimize impacts to the park and lessen the path footprint.

### **Why is Riverfront Park Important?**

Riverfront Park is located along the Arkansas River is owned and operated by the City of LR. It has been an evolving park since the early 1980's and is presently 33 acres in size and is located along an eleven block stretch from the Bill Clinton Presidential Library to the Broadway Bridge. The main purpose of Riverfront Park is to provide residents and visitors a place to enjoy outdoor events and leisure activities, including the following:

- Pedestrian/bicycle access to the Arkansas River Trail and access to additional pedestrian/bicycle crossings of the Arkansas River at the Junction Bridge and the Clinton Presidential Park Bridge.
- A History Pavilion providing historical information.
- Views of the "Little Rock" that gave the city its name at La Petite Roche Plaza.
- A 1,300 foot three-dimensional mural wall promoting wellness benefits and a healthy lifestyle know as the "Medical Mile".
- The Riverfront Park Belvedere Gazebo serves as a performance space for all kinds of instrumental music.
- The Forever a Rose Garden, the Vogel Schwartz Sculpture Garden and the Jack Fleischauer Garden are located in close proximity to each other and offer views of unique sculptures and garden areas in the park.
- Access to Peabody Park, Witt Stephens Jr. Central Arkansas Nature Center, the Science Museum, the Riverfest Amphitheater, the Clinton Presidential Center, Heifer International and Bill Clark Wetland area.



Source: Garver and Associates

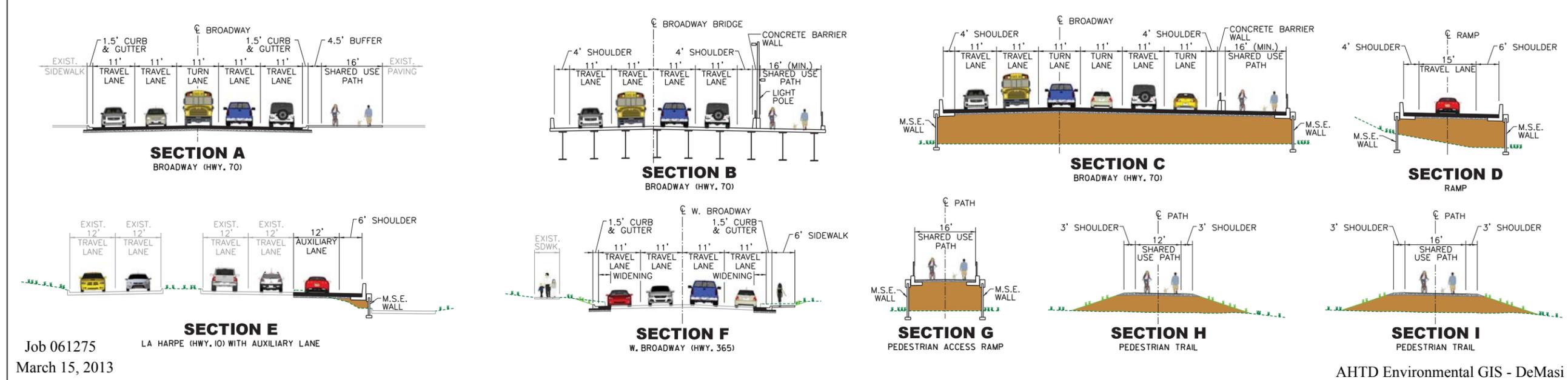


Figure 3  
Design View

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### **Can We Avoid the Park?**

Because of the close proximity of the existing bridge to the park, avoidance of the park is not possible. Construction of the bridge, highway access and the pedestrian/bicycle access will directly impact Riverfront Park, design details of these items of construction are shown in Figure 3.

### **What Will the Project Do To the Park?**

Approximately 0.14 acre of the 33 acres of Riverfront Park (0.42% of its entire area) will be acquired to construct the bridge and access improvements. The contractor will be instructed to coordinate activities with the City of LR engineers and park personnel to coordinate phases of construction, time constraints, determine which park properties would/could be utilized, and to provide the park personnel ample time to schedule park activities. Figure 4, looking to the west, shows the Broadway Bridge north bound access ramp from La Harpe Boulevard, the City of LR and Pulaski County parking facilities, the Arkansas River Trail and the Arkansas River.



Figure 4  
Riverfront Park (looking east towards Broadway Bridge).

Figure 5, looking to the east, shows the Arkansas River, the Arkansas River Trail and the City of LR and Pulaski County parking facilities in relation to the Broadway Bridge.

