



and



### Finding of No Significant Impact

### Missouri Route 47 Franklin & Warren Counties, MO

Missouri River Bridge at Washington
JOB NUMBER J3P2155



and

Missouri Department of Transportation



### FEDERAL HIGHWAY ADMINISTRATION FINDING OF NO SIGNIFICANT IMPACT

### FOR

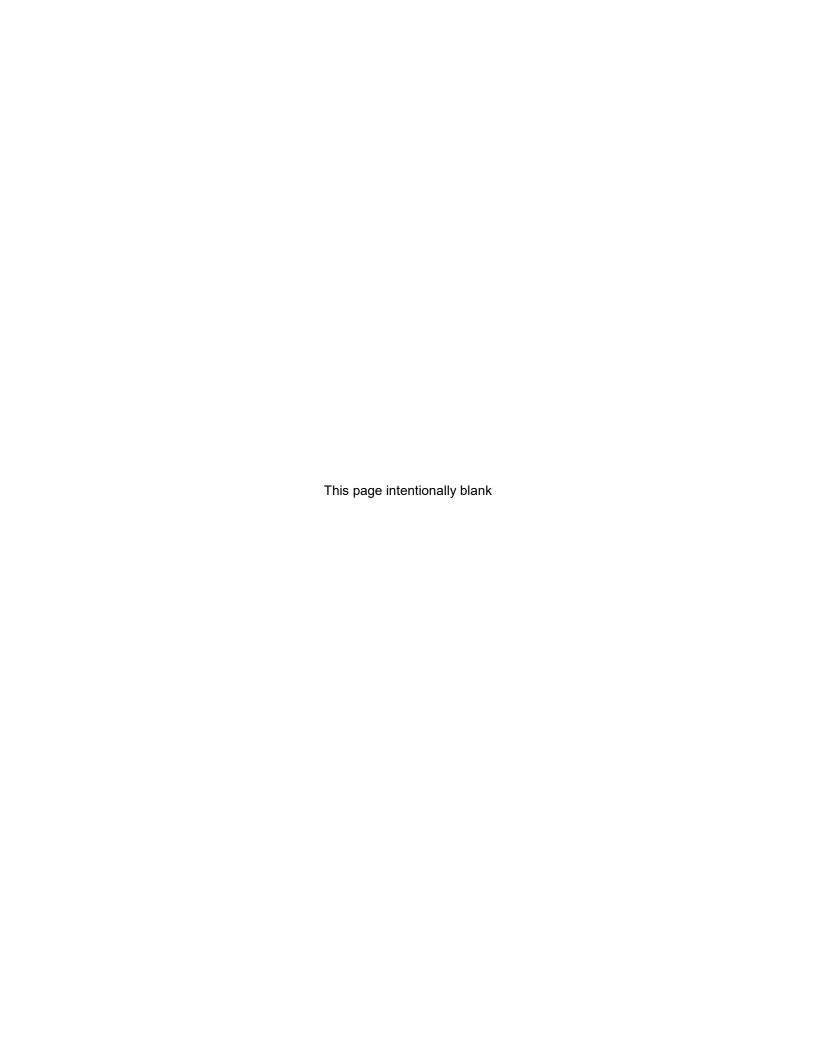
### MISSOURI ROUTE 47, FRANKLIN AND WARREN COUNTIES, MISSOURI MISSOURI RIVER BRIDGE AT WASHINGTON JOB NUMBER J3P2155

The FHWA has determined that this project will not have any significant impact on the human environment. This finding of no significant impact is based on the attached environmental assessment, which has been independently evaluated by the FHWA and determined to discuss the environmental issues and impacts of the proposed project adequately and accurately. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the attached environmental assessment.

Data

Responsible Official

Title



### Finding of No Significant Impact

### 23 CFR 771.121 Missouri Department of Transportation/Federal Highway Administration

| REGION               | STATE PROJECT NO. | PROJECT TITLE, ENVIRONMENTAL DOCUMENT TYPE   |
|----------------------|-------------------|--|
| Missouri<br>Division | J3P2155           | Missouri Route 47, Franklin and Warren Counties, Missouri<br>Missouri River Bridge at Washington<br>Environmental Assessment |

### INCLUDES PROGRAMMATIC SECTION 4(f) and MEMORANDUM OF AGREEMENT FOR MITIGATION OF ADVERSE EFFECTS

### DECISION

The Federal Highway Administration, Missouri Division, approved the *Missouri Route 47, Franklin and Warren Counties, Missouri, Missouri River Bridge at Washington, Job Number J3P2155, Environmental Assessment* (EA) on December 2, 2010. Notice of the EA's availability was sent to agencies and the document was made available for public review on December 15, 2010. The EA was available at eight locations in the affected counties and also was posted on MoDOT's District 3 website at http://www.modot.org/northeast/Route47BridgeatWashington.htm.

The Selected Alternative to solve the transportation problems associated with the Route 47 Bridge is the adjacent upstream alternative. The selected alternative will replace the existing, deficient bridge with a new two-lane bridge approximately 50 feet upstream from the current location. This alternative will slightly realign the roadway beyond the bridge limits to tie into existing Route 47. The selected alternative will result in removal of the existing historic bridge after the new structure is built.

The selected alternative was identified through public and agency involvement along with assessment of socioeconomic and environmental consequences. The public hearing was held in accordance with established MoDOT procedures. The department has considered possible social, economic, and environmental effects of the proposed improvements. No additional project impacts have been identified beyond those described in the original EA documentation.

The project is consistent with local planning goals and objectives, and there are no potential conflicts of interest on this project. The City of Washington, Franklin County, and Warren County have all pledged funds toward the design of the new bridge.

### PUBLIC AND AGENCY REVIEW/COMMENT ON EA

### **Public Comments**

A location public hearing was held February 28, 2011, at the City Hall in Washington from 5:00 - 6:30 p.m. Approximately 35 people attended the hearing, which was originally scheduled for January but postponed because of inclement weather. Comment sheets were available for attendees to provide written feedback. A -virtual" public hearing was also available via the project's website, where the EA and public hearing displays were posted for viewing by those not able to attend the public hearing in person. Because the document was available for public review in December 2010 and weather forced postponement of the hearing as originally scheduled, this project had an unusually long comment period, with comments on the EA accepted until March 14, 2011.

Ten written comments were received from the public and local stakeholders: a January 21, 2011, letter from the Route 47 Bridge Committee, two comments at the hearing, and seven e-mailed comments. Most of the comments related to a bicycle facility in one way or another, reflecting a desire for a bike lane though not all favored the specific plan laid out. Two commenters mentioned safety concerns for Washington-bound bicyclists crossing Route 47 back and forth between the KATY Trail and the bridge. One proposed keeping all bicycle traffic on the east side of Route 47, instead of splitting the northbound and southbound bicyclists, to eliminate potentially dangerous crossings of the highway. The other wanted the KATY Trail connection with the bridge to avoid the Route 47/94 intersection, instead suggesting a separate new bike path going between Lake Creek and the Washington Airport east of Route 47.

Response—Using the shoulders of Routes 94 and 47 from the trailhead at Dutzow to Augusta Bottom Road makes efficient use of the existing Route 47 and 94 infrastructure (graded shoulders), which will also be routinely maintained (cleared, resurfaced, and marked) with the pavement surface. This allows bicyclists to travel in the same direction as vehicular traffic; with rumble strips separating vehicular traffic from bicycle traffic, this is a safe and acceptable configuration. From Augusta Bottom Road to the City of Washington, both directions of bicycle travel would be on the east side of Route 47, protected by guardrail or barrier on the bridge.

Two commenters proposed retaining the existing historic bridge or at least its main spans for use as a bike/pedestrian facility. One of those elaborated on the historic value of the bridge as one of the last remaining old truss bridges across the Missouri River in the state of Missouri and the iconic value of the bridge to the City of Washington. A complete summary of this individual's comments and additional detailed response follows discussion of the Route 47 Bridge Committee's comments.

Response—Because of the expected on-going maintenance costs needed to retain the historic structure and the obstacles to navigation that the additional bridge piers would present, the existing bridge will be demolished if no proposals for adaptive reuse are forthcoming. Retaining the existing structure as a bicycle/pedestrian bridge, would result in a much greater future cost to reconfigure the new bridge to four lanes. Without bicycle/pedestrian accommodation, the new bridge would be 44 feet wide (two 12-foot lanes and 10-foot shoulders). Widening that in the future to the roughly 53-foot wide section of the selected alternative would require adding nine feet of roadway width, more than could be cantilevered from each side (typically a foot or two additional width). Therefore another girder line would be needed for that additional width and that girder line would need additional substructure, including another river pier, which would make the widening very expensive.

One commenter suggested not overlooking tolling as a way to pay for the new bridge and asked whether the right of way planned would accommodate a toll collection facility. Another commenter proposed constructing the bridge wide enough to provide ten-foot shoulders in the four-lane configuration and questioning whether the four-lane configuration should have a traffic barrier to prevent crossovers.

Response—Tolling is not currently an option for the bridge, so right-of-way requirements for a toll collection facility were not investigated. The initial two-lane bridge configuration with ten-foot shoulders is expected to perform at a satisfactory level of service for the foreseeable future based on twenty-year traffic projections. Although the bridge can be expected to last 75 to 100 years, traffic projections beyond twenty years are not considered reliable.

The Route 47 Bridge Committee expressed agreement with the preferred alternative in their comment letter. Additionally, the committee raised several concerns and recommended several revisions to the EA including 1) the desire of local planners to provide as high a level of service as possible (and Washington officials' willingness to work with MoDOT in the future to continually improve the level of service for Route 47), minimize peak hour traffic congestion, and ensure -that traffic problems do not occur given the fact that the bridge is so crucial for the school, medical services, etc."; 2) local planners' interest in the availability of sufficient right of way for a future transition of the bridge to four lanes; and 3) local designers' desire for -a careful review of expected traffic flows beyond the 2033 design year." The Committee also requested that -the bridge be easily expandable to 4 lanes, with adequate shoulders and

a bike path."

The bridge committee expressed particular concern about the proposed "S curve" at the south end of the bridge and requested softening or straightening this curve by acquiring a reasonable amount of additional right-of-way in order that a traffic and safety hazard not be created." Sample preliminary drawings of such a possibility were provided. The committee requested clarification that the Traffic Management Plan would be drafted in concert with local emergency service officials from Washington and Warren County. Finally, the committee noted that the historic bridge is part of the identity of the community, is branding for the Washington Area Chamber of Commerce, signs entering the community, signs and memorials in the City Hall complex area, signs for the Heidmann Industrial Park on the west side of town on Highway 100, all include a mock up of the graceful lines of the historic truss bridge." They requested that aesthetics be addressed to provide a link between the design of the new bridge and the old bridge that will allow the community to retain this identity.

Response—MoDOT appreciates the Route 47 Bridge Committee's interest in the project and notes their desire for a high level of service. MoDOT's practical design guidance determines the level of service to pursue, and while a satisfactory level of service is desired, excess capacity will not be provided to achieve, for example, a level of service A at all times. The new Mississippi River Bridge currently under construction in St. Louis is estimated to carry over 55,000 vehicles by 2030. It will have only two lanes in each direction, with the possibility to widen to three in the future by incorporating the shoulders and restriping the roadway. The resultant roadway would provide three 12-foot lanes with 2-foot shoulders, a similar approach to that proposed at Washington. The expressed willingness of Washington officials -te work with MoDOT in the future to continually improve the level of service for Route 47" is taken as support for past discussions about using access management to improve traffic flow on Route 47 (e.g., closing off side road access and requiring local traffic to access Route 47 via the signalized intersections at Fifth or Eighth Streets). MoDOT would work with the city to implement these measures regardless of any action on the bridge project. If or when the bridge is expanded to four lanes of traffic, these types of measures would likely be required as part of a comprehensive approach to managing traffic.

There is sufficient right of way in the area between the bridge and Fifth Street to accommodate a four-lane configuration, although side-road access may need to be limited to ensure satisfactory traffic flow. No right of way would be needed north of First Street. A minor amount of right of way might be needed on the east side of the Route 47 corridor from First Street to Third Street because of the grade differential adjacent to the parking lot; alternatively, this could be achieved by constructing a short retaining wall. Pavement structure currently exists between Third Street and Fifth Street to accommodate a four-lane configuration and sidewalk on the west side of the Route.

The S-curve at the south end of the bridge is not an uncommon feature and will minimize the project's right-of-way impacts. The degree of curvature used in the preliminary layout is within the standard design range for this type of facility. As detailed design commences, the degree of curvature used can be minimized to that which will allow construction staging. MoDOT will not use an unacceptable degree of curvature. The sample alignment provided would require additional right-of-way, an increased number of residential displacements, increased complexity in the bridge, and an overall increase in cost with no real benefit to the project.

MoDOT's standard practice is to develop the Transportation Management Plan in collaboration with local emergency service officials and this project will follow that practice. In addition, MoDOT will work with local officials regarding their desire to link the new bridge design with that of the existing bridge, thus allowing the community to retain this identity that is used for local branding. Perhaps something could be incorporated into the bridge railing that recalls the design of the historic bridge.

Mr. Nathan Holth submitted comments on the EA on February 16, 2011. Mr. Holth stated that he is a private citizen not affiliated with any organization or agency and is neither an engineer nor a certified bridge inspector but acknowledged he has a bias toward preserving historic bridges. Mr. Holth's primary concern with the EA is the lack of consideration for leaving the historic bridge standing next to its

replacement, with the historic bridge serving non-motorized traffic"—a solution he believes —better meets the needs of the project, and would avoid adverse effect to an extremely important and increasingly rare Missouri River historic bridge." He points out that a number of historic bridges on the Missouri River have been demolished and asserts that —it is easy to suspect that MoDOT wishes to demolish every bridge with historic value on the entire Missouri River within the state." Mr. Holth notes the association of large historic cantilever bridges like the Washington Bridge with crossings of large rivers, often only those rivers considered navigable, highlighting the rarity of this type of bridge.

Mr. Holth encourages MoDOT -to change its plans for the Washington Bridge" and leave it -standing next to its replacement for non-motorized use." He alleges that such preservation would -address concerns from the public brought forward during public meetings" and more completely meet public comments regarding the need for -a separate (protected) bike/ped facility...both across the bridge and to the KATY Trail." He reasons that a -separate bridge would meet these concerns more completely than the proposed sidewalk with barrier" and asserts that -preserving the Washington Bridge could have significant economic benefits from tourism and increased community desirability in years to come."

Mr. Holth contends that the EA's description of the preferred alternative is misleading because it implies the removal of the entire bridge is required as part of the project. He argues that the main spans could be retained and a new ramp to the historic bridge built to allow non-motorized access. Mr. Holth's opinion is that such alterations would not diminish the historic significance of the bridge and the cost to build the new approaches could be partially offset by savings from eliminating the sidewalk on the new bridge and the money that would have been used for demolition.

Mr. Holth takes issue with the statement in the EA that the bridge is nearing the end of its useful service life, contending it implies that the bridge's service life cannot be extended by changing the function of the bridge, such as for non-motorized use. He cites examples of older bridges, such as New York's Brooklyn Bridge, for which rehabilitation projects were recently undertaken and points out there are far older bridges in Europe that are kept in service in perpetuity. He states that rather than talking about the end of a service life, the EA should indicate specific structural conditions such as deficiencies and NBI ratings.

Finally, Mr. Holth requests copies of the proposed historic bridge recordation with the intent of making these materials available freely to the public on the web site HistoricBridges.org should it be found that the project has an adverse effect on the historic bridge.

Response—Safe accommodation for bicyclists and pedestrians is one of the three identified needs for the proposed bridge replacement and MoDOT has additionally committed to having separate Route 47 improvements in place when the bridge is completed to enhance safety for bicyclists between the KATY trail and the new bridge. However, maintaining a functional river crossing for the more than 10,000 vehicles per day that depend on the bridge to access employment, schools, medical care, shopping, and other needs is critical to the area's economy. MoDOT, like many other state transportation agencies, lacks sufficient funds to address all identified needs and currently has no funding available for construction of the selected alternative. Even if the U.S. Army Corps of Engineers and the U.S. Coast Guard would allow the old bridge and its supporting piers to be left in place along with a new bridge, converting the existing bridge for use by non-motorized traffic does not mean that the maintenance requirements would cease. That is the reality of the situation and the additional cost to construct new approaches, even for non-vehicular use, and to further rehabilitate and continue to maintain the historic bridge solely for the numbers of bicyclists and pedestrians that would use it is not a cost-efficient use of Missouri's limited resources. Additionally, pedestrian fencing would need to be added to the existing structure and ensuring that the added fencing is esthetically pleasing would further increase the cost. Adding such fencing could be deemed an adverse effect under Section 106.

Mr. Holth cites the Brooklyn Bridge as an example of a bridge that has been saved through regular maintenance. The project currently under way to rehabilitate that bridge and make improvements to the approaches is a billion-dollar project. Restoring the Washington bridge for non-motorized traffic use would not cost a billion dollars, but the relative value of the resources needed must be considered and

weighed against their value for other uses. The precious funds that Missouri has are due the full diligence MoDOT gives them. Certainly there are structures worthy of saving, a good example being the old Chain of Rocks bridge. However, this particular structure is not one that lends itself to preservation, thus the statement that it is -nearing the end of its **useful** service life." Information about the bridge's current condition, including its deficiencies and NBI rating, may be found on pages 6–8 of the EA.

If it were simply a matter of the bridge being narrow and weight restricted, there would be a valid case for keeping it, but its condition, currently rated as "fair" only because of the recent rehabilitation project, is constantly deteriorating. Furthermore, use of the bridge for non-motorized versus motorized traffic loses its relevance in light of the condition of the bridge and the dynamics of bridge deterioration. It might be a solution worth further consideration if it were possible to remove the chlorides from the steel of the existing bridge truss spans and to stop the corrosion, but even as the bridge is repaired and repainted, the rust returns from the inside. MoDOT will provide Mr. Holth with a digital format copy of the final documentation for the historic bridge, as described in Stipulation 1 of the Draft Memorandum of Agreement that accompanied the EA.