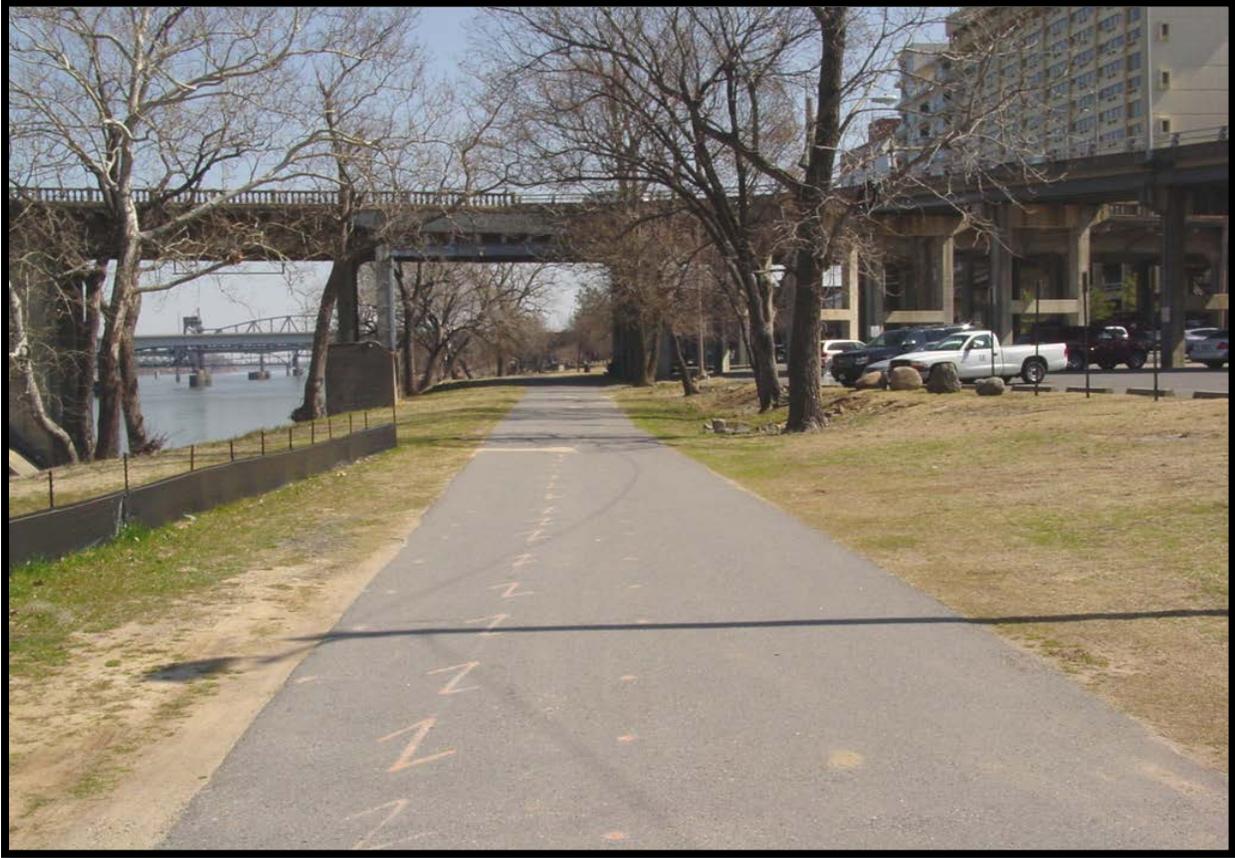


Figure 5  
Riverfront Park (looking west towards Broadway Bridge).

Impacts to the park that result from bridge construction will include:

#### *Negative Impacts*

- Temporary closure of Riverfront Park and the Arkansas River Trail will occur at the construction site in order to construct the bridge. Once the bridge and the Arkansas River Trail are reconstructed, pedestrians and bicyclists will be allowed use this part of Riverfront Park and the trail.

#### *Positive Impacts*

- The project will improve safety for all users.
- The project will improve or maintain existing capacity for each user group (there will be no decline in capacity for any one group).
- The project will promote pedestrian and bicycle use through improved facilities on the bridge and improved connection to facilities off the bridge.

- The project will promote connectivity to both parks. Currently, only pedestrians can have direct park access to/from the bridge.

### **What Did We Do to Reduce Harm to the Park?**

The following measures were included in the proposed project to reduce harm to Riverfront Park:

- The bridge will be replaced on existing location. The AHTD minimized the footprint of the bridge and its related approaches.
- Utilized the existing right of way as much as possible.
- Coordination with city park officials about construction timing, construction clear zones, pedestrian and bicycle traffic diversions around the construction zone have been ongoing.
- Replacement of the pedestrian/bicycle trail once the project is complete.
- Replacement value of 0.014 acres of park property that was included under a Land and Water Conservation Grant 6(f) fund program will be mitigated. Mitigation property to be selected by the City of LR Parks and Recreation Department and the AHTD. These lands to be approved by the National Park Service, Arkansas State Parks and the FHWA.
- The construction contractor will submit a Closure Plan to the AHTD providing a schedule of anticipated closure times for the area of Riverfront Park and the Arkansas River Trail in the construction zone and include a detour route for the Arkansas River Trail, as specified by the City of LR Parks and Recreation Department, to be established and maintained by the construction contractor. The AHTD will coordinate with City of LR Parks and Recreation Department on the Closure Plan seeking mutual acceptance between the City and the AHTD before final approval is granted.
- The AHTD will coordinate with City of Little Rock Parks and Recreation Department seeking mutual acceptance between the City and the AHTD to revise design plans in the area of the pedestrian access ramp to Riverfront Park to be more compatible with their “Gateway” concept.



Arkansas River

Arkansas River Trail

Little Rock Riverfront Park

10

La Harpe Blvd

Arch St

Little Rock City Hall

Robinson Center

Broadway St

Conway St

Markham St

-  Proposed Pedestrian Walkway
-  Existing Right of Way
-  Proposed Right of Way
-  Park with 6(f) Funding
-  Roadway Improvements
-  Bridge Footprint
-  Park

Figure 6  
Riverfront Park Impacts



0 75 150  
Feet

Job 061275  
March 18, 2013  
AHTD - Environmental GIS - Strawn  
Photography: ADOP 2009

## **How Did We Involve the Public In This Evaluation?**

A Public Officials Meeting and an open forum Public Involvement Meeting were held on February 7, 2012 and a Location Public Hearing was held August 23, 2012. Comments about potential park impacts and pedestrian connections were requested and the information was used to develop the project plans concerning the park.

A Design Public Hearing was held Thursday, March 28, 2013 at the Arkansas Transit Authority Building. The hearing presented the officials and the public the proposed bridge design and offered the opportunity for comments or to answer any questions about the project and its impacts to the park. This Draft Section 4(f) Evaluation was made available for review and comment for 45 days. No comments were submitted concerning the draft document.

Comments concerning the park were submitted at the Design Public Hearing, and these comments were addressed in the Disposition of Public Comments and the Design Public Hearing Synopsis. These documents will be submitted with the Finding of No Significant Impacts (FONSI) document to the FHWA. The public was asked in the Design Public Hearing *“Do you have any comments concerning impacts to Riverfront Park in Little Rock and North Little Rock? A Draft De Minimus 4(f) is available for viewing.”*

Five of nine comments received in this section were directly related to the parks. One individual was concerned about the continuity of the trail. One individual was concerned about trail access and one individual was interested about staircase access. One individual was concerned about placing a gate to the North Little Rock Park restricting pedestrian access during park closure or special events. One individual specifically wanted placement of a staircase at the access ramp location on the North Little Rock side. In response to these comments the AHTD will:

- Provide continuity of the Arkansas River Trail system.
- Provide park and trail access ramps to both Riverfront Parks.
- Placed the access ramp on the LR side over the existing access ramp to Broadway Bridge to minimize impacts to Riverfront Park.
- Provide overlook areas on both sides of the park and trail access ramps for both Riverfront Parks.
- Provide a moveable and lockable gate down gradient of the overlook areas on the NLR side only.

## **What is the Decision?**

We believe that this evaluation determines that the proposed bridge replacement project will not harm the protected features, qualities, or activities that make the park important for recreation under Section 4(f), thus qualifying for a *de minimis* finding on the Riverfront Park in LR. The City of LR has agreed that this project will not have a harmful effect on Riverfront Park. A copy of this agreement is included in Appendix A.

**APPENDIX A**

**CITY OF LITTLE ROCK CONCURRENCE**

I concur with the assessment and the proposed minimization and mitigation of impacts to Little Rock Riverfront Park as detailed in the enclosed Section 4(f) Evaluation and documentation of De Minimis Findings to Section 4(f) Property for Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges.