### **Agency Comments**

In a letter of December 20, 2010, the U.S. Army Corps of Engineers (COE) thanked MoDOT for the opportunity to comment on various draft phases of the EA. The COE expressed appreciation for inclusion of their comments in the document and stated that they had no further comments at that time.

The Missouri Department of Natural Resources (MDNR) submitted comments on the EA in a February 8, 2011, letter. The agency provided some general information on watersheds, ecological drainage units, geospatial data, and geology. Regarding water quality, MDNR stated that the EA covered the basic issues but they felt a few specific comments or questions might be emphasized for project planners. The Missouri State Operating Permit for land disturbance referenced in 4) WATER OUALITY on page 33 was listed as MO-Rl00xxx, but the actual number of the permit is MO-Rl00007. MoDOT's Municipal Separate Storm Sewer (MS4) permit, MO-R040063, which was not mentioned in the EA, works in concert with the land disturbance permit to ensure proper site design, Best Management Practices during construction, and post-construction water quality protection.

MDNR requested a reference for the Federal Highway Administration nationwide studies on pollutants in highway runoff that were mentioned on page 33. The agency expressed concern about possible lead contamination during bridge demolition and asked whether the bridge contains lead paint. MDNR noted that the north river bank, which would likely be used for the majority of construction staging, appears to be covered in substantial floodplain forest and cautioned that project planners should work to avoid and minimize impacts. Finally, MDNR asked whether the wetland delineation has been completed for the preferred alternative and if not, how the two wetlands identified in 5) WETLANDS AND WATERS OF THE U.S. (page 34) were determined.

Response—MDNR's comments on the correct land disturbance permit number and the concern about impacts from the project staging area are noted. MoDOT has two general permits for storm water runoff from MoDOT property and activities—MO-R040063, the Municipal Separate Storm Sewer (MS4) permit and MO-R100007, the Missouri State Operating Permit for land disturbance. These permits ensure that Missouri's clean water standards are met. MoDOT's comprehensive storm water management program requires Best Management Practices (BMPs) for erosion control for all construction or maintenance projects disturbing one acre or more. The program goals are to reduce discharge of pollutants to water bodies, protect water quality, meet defined water quality requirements, and control the quantity of storm water discharge.

As cited in the Route 19 Missouri River Bridge Final Environmental Impact Statement (FHWA-MO-EIS-99-01-F), page 4-14, -Nationwide studies by the Federal Highway Administration indicate that pollutants in highway runoff are not present in amounts sufficient to threaten surface or groundwater quality where the ADT is less than 30,000 (U.S. EPA 1993)." During the 2009 Route 47 bridge rehabilitation, lead paint was removed (by sandblasting) from substructure members below the deck and to a height of 10 feet

above the driving surface. The remaining lead paint on the bridge will not be removed prior to demolition. The spans will be dropped into the river one at a time and must be removed within 24 hours. The potential release of lead into the water from the demolition will not exceed water quality standards. The final paragraph in 14) HAZARDOUS WASTE SITES, PAGE 50, states that lead paint will not be removed from the bridge prior to demolition. MoDOT uses NWI maps, soil surveys, topographic maps, and possibly an on-site field check for alternative analysis in an EA. Delineation of wetlands and streams then normally occurs during project design. For this project, however, as stated in the penultimate paragraph on page 34, any unavoidable, minor temporary wetland impacts that may occur would be associated with temporary access to the construction area, are job specific, and are determined by the contractor. Permanent impacts to waters of the U.S. are expected to be limited to bridge pier placement in the Missouri River.

### **SUMMARY OF IMPACTED RESOURCES:**

### 1) FARMLAND IMPACTS

The selected alternative will need approximately 4.7 acres of new right of way in Warren County. The total conversion impact rating for this alternative was 56 points, well below the 160-point threshold NRCS established for consideration of farmland protection. Any small variation of the alternative that might occur during detailed design is unlikely to differ significantly from this evaluation. The project will be fully compatible with existing agriculture.

### 2) COMMUNITY IMPACTS

Although temporary disruptions in travel patterns and travel time may occur during construction, the long-term benefits of a new bridge should far outweigh short-term impacts. The selected alternative is not anticipated to result in any long-term negative effects within the city of Washington. MoDOT will continue to work with community and area residents to minimize inconvenience to residents and the traveling public during construction.

Over the long term, both Washington and the surrounding region are expected to benefit from a new bridge. The selected alternative will benefit travel efficiency and reliability at the Missouri River crossing by eliminating delays from traffic stoppages for oversized vehicles and agricultural equipment and by decreasing maintenance-related closures. In addition, local and visiting bicyclists will benefit from the structure's protected bicycle/pedestrian accommodation in combination with the separate project to improve Route 47 between the new bridge and the KATY Trail for bicycle travelers.

### Right-of-way Acquisition and Easements

New, permanent right of way is needed for the roadway north of the river in Warren County. The bridge over the river is accommodated by a U.S. Coast Guard permit. South of the river in Franklin County, the bridge will require permanent aerial easements from the Union Pacific Railroad as well as from the City of Washington (to span the park). New, permanent right of way will be needed to tie the new roadway alignment back into the existing roadway between the Missouri River and First Street.

The selected alternative will require 6.4 acres of new right of way, impacting 12 parcels, and will use an additional 5.8 acres of existing right of way. The majority of this area is undeveloped or agricultural land north of the river in Warren County. The selected alternative will require one residential displacement south of the river in Washington.

If any additional temporary easements are needed to provide contractor access for machinery and personnel, impacts will be addressed as the bridge and roadway details are finalized.

### 3) WETLANDS AND WATERS OF THE U.S.

Permanent impacts to waters of the U.S. are expected to be limited to placement of bridge piers in the Missouri River. Work in the river falls under Section 10 of the Rivers and Harbors Act, which generally allows only the absolute minimum of temporary obstruction to the navigable channel and requires that there be no permanent impacts to the channel.

If wetland impacts are unavoidable, the selected alternative could have temporary impacts on an old borrow ditch south of the river between the Rotary Riverfront Trail and the railroad tracks in Washington. Associated with temporary access to the construction area, job-specific impacts of this nature are determined by the contractor. Demolition of the existing bridge will result in temporary impacts to the river itself and possibly to the borrow ditch wetland as well.

The No-Build is the least intrusive alternative.

### Only Practicable Alternative Finding

In accordance with Executive Order 11990, this project avoids to the extent possible long- and short-term adverse impacts associated with the destruction or modification of wetlands. The proposed action includes all practicable measures to minimize harm to wetlands that may result from such action.

The selected alternative is anticipated to have less than 0.1 acre of permanent impacts to wetlands/waters of the U.S. FHWA has determined that the selected alternative comprises the least environmentally damaging, practicable alternative that meets the project purpose.

### 4) NAVIGABLE WATERWAYS

Construction of the new bridge will be conducted so as not to unreasonably interfere with free navigation of the waterway or impair the present navigable depths. A temporary reduction in navigation channel width is anticipated but will require USCG review and approval. This reduced navigation clearance during construction, if allowed by the USCG, will only be required for the short amount of time needed to erect the girders within the navigation channel span. The contractor's falsework will be removed promptly to restore the full width of the navigation channel span. The selected, adjacent upstream alternative will not affect the location of the navigation channel. The USCG favors the selected alternative from a navigation perspective. Because the river bends left almost immediately downstream of the existing bridge, locating a new bridge upstream would enable tow pilots to navigate the bend and the wing dikes more easily.

The existing bridge will be demolished, with potential impact to river way users and Missouri River commerce associated with blocking navigation through the span for short periods of time. The spans will be dropped into the river and then salvaged. If the existing bridge is demolished during the supported navigation season, commercial use of the river near the bridge will be slowed during demolition, but use of the navigation channel will only be restricted for a 24-hour period while the span is salvaged. The U.S. Coast Guard monitors the demolition on site to provide a safe environment during the span blasting and salvage and this operation is anticipated to have minimal impact on through commercial traffic on the river.

Recreational use of the river near the bridge may be reduced both during construction and demolition activities, as recreational users will most likely avoid the construction site for safety concerns. However, their travel near the bridge will not be impeded any more than commercial traffic.

### 5) FLOODPLAIN IMPACTS

The selected alternative will require an estimated 4.7 acres of new right of way in Warren County south of Augusta Bottom Road within the base floodplain. From the northern construction limit near Augusta Bottom Road to the southern limit in Washington, the selected alternative crosses roughly 3800 feet of base floodplain (as does the existing roadway), of which approximately 1400 feet is regulatory floodway.

With the selected alternative located adjacent to existing Route 47, there would be minimal, if any, additional impact to the base floodplain and regulatory floodway following completion of construction and removal of the existing Route 47 bridge and roadway approaches.

### Only Practicable Alternative Finding

The selected alternative was determined to provide the best solution for the project needs, to best accommodate community access and growth, and to have a lower environmental impact. The crossings of all regulated floodplains will be designed and constructed in compliance with applicable floodplain regulations, including Executive Order 11988. There will be no increases in base flood elevations attributable to the implementation of this project. During the design process, a detailed hydraulic analysis of the flows and water surface elevations will be made in accordance with the requirements of the FEMA and the U.S. Army Corps of Engineers to ensure the absence of any encroachments upon regulatory floodways as well as to avoid any adverse impacts.

The proposed action conforms to applicable state of Missouri and local floodplain protection standards.

### 6) THREATENED AND ENDANGERED SPECIES

The species of concern for this project are the federally listed endangered pallid sturgeon (*Scaphirhynchus albus*), the state listed endangered lake sturgeon (*Acipenser fulvescens*), the federally listed endangered Indiana bat (*Myotis sodalis*), and federally protected migratory birds. There are virtually no differences in potential impacts to the natural environment from the selected alternative (adjacent upstream) versus the adjacent downstream alternative.

MoDOT will obtain a habitat assessment for the pallid sturgeon and lake sturgeon to ascertain potential impacts and will evaluate project impacts in the floodplain and in the Missouri River during the design phase of the project. Impacts analysis will cover temporary and permanent impacts from construction and demolition on pallid sturgeon and any suitable habitat in the project area, taking into account the methods and duration of disturbance. MoDOT will also consult with FWS as appropriate regarding considerations to avoid impacts to pallid sturgeon and any suitable spawning/over-wintering habitat.

No potential Indiana bat summer roost trees were present in the project impact area during a field habitat assessment In January 2010. This area will be re-evaluated during the design phase and if suitable roost trees need to be removed for construction, MoDOT will only allow clearing of potential roost habitat between November 1 and March 31. If potentially suitable roost trees must be cleared during the April 1 to October 31 Indiana bat maternity season, additional field surveys, and possible informal consultation with the FWS, may be necessary.

Screen panels installed to prevent swallows from nesting on the bridge piers during the 2009 bridge rehabilitation were left on the bridge after the project was completed. MoDOT plans to leave these exclusionary screens in place until the existing Route 47 bridge is demolished following construction of a new bridge. If necessary, additional measures will be taken and/or seasonal restrictions followed prior to demolition to avoid conflict with the MBTA.

### 7) HISTORIC AND ARCHAEOLOGICAL SITES

The selected alternative will require removal of the bridge, resulting in an "adverse effect" on those qualities that make the bridge eligible for listing in the NRHP. The SHPO concurred on February 26, 2010, with the MoDOT's Section 106 finding that the Route 47 Bridge K0969 is eligible for listing on the NRHP, the selected alternative will have an adverse effect on the bridge, and that no other historic properties were identified in the area of potential effects (APE). Missouri's Historic Bridge Preservation Plan, which was formulated in consultation with the SHPO, does not identify the Route 47 Bridge at Washington as a bridge important for preservation. An executed Memorandum of Agreement (MOA) among the Federal Highway Administration, MoDOT, and SHPO accompanies this NEPA decision document. The MOA details the mitigation measures that MoDOT will complete before the bridge is

removed as well as identifying how any unanticipated discoveries would be handled.

### 8) PUBLIC LANDS & POTENTIAL SECTION 4(f)/SECTION 6(f) PROPERTIES

The City of Washington's Rotary Riverfront Trail, part of the Washington Bikeway, passes directly under the existing bridge and a portion of the trail in the area of the bridge will be closed as a temporary easement to ensure public safety during construction activities. Project construction will not affect the official entry to this part of the trail system.

Under certain specified conditions, temporary easements are not subject to Section 4(f). The temporary closure of a section of the trail is not subject to Section 4(f). The City of Washington's Parks and Recreation Department is aware of the proposed action and is strongly in favor of the project.

The Route 47 Missouri River bridge at Washington (Bridge No. K0969) is a historic resource protected under Section 4(f). A programmatic Section 4(f) evaluation accompanies this NEPA decision document because the selected alternative will have an adverse effect on the NRHP-eligible bridge.

There are no other Section 4(f) or Section 6(f) issues associated with this project.

### 9) CONSTRUCTION IMPACTS

Construction of the selected alternative will result in some short-term, temporary adverse impacts near the proposed action, including noise, dust, and pollutants discharged by construction equipment as well as impacts to motorized and non-motorized traffic and to businesses in the area. These kinds of short-term impacts are generally among the most readily mitigated impacts. Pollution control measures outlined in the Missouri Standard Specifications for Highway Construction will be used to minimize impacts associated with the construction of any alternative; these measures pertain to air, noise, and water pollution as well as traffic control (e.g., detours) and safety measures. Best management practices will be employed to minimize or mitigate potential impacts.

Contractors must comply with all federal, state, and local laws and regulations to protect air quality during construction. They must also work within the requirements of their operating permits issued through the Missouri Department of Natural Resources. Exhaust emissions from construction equipment will be controlled in accordance with emission standards prescribed under state and federal regulations. Any burning, when permitted, will be conducted in accordance with applicable local laws and state regulations.

Contractors are required to control fugitive dust to keep it from leaving project limits, just as they must make efforts to control soil particles that stormwater tends to carry away.

To reduce the impacts of construction noise, MoDOT has special provisions in the construction contract requiring that all contractors comply with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. Construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications.

If the foundation design for the new bridge requires pile driving, MoDOT will prohibit such activity during the night. Demolition of the trusses and bridge piers will involve the use of explosives. Blasts are expected to be limited in number and will be scheduled for daytime occurrence to avoid disrupting residential and hospital nighttime quiet.

The Missouri River corridor provides habitat for a number of species of animals that have federal and state protection. Suitable roosting trees for the federally listed endangered Indiana bat will be removed during the period between November 1 and March 31 to avoid possible direct impacts to Indiana bats during the summer maternity season. If potentially suitable roost trees must be cleared during the April 1 to October 31 Indiana bat maternity season, additional field surveys, and possible informal consultation

with the FWS, may be needed.

Pallid sturgeon migrate through the entire Missouri River system, using different habitats for spawning, feeding, nursery, and over-wintering areas. The habitat diversity of the impact area for construction of the selected alternative and demolition of the existing bridge is unknown at this time. If necessary, conditions will be followed to avoid negatively impacting pallid and lake sturgeon by temporary and permanent construction impacts.

In Missouri, it is generally accepted that swallow nests could be occupied between April 15 and July 15. If any swallows are found nesting on the existing bridge, exclusionary measures will be used and seasonal restrictions will be followed to avoid conflicts with the Migratory Bird Treaty Act. Screen panels installed to prevent swallows from nesting on the existing Route 47 bridge piers before the 2009 rehabilitation project were left on the bridge after the project was completed and MoDOT plans to leave the exclusionary screens on the bridge until it is demolished following construction of a new bridge. If necessary, additional measures will be taken and/or seasonal restrictions followed prior to demolition to avoid conflict with the MBTA.

The Missouri Department of Natural Resources (MDNR) regulates the control of runoff from land disturbance. Erosion control measures must be put in place before land clearing begins. MoDOT's Pollution Prevention Plan provides for temporary erosion and sediment control measures that will be included within construction contract specifications. Careful refueling practices will limit spills of gasoline and diesel fuels. Oil spills can be minimized by frequent checks of construction equipment.

A Traffic Management Plan (TMP) to manage the work zone impacts will be developed during project design. A TMP lays out a set of coordinated traffic management strategies. Traffic management strategies for this project could include staging construction to impact traffic as little as possible, conducting active public information and outreach, scheduling high-impact work for hours of off-peak traffic, installing temporary traffic control devices, and possibly enlisting the help of law enforcement, if necessary.

It is expected that some day- (or night-) time lane closures will be needed to tie the new bridge into the existing Route 47 alignment, but MoDOT will require the contractor to flag traffic during these times and to keep back-ups to a minimum.

MoDOT will send a weekly news release out to local newspapers and radio stations giving local commuters information about construction activities that could impact their daily travels. MoDOT also publishes construction-related news releases and information on its web site at www.modot.org for those who have Internet access.

Barges on the river will be used throughout the bridge construction. It is anticipated that river traffic will only be halted if the old bridge is demolished during the navigation season. MoDOT will coordinate with the United States Coast Guard to schedule the time and duration of any closures.

MoDOT will likely close a portion of the Rennick Riverfront Park and the Washington Bikeway/Rotary Riverfront Trail during construction of the bridge piers on the south side of the river to allow working room and to protect people from falling objects. Such closure will be only temporary and the affected area of the park will be reopened upon completion of the work. The City of Washington, which owns the park, has indicated a willingness to allow this.

The Union Pacific Railroad (UP) also passes under the existing and proposed bridges on the south side of the river and runs approximately 40 trains per day on their tracks. MoDOT will coordinate with the railroad to work around their train schedule. Construction of bridge piers nearby will require flaggers during construction operations. All flagging costs will be borne by MoDOT. To avoid interrupting train traffic, the bridge contractor will coordinate with the railroad to schedule setting girders and handling other materials over the railroad tracks. It is not anticipated that rail traffic will be impacted by construction,

although company flagmen will be on-site whenever there is active construction on railroad right-of-way.