Signature

City Manager

Title

Aug 1, 2013

Date

**EVALUATION AND DOCUMENTATION OF A  
DE MINIMIS FINDING TO SECTION 4(F) PROPERTY  
FOR PUBLIC PARKS, RECREATION LANDS, AND  
WILDLIFE AND WATERFOWL REFUGES**

AHTD Job Number 061275  
FAP Number BRN-9253(63)  
Arkansas River Str. & Apprs. (Broadway)(LR/NLR)  
Pulaski County

Riverfront Park  
City of North Little Rock

June 2013

Federal Highway Administration

Arkansas State Highway and Transportation Department

## **What is Section 4(f)?**

Section 4(f) is part of a law that was passed to protect public parks, recreation areas, wildlife/waterfowl refuges, and important historic sites from being harmfully affected by transportation projects.

## **Does Section 4(f) Apply to Riverfront Park?**

Riverfront Park in North Little Rock (NLR), Arkansas is an important public park for the metropolitan area (Figure 1). Due to the proximity to the bridge project, a Section 4(f) would apply to the park. Figure 1 shows a portion of the Riverfront Park looking east from the Broadway Bridge.



Figure 1  
Riverfront Park (NLR)

After we do an evaluation like this one, some Section 4(f) impacts can be recognized as “*de minimis*,” which means relatively minor. We will present information to prove that there are only minor impacts to Riverfront Park in NLR. We can have a *de minimis* finding on projects that meet the conditions shown in Table 1.

<b>Table 1</b>	
<b>When Can We Use A <i>De Minimis</i> Finding on Section 4(f) Properties?</b>	<b>Does It Apply To This Project?</b>
Did we specially design the project to protect Riverfront Park as much as possible? Did we use mitigation and enhancement where it was suitable?	Yes
Did the official(s) with authority over Riverfront Park have a chance to consider this information and agree that the project will not greatly harm the things that make Riverfront Park important?	Yes
Did the public have an opportunity to review and comment on the effects of the project on Riverfront Park and the things that make it important to them?	Yes

**What is the proposed bridge project?**

The Arkansas Highway and Transportation Department (AHTD) and the Federal Highway Administration (FHWA) proposes to replace the existing Highway 70 Bridge (Broadway Bridge) crossing the Arkansas River between the cities of Little Rock and NLR, Arkansas (Figure 2). The proposed bridge will consist of a double, basket-handle, network tied arch bridge having a length of 1,767 feet and a total width of 73 feet, within a total project length of 3,015 feet. The typical cross-section across the main span of the bridge will consist of four 11-foot travel lanes with 4-foot shoulders and a 16-foot multiuse path (Figure 3, Section B)

Improvements to Riverfront Park include:

- The Arkansas River Trail in Riverfront Park will be impacted by the demolition and reconstruction of the bridge and will require complete reconstruction. The reconstructed trail will match the design, size, color and texture found in the existing trail system.

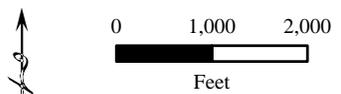
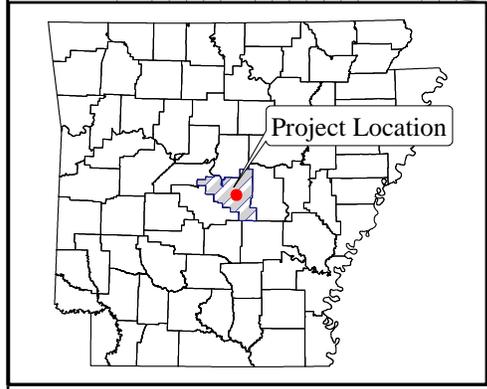
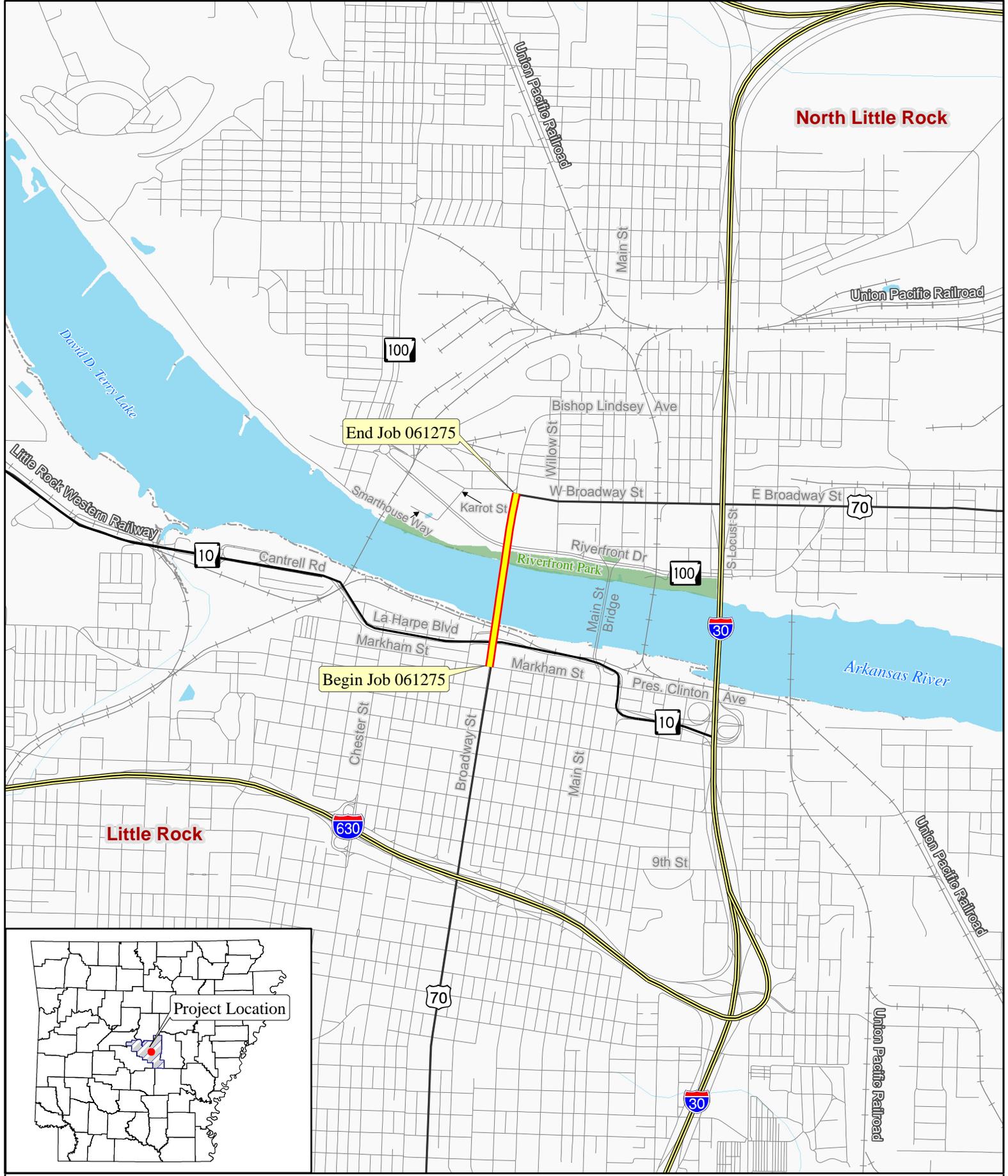


Figure 2  
Project Location



- An elevated 16-foot shared use path on piers will access Riverfront Park from the bridge. Elevated viewing platforms will be constructed on both sides of the shared use path along the uppermost part of the access. This will allow pedestrians and bicyclists the opportunity to rest and enjoy the view without interference to traveling pedestrians and bicyclists. Immediately up gradient of the viewing platform will be a lockable gate. This lockable gate will be installed to manage pedestrian and bicycle traffic. The City of NLR will have the authority to open and close this gate.
- The elevated shared use path will be placed between the existing levee system and Riverfront Drive (Highway 100) veering slightly to the southeast as it approaches ground-level in the park. The path will intersect with the existing trail system south of the present Riverfront Park entrance gate and floodwall structure located at the intersection of Willow Street and Riverfront Drive.