Several utilities on or near the existing Missouri River bridge may be impacted by the eventual removal of the historic bridge. The owners of the two private communications lines and the power lines already attached to the bridge will be given the opportunity to attach to the new bridge, through conduits either embedded in the rail or suspended under the bridge deck. There will be costs associated with the attachments, however, and the utilities would be required to pay for the conduits and for future maintenance.

Ameren, Missouri Natural Gas, SBC, and Sprint serve area customers through facilities near the bridge approaches. To avoid impacts, these lines will need adjustment before construction. Details of utility disposition will be determined during project design. Lines outside the existing right of way will be moved at MoDOT's cost. Under the agreement allowing utilities on MoDOT's right of way, the utilities will bear the cost of relocating lines currently on the right of way. MoDOT's utility engineers and representatives of the utilities will work out details of individual utility adjustments on a case-by-case basis.

### **COMMITMENTS:**

### Design

- The new bridge will meet MoDOT's standards for lane width, shoulders, and vehicular load.
- The new bridge will include a protected lane for bicyclists and pedestrians, with a concrete barrier separating the lane from vehicular traffic. The new bridge design will allow future relocation of the bicycle/pedestrian lane if additional traffic capacity is needed.
- Separate improvements to Route 47 between Dutzow and the Missouri River will be in place when the new bridge is completed to enhance safety for bicyclists between the KATY trail and the bridge. The portion of MoDOT Job No J3P2194 between Dutzow and the Missouri River will be accelerated so that the shoulders on Route 47 are paved and marked for bicyclists and crossings are provided for bicycle traffic. The new Lake Creek bridge (MoDOT Job No. J3P2167, scheduled for 2014 replacement) will also be re-striped to designate a bicycle lane on each side continuous with the roadway shoulders. No separate pedestrian accommodations will be provided north of the Missouri River.
- → MoDOT will evaluate project impacts in the floodplain and in the Missouri River during the design phase. Impacts analysis will cover temporary and permanent impacts from construction and demolition on pallid sturgeon and any suitable habitat in the project area, taking into account the methods and duration of disturbance.
- As project development proceeds, MoDOT will obtain a habitat assessment of the existing streambed via a gridded depth sounding study. MoDOT will also obtain updated records during the design phase of the project and consult with FWS as appropriate for considerations to avoid impacts to pallid sturgeon and any suitable spawning/over-wintering habitat.
- → The project impact area will be re-evaluated during the design phase for the presence of suitable Indiana bat summer roost trees and if any such trees need to be removed for construction, MoDOT will only allow clearing of potentially suitable roost habitat between November 1 and March 31.
- → A Traffic Management Plan (TMP) will be developed during project design. A TMP lays out a set of coordinated traffic management strategies to manage the work zone impacts
- Impacts associated with any additional temporary easements (other than those evaluated in this

- EA) needed to provide contractor access for machinery and personnel will be addressed as the bridge and roadway details are finalized.
- → MoDOT will implement mitigation agreed upon in the Memorandum of Agreement among the Federal Highway Administration, MoDOT, and SHPO to address the adverse effect to the Route 47 Bridge.

### Right of way

- → MoDOT will acquire all properties needed for this project in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 as amended (Uniform Act; 42 U.S.C 4601), and other regulations and policies as appropriate. MoDOT will provide relocation services to all impacted households without discrimination under guidance of the Uniform Act.
- → MoDOT's utility engineers and representatives of the utilities will work out details of individual utility adjustments on a case-by-case basis.
- → After project completion, any farms with uneconomic remnants will be compensated at prevailing market rates.

### Traffic handling

- Construction of the southern approach spans and the tie-in to the north will be staged to allow uninterrupted Route 47 traffic during construction. MoDOT will require the contractor to flag traffic during day- or night-time lane closures (needed to make the tie-ins) to keep back-ups to a minimum.
- To ensure public safety, the portion of the trail that passes under the bridge will be closed as a temporary easement when the affected area is under construction.
- → Flaggers will be required for trains during construction of bridge piers near the railroad. All flagging costs will be borne by MoDOT.
- → Prior to each week's scheduled work, MoDOT will send a news release out to local newspapers and radio stations giving local commuters information about construction activities that could impact their daily travels.

### Navigation

- → Construction will be conducted so as not to unreasonably interfere with free navigation of the waterway or impair the present navigable depths.
- → If the existing bridge is demolished during the supported navigation season, commercial use of the river near the bridge will be slowed during demolition but use of the navigation channel will only be restricted for a 24-hour period while the span is salvaged.

### Construction

- → If screen panels installed to prevent swallows from nesting on the bridge piers during the 2009 Route 47 bridge rehabilitation project and left on the bridge after completion of the project are removed or they are not completely effective, additional measures will be taken and/or seasonal restrictions followed prior to demolition to avoid conflict with the Migratory Bird Treaty Act.
- → Special provisions in the construction contract require contractors to comply with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site.
- → Construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications.

- → MoDOT will prohibit pile driving at night.
- → Use of explosives for demolition of the trusses and bridge piers are expected to be limited in number and will be scheduled for daytime occurrence.
- → MoDOT will comply with MDNR's stormwater regulations. MoDOT will implement its Soil and Water Pollution Prevention Plan, which provides for temporary erosion and sediment control measures that will be included within construction contract specifications.
- All construction activities will comply with the existing rules and regulations of governmental agencies having jurisdiction over streams and water supplies in the area.
- → Pollution control measures outlined in the Missouri Standard Specifications for Highway Construction will be used to minimize impacts associated with construction; these measures pertain to air, noise, and water pollution as well as traffic control (e.g., detours) and safety measures. Best management practices will be employed to minimize or mitigate potential impacts.
- → Emissions from construction equipment will be controlled in accordance with emission standards prescribed under state and federal regulations.
- The contractor will remove from the project, burn, or otherwise dispose of materials resulting from clearing and grubbing, demolition, or other operations (except materials to be retained). In lieu of open burning, the contractor will attempt to harvest marketable timber, use mulched timber for erosion control, and compost excess mulch. Any burning, when permitted, will be conducted in accordance with applicable local laws and state regulations.
- Any previously unknown hazardous waste sites found during project construction will be handled in accordance with federal and state laws and regulations. If regulated solid or hazardous wastes are found during project construction activities, the MoDOT construction inspector will direct the contractor to cease work at the suspect site. The construction inspector will contact the appropriate environmental specialist to discuss options for remediation. The environmental specialist, the construction office, and the contractor will develop a plan for sampling, remediation, and continuation of project construction. Independent consulting, analytical, and remediation services will be contracted if necessary. The Missouri Department of Natural Resources will be contacted for coordination and approval of required activities.
- There will be no lead paint removal from the superstructure prior to demolition.

### **REQUIRED PERMITS:**

The selected (Adjacent Upstream) alternative will require -no-rise" certification and a Missouri State Emergency Management Agency (SEMA) floodplain development permit.

Permitting for this project is at the discretion of the U.S. Coast Guard (USCG) and the Missouri State Regulatory Office of the U.S. Army Corps of Engineers (COE). Construction of the selected alternative will require a USCG Section 9 of the Rivers and Harbors Act of 1899 Bridge Permit. Any work in the designated navigational waterway triggers Section 10, which generally allows only the absolute minimum of temporary obstruction to the navigable channel and requires that there be no permanent impacts to the channel.

Permanent impacts to wetlands/waters of the U.S. are anticipated to be less than 0.1 acre. This level of impact should qualify for Nationwide Permit #14. However, if the dredge spoil is redeposited in the Missouri River, the project might require Individual Permit authorization.

Although MoDOT is statutorily exempt from individual Section 401 certification on nationwide permits, the USCG will require MoDOT to obtain Section 401 certification to complete the Section 9 Permit application regardless of the type of Section 404 permit needed.

Construction of the selected alternative will be conducted so as not to unreasonably interfere with free navigation of the waterway or impair the present navigable depths. A temporary reduction in navigation channel width is anticipated but will require USCG review and approval.

### **APPENDICES**

- (1) Selected Alternative aerial view
- (2) EA Notice of Availability(3) Agency and public comment on EA

Attachments (following Appendices):

- Programmatic Section 4(f) Evaluation
   Memorandum of Agreement for Mitigation of Adverse Effects
   Information To Accompany the Memorandum of Agreement

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**SELECTED ALTERNATIVE** 

### **NOTICE OF AVAILABILITY**

### **Environmental Assessment: Missouri River Bridge at Washington**

### Missouri Route 47 Franklin & Warren Counties, MO

The Missouri Department of Transportation and the Federal Highway Administration are pleased to announce the availability of the *Missouri Route 47, Franklin and Warren Counties, Missouri, Missouri River Bridge at Washington, Job Number J3P2155, Environmental Assessment (EA).* The EA will be available for public review on December 15, 2010. The EA was prepared in accordance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act, 23 CFR 771, and regulations of the Council on Environmental Quality, to provide guidance in determining the appropriate actions needed to address the deteriorating bridge.

<u>Public Review:</u> Public involvement is considered to be an important component of a successful planning process. An electronic version of this document can be found on MoDOT's website at <a href="http://www.modot.org/northeast/Route47BridgeatWashington.htm">http://www.modot.org/northeast/Route47BridgeatWashington.htm</a>. This site provides access to the EA and related documents on public review. Users of the site are encouraged to submit comments on this document while it is available for public review. Written comments can be mailed to:

Mr. Kevin Keith, Director Missouri Dept. of Transportation P.O. Box 270 Jefferson City, MO 65102

Please have all comments submitted no later than January 31, 2011.

The EA will be available for review at the Warren County courthouse, Marthasville City Hall, Augusta South County Branch Library, Scenic Regional Library in Warrenton, Franklin County Administration Building, Washington City Hall, the Washington Public Library, the Missouri Department of Transportation St. Clair Area Office (2215 North Commercial, St. Clair), and on the world wide web as indicated above. A limited number of CDs containing the EA will also be available at each of the public review sites, with additional CDs obtainable by request from MoDOT at the address above. The EA includes a programmatic Section 4(f) evaluation for the historic bridge and a draft Memorandum of Agreement (MOA) for mitigation of adverse effects to the bridge. If you have any additional questions concerning this announcement, please contact Ms. Peggy Casey, Program Development Team Leader, FHWA Division Office, 3220 West Edgewood, Suite H, Jefferson City, Missouri 65109, or at (573) 638-2620.

### **NOTICE OF PUBLIC HEARING**

A public hearing concerning the replacement of the Route 47 Missouri River Bridge at Washington, Missouri, will be held on January 20, 2011, at Washington City Hall from 4:30–6:30 p.m. The hearing will offer an opportunity for citizens to learn more about the proposal and to provide oral and written comments on the project.

<u>Proposed Project:</u> At over 70 years of age, the existing bridge has exceeded its design life and the rehabilitation completed in 2009 is expected to last only seven to eight years. The bridge's through-truss design rules out widening the roadway surface without replacing at least the truss superstructure, which is, unfortunately, the bridge's most striking visual feature as well as the bridge component in the worst condition. The bridge is reaching the end of its useful life and as its deterioration accelerates, it will eventually cost more to maintain than to replace.

The preferred alternative would replace the existing, deficient bridge with a new two-lane bridge approximately 50 feet upstream from the current location. The new bridge would have two 12-foot travel

lanes and 10-foot shoulders to allow maneuvering room during emergencies and the removal of disabled vehicles from the travel lanes. Consistent with other Missouri River bridges in the state, the new bridge would include a protected lane for bicyclists and pedestrians, with a concrete barrier to separate the eight-foot-wide lane from vehicular traffic. The new bridge would be designed to allow relocating the bicycle/pedestrian lane in the future if additional traffic capacity is needed. The protective barrier could be removed, the entire bridge deck could be used for traffic lanes and shoulders, and a new bike/ped lane could be cantilevered off the side of the bridge. This alternative would maintain uninterrupted traffic on Route 47 during construction.

The United States Coast Guard (USCG) favors the adjacent upstream location because of the river's geometry and maneuverability needs of river traffic. Locating a new bridge upstream would enable tow pilots to more easily navigate the bend and the wing dikes. The preferred alternative would remove the existing, historic bridge once the new bridge is completed.

The proposed improvement, like the existing roadway, crosses roughly 3800 feet of base floodplain, about a third of which is regulatory floodway. With the new bridge located adjacent to existing Route 47, there would be minimal, if any, additional impact to the base floodplain and regulatory floodway following completion of construction and removal of the existing Route 47 bridge and roadway approaches. Permanent impacts to waters of the U.S. from the proposed improvement are expected to be limited to placement of bridge piers in the Missouri River, with less than 0.1 acre of permanent impacts to wetlands/waters of the U.S. anticipated. This level of impact should qualify for U.S. Army Corps of Engineers (COE) Nationwide Permit #14. However, if the dredge spoil is redeposited in the Missouri River, the project might require Individual Permit authorization.

A USCG Section 9 of the Rivers and Harbors Act of 1899 Bridge Permit will be required. Construction activities in the Missouri River are anticipated to require a COE Section 10 of the Rivers and Harbors Act Letter of Permission for temporary impacts to the navigable channel. The project will also require no-rise certification and a Missouri State Emergency Management Agency (SEMA) floodplain development permit. Concerns relating to these regulatory permits should be expressed at this hearing.

All written comments that are to be included in the public hearing record must be received at the Missouri Dept. of Transportation, P.O. Box 270, Jefferson City, MO 65102, no later than January 31, 2011.



### **DEPARTMENT OF THE ARMY**

### KANSAS CITY DISTRICT, CORPS OF ENGINEERS STATE REGULATORY PROGRAM OFFICE - MISSOURI

221 BOLIVAR STREET, SUITE 103 JEFFERSON CITY, MISSOURI 65101 December 20, 2010

REPLY TO ATTENTION OF:

Missouri State Regulatory Office (2008-00923)

Kevin Keith, Director Missouri Department of Transportation P.O. Box 270 Jefferson City, Missouri 65102

Dear Mr. Keith:

This is in response to your Notice of Availability for the *Missouri Route 47, Franklin and Warren Counties, Missouri, Missouri River Bridge at Washington, Job Number J3P2155, Environmental Assessment (EA)*. We want to thank you for the opportunity provided to us to comment on the various draft phases of this document. Also, we appreciate the positive response to our comments by Ms. Carole Hopkins and inclusion of our comments into your document. At this time we have no further comments. If you have any questions or would like any further cooperation from our office, please feel free to write me or call me at 816-389-3834.

Sincerely,

James A. Ptacek Project Manager

Missouri State Regulatory Office

James to Stare Co

www.dnr.mo.gov

February 8, 2011

Ms. Peggy Casey Environmental Projects Team Leader Federal Highway Administration, Division Office 3220 West Edgewood, Suite H Jefferson City, Missouri 65109

Mr. Kevin Keith Director Missouri Department of Transportation P.O. Box 270 Jefferson City, Missouri 65102

Re: Missouri River Bridge, Route 47 at Washington, Franklin and Warren Counties, Missouri

Dear Ms. Casey and Mr. Keith:

The Missouri Department of Natural Resources (department) appreciates the opportunity to review the Environmental Assessment (EA) for the Missouri River Bridge, Route 47 at Washington, Franklin and Warren Counties, Missouri. The department offers the following comments for consideration.

### **Water Quality**

The Environmental Assessment appears to cover the basic issues related to water quality and wetlands. However, below are some specific comments or questions that might be emphasized, to make sure that project planners are aware of current environmental requirements.

<u>Page 33, Water Quality, Second Paragraph</u>: The Missouri State Operating Permit for land disturbance is listed as MO-R100xxx. The actual number of the permit is MO-R100007. This permit expires May 30, 2012. A new general permit will likely be renewed at that time, possibly with changes to comply with any new requirements since the last renewal in 2007.

MoDOT also holds a Municipal Separate Storm Sewer (MS4) permit under MO-R040063, which is not mentioned in the Environmental Assessment. The MS4 permit works in concert with the land disturbance permit to ensure proper site design, Best Management Practices during construction as well as post-construction water quality protection.



Ms. Peggy Casey Mr. Kevin Keith February 8, 2011 Page 2

<u>Page 33, Water Quality, Last Paragraph</u>: Please reference the national studies conducted by the Federal Highway Administration that are described in this paragraph.

Water Quality, Bridge Demolition: The Environmental Assessment does not describe in detail the method for demolishing the old bridge nor its impacts to the river and its water quality should the preferred alternative be constructed. Does the old bridge contain lead paint? Given that the bridge was constructed in 1934, the likelihood is significant, though the threat of lead contamination may have been mitigated during the two most recent rehabilitation projects. MoDOT should provide information to show that the demolition will not cause water quality violations in the Missouri River.

<u>Page 52, Water Quality, Last Paragraph</u>: Erosion control measures must be in place 'before' land clearing begins, not 'as' it begins.

<u>Page 53, Traffic Control/Safety, First Partial Paragraph</u>: The Environmental Assessment indicates that the north river bank will be used for the majority of the construction staging. According to recent satellite imaging, the area appears to be covered in a substantial floodplain forest and possibly wetlands. Project planners should be sure that no wetlands exist or avoid and minimize those impacts. Should trees be removed from the riparian area, be sure that stormwater or equipment does not cause degradation of the water quality at that location. The area should be protected by Best Management Practices during the construction period as well as be reseeded and/or replanted as soon as possible to limit the amount of erosion.

Page 57, Agency Collaboration Point 1, Second Paragraph: The Environmental Assessment notes that for wetlands '...MoDOT...completes the delineation of the selected alternative post-NEPA, when access to properties is obtained.' Does this statement indicate that the wetland delineation for the preferred alternative has not been completed? The EA should indicate how the two wetlands identified in Section 5 (page 34) were determined. The department requests that MoDOT keep the department's Clean Water Act Section 401 Water Quality Certification (certification) staff informed of the delineation and any requests for permits. This will help ensure that when it is time to complete a certification for the U.S. Coast Guard permit and possibly for a Department of the Army permit, the process will be efficient and timely.