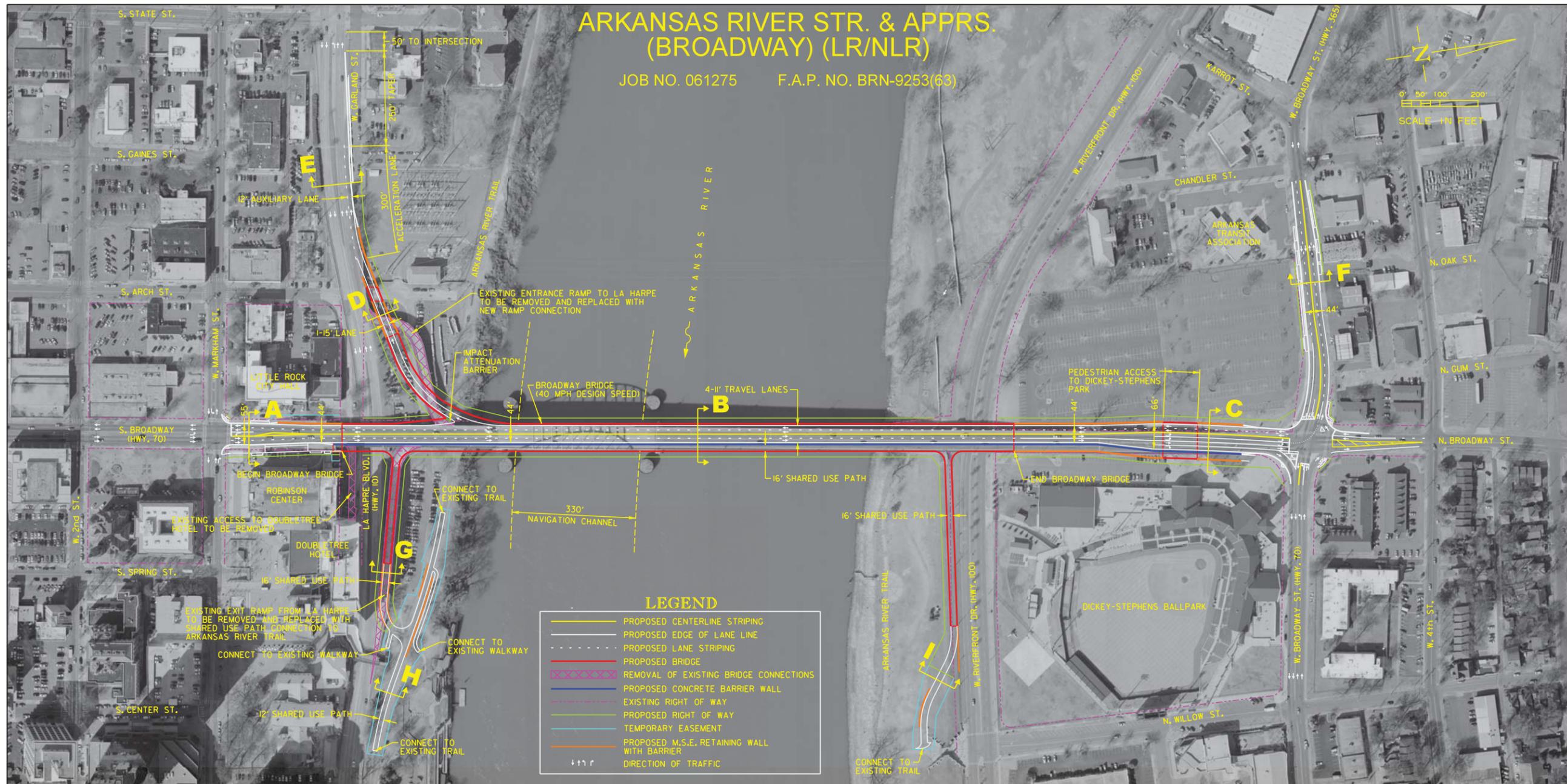
### **Why is Riverfront Park Important?**

Riverfront Park is located along the Arkansas River and is owned and operated by the City of NLR. The NLR Advertising & Promotion Commission and the NLR Visitors Bureau oversee the park and handle requests and reservations for special events held in the North Shore River District. Riverfront Park is maintained by the NLR Parks Department and the NLR Street Department. The main purpose of Riverfront Park is to provide residents and visitors a place to enjoy outdoor events and leisure activities, including the following:

- Pedestrian/ bicycle access to the Arkansas River Trail.
- Picnicking facilities.
- Concerts, festivals, outdoor trade shows, and outdoor activities.
- Overflow RV parking for large groups are also allowed.

### **Can We Avoid the Park?**

Because of the proximity of the existing bridge and the park, avoidance of the park is not possible. Construction of the bridge and the pedestrian/bicycle access will directly impact Riverfront Park. Access improvements to Riverfront Park from the new Broadway Bridge will require demolition of the existing stairs and new access construction on the eastern side of the bridge; details are shown in Figure 3.



Source: Garver and Associates

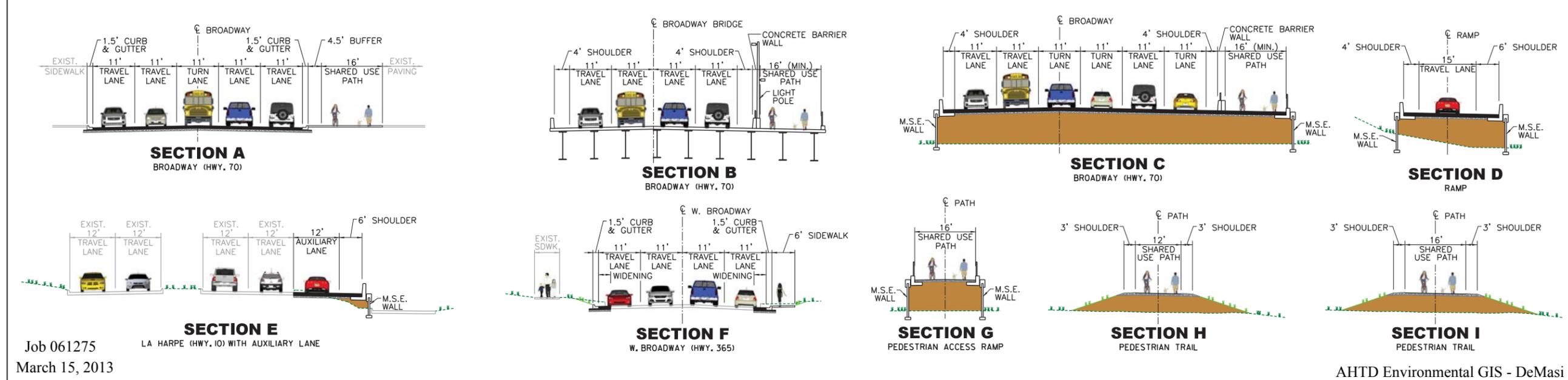


Figure 3  
Design View

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### **What Will the Project Do To the Park?**

Approximately 0.43 acre of the 14.3 acres (3.0% of the entire area) of NLR's Riverfront Park will be acquired to construct the bridge and access improvements. Usage of the Arkansas River Trail through this area will be impacted. No other permanent recreational activities occur on the park property at this location. Construction of the bridge will require a temporary construction easement from the park to allow for contractor operations. The contractor will be instructed to coordinate activities with the City of NLR engineers and park personnel to discuss phases of construction, time constraints, determine which park properties would/could be utilized, and to provide the park personnel ample time to schedule park activities. Figure 4 illustrates the eastern view underneath the bridge showing the Little Rock District-Corp of Engineers levee where an elevated shared use path will be constructed, Riverfront Park general use area, the Arkansas River Trail and the Arkansas River in the background.



Figure 4  
Riverfront Park (looking east from underneath Broadway Bridge).

Figure 5 shows the immediate area west of the Broadway Bridge. This picture points shows the Arkansas River, the Riverfront Park general usage area, the Arkansas River Trail with health information stations, and the Little Rock District-Corp of Engineers floodwall. Figure 6 shows the existing right of way and the proposed right of way in the park area.



Figure 5  
Riverfront Park (looking west from underneath Broadway Bridge).

Impacts to the park that result from bridge construction will include:

*Negative Impacts*

- Temporary closure of Riverfront Park and the Arkansas River Trail will occur at the construction site in order to construct the bridge. Once the bridge and the Arkansas River Trail are reconstructed, pedestrians and bicyclists will be allowed to use this part of the Riverfront Park and trail.



- - - Proposed Pedestrian Walkway
- Proposed Right of Way
- - - Existing Right of Way
- - - Roadway Improvements
- Bridge Footprint
- Park

Figure 6  
NLR Riverfront Park Impacts

  
 0      60      120  
 Feet  
 Job 061275  
 March 18, 2013  
 AHTD - Environmental GIS - Strawn  
 Photography: ADOP 2009

*Positive Impacts*

- The project will improve safety for all users.
- The project will improve or maintain existing capacity for each user group (there will be no decline in capacity for any one group).
- The project will promote pedestrian and bicycle use through improved facilities on the bridge and improved connection to facilities off the bridge.
- The project will promote connectivity to both parks. Currently, only pedestrians can have direct park access to/from the bridge.

**What Did We Do to Reduce Harm to the Park?**

The following measures were included in the proposed project to reduce harm to Riverfront Park:

- The bridge will be replaced on existing location. The AHTD minimized the footprint of the bridge and its related approaches.
- Utilized the existing right of way as much as possible.
- Coordination with city park officials about construction timing, construction clear zones, pedestrian and bicycle traffic diversions around the construction zone have been ongoing.
- Efforts to minimize impacts to pedestrians/bicyclists using the Arkansas River Trail include a detour route along Riverfront Drive from the Missouri Pacific Railroad Overpass Bridge east to North Willow Street. This detour route will divert pedestrians and bicyclists away from the main bridge construction site.
- Bridge construction immediately over Riverfront Drive will require road closure for a relatively short period of time. During this phase of work, detour routes for the traveling motorists, pedestrians and bicyclists will be provided to circumvent the construction site and will be reopened once construction in that area is complete.
- The pedestrian access ramp will be built on the north side of the levee system to minimize impacts to the park and the levee system maintained by the U. S. Army Corp of Engineers-LR District.