### **General Water Information**

<u>Ecological Drainage Unit</u>: The proposed project lies within the Ozarks/Moreau/Loutre Ecological Drainage Unit.

<u>Watersheds</u>: The proposed project lies with the Hydrologic Unit Code 10300200 06 01, the Dubois Creek-Missouri River Sub-Watershed.

After avoiding and minimizing impacts to water resources, Ecological Drainage Unit and watershed locations may be needed should mitigation be required. Currently, one approved

Ms. Peggy Casey Mr. Kevin Keith February 8, 2011 Page 3

commercial bank, the Lower Missouri Wetland Mitigation Bank, exists within both the eight-digit Hydrologic Unit Code and Ecological Drainage Unit. This bank appears to be the sole approved mitigation bank in the area.

Geospatial Data: Department geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Service website at <a href="http://msdis.missouri.edu/">http://msdis.missouri.edu/</a>.

### Geology

Bedrock within the project area is Ordovician-age Jefferson City Dolomite, which is known for very limited dissolution. While it is possible for sinkholes to form in dolomite, the local formations do not exhibit extensive karst features. Therefore, the sinkhole collapse potential is low within the project area.

The Missouri River alluvium has the potential for significant erosion during severe flood events.

There are no known underground mines or active geologic faults within the project area.

### Solid Waste

The EA appears to have incorporated the department's previous comments regarding the proper management of solid waste generated from construction/demolition as well as the potential for solid waste to be discovered during excavation.

We appreciate the opportunity to provide comments for the Missouri River Bridge, Route 47 at Washington, Franklin and Warren Counties, Missouri. If you have any questions or need clarification, please contact me or Ms. Jane Beetem, phone number (573) 751-3195. The address for correspondence is Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102. Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Dru Buntin

Deputy Director for Policy

Sm Buntin

DB:ibi

c/o Bob Zick, Chairman
P.O. Box 2114 - 438 West Front Street
Washington, Missouri 63090
Phone: 636-239-1616 - Fax: 636-239-5161

E-mail: raz@zvplaw.com

### Members

David Christensen, P.E., MPPA Engineer

Honorable Scott Dieckhaus State Representative

Arden Engelage Warren County Presiding Commissioner

Raymond H. Frankenberg, I M.S., P.E., LS

John E. Griesheimer Franklin County Presiding Commissioner

Bill Halmich Fire Chief – Washington

Richard Hirschl

Karl Koenigsfeld, P.E. Engineer

Kevin C. Kriete, P.E. Engineer

Darren Lamb, AICP City of Washington

Terri L. McLain President St. John's Mercy Hospital

Mike Marquart

Honorable Brian D. Nieves State Representative

Burt Schweissguth

Honorable Bart Korman State Representative

Dr. Lori VanLeer Superintendent of Washington School District

Bob Zick

January 21, 2011

### VIA EMAIL (kevin.keith@modot.mo.gov) AND BY REGULAR U.S. MAIL

Mr. Kevin Keith, Director Missouri Department of Transportation P.O. Box 270 Jefferson City, Missouri 65102

Re: November, 2010, Environmental Assessment:
Missouri River Bridge at Washington
(Missouri Route 47 – Franklin & Warren Counties, MO)

Dear Mr. Keith:

The following is the input of the Missouri Highway 47 Bridge Committee concerning the draft of the Environmental Assessment ("EA") that has been provided to us:

1. At page 9, about half way down the page, the last paragraph in the section entitled "Congestion and Capacity (Traffic Operation)," we would suggest adding the following sentence to that last paragraph:

However, local planners in the Franklin and Warren County area, and in the City of Washington, Missouri, have indicated that they would like the level of service to be as high as it can be under the circumstances. The officials of the City of Washington have indicated a willingness to work with MoDOT in the future to continually improve the level of service for Route 47.

2. We believe that a study is needed to take into account the right-of-way that will be necessary for traffic along Highway 47, between the bridge and Fifth Street in Washington, Missouri, in conjunction with the construction of the new bridge. Therefore, we would recommend that the first paragraph in the "Conclusion" section toward the bottom of page 10 of the EA be substantially revised as follows (*text proposed to be stricken is shown with a line through it, and text proposed to be added is shown as underlined text*):

Mr. Kevin Keith, Director Missouri Department of Transportation January 21, 2011 Page 2

> Overall, Route 47 <u>currently</u> does an acceptable job of carrying traffic between Dutzow in Warren County and Fifth Street in Washington (Franklin County), with some noted weaknesses. Local planners in the Franklin and Warren County area, and in the City of Washington, have expressed an interest in insuring that sufficient right-of-way is available to transition the bridge to four lanes, once traffic levels dictate this. Since the bridge expected to be designed will have an expected useful life of approximately 75-100 years, local designers encourage a careful review of expected traffic flows beyond the design year of 2033. Local planners are also concerned about minimizing peak hour traffic congestion and feel that some provision needs to be built into the bridge planning process to insure that traffic problems do not occur given the fact that the bridge is so crucial for the school, medical services, etc. Minimizing the severity of any "S curve" at the south end of the bridge is a particular concern (see below). Furthermore, it is requested that the bridge be easily expandable to 4 lanes, with adequate shoulders and a bike path. Otherwise, Acceptable acceptable levels of service are expected for the highway in the study area through the design year 2033, except north of the bridge where localized improvements could be made to maintain acceptable levels of service. Auxiliary lanes for right and left turns could be added at locations that generate sufficient traffic to cause impacts. Adding such turn lanes would remove the turning traffic from the through lanes, allowing freer flowing traffic for those continuing through the area. The vehicles in the left-turn lanes could await openings in the oncoming traffic to safely turn into entrances and side roads without impeding the regular flow of through traffic behind them, while those making right turns could quickly leave the through lanes, slow, and make their turns. These improvements are unrelated to the Route 47 river crossing and would be needed for traffic management regardless of the bridge's condition.

Mr. Kevin Keith, Director Missouri Department of Transportation January 21, 2011 Page 3

- 3. The Missouri Highway 47 Bridge Committee is in agreement with the conclusion at the top of Page 25 of the EA to the effect that the preferred alternative is the adjacent upstream alternative, which begins at the bottom of page 15.
- 4. Within the chart at page 21, in the line item entitled "Number/type potential displacements," the New Bridge Adjacent Upstream column currently calls for one residential displacement. In addition, "Right-of-Way Acquisition and Easements" are discussed at pages 28-29. The Bridge Committee is concerned that this conclusion should be studied further. The Bridge Committee further is concerned that any "S curve" that might be contemplated in the design of the bridge be very carefully considered. If any such "S curve" can be softened or made straight by acquiring a reasonable amount of additional right-of-way, the Bridge Committee suggests that this be strongly considered in order that a traffic and safety hazard not be created in the area. Sample preliminary drawings of a layout avoiding an "S curve" are attached for whatever benefit they may provide for discussion purpose.
- 5. The Bridge Committee would also suggest that the third from the last bullet item on page 71, outlining commitments of MoDOT, be revised to read as follows:
  - It is expected that some day- or night-time lane closures would be needed to make the
    tie-ins, but MoDOT will require the contractor to flag traffic during these times and to
    keep back-ups to a minimum. The traffic management plan (TMP) mentioned above
    will be drafted in concert with local emergency service officials in the City of
    Washington, Missouri, and in Warren County.
- 6. The Bridge Committee also asks that aesthetics be addressed, perhaps within the "**Community Impacts**" section commencing on page 26 of the EA. The added subsection might read substantially as follows:

Aesthetics. The historic Missouri River Bridge at Washington has become part of the identity of the community. Local branding for the Washington Area Chamber of Commerce, signs entering the community, signs and memorials in the City Hall complex area, signs for the Heidmann Industrial Park on the west side of town on Highway 100, all include a mock up of the graceful lines of the historic truss bridge. Local leaders and planners have suggested to MoDOT that the design of any new bridge should attempt to form a link with the past which will allow the community to retain this identity.

Mr. Kevin Keith, Director Missouri Department of Transportation January 21, 2011 Page 4

Thank you for this opportunity to provide input on this important project.

Respectfully,

MISSOURI HIGHWAY 47 BRIDGE COMMITTEE

By:/

Bob Zick, Chairman

### RAZ:wll

cc: Mr. Matt Burcham (via email to: <a href="matthew.burcham@modot.mo.gov">matthew.burcham@modot.mo.gov</a>)
cc: Members of the Missouri Highway 47 Bridge Committee (via email)

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# BRIDGE EXHIBIT A

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 LEGEND
 (YELLOW)

 PROPOSED & STRIPING
 (BRIGHT YELLOW)

 LANE STRIPING
 (WHITE)

 SHOULDER
 (PINK)

 BIKE PATH
 (BLUE)

 EXISTING SHOULDER
 (BLACK)

## PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY NOT TO BE USED FOR CONSTRUCTION

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| -Mail: mail@bfaeng.com | REET                                  | با             |
| Ĕ                      | ST                                    | S.J.L.         |
| No.                    | 103 ELM STREET                        | Ä              |
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NOTES:

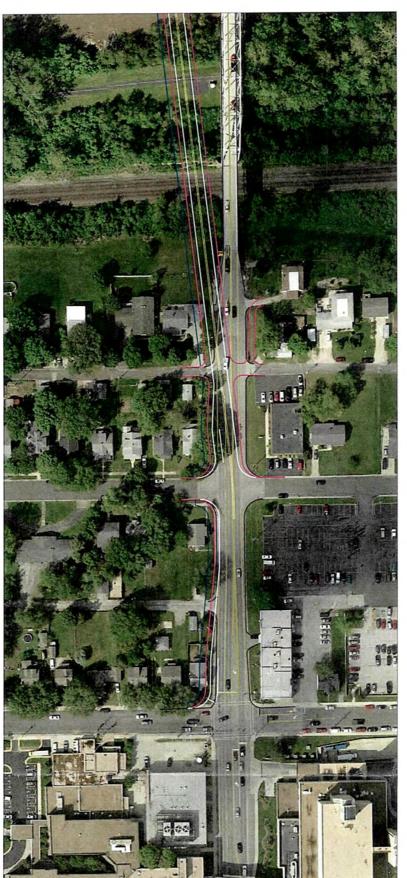
1. TRAFFIC LANES SHOWN HERE ON ARE NOT FULLY DESIGNED AND ARE SUBJECT TO CHANGE FOR SAFETY AND CAPACITY

2. AERAL PHOTOS TAKEN 5-16-08
3. 10' SEPARATION FROM EXISTING BRIDGE ABUTMENT TO
THE SHOULDER LINE

# **BRIDGE EXHIBIT A-1**



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### PRELIMINARY DRAWING

(BRIGHT YELLOW) (YELLOW)

PROPOSED & STRIPING EXISTING & STRIPING

LANE STRIPING SHOULDER BIKE PATH

LEGEND

(WHITE)

(PINK)

103 ELM STREET DWN BY

NOT TO BE USED FOR CONSTRUCTION FOR REVIEW PURPOSES ONLY

EXISTING SHOULDER

7

(BLACK) (BLUE)

AND CAPACITY
AERIAL PHOTOS TAKEN 5-16-08
10' SEPARATION FROM EXISTING BRIDGE ABUTMENT TO
THE SHOULDER LINE

TRAFFIC LANES SHOWN HERE ON ARE NOT FULLY DESIGNED AND ARE SUBJECT TO CHANGE FOR SAFETY

BFA

DATE

1-13-11

## BRIDGE EXHIBIT B

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8

| XISTING & STRIPING  | (YELLOW)        |
|---------------------|-----------------|
| PROPOSED & STRIPING | (BRIGHT YELLOW) |
| ANE STRIPING        | (WHITE)         |
| HOULDER             | (PINK)          |
| SIKE PATH           | (BLUE)          |
| XISTING SHOULDER    | (BLACK)         |

## PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY NOT TO BE USED FOR CONSTRUCTION

| 103 ELW STREET | SOLI INGINADIDEN SALANDER SANDO | Telephone: (636) 233 PRS MASHINGTON, MISSOURI | (636) ;<br>MISSOL |
|----------------|---------------------------------|---|-------------------|
| DWN. BY        | DATE 1-13-11                    | PROJ. NO.                                     | 3062              |

4

AERIAL PHOTOS TAKEN 5-16-08

10 SEPARATION FROM EXISTING BRIDGE ABUTMENT TO THE SHOULDER LINE
ADDED LANES TO WEST SIDE OF PROPOSED BRIDGE

# **BRIDGE EXHIBIT B-**



I

O



PRELIMINARY DRAWING

(BRIGHT YELLOW) (YELLOW) (WHITE)

PROPOSED & STRIPING **EXISTING & STRIPING** 

LANE STRIPING SHOULDER BIKE PATH

AERIAL PHOTOS TAKEN 5-16-08 10' SEPARATION FROM EXISTING BRIDGE ABUTMENT TO TRAFFIC LANES SHOWN HERE ON ARE NOT FULLY DESIGNED AND ARE SUBJECT TO CHANGE FOR SAFETY

THE SHOULDER LINE ADDED LANES TO WEST SIDE OF PROPOSED BRIDGE

(BLACK)

**EXISTING SHOULDER** 

(PINK) (BLUE)

NOT TO BE USED FOR CONSTRUCTION FOR REVIEW PURPOSES ONLY

BFA 103 ELM STREET DAN, BY

NOTES:



### Nathan Holth 5371 Walker Road

5371 Walker Road North Street, MI 48049

269-290-2593 nathan@historicbridges.org

February 16, 2011

Richard Domzalski Missouri Department of Transportation Project Manager richard.domzalski@modot.mo.gov

Subject: Washington Bridge Environmental Assessment and Proposed Historic Bridge Demolition

Dear Mr. Domzalski:

My intent is for this letter to be entered into the public record as my comments regarding the solicitation for public input on the Environmental Assessment for the Washington Bridge project. I sincerely hope you will consider my thoughts. I also would be happy to discuss my comments further in more detail.

While it bears acknowledgement that I am a private citizen not affiliated with any organization or agency, and neither an engineer or certified bridge inspector, I do want to comment that I have visited and closely looked at over 2100 old and historic bridges in North America, and I have worked with, watched, and learned from many professionals in the historic bridge world including engineers, craftsmen/fabricators, and historians. I have become familiar with a rather wide variety of aspects of historic bridges and their preservation as I have worked to develop one of the largest historic bridge websites on the internet, www.historicbridges.org. I consider myself a bridge historian, but unlike the stereotype, am not unaware of or blind to other bridge issues such as bridge condition, traffic needs, AASHTO guidelines, engineering/inspection concerns, etc. At the same time, I do not claim to know everything, so please forgive any errors or oversights in my comments. As a person who has been involved with historic bridges for eight years, I realize I have a bias toward preserving historic bridges. At the same time, I do not intend to be someone who blindly demands preservation and suggests preservation solutions that are not grounded in reality.

### A Cause For Concern

My primary concern with the Environmental Assessment is that it reflects a problem that has been present throughout the duration of the project planning process, which is the lack of consideration for leaving the historic bridge standing next to its replacement, with the historic bridge serving non-motorized traffic. I believe that this solution better meets the needs of the project, and would avoid adverse effect to an extremely important and increasingly rare Missouri River historic bridge.

In determining whether it is prudent or not to leave this historic bridge standing, it is normal to tend to fall into the trap of just looking at this one bridge and considering it from the perspective of a single bridge. However to truly evaluate the importance of preserving the Washington Bridge, a larger look needs to be considered, particularly that of the Missouri River. As little as a handful of years ago there were many historic bridges on the Missouri River within and on the border of Missouri. One by one, these bridges have been demolished. Most of them are MoDOT owned bridges. The Hermann Bridge, the Glasgow Bridge, the

Miami Bridge, and the Lexington Bridge are some examples. Even over in Kansas City, consider the Paseo Bridge and the Amelia Earhart Bridge, also the victims of replacement and demolition projects. Turn the clock back a few more years, and it gets worse, with the loss of one of the most significant historic bridges in the country, the Chouteau Bridge. The future is looking even grimmer. The Washington Bridge is not the only bridge being considered for demolition. MoDOT has also proposed the demolition of the Westbound Route 40/61 "Daniel Boone Bridge". MoDOT also proposes the demolition of the Blanchette Bridge carrying Westbound I-70.

One by one, the historic bridges of the Missouri River appear to be systematically being destroyed by MoDOT. This trend begs a question that should be considered when deciding the fate of the Washington Bridge. Where does this end? Based on the statistics, it is easy to suspect that MoDOT wishes to demolish every bridge with historic value on the entire Missouri River within the state. To demolish so many bridges with so little preservation is in conflict with the United States Congress who has found it in the national interest to preserve historic bridges, and this is why Section 106 and Section 4(f) apply to bridges. Missouri's borders once held or touched one of the finest collections of large-size historic bridges in the country, between the bridges of the Missouri and Mississippi Rivers. Today, this collection has dwindled, and the Missouri River in particular is now at risk of losing all of that which once made it so rich in heritage.

Large historic cantilever bridges like the Washington Bridge are very few in number relative to the total sum of bridges nationwide. Only large rivers, and often only those rivers which are navigable, are host to these types of bridges. The number of large bodies of water and associated crossings is relatively small, and even smaller is the number of rivers considered navigable. These facts highlight the rarity of bridges like the Washington Bridge, and impress the importance that at least some of Missouri's large historic cantilever truss bridges be preserved.

### Recommendations

I strongly encourage MoDOT to change its plans with the Washington Bridge, answer the national call for historic bridge preservation, and choose to leave the Washington Bridge standing next to its replacement for non-motorized use. In addition to preserving one of the finest remaining cantilever truss bridges in the state, choosing to preserve the Washington Bridge would also address concerns from the public brought forward during public meetings. A summary from the Environmental Assessment includes a statement that public input included comments that "...losing the historic bridge would be a great loss to the city, the bridge is part of Washington's history and should be able to be seen from the downtown area." Reality has to be faced. No modern bridge will ever be able to offer the beauty, heritage, and landmark value of the historic Washington Bridge. The demolition of the Washington Bridge will mean that the city no longer has this unique icon to identify itself. As more and more of these bridges are demolished, the Washington Bridge would only become more rare. As such, preserving the Washington Bridge could have significant economic benefits from tourism and increased community desirability in years to come.

The Washington Bridge appears to be one of the best remaining candidates for preservation among the surviving historic cantilever truss bridges under MoDOT jurisdiction. It is one of the older and more historically significant examples of its type. More importantly, there is the unique opportunity for its reuse as a crossing for non-motorized traffic. It has been noted that the crossing at Washington will serve as an important crossing for non-motorized traffic, as a connector to the Katy Trail. Why confine these trail users to the sidewalks of a dull and unremarkable modern bridge when instead they could make use of the historic Washington Bridge, and enjoy crossing the Missouri River on a landmark historic structure, and do so away from the noise and dangers of motorized traffic? Public coordination for this project on the part of MoDOT has further indicated public interest and support for a separate facility for non-motorized traffic, as the Environmental Assessment indicates "Many commented that it was vital to maintain a crossing during construction and that a separate (protected) bike/ped facility is needed both across the bridge

and to the KATY Trail." A separate bridge would meet these concerns more completely than the proposed sidewalk with barrier MoDOT has suggested for the replacement bridge.

The description of the preferred alternatives is misleading in several areas of the Environmental Assessment because it implies that removal of the entire bridge is required as part of the project. It is my understanding that the main spans of the Washington Bridge are not in the way of its replacement, and only the southern approach spans are actually required to be completely removed. The historic significance of this bridge is primarily in the main spans, and so alterations to the approach as needed would in my view not diminish the historic significance of the bridge. A new ramp could be built to the historic bridge to allow non-motorized access. The cost of such a ramp should be relatively low, since any new construction need only be designed to support non-motorized traffic, and could be at least partially paid for by money that would have been used to demolish the bridge. Also, the cost of the new bridge could be reduced, by eliminating the sidewalk with barrier.

I understand these suggestions would involve a significant change of plans and readjustment of the proposed project and associated Environmental Assessment. I however strongly believe that efforts in this regard would be well worth it for the reasons mentioned above.

### **Additional Concerns and Recommendations**

Regardless of whether MoDOT chooses to preserve this historic bridge, there is an additional comment I wish to make regarding the proposed Environmental Assessment.

The Environmental Assessment makes the statement regarding the project needs that "The bridge is 76" years old and nearing the end of its useful service life. Its age and condition create an ongoing need for maintenance, resulting in substantial expense to taxpayers and periodic lane closures that greatly inconvenience the traveling public." This statement implies that because the Washington Bridge is 76 years old, it therefore cannot be made economical to maintain under any means. It also implies that the bridge's service life cannot be extended by changing the function of the bridge, such as for non-motorized use. The concept of "service life" may be appropriate to determine the length of time between rehabilitations (versus routine repair and maintenance), however to assume that this bridge is at the "end of its useful service life" goes against numerous examples of bridges across the world that are older and/or are being rehabilitated. Would MoDOT say that because the Queensboro Bridge or even the Brooklyn Bridge in New York are over 100 years old and deteriorated that they have reached the end of its service life? The Quebec Bridge in Canada? I suspect MoDOT would be met with some opposition in that regard, especially given that rehabilitation projects were recently undertaken for these bridges. This is to say nothing of bridges found in Europe, where bridges far older than the Washington Bridge are kept in service in perpetuity through routine maintenance, repair, and when needed comprehensive rehabilitation which ensures that the routine maintenance costs are kept reasonable.

While indeed, structural deterioration may be a basis for initiating a project, and perhaps deciding to demolish and replace a bridge, saying the bridge is structurally at the end of a service life is highly misleading. Instead, the statement in the environmental assessment should be reworded to indicate specific structural conditions. Is the bridge structurally deficient? What are the NBI ratings for deck, superstructure, and substructure? Describing these types of conditions more specifically should point out any structural problems, while avoiding the vague and misleading nature of "service life."

### In The Event of Adverse Effect

Finally, should it be found that the final project has adverse effect on the historic bridge, I would be interested in receiving copies of the proposed historic bridge recordation also referred to as the "final documentation" for the bridge in digital format, including historical narrative, archival photos, and original plans for the bridge. My intent would be to make these materials available freely to the public on

HistoricBridges.org. Please if possible include me on the list of parties to receive any final documentation completed.

I would be happy to discuss this further if there are further questions or interest.

Sincerely,

Nathan Holth

Author/Webmaster, HistoricBridges.org

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## PROGRAMMATIC SECTION 4(f) EVALUATION

### HISTORIC BRIDGES

| PRОЛ         | ECT NUMBER J3P2155 RTE. 47 COU   | JNTY <u>Frankli</u> | n/Warren_    |
|--------------|--|---------------------|--------------|
| SECTI        | ON 4(f) RESOURCE <u>Washington Bridge No. K0969</u>  |                     |              |
| REVIE        | WEDBY Peggy J. Casey TITLE /   | Program De          | V. Team Lead |
| APPRO        | OVED BY Jeggy (). (Iso) DAT  | ге <u>8/23/1</u>    | <u> </u>     |
|              | is project and its impacts have been determined to meet the fologrammatic Section 4(f). Sufficient documentation exists in the                                 |                     |              |
| this<br>to a | s determination. Note: Any response in a bracket requires add<br>approval. Consult Programmatic 4(f) Evaluation signed July 5<br>fice of Environmental Policy. | litional informat   | cion prior   |
| A D          | DI ICA DII ITY   |                     |              |
| AP           | <u>PLICABILITY</u>   |                     |              |
|              |  | Yes                 | No           |
| 1,           | Will the bridge be replaced or rehabilitated with Federal funds?   | X_                  | [ ]          |
| 2.           | Will the project require the "use" of an historic bridge which is on or eligible for listing on the  | V                   |              |
|              | National Register of Historic Places?  | _ <del>X</del> _    |              |
| 3.           | Will the project impair the historic integrity of the bridge either by demolition or rehabilitation?   | X                   | [ ]          |
| 4.           | Has the bridge been determined to be a National Historic Landmark?   | [ ]                 |              |
|              |  |                     |              |
| <u>AL</u>    | TERNATIVES CONSIDERED  |                     |              |
| 1.           | The do nothing alternative has been studied and is considered not to be feasible and prudent for   |                     |              |
|              | reasons of maintenance and safety.   | X                   | [ ]          |

|    |  | Yes         | No     |   |
|----|--|-------------|--------|---|
| 2. | The building on new location alternative without using the old bridge has been studied and has been determined to be not feasible and prudent for reasons of terrain; and/or adverse social, economic or environmental effects; and/or engineering and economy.  | <u>X</u>    | [      | ] |
| 3. | Rehabilitation of the existing bridge without affecting<br>the historic integrity of the bridge has been studied<br>and has been determined to be not feasible and prudent<br>for reasons of structural deficiency and/or geometrics.  | X           | [      | ] |
| 4. | Relocation of the existing bridge has been studied and found to be not feasible and prudent because either the bridge's historic integrity would be adversely affected or no responsible party could be found to accept responsibility for the bridge.   | · <u>X</u>  | [      | ] |
| Μŀ | EASURES TO MINIMIZE HARM   |             |        |   |
| 1. | For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved, to the greatest extent possible, consistent with unavoidable transportation needs, safety, and load requirements.   | <u>MA</u> - | [      | ] |
| 2. | For bridges that are to be rehabilitated to the point that the historic integrity is affected or that are to be moved or demolished, the FHWA has ensured that fully adequate records are made of the bridge in accordance with the Historic American Engineering Record (HAER) standards, or other suitable means developed through consultation. | N.A.        | [      | ] |
| 3. | For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge.  | Χ.          | Ĺ<br>Ĩ | ] |
| 4. | For bridges that are adversely affected the FHWA, SHPO, and ACHP have reached agreement through the Section 106 process on Measures to Minimize Harm and those measures are incorporated in the project.   | V           | Γ      | 1 |

# MEMORANDUM OF AGREEMENT FOR MITIGATION OF ADVERSE EFFECTS

**TO HISTORIC PROPERTY:** Washington Bridge (K0969) on Missouri Route 47 over the Missouri River and the Union Pacific Railroad in Franklin and Warren Counties, Missouri. **UNDERTAKING:** Build a new bridge adjacent to the existing Washington Bridge, either upstream or downstream, and remove the existing bridge. Franklin/Warren County, Route 47, MODOT project J3P2155.

**STATE:** Missouri.

**AGENCY:** Federal Highway Administration.

WHEREAS, the Federal Highway Administration (FHWA) has determined that the replacement of Washington Bridge (K0969) will have an adverse effect on the bridge, which has been determined eligible for inclusion to the National Register of Historic Places (NRHP), and has consulted with the Missouri State Historic Preservation Office (SHPO) pursuant to the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

**WHEREAS**, the FHWA has notified the Advisory Council on Historic Preservation (Council) of its adverse effect determination and the Council has chosen not to participate in this Memorandum of Agreement (MOA); and

**WHEREAS**, the Missouri Highways and Transportation Commission (MHTC), acting by and through the Missouri Department of Transportation (MODOT), has been invited to participate in the preparation of and be a signatory to this MOA; and

WHEREAS, to the best of the FHWA's knowledge and belief, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001), are expected to be encountered; and

**NOW, THEREFORE**, FHWA and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations.

### **STIPULATIONS**

FHWA shall ensure that the following measures are carried out:

1. The MHTC, acting by and through MODOT, shall develop archival documentation to the following specifications:

- a. 8X10 inch high-resolution black and white digital images printed on archival paper sufficient to fully document overall views and details of the historic bridge. Photographs will be taken and processed according to standards for photographs accompanying NRHP documentation. Digital compact discs with all views will be provided.
- b. A historic narrative and technical descriptions for the historic bridge.
- c. A copy of the original construction plans for the historic bridge.

The final documentation shall be provided to the SHPO along with archival digital discs containing the TIFF images and report PDF. Additional copies shall be provided to appropriate local historical groups, and retained by MODOT. Bound copies and/or CDs of the final documentation also will be available to others upon request.

2. Advertisement for Adaptive Reuse (or waiver):

The MHTC, acting by and through MODOT, shall consult with the SHPO to determine the appropriate approach and method for marketing Bridge K0969 as per the Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA) Section 123(f). A waiver of advertisement also shall be discussed. The MHTC, acting by and through MODOT; the SHPO; and the FHWA shall agree to the approach and method prior to implementation.

If ownership of the bridge (or a portion thereof) is transferred to another party, the transfer deed may include preservation covenants that require the new owner to move and maintain the bridge in accordance with the "Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings." The proposed reuse plan and specifications will be forwarded to FHWA for review and approval in consultation with the SHPO; and MHTC, acting by and through MODOT. If no party is found to take possession of the existing bridge, it may be removed.

- 3. If modifications to the project activities result in an adverse effect to any NRHP eligible archaeological site, the FHWA shall consult with the SHPO and appropriate Indian Tribes to resolve the adverse effects, consistent with guidance provided in 36 CFR § 800.6, through the implementation of an Archaeological Data Recovery Plan(s) developed in accordance with the Council "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites" (64 FR 27085-87 published in the Federal Register on May 18, 1999), the Council's Handbook on Treatment of Archaeological Properties, and the Secretary of the Interior's Standards for Archaeological Documentation; and
- 4. Within one year after carrying out the terms of the MOA, the FHWA shall provide to all signatories a written report regarding the actions taken to fulfill the terms of the agreement.

- 5. If any signatory proposes that this agreement be amended, the FHWA shall consult with the other parties of this agreement. Said amendment shall be in writing, governed in accordance with 36 CFR 800.6, and executed by all parties to the Memorandum of Agreement.
- 6. If any signatory determines the terms of the MOA cannot be carried out, the signatories shall consult to seek amendment. If the MOA is not amended any signatory may terminate it. If the MOA is terminated, the FHWA shall execute a new MOA or request the comments of the Council.
- 7. Three (3) copies of this signed MOA will be provided, one to each signatory. One (1) signed copy will be transmitted to the Council for inclusion in their files.
- 8. Failure to carry out the terms of this MOA requires that the FHWA again request the comments of the Council in accordance with 36 CFR Part 800. If FHWA cannot carry out the terms of the agreement, it shall not take or sanction any action or make any irreversible commitment that may affect historic properties until such time as the Council has been given the opportunity to comment on the full range of project alternatives which might avoid or mitigate any adverse effects.
- 9. This agreement shall commence upon having been signed by the FHWA and SHPO and shall be null and void if its terms are not carried out within eight (8) years from the date of its execution, unless the FHWA and SHPO agree in writing to an extension for carrying out its terms.



Execution of this Memorandum of Agreement, and carrying out its terms, evidences that the FHWA has afforded the Council an opportunity to comment on the removal of the Washington Bridge (K0969) and its effects on historic properties, and that FHWA has taken into account the effects of the project on historic properties, in accordance with Section 106 of the National Historic Preservation Act.

| Signed:   |                 |  |  |  |  |
|---|-----------------|--|--|--|--|
| FEDERAL HIGHWAY ADMINISTRATION:                           |                 |  |  |  |  |
| By: Paggy J. ases  Title: Program Development Feam Leader | Date: 8-5-11    |  |  |  |  |
| THE MISSOURI STATE HISTORIC PRESERVATION OFFICE:          |                 |  |  |  |  |
| By: Mark a Male  Title: DSHPO                             | Date: 8-4-11    |  |  |  |  |
|   |                 |  |  |  |  |
| MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION:          |                 |  |  |  |  |
| By: Roberts Brocker                                       | Date: 7-27-11   |  |  |  |  |
| Title: Chief Financial Officer                            |                 |  |  |  |  |
| May die   | red as to form: |  |  |  |  |



# INFORMATION TO ACCOMPANY THE MEMORANDUM OF AGREEMENT

### MEMORANDUM OF AGREEMENT FOR MITIGATION OF ADVERSE EFFECTS

**TO HISTORIC PROPERTY:** Washington Bridge (K0969) on Missouri Route 47 over the Missouri River and the Union Pacific Railroad in Franklin and Warren Counties, Missouri. **UNDERTAKING:** Build a new bridge adjacent to the existing Washington Bridge, either upstream or downstream, and remove the existing bridge. Franklin/Warren County, Route 47, MODOT Project J3P2155.

**STATE:** Missouri.

**AGENCY:** Federal Highway Administration.

### I. Project Description

Missouri Department of Transportation (MODOT) Project No. J3P2155 is an Environmental Assessment (EA) undertaken to consider alternatives for improving the safety and efficiency of the Route 47 crossing over the Missouri River and the Union Pacific Railroad, by replacing the existing historic bridge with a new bridge located either upstream or downstream of the current location. (Appendix A). Historic Bridge K0969 is nearing the end of its service life. It was rehabilitated in 1996 and again in 2009. The last rehabilitation is expected to add only seven to eight years of service life. The FHWA and MODOT began developing an Environmental Impact Statement (EIS) in 2008 so that a solution could be selected, completed, and usable before the existing bridge requires rehabilitation again. Because of the reduced project scope, lack of controversy, and generally minor impacts, the two agencies decided to rescind the Notice of Intent to prepare an EIS, in favor of an EA.

### II. Public Involvement

<u>Public Meeting of June 3, 2008; 4:30-6:30PM, City Hall, Washington, MO:</u> Excluding MODOT personnel, 26 people attended the public meeting to review displays, visit with knowledgeable staff, ask questions and submit comments. The Project Manager gave a presentation at 5 p.m. summarizing the purpose of an environmental impact study, and explained the process. Those in attendance were invited to share comments that evening or online at <a href="https://www.modot.org/northeast">www.modot.org/northeast</a>.

Advertisements and news releases were placed in the Warren Co. Record, the Washington Missourian, and the Marthasville Record; and submitted to several radio stations and MODOT E-Update subscribers. The MODOT Northeast and St. Louis Districts worked together to promote the public meeting. All displays and handouts from the meeting were posted online, including the opportunity to submit comments online, the advertisement, and the news releases. Participants who provided their email addresses were added to the project E-Update subscription. (Appendix B).

Comments from the public meeting included support for keeping the historic bridge where it is because of medical and emergency services, schools, business interests, industrial infrastructure and jobs, and the airport. Medical and educational services are built around the existing bridge site. However, concern was expressed about bringing higher speed traffic over a four-lane bridge with the hospital situated nearby.

One comment suggested rehabilitating the historic bridge and building a new one from Route 47/94 at Marthasville across the river to Route 100 in order to take excess traffic off the city streets. Another comment suggested building the new bridge to the east into St. Charles County to accommodate those who use Augusta Bottoms Rd. Some suggested using Route 185 as a location for a new river crossing.

Preferences regarding placement of the new bridge to the east or west of the existing bridge were split. Some suggested rehabbing the old bridge and adding a new bridge next to it to provide four lanes.

The comment form included a question about improving Route 47 on the north side of the river. Responses stressed the importance of improving the reliability of Route 47 north of the river in order to open up the area for development. One suggestion was to build an elevated roadway like that at the Page Avenue extension.

Several comments reminded MODOT staff of the need for a connector route between I-70 and I-44, and that Route 47 would be an excellent choice. Many commented that it was vital to maintain a crossing during construction, and that a separate protected bicycle/pedestrian facility would be needed across the bridge and to the KATY Trail.

The airport manager of Washington Aviation Inc. voiced strong support for keeping the existing bridge in its present location, but favored rerouting Route 47 through the floodplain on new alignment to the east extending it directly to Route 94 east of Dutzow. He pointed out that there would be no need for Augusta Bottom Road if Route 47 connected with Route 94 at that location. He also stated that recent development has occurred around Route 94 in the area suggested for the relocated Route 47 tie-in, so relocating 47 there would open up the area to new development.