**How Did We Involve the Public In This Evaluation?**

A Public Officials Meeting and an open forum Public Involvement Meeting were held on February 7, 2012 and a Location Public Hearing was held August 23, 2012. Comments about potential park impacts and pedestrian connections were requested and the information was used to develop the project plans concerning the park.

A Design Public Hearing was held Thursday, March 28, 2013 at the Arkansas Transit Authority Building. The hearing presented the officials and the public the proposed bridge design and offered the opportunity for comments or to answer any questions about the project and its impacts to the park. This Draft Section 4(f) Evaluation was made available for review and comment for 45 days. No comments were submitted concerning the draft document.

Comments concerning the park were submitted at the Design Public Hearing, and these comments were addressed in the Disposition of Public Comments and the Design Public Hearing Synopsis. These documents will be submitted with the Finding of No Significant Impacts (FONSI) document to the FHWA.

The public was asked in the Design Public Hearing “*Do you have any comments concerning impacts to Riverfront Park in Little Rock and North Little Rock? A Draft De Minimus 4(f) is available for viewing.*” Each comment that was received is listed below followed by the response.

**Comment:** Please consider a gate at the top of the NLR pedestrian/bike ramp for park closures and also an observation platform near the top of ramp.

**Response:** These items will be incorporated into the final plans.

**Comment:** The project should better tie the two parks together.

**Response:** Comment noted

**Comment:** I wish that on the North Little Rock side you had a staircase that led from the park to the bridge (where the ramp connects), so that you wouldn’t have to go all the way to the foot of the pedestrian bridge to get on the bridge.

**Response:** The addition of stairs on the North Little Rock side would have to be supported on the levee. The U.S. Army Corps of Engineers does not allow the construction of this type of element on top of the levee due to maintenance concerns.

**Comment:** Just keep the bike trail in there.

**Response:** Comment noted

**Comment:** The direct access to the River Trail is a big plus.

**Response:** Comment noted

**Comment:** You need connections on both sides to the River Trail, but think about bike community – they use streets and go to work/business places.

**Response:** The bicyclists will still be able to use the main lanes for their commutes, even though the safety factor will be lower for such an option. The best option for the commuting bicyclist would be to use the shared use facility with its wider lanes and

protection barrier versus the traffic shoulders is a consideration each bicyclist will have to consider.

### **What is the Decision?**

We believe that this evaluation determines that the proposed bridge replacement project will not harm the protected features, qualities, or activities that make the park important for recreation under Section 4(f), thus qualifying for a *de minimis* finding on the Riverfront Park in NLR. The City of NLR has agreed that this project will not have a harmful effect on Riverfront Park. A copy of this agreement is included in Appendix A.

**APPENDIX A**

**CITY OF NORTH LITTLE ROCK CONCURRENCE**



**APPENDIX C**

**SHPO CORRESPONDENCE**



**The Department of  
Arkansas  
Heritage**

Mike Beebe  
Governor

Martha Miller  
Director

Arkansas Arts Council

Arkansas Natural Heritage  
Commission

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars  
Cultural Center

Old State House Museum



**Arkansas Historic  
Preservation Program**

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[www.arkansaspreservation.org](http://www.arkansaspreservation.org)

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August 13, 2013

Mr. Lynn P. Malbrough  
Division Head  
Environmental Division  
Arkansas State Highway and Transportation Department  
P.O. Box 2261  
Little Rock, Arkansas 72203-2261

Re: Pulaski County – Multi  
Section 106 Review – FHWA  
Proposed Broadway Bridge Replacement in Little Rock/North Little  
Rock  
AHTD Job Number 061275  
AHPP Tracking Number 73205

Dear Mr. Malbrough:

Thank you for addressing our concerns regarding the potential for the proposed undertaking to have a visual impact on the Old State House, a National Historic Landmark. Based on the information presented and discussions with your office, we concur that the proposed undertaking will have no adverse effect on historic properties. Therefore, we have no objection to the implementation of the proposed undertaking as designed.

Thank you for the opportunity to review this undertaking. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, please call Eric Gilliland of my staff at 501-324-9270.

Sincerely,

Frances McSwain  
Deputy State Historic Preservation Officer

cc: Dr. Ann Early, Arkansas Archeological Survey  
Mr. Randal Looney, FHWA