<u>Public Meeting of November 20, 2008; 4:30-6:30PM, St. John's Mercy Hospital, Washington, MO:</u> Excluding MODOT personnel, 44 people attended the public meeting to review displays, visit with knowledgeable staff, ask questions and submit comments regarding alternatives that had been eliminated and alternatives that were still being considered. The Highway 47 Bridge Committee met with the MODOT Project Manager at 4 p.m., prior to the public meeting. The Committee highly encouraged the consideration of a four-lane bridge alternative.

Advertisements were placed in the Warren Co. Record, the Washington Missourian, and the Marthasville Record; and a news release was submitted to several radio stations and MODOT E-Update subscribers. Advertisement flyers were posted at all polling places in Washington for the November 4th election, and St. John's Mercy Hospital made oversized posters for placement at each of their entrances. The MODOT Northeast and St. Louis Districts worked together to promote the public meeting. The St. Louis District Area Engineer provided a handout outlining the rehabilitation project that will occur on the bridge next summer. All displays, advertisements and news releases from the public meeting were posted online, and provided the opportunity to submit comments. Participants who provided their email addresses were added to the project E-Update subscription. (Appendix B).

Thirteen comments were submitted. They including personal letters from the Washington Chamber of Commerce and the Economic Development Corporation, suggested a four-lane

bridge, suggested replacing the historic bridge with a new bridge on either side of the existing bridge, and suggested replacing the old bridge with a new bridge in the existing location. Some comments suggested including bicycle/pedestrian access on the new bridge. Within two weeks of the meeting, reply letters were sent to each person who commented.

<u>Public Meeting of December 15-18, 2009; 4:00-6:00PM, Washington West Elementary School, Washington MO:</u> Advertisements for the third public meeting were placed in the Warren County Record and the Washington Missourian, and an E-Update was sent to the 225 subscribers of the Route 47 Bridge project. (Appendix B). Displays were provided entitled "How are we narrowing our options", "Environmental", "What will happen next", and a map was provided for the two alternatives being considered (build upstream or downstream). In addition, a handout was provided at the public meeting and online.

Eleven MODOT staff attended the public meeting including representatives from the St. Louis District, Northeast District and Central Office. Forty-four people came to the public meeting and included about 25 members of the local Route 47 Bridge Committee who held a separate meeting prior to the main event. At the Committee meeting, MODOT staff went over the screening criteria in the matrix, and copies of the technical matrix were later made available to the public. In addition, there were 165 visitors to the Virtual Public Meeting web page during a period extending from December 15 to December 18, 2009.

Five comments were received from the public meeting, and five additional comments were received from the virtual meeting. Three supported building the bridge upstream and three supported building the bridge downstream. Three other comments related to the need for a new bridge and safety concerns. One comment supported putting a new bridge on either side, but asked that MODOT include an upgrade to Augusta Bottoms Road. One comment encouraged building a four-lane bridge, and another wanted to ensure MODOT provided a bicycle/pedestrian path regardless of width.

Highway 47 Bridge Committee Meeting of September 21, 2010; City Hall, Washington, MO: MODOT staff gave a presentation on the status of the NEPA process, a review of the EA environmental and cultural impacts, the preferred alternative, past steps and next steps in the NEPA process, and memorializing the existing historic bridge. The presentation was recorded on digital video tape. The highlight of the evening was a discussion on advertising the existing bridge for adaptive reuse, and possible uses of all or parts of the bridge. Hand-outs were provided illustrating innovative uses of bridge parts on previous historic bridge projects in the State.

Public Meeting of February 28, 2011; 5:00-6:30PM, City Hall, Washington, MO: About 35 people attended the meeting including several engineering consultants, several members of the local Highway 47 Bridge Committee, and two media representatives from the Missourian newspaper. Two people submitted written comments at the meeting, and 338 people visited the virtual meeting online providing 3 additional comments. The primary focus of the meeting was to give the public one last opportunity to comment on the environmental assessment document, which identified the location of the new bridge. The majority of interest from those attending focused on the connection to the Katy Trail and the importance of offering a pedestrian bridge as part of the new plan. Informational handouts were provided and displays were available for

viewing during discussion with MODOT representatives. A copy of the EA document was also available for review.

In addition to the continuation of public involvement, and with the review and approval of the Missouri State Historic Preservation Office (SHPO), marketing letters will be sent out to regional planning organizations, county commissioners, city mayors, state and federal agencies, and other groups; with information packets containing location maps, photographs, and historic and structural information for the existing historic Washington Bridge K0969. The letters will inform the groups that the bridge has been determined eligible for the National Register of Historic Places, and that MODOT proposes to replace it. (The Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA) Section 123(f) states: "prior to the demolition of a historic bridge, the State shall market (sell or donate) the bridge to a State or local government, agency or responsible private entity"). As part of this mitigation process, MODOT will make Bridge K0969 (or portions thereof) available for adaptive reuse, to any group or entity willing to move, re-erect, maintain, and assume legal and financial responsibility for the structure.

### III. Summary of Previous Work

By February of 1993 Clayton Fraser's Missouri Historic Bridge Survey had inventoried the Washington Bridge which had been determined NRHP eligible in his 1989 Preliminary Determinations of Eligibility study. In 1996, MODOT altered the bridge truss sway bracing in order to increase the vertical clearance for high-profile vehicular traffic. Archival photos were taken to document the change in truss configuration for the SHPO's records. In 2002 the Route 47 Major Transportation Investment Analysis (MTIA) identified bridge and floodplain improvement needs and recommended replacement of the historic bridge at Washington. A Notice of Intent to prepare an Environmental Impact Statement (EIS) was published in the Federal Register on April 22, 2008. The first public meeting was held in Washington on June 3, 2008. The first MODOT Core Team Meeting for the Route 47 EIS was held on August 4, 2008. The second public meeting was held in Washington on November 20, 2008. The Washington Bridge was again rehabilitated in the winter of 2009 mainly to repair and correct rust damage to the bottom chord and adjacent members below the bridge deck. (On November 14, 2009, the SHPO had concurred that the rehabilitation job would have "no adverse effect" on the historic bridge). The third public meeting was held in Washington on December 15 through 18, 2009. A Section 106 review was performed by MODOT staff for the EIS study, and on February 26, 2010 the SHPO concurred with MODOT's finding that Bridge K0969 is the only historic property on the project that will be adversely affected. The SHPO looked forward to reviewing the MOA for mitigation, and the project would be covered under a nationwide Programmatic 4(f) Evaluation. On June 1, 2010 a notice rescinding the Notice of Intent to prepare an EIS was published in the Federal Register, and the project was approved as an Environmental Assessment (EA). A Highway 47 Bridge Committee Meeting was held on September 21, 2010. On November 19, 2010, the Advisory Council on Historic Preservation chose to not participate in the MOA consultation. A public hearing was held on February 28, 2011 in Washington. (Appendices B and C).

### IV. Description of the Historic Property

Bridge K0969 is a steel, five-span rigid-connected cantilever through truss with two Warren deck truss and two steel deck girder approach spans. It measures 2,562 feet in length with a roadway width of 22 feet. The substructure consists of concrete abutments and spill-through piers with Moderne detailing. Built 1934-36 by the Missouri State Highway Department (MSHD), it is considered a superlative example of large-scale truss bridge construction at an important crossing of the Missouri River. It is on the Missouri Historic Bridge List and is NRHP eligible as per the corresponding Programmatic Agreement signed on October 1, 2003. It is eligible under Criterion C in the Area of Engineering and possibly under Criterion A in the Area of Transportation. (Appendices C and D).

### V. Adverse Effect on the Historic Property

This project will result in building a new bridge adjacent to the existing Washington Bridge, either upstream or downstream, and remove the existing bridge. The bridge is eligible for the NRHP, and this action constitutes an "adverse effect" to the structure as described in 36 CFR 800.3 (b) (1) (4) of the National Historic Preservation Act.

### VI Summary of Alternative Courses of Action

The alternatives initially considered included a No-Build Alternative, two build alternatives that would reuse at least part of the existing bridge, and eight alternatives that would construct a new bridge. Three alternative courses of action were retained for this project. These include the No-Build Alternative, the Adjacent Upstream Alternative, and the Adjacent Downstream Alternative. The No-Build Alternative, offers a baseline for evaluating the proposed build alternatives, and the two adjacent alternatives are being retained because the public overwhelmingly favors a bridge that quickly ties back into the existing roadway and has fewer environmental and socioeconomic impacts than a bridge farther upstream or downstream. Also, the two retained build alternatives would cost less and take less time to build.

The **No-Build** Alternative would retain the existing historic bridge and would make no improvements beyond normal bridge maintenance. Normal maintenance includes washing the bridge twice a year to remove de-icing chemicals, sealing the bridge deck every three to five years, sealing and replacing the expansion joints as needed, and replacing minor portions of the steel and concrete that have deteriorated. This alternative would not include any new major construction. With the No-Build Alternative, when the bridge deteriorates to a point where normal bridge maintenance is no longer sufficient to ensure safe operation, it would either need another major rehabilitation or be subject to weight restrictions and/or closure. However, due to the age and condition of the existing bridge, even routine maintenance and rehabilitation would be very costly and only serve as a short-term solution. The No-Build Alternative fails to meet the project needs and address existing deficiencies.

The **Adjacent Upstream** Alternative (\$46 million estimated total cost) would replace the existing, deficient, historic bridge with a new two-lane bridge approximately 50 feet upstream from the current location. The Adjacent Upstream new bridge would be roughly the same length as the existing bridge, which would be removed. Once the old bridge is out of the way, the rest of the new bridge would be built and traffic would be shifted to the proper lane locations. This alternative would meet the project needs and address existing deficiencies. It would provide a

Missouri River crossing that is not deficient; meets MODOT's standards for lane width, shoulders, and commercial vehicle load; and safely accommodates bicyclists and pedestrians.

The **Adjacent Downstream** Alternative (\$46 million estimated total cost) would replace the existing, deficient bridge with a new two-lane bridge approximately 50 feet downstream from the current crossing. The new bridge would be roughly the same length as the existing bridge, with the downstream levee controlling placement of the northern abutment. The existing bridge would then be removed. Once the old bridge is out of the way, the rest of the new bridge would be built and traffic would be shifted to the proper lane locations. This alternative would meet the project needs and address existing deficiencies. It would provide a Missouri River crossing that is not deficient; meets MODOT's standards for lane width, shoulders, and commercial vehicle load; and safely accommodates bicyclists and pedestrians.

The Adjacent Upstream Alternative has been identified as the **Preferred** Alternative, and the most responsible and cost effective way to solve the transportation problems associated with the Route 47 Bridge. This alternative would replace the existing, deficient bridge with a new two-lane bridge approximately 50 feet upstream from the current location. This alternative would include slight roadway realignment beyond the bridge limits to tie into existing Route 47. It would result in removal of the existing historic bridge after construction of the new structure. The Preferred Alternative was identified through public and agency involvement along with assessment of socioeconomic and environmental consequences.

Regardless of which build alternative is chosen, removal of the historic bridge will be accompanied by mitigation of the adverse effect to the historic bridge with data recovery, through photographic and historical documentation as determined in consultation with the Missouri SHPO and FHWA. Also, the bridge will be marketed and advertised as available for adaptive reuse at a new location. This mitigation will be initiated well in advance of the commencement of construction project activities.

### VII. Proposed Action

FHWA shall ensure that the following measures are carried out:

- 1. The MHTC, acting by and through MODOT, shall develop archival documentation to the following specifications:
  - a. 8X10 inch high-resolution black and white digital images printed on archival paper sufficient to fully document overall views and details of the historic bridge. Photographs will be taken and processed according to standards for photographs accompanying NRHP documentation. Digital compact discs with all views will be provided.
  - b. A historic narrative and technical descriptions for the historic bridge.
  - c. A copy of the original construction plans for the historic bridge.

The final documentation shall be provided to the SHPO along with archival digital discs containing the TIFF images and report PDF. Additional copies shall be provided to appropriate local historical groups, and retained by MODOT. Bound copies and/or CDs of the final documentation also will be available to others upon request.

2. Advertisement for Adaptive Reuse (or waiver):

The MHTC, acting by and through MODOT, shall consult with the SHPO to determine the appropriate approach and method for marketing Bridge K0969 as per the Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA) Section 123(f). A waiver of advertisement also shall be discussed. The MHTC, acting by and through MODOT; the SHPO; and the FHWA shall agree to the approach and method prior to implementation.

If ownership of the bridge (or a portion thereof) is transferred to another party, the transfer deed may include preservation covenants that require the new owner to move and maintain the bridge in accordance with the "Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings." The proposed reuse plan and specifications will be forwarded to FHWA for review and approval in consultation with the SHPO; and MHTC, acting by and through MODOT. If no party is found to take possession of the existing bridge, it may be removed.

- 3. If modifications to the project activities result in an adverse effect to any NRHP eligible archaeological site, the FHWA shall consult with the SHPO and appropriate Indian Tribes to resolve the adverse effects, consistent with guidance provided in 36 CFR § 800.6, through the implementation of an Archaeological Data Recovery Plan(s) developed in accordance with the Council "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites" (64 FR 27085-87 published in the Federal Register on May 18, 1999), the Council's Handbook on Treatment of Archaeological Properties, and the Secretary of the Interior's Standards for Archaeological Documentation.
- 4. Within one year after carrying out the terms of the MOA, the FHWA shall provide to all signatories a written report regarding the actions taken to fulfill the terms of the agreement.

### VIII. <u>List of Appendices</u>

- A. Location Maps for the Washington Bridge Project.
- B. Public Involvement.
- C. Correspondence and Coordination.
- D. Photographs of the Washington Bridge.



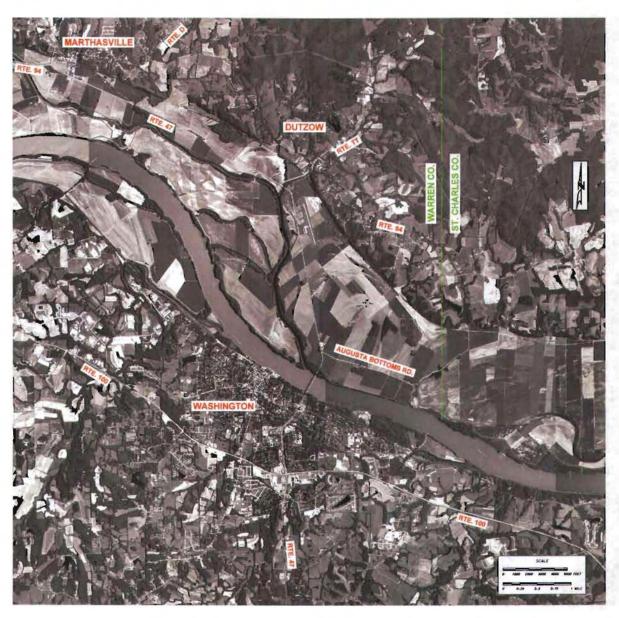
**Appendix A**Location Maps for the Washington Bridge Project.





# RTE. 47 BRIDGE STUDY AREA





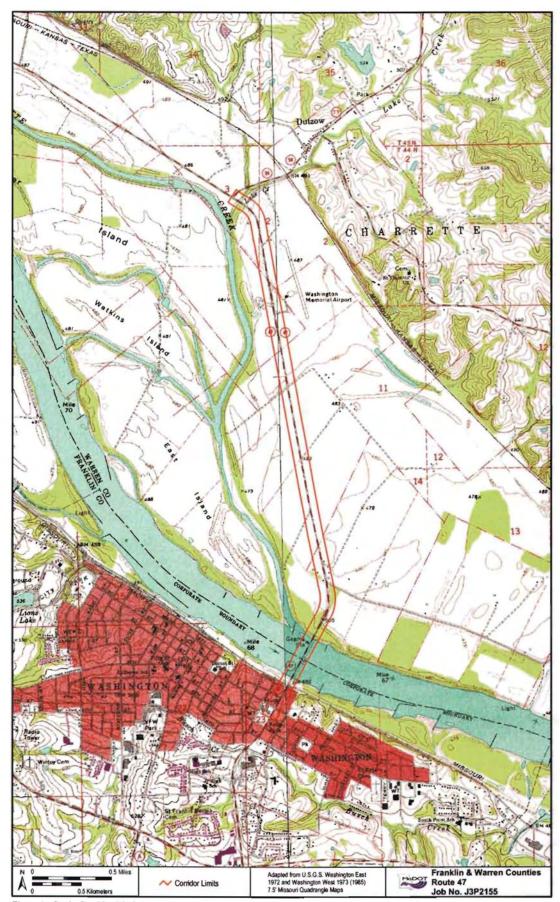
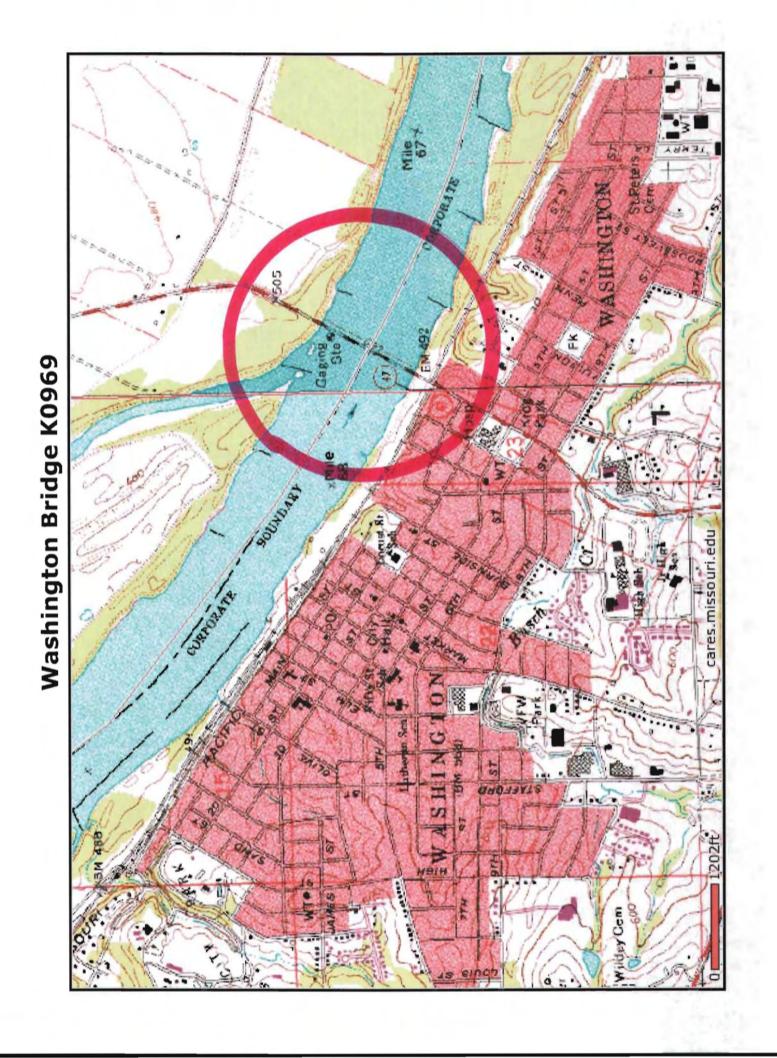


Figure 1. Study Corridor Limits.





**Appendix B**Public Involvement.





# **ROUTE 47 BRIDGE**

at Washington

Environmental Impact Study

This meeting is one of the very first steps toward improving the Route 47 bridge over the Missouri River near Washington. The focus of tonight's meeting is to help us learn from you the environmental and cultural issues in the area that might be impacted should a new bridge be constructed. Please keep in mind there is no funding for a new bridge. However, MoDOT will continue to keep those interested informed through public involvement including meetings, media, personal visits, and email.

### YOUR INPUT IS IMPORTANT TO THIS PROCESS!

After hearing tonight's presentation, reviewing the displays, and discussing the various topics with MoDOT representatives, please share with us any thoughts and ideas you have about environmental and cultural issues, along with thoughts about a new bridge. Comments sheets are available at the meeting, or you can submit a comment online at www.modot.org/northeast.



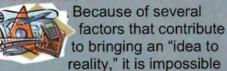
If you have email and would like to receive updates on this project, please subscribe to our free eupdate system by visiting our website at modot.org/ northeast or call us, and we'll subscribe for you!



# WHAT IMPROVEMENTS ARE NEEDED?

While MoDOT is excited to continue to improve Missouri's transportation system, rest assured the Route 47 bridge is safe. Since a new bridge is unlikely for several years, MoDOT is rehabilitating the existing bridge next summer, and these improvements will allow the bridge to remain safe. As traffic increases and the bridge ages, the existing structure eventually will need to be replaced. A new bridge will improve safety, add capacity, improve reliability and contribute to the continued growth in the area.

# How Long WILL IT TAKE TO GET A NEW BRIDGE?



to predict how long it will be before a new bridge is built. MoDOT is just beginning the environmental and location studies on the bridge. Before a project can move forward, MoDOT works with key stakeholders, area residents, planning partners, and the Federal Highway Administration to determine the environmental and cultural impacts to the area should a new bridge be built. Another significant issue is how to pay for the bridge. Senator Christopher "Kit" Bond earmarked three million dollars to help support the project, but most of this money has been used for rehabilitation of the existing bridge, to keep it usable until sufficient funds become available for the bridge's replacement. There is about \$200,000 remaining.

(over)

### What are our options?

These are OUR ideas to replace the existing bridge...

- 1. Build a new bridge as far west as Marthasville on new Route 47 alignment following Route 100. Locating a new Missouri River crossing west of Washington at Marthasville was an option investigated during the Major Transportation Investment Analysis. We could consider any location to the west that minimizes impacts to environmental and cultural resources, while meeting the purpose and need of the project.
- 2. Build a new bridge on Route 47 alignment as far **east** crossing into St. Charles County following Route 100. Locating a new Missouri River crossing east of Washington into was another option investigated during the Major Transportation Investment Analysis. We could consider any location to the east that minimizes impacts to environmental and cultural resources, while meeting the purpose and need of the project.
- 3. Build a new bridge adjacent to the existing one.
- 4. Build a new bridge adjacent to the existing bridge, but replacing the existing bridge's truss with steel girders, so it could continue to be used. The condition and load carrying ability of the concrete piers would need to be evaluated for this use.

We are also considering these ideas to improve the reliability of Route 47 north of the river during flooding by adding lanes from the new bridge across the floodplain...

- 1. New lanes from either bypass option would likely connect to Route 94.
- 2. New lanes from an adjacent bridge could either paral-

lel the existing Route 47 alignment, or could extend south of the airport to Route 94.

Please consider other options and share those with us when completing the comment forms provided at the meeting or online. Thank you for your input and your interest!

# How Many Vehicles Cross the Bridge Each Day?

Traffic on the Route 47 bridge is at a "Level C," which means it's still flowing fairly well with few accidents. About 11,000 vehicles travel over the bridge each day.

# How can we Minimize Impacts to the Area?

During the environmental and location study, MoDOT needs public input on potential environmental and cultural issues. MoDOT wants to avoid or at least minimize impacts whenever considering a new project, and many times this information comes directly from residents in the area.

### WHAT WILL HAPPEN NEXT?

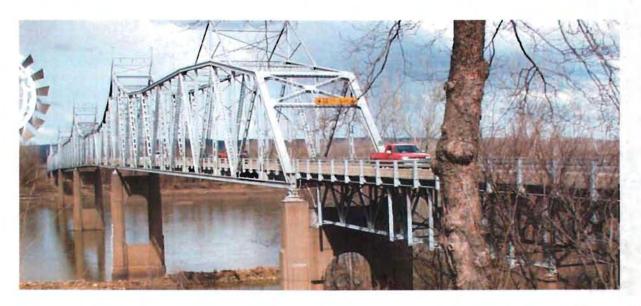
While a lot has already been done locally through the Highway 47 Bridge

Committee, now that MoDOT has begun the environmental and location study process, there will be more formalized meetings and discussions about the potential impacts of constructing a new bridge, what that bridge will look like, and where it will be located. MoDOT will continue to keep area residents informed through mailings, meetings, personal visits, local medial and email.

### Washington Bridge (No. K0969)

Construction of a new bridge over the Missouri River at Washington may have an "adverse effect" on existing historic Bridge K0969, which is eligible for the National Register of Historic Places.

Bridge K0969 is a steel, five-span rigid-connected cantilever through truss with a Warren web and Warren deck truss approaches. It measures 2,562 feet in length with a roadway width of 22 feet. The substructure consists of concrete abutments and spill-through piers with Moderne detailing. Built 1934-36 by the Missouri State Highway Department (MSHD), it is considered a superlative example of large-scale truss bridge construction at an important crossing of the Missouri River. Undertaken during the Great Depression, it was one of a series of great river bridges built in the state during the 1920s and 1930s. Similar structures included the Mark Twain Memorial Bridge, the Hermann Bridge, and the Miami Bridge. (Clayton Fraser, Missouri Historic Bridge Inventory, 1996).



A Programmatic Agreement for Historic Bridges in Missouri was signed on October 3, 2003, and obliges all parties (Federal Highway Administration, Missouri Department of Transportation, the State Historic Preservation Office and the Federal Advisory Council on Historic Preservation) to explore alternatives for bridge preservation.

An "adverse effect" to the historic bridge will require, at a minimum, a two-party MOA for mitigation in the form of archival photographs and historic documentation to be submitted to the State Historic Preservation Office (SHPO) for curation. Also, the FHWA may be asked to approve a Programmatic Section 4(f) Evaluation for the bridge. Additional mitigation measures will be discussed in consultation with the SHPO and FHWA.

### Contacts:

- Rick Domzalski at 573-248-2579 or richard.domzalski@modot.mo.gov for project information
- Randy Dawdy at 573-526-3591 or randall.dawdy@modot.mo.gov for historic bridge information

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### News and Information



Contributed through . Speed, inattention and tailgating are cited as the cause of most crashes in areas where roadwork is under way.

For more information, contact Marisa Brown, Community Relations Manager, 573-248-2502

November 10, 2008

### **Public Meeting To Show Alternate Locations of New** Bridge

HANNIBAL - The public is invited to view alternate locations being considered for a new Route 47 Bridge at Washington during a public meeting on Thursday, November 20 from 4:30 until 6:30 p.m. at St. John's Mercy Hospital in the Tucker Room on 2nd floor. There is no formal presentation planned, and guests can come anytime within the two hours to look at the displays and ask questions.

MoDOT engineers and environmental specialists will be available to answer questions and explain the exhibits, and informational material will be distributed. In addition, MoDOT will have available information about the extensive work that will be done next year on the current bridge.

For anyone interested in the locations and unable to attend the public meeting, maps will be posted on modot.org immediately following the public meeting. Information is also available by calling Rick Domzalski, MoDOT project manager, at 573-248-2579 or 1-888-275-6636.



at Washington

Environmental Impact Study

Your input will help us in the process to make a final decision on what this project should look like. The focus of tonight's meeting is to discuss the alternatives that are being carried forward for further evaluation. We also want to let you know what alternatives were considered and eliminated from further consideration, and communicate what additional information has been identified since the first meeting to help to shape the direction of the project.

### STAY INFORMED!

If you have not already done so and are interested in receiving updates on the project through email, please consider subscribing to our free e-update service. The web pages for the Route 47 Bridge project are updated regularly and can be found at www.modot.org/northeast. Comments sheets are available at the meeting, or you can submit a comment online.



If you have email and would like to receive updates on this project, please subscribe to our free e-update system by visiting our website at modot.org/northeast or call us, and we'll subscribe for you!



# Two lanes needed for the foreseeable future



Projections for traffic growth tell us that a two-lane

bridge with full shoulders should be able to handle the traffic needs of the area for the next twenty years. This is based on the criteria of providing stable flow (Level of Service D) during peak hours of traffic. We realize that there is significant uncertainty when trying to project traffic volumes out that far into the future, and also that the bridge is being designed to last many decades beyond that twenty-year period. Because of this, we want to consider options for ultimately accommodating more lanes.

# Options Eliminated from Further Consideration

Traffic patterns reveal that a majority of bridge traffic headed for Washington comes down Route 47 from the Warrenton area and down Route T/TT/94 from the Foristell area. To locate a new bridge away from the existing location would force these major volumes of traffic significant distances out of the way. The Washington Airport, located mid-way between Route 94 at Dutzow and the existing bridge, has a direct path to the City, and the hospital in particular. (cont'd on back)

### QUESTIONS?

Please call our toll-free number at 1-888-275-6636 or email Transportation Project Manager Richard Domzalski at richard.domzalski@modot.mo.gov. Specific locations eliminated from consideration include:

- A crossing west at Route 185
- A crossing east into St. Charles County.
- Crossings that would terminate in developed areas of the City of Washington were not specifically studied due to the obvious impacts they would have on the City.

### **Alternates Moving Forward**

In addition to the no-build option that is used as a comparison for all other options, several options are moving forward for consideration. All are in the immediate area of the existing bridge and require traffic to be maintained across the river at Washington during construction. They include:

- New two-lane bridge immediately upstream or downstream of the existing with partial reconstruction (superstructure replacement) of the existing bridge. The widest roadway that could likely be built on the existing piers is 26', providing 11' lanes and 2' shoulders.
- New two-lane bridge immediately upstream or down-stream of the existing bridge without partial reconstruction (tear down the old bridge).

  The new bridge would be built with the idea that the lanes could be re-striped in the future to accommodate four lanes of traffic.
- New two-lane bridge as close to the existing alignment as possible, built in stages to overlap with the existing structure, much like we did with the new Bond Bridge near Hermann.

### What About Flooding?

Route 47 in Warren County closed twice in 1993 and once in 1995 due to flooding, with the closures in 1993 lasting between one and two weeks on average. All of these events were due to the failure of the Missouri River levees. The second closure in 1993 occurred before the levees could be repaired from the earlier failure. To protect Route 47 from this sort of Missouri River flooding would require raising the grade of the roadbed several feet, since those levees to the west are built to a substantially higher elevation.

When investigated in the mid-1990s, raising the grade of Route 47 across the floodplain met serious opposition from



the United States Army Corps of Engineers due to the waterway blockage that would be created by such a roadway. As such, it is likely that an elevated roadway would have to be built as a bridge-type structure, making it prohibitively expensive.

### What about bicycles?



Any of the alternatives proposed to move forward include the placement of a protected bicycle lane. Constructing a concrete barrier between the bike lane and the roadway would deter converting part of the bike lane to roadway use in the future.

### What Comes Next?

There will be ongoing data collection and evaluation of remaining alternatives over the next several months. The study team will consider public comments gathered tonight to narrow the reasonable range of alternatives to one "preferred" alternative alignment, which will be presented in 2011 or before.

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For more information, contact Marisa Brown, Community Relations Manager, at 573-248-2502

December 09, 2009

## Public Invited to Route 47 Bridge Meeting

HANNIBAL - MoDOT will hold a public meeting on Tuesday, December 15 from 4 - 6 p.m. at the Washington West Elementary School, 1570 West 5th Street, in the cafeteria, to seek input from the public about replacing the historic bridge across the Missouri River. The focus of the meeting is to solicit comments on alternatives that are proposed. Alternatives adjacent to either side of the existing bridge stand out right now as those to be retained for detailed analysis.

MoDOT Transportation Project Manager Rick Domzalski said consideration is made for each alternative using various screening factors. Some of these factors include costs, engineering and environmental considerations, right of way and purpose and need. "Each of these factors is carefully evaluated by study team members," he explained. "We value the input provided by the community and area residents," he added.

A "virtual meeting" is being added to the public involvement process to allow those who have questions and cannot attend the public meeting the opportunity to receive immediate answers to questions or comments. From 8:00 a.m. until 5:00 p.m. on December 16, 17, and 18, MoDOT staff will participate in the virtual meeting. The public also is welcome to view the on-line displays and comment any time with MoDOT staff replying within the next business day.

MoDOT representatives are also available to answer questions by phone at 1-888 ASK MODOT.

Links to related information:

Route 47 Bridge at Washington

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## News and Information



Speed, inattention and tailgating are cited as the cause of most crashes in areas where roadwork is under way.

For more information, contact Marisa Brown-Ellison, Community Relations Manager, 573-248-2502

April 26, 2010

## Route 47 Bridge at Washington Study Indicates Bridge Replacement

HANNIBAL - In the past two years, MoDOT has been working with the Highway 47 Bridge Committee and Washington area residents to gather information for an Environmental Impact Statement (EIS), which is required by the National Environmental Policy Act (NEPA) when significant impacts are expected on transportation projects. However, when the impacts of a project are determined to be minor, the EIS can be reduced to an Environmental Assessment, which can require less time than an EIS. The Federal Highway Administration (FHWA) recently gave that approval.

"This is good news for the project," said MoDOT Transportation Project Manager Rick Domzalski. "Since we have completed a substantial portion of the EIS, we have determined that the project will essentially be a bridge replacement adjacent to the existing location. Thus with a reduced project scope and impacts an Environmental Assessment will document the impacts adequately and require less review time than a full EIS," Domzalski explained.

While it doesn't mean funding is available for a new bridge at Washington, it does mean the environmental aspects required prior to designing a new bridge will be done quicker. "It is our intention to finish the Environmental Assessment later this year, and be ready to start work on plans for a new bridge," Domzalski stated.

Already determined through the EIS process is that the bridge will be replaced just to the west of the existing bridge. Following the completion of the Environmental Assessment, a location public hearing will be held to present the preferred location to the public and to take comment. Once the Environmental Assessment has been approved, and a Finding of No Significant Impact (FONSI) is signed, MoDOT will begin working on plans for a new bridge.

The Route 47 Bridge at Washington was identified as a top need in

the prioritization process by MoDOT and its planning partners. However, there is no funding identified within the next several years to help make the estimated \$45 million structure a reality.

MoDOT has a web page devoted to the Route 47 Bridge at Washington at <a href="https://www.modot.org/northeast">www.modot.org/northeast</a>. More information can be found there or by calling the toll-free number at 1-888 ASK MODOT.

## Links to related information:

Route 47 Bridge at Washington

## News and Information

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Speed, inattention and tailgating are cited as the cause of most crashes in areas where roadwork is under way.

For more information, contact Marisa Brown-Ellison, Community Relations Manager, *573-248-2502* 

January 11, 2011

## Public Invited to Review Environmental Assessment on New Bridge

HANNIBAL - Another step in the process to replace the Route 47 Missouri River bridge at Washington has been completed. The Environmental Assessment, which researched the environmental, cultural and historical issues associated with replacing the bridge is complete and is now available for public comment.

A public hearing will be held at City Hall in Washington on Thursday, January 20 from 4:30 p.m. until 6:30 p.m. The document and displays that will be at the public hearing also will be online as a "virtual hearing" for those not able to attend the public hearing in person, but are interested in the findings. Comments about the document will be accepted until Monday, January 31, 2011.

"We have worked with our partners and determined the best site for a new bridge is about 50 feet upstream from its current location," said MoDOT Transportation Project Manager Rick Domzalski. "We still want the public to comment just to make sure we haven't missed something," he said. After the public hearing, any substantive concerns will be addressed, and a Finding of No Significant Impact (FONSI) is expected to be issued for the project.

The 223 page document is available online at www.modot.org/northeast. "We will have it at the public hearing, as well as other displays including details of how we propose to connect the City of Washington to the Katy Trail," Domzalski added. He said MoDOT also would like to know if anyone is interested in reusing the old, historic bridge.

The document is available for viewing at several public locations including the Warren County Courthouse, Marthasville City Hall, Augusta South County Branch Library, Scenic Regional Library in Warrenton, Franklin County Administration Building, Washington City Hall, the Washington Public Library, and MoDOT's St. Clair Project Office. A CD can be requested through MoDOT, c/o Richard Moore, 601 West Main, Jefferson City, MO 65102.

While another step in the process is completed, Domzalski reminds the public there is no funding in place for the new bridge. "The bridge was identified as the top priority rural bridge in our planning process, yet with our current funding levels, it could be a while before we can allocate the nearly \$50 million needed to replace it," he added. MoDOT will continue to work with the City of Washington to move forward on the design of the new bridge.

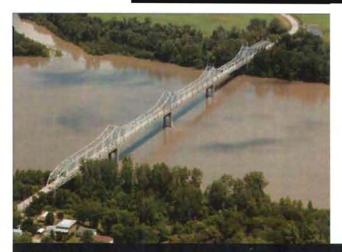
For future developments in the project, the public can sign up for an email alert system. The eupdate subscription service can be found on the MoDOT website.

For more information about the project, call Domzalski at 573-248-2579 or MoDOT's toll-free number at 1-888-275-6636.

### Links to related information:

Route 47 Bridge at Washington

## **Route 47 Bridge at Washington**





Historic Washington Bridge No. K0969:

Construction of a new bridge over the Missouri River at Washington will have an "adverse effect" on the existing bridge, which is eligible for the National Register of Historic Places.

Built during the Great Depression (1934-36), it is a steel, five-span rigid-connected cantilever through-truss with a Warren web, and Warren deck-truss approach spans. It measures 2,562 feet in length with a roadway width of 22 feet. The substructure consists of concrete abutments and spill-through piers with Moderne detailing. It is a superlative example of large-scale bridge truss construction at an important major river crossing.

Mitigation of the "adverse effect" will be undertaken as stipulated in a Memorandum of Agreement signed by two State and two Federal Agencies:

- Documentation: Archival photographs and historical documentation will be prepared for curation at the James C. Kirkpatrick State Information Center in Jefferson City, or the Library of Congress in Washington, DC.
- Advertisement for Adaptive Reuse: The bridge will be offered to potential recipients who must
  agree to accept title, preserve the bridge and features which make it historic, assume legal and
  financial responsibility, and hold the State and Federal agencies harmless in any liability action.
- Additional Measures will be discussed in consultation with the State and Federal agencies, and other interested parties.



Federally Listed Endangered Species - Pallid Sturgeon

MoDOT consults with the U.S. Fish and Wildlife Service to protect this species from project construction and/or demolition.







Washington Bike Trail



**Appendix C**Correspondence and Coordination.



## Volume IV



BOONVILLE, MO

## MISSOURI HISTORIC BRIDGE INVENTORY

March 13th, 1905.

### DRAFT INVENTORY REPORT

submitted to: Missouri Highway and Transportation Department 200 Harrison Street Jefferson City, Missouri 65102

produced by: FRASERdesign 1269 Cleveland Avenue Loveland Colorado 80537

April 1996

## Washington Bridge

### WARR01

## GENERAL DATA

structure no.: K 969

city/town:

Washington

Warren county:

feature Inters.: Missouri River

cadastral grid: Survey 1647, T44N, R1W

highway route: State Highway 47

highway distr.: 3

current owner: Missouri Highway and Transportation Depart-

### STRUCTURAL DATA

superstructure: steel, rigid-connected, cantilever Warren through truss substructure: concrete abutments and piers with Moderne detailing

span number:

condition:

good none

span length: total length:

475.0' 2562.0 alterations:

floor/decking: concrete deck over steel stringers

roadway width: 22.0'

other features: upper chord and inclined end post: 2 built-up channels with cover plate and lacing; lower chord: 2 built-up channels with batten plates; vertical: 2 angles with lacing; diagonal: 2 channels with lacing or batten plates; lateral bracing: 2 angles with lacing; floor beam: Ibeam, field-bolted to vertical; guardrail: 2

steel channels

#### HISTORICAL DATA

erection date: 1934-36

erection cost: \$802,000.00

designer:

Sverdrup and Parcel, St. Louis MO

fabricator:

Stupp Brothers Bridge and Iron Company, St. Louis MO

contractor:

Stupp Brothers Bridge and Iron Company, St. Louis MO (superstructure) Missouri Valley Bridge and Iron Co., Leavenworth KS (substructure)

references:

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. K 969; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; "Building Bridge Major Event for City," The (Washington) Missourian, 24 May 1989, page 10; Ralph Gregory, A History of Washington, Missouri, pages 81-82, 88-89; Mari-Anne Messmann, "Desire, Determination Bridge the Missouri," Washington Missourian, 6 February 1975; "Washington Bridge Was 38 Years Old Monday," Washington Missourian, 30 May 1974; "Building of Bridge Major Event for City," Washington Missourian, 24 May 1989; "Work on Washington Bridge to Begin Soon," Hermann Advertiser-Courier, 15 March 1929; field inspec-

tion by Clayton Fraser, 29 June 1994.

## Washington Bridge

sign. rating:

72

evaluation:

NRHP determined eligible (superlative example of large-scale truss bridge construction on an important crossing of the Missouri River)

inventoried by: Clayton Fraser and Michelle Crow-Dolby 22 February 1993

# Route 47 Major Transportation Investment Analysis

# Draft Executive Summary and Locally Preferred Alternative Report

Franklin, Warren and St. Charles Counties Interstate 44 to Route 94 West

Prepared by the Transportation Corridor Improvement Group

in conjunction with

Bi-State Development Agency
East-West Gateway Coordinating Council and
Missouri Department of Transportation

with technical assistance from

Wilbur Smith Associates and Harrington & Cortelyou, Inc.

February 2002



# U.S. Department of Transportation Federal Highway

## Missouri Division

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

Administration

April 16, 2008

Mr. Raymond Mosley Director, Office of the Federal Register 800 North Capital Street, Northwest 7<sup>th</sup> Floor, Suite 700 Washington, D.C. 20408

Subject:

Notice of Intent

Rte 47, Franklin and Warren Counties, Missouri

MoDOT Job No. J3P2155

Notice of Intent for Environmental Impact Statement

Dear Mr. Mosley:

I hereby certify that the enclosed diskette contains a true and accurate copy of the three signed paper copies of the notice of intent for publication in the Federal Register.

Sincerely yours,

//original signature//

Peggy J. Casey, P.E. Environmental Projects Engineer

HEPE-1/Owen Lindauer
HRC-MW
MoDOT/Design/Matt Burcham
MoDOT/Environmental Section/Gayle Unruh





Matt Blunt, Governor • Doyle Childers, Director

## DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

November 14, 2008

Robert L. Reeder Historic Preservation Manager Missouri Department of Transportation P.O. Box 270 Jefferson City, Missouri 65102

Re:

Route 47, Job No. J6P2158 (FHWA) Franklin County, Missouri

Dear Dr. Reeder:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the Section 106 Bridge Evaluation for the proposed rehabilitation of Bridge No. K0969 over the Missouri River at Washington, Missouri. We concur with your determination that Bridge No. K0960 is eligible for inclusion in the National Register of Historic Places. We also concur that the proposed rehabilitation will have **no adverse effect** as the plans and specifications are in conformance with the Secretary of the Interior's Standards and Guidelines for Rehabilitation

Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.

If you have any questions, please write the State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 attention Review and Compliance, or call Judith Deel at 573/751-7862. Please be sure to include the SHPO Log Number (001-FR-09) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Mark A. Miles Director and Deputy

State Historic Preservation Officer

MAM:jd

c Peggy Casey, FHWA Jane Beetem, DNR/OD STATE OF MISSOURI Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director

EPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

February 26, 2010

Dr. Robert Reeder MoDOT, Historic Preservation 105 West Capitol Avenue, P.O. Box 270 Jefferson City, MO 65102

Re

SHPO Project Number: 019-MLT-10: Route 47, Job No. J3P2155, Route 47 Bridge, Washington, Franklin and Warren Counties, Missouri (FHWA)

Dear Dr. Reeder:

Thank you for submitting information about the above-referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which require identification and evaluation of cultural resources.

Based on the information provided, we agree that bridge number K0969 is eligible for listing in the National Register of Historic Places. In addition, we agree that Architectural Resources 3, 5, 6, 7, and 8 are not eligible. For Architectural Resource 4, SHPO staff agrees that while this property is unique and interesting, it does not meet the National Register criteria. We hope that due to the recent loss of so many historic properties in Washington, MoDOT staff will either photographically document the property or allow the SHPO to photo document the property should it be slated for demolition as part of this project. In addition, in accordance with the Advisory Council on Historic Preservation's regulation Protection of Historic Properties (36 CFR Part 800), Section 800.5, it is our opinion that the proposed project will have an adverse effect on the National Register of Historic Places eligible bridge. We recommend preparing a Memorandum of Agreement.

In accordance with Section 800.6(a)(1), FHWA or its applicant shall forward the necessary adequate documentation to the Executive Director, Advisory Council on Historic Preservation, the Old Post Office Building, 1100 Pennsylvania Avenue NW, #809, Washington, D.C 20004. Pending receipt of the Council's decision on whether it will participate in consultation, no action shall be taken which would foreclose Council consideration of alternatives to avoid or satisfactorily mitigate any adverse effect on the property in question. Please be sure to copy us on any correspondence to the ACHP.

If you have any questions please write Missouri Department of Natural Resources, State Historic Preservation
Office, Attn: Review and Compliance, P.O. Box 176, Jefferson City, Missouri 65102, or call Rebecca Prater at (573)
751-7958. Please be sure to include the SHPO Project Number (019-MLT-10) on all future correspondence relating to this project. If the information is provided via telephone call, please follow up in writing for our files.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Mark A. Miles Director and Deputy

State Historic Preservation Officer

MAM:rp

C: Peggy Casey, FHWA

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Preserving America's Heritage

November 19, 2010

Ms. Peggy J. Casey, P.E. Program Development Team Leader FHWA – Missouri Division 3220 W. Edgewood, Suite H Jefferson City, MO 65109

Ref: Proposed replacement of Washington Bridge (K0969) on Missouri Route 47 over the Missouri River and the Union Pacific Railroad in Franklin and Warren Counties, Missouri

Dear Ms. Casey:

The Advisory Council on Historic Preservation (ACHP) has received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Missouri State Historic Preservation Office (SHPO), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact Mr. Anthony Lopez at 202-606-8518 or via e-mail at alopez@achp.gov

Sincerely,

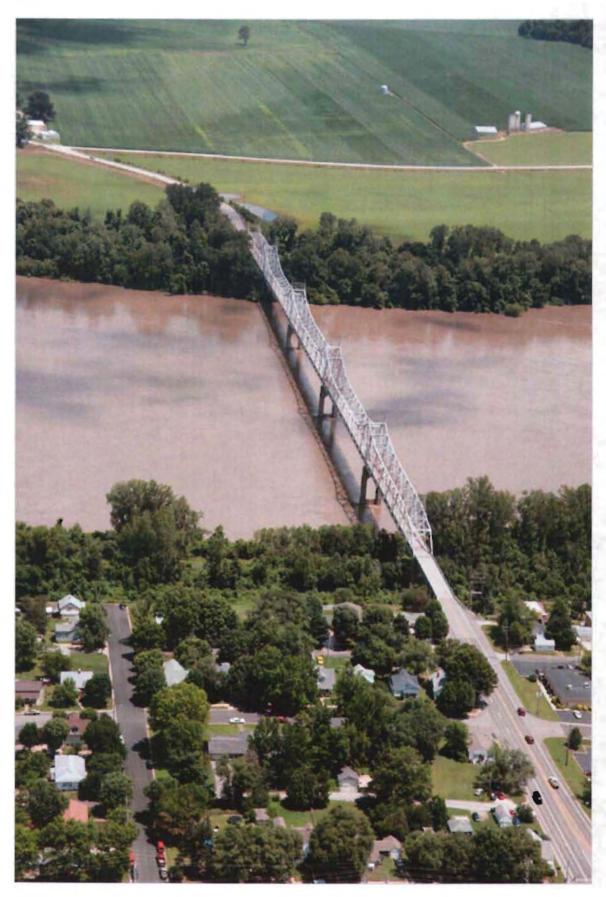
LaShavio Johnson

Historic Preservation Technician
Office of Federal Agency Programs

a Shavio Johnson

Appendix D
Photographs of the Washington Bridge.

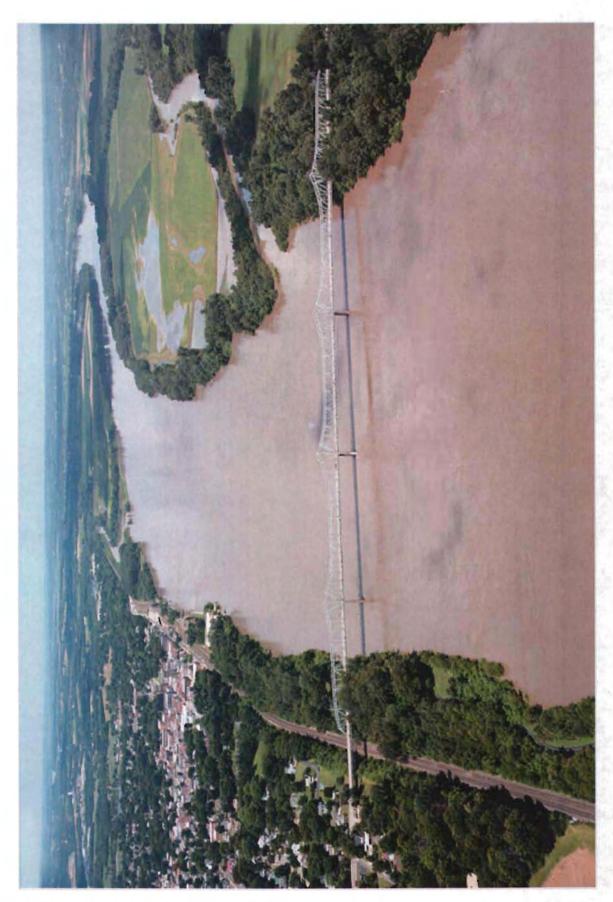




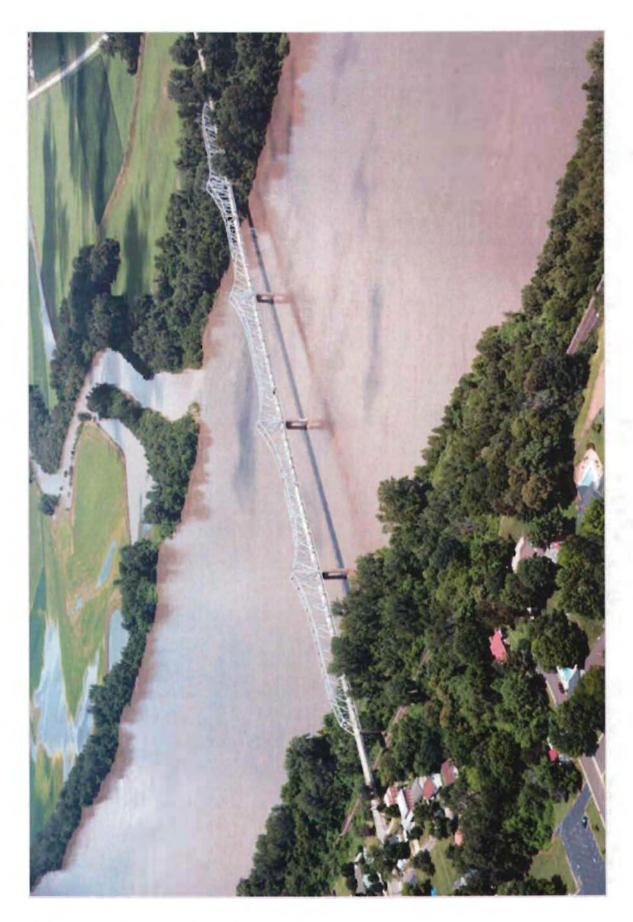
Washington Bridge (K0969). View to north.



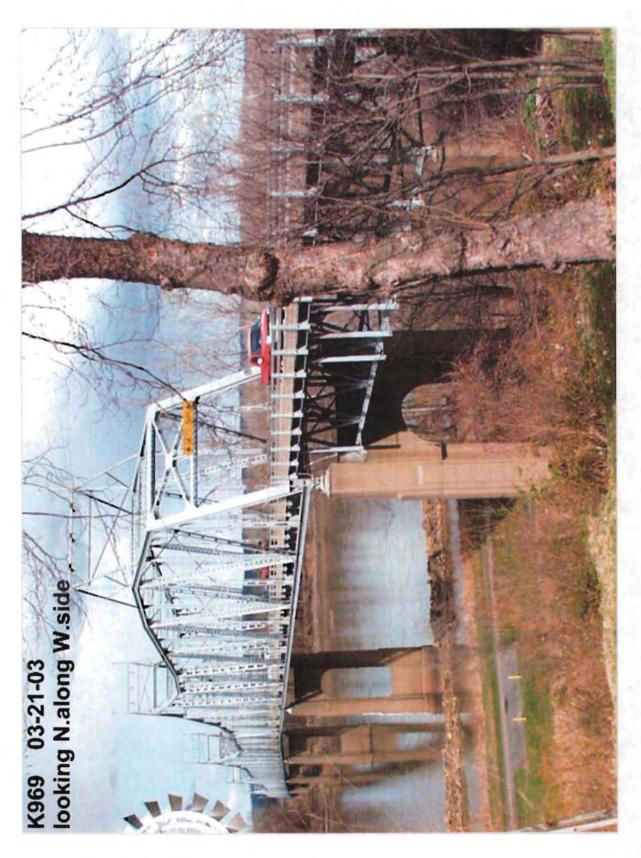
Washington Bridge (K0969). View to northeast.



Washington Bridge (K0969). View to west.



Washington Bridge (K0969). View to northwest.



Washington Bridge (K0969). View to north.

