

**City of Vicksburg Washington Street Tunnel and Lee Street
Extension Project**

NEPA ENVIRONMENTAL ASSESSMENT

Federal Railroad Administration

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Date of Approval

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Federal Railroad Administration

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1.0 INTRODUCTION

1.1 Purpose and need for Action

The purpose of the project is to enhance railroad and traffic safety by replacing the aging and structurally deficient Washington Street Bridge. Significant improvement or replacement of the Washington Street Bridge is necessary to adequately accommodate truck traffic through the City of Vicksburg and assure continued safe operation of passenger cars over the Kansas City Southern Railroad Company (KCSRC) right-of-way. The bridge should be replaced with the most cost-effective structure. In addition, and considering the improvements proposed for the Washington Street Bridge, this project seeks to construct an extension to Lee Street connecting to Washington Street that would allow for the closing of the Lee Street grade crossing.

1.2 Decisions needed

Under the National Environmental Policy Act (NEPA), the Federal Railroad Administration (FRA) is charged with determining if the proposed project might have significant impacts on area resources. This Environmental Assessment (EA) evaluates the potential impacts of this proposed project and alternatives on physical, biological, and human resources in the area. If the FRA decides that impacts would not be significant, it will prepare and sign a Finding of No Significant Impact (FONSI). This finding would allow the City of Vicksburg to proceed with the proposed action. Congress has appropriated funds to the FRA to cover a portion of the cost of the project.

1.3 Permits, Licenses and Related Laws

No environmental permits or further approvals will be needed for this project. In letters dated 3/31/08 and 6/4/08, the Mississippi Department of Archives and History declared the Lee Street Extension and Washington Street Bridge sections of the proposed project to be free of historical resources.

1.4 Organization of the EA

The project objective, purpose and need statement, and permit requirements are described in Section 1.0. The project alternatives are evaluated in Section 2.0 with a brief discussion of alternatives eliminated from the study. Section 3.0 describes existing resources that might be affected by the proposed project. Section 4.0 evaluates the consequences of project activities on any physical, biological and/or human resources located within the project vicinity. References for the report are listed in Section 5.0. Correspondence records are presented in Appendix A.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Alternative 1 (Preferred Alternative)

The Preferred Alternative involves the demolition and replacement of the Washington Street Bridge that crosses over the Kansas City Southern Railway Company (KCSRC) railroad right-of-way. In place of the demolished bridge the City proposes to construct a tunnel over the right-of-way/tracks, with an at-grade road placed on top of the tunnel structure to accommodate Washington Street traffic. The total length of the proposed tunnel is approximately 350 feet. The length of the tunnel will be based on an embankment width of 64 feet, with a fill slope ration of 3:1. Existing bridge approaches will be reconstructed approximately 350 feet from each end of the existing bridge location. North approach reconstruction requires increasing the height of an existing retaining wall, and partial reconstruction of Clark Street, from its intersection with Washington Street back to Hanley Street. The new section of Washington Street profile grade would dip approximately 8 feet below the grade of the existing bridge, to reduce the fill material volume needed to construct an embankment, and to improve the geometry for the new connector that will reach from Lee Street Washington Street. The tunnel would be constructed adjacent to the existing Washington Street Bridge which would remain open during most of the construction period.

The project also encompasses a street extension that would connect two non-contiguous segments of Lee Street west of the KCSRC right-of-way. This proposed extension (Lee Street extension) would allow for the closing of the Lee Street grade crossing that currently is located several blocks north of the Washington Street Bridge, by including a new Lee Street /Washington Street connection.

2.2 Alternative 2

Alternative 2 would replace the existing Washington Street Bridge with a new bridge in the same location. The new bridge would be longer than the currently existing bridge by 60 feet, spanning a total length of 330 feet. The bridge would be lengthened on each end to accommodate placing the end foundations in material located in an area more stable than that of the existing bridge foundation location. The bridge would be constructed of three prestressed concrete bulb tee girder spans cast continuous to support live loads. Interior support bents would be constructed on drilled piers to minimize disturbance of the unstable bluff slopes and adjacent rail right-of-way. In order to reduce approach reconstruction complications, the grade of the replacement bridge would be at the same grade as the existing bridge. Under Alternative 2, Clark Street would necessarily require realignment, from the intersection with Washington Street back to Hanley Street. The existing retaining wall at the corner of Washington Street and Clark Street would be partially relocated.

Alternative 2 would extend Lee Street through a proposed connection very similar to that proposed in Alternative 1. This proposed portion of the project would include a new connector from Lee Street to Washington Street as described in Alternative 1.

2.3 No-action Alternative

Under the no-action alternative, the proposed project would not be implemented. The current Washington Street Bridge would remain operational without repairs, and no

tunnel or replacement bridge would be constructed. No extensions to Lee Street would be constructed, and the current Lee Street grade crossing would remain operational without modification. Although this alternative would not meet the City of Vicksburg's needs, consideration of this alternative is required under NEPA regulations.

2.4 Alternative Eliminated from Detailed Study

An alternative initially studied but dismissed from further consideration is the demolition of the current Washington Street Bridge, with construction of a new bridge in an alternative location east of the existing Washington Street alignment. This eliminated alternative would have also extended Lee Street while closing the Lee Street Grade crossing in a manner very similar to the Preferred Alternative and Alternative 2. The rationale for dismissing this alternative is summarized below:

- Construction of a bridge in an entirely new location would have required significant additional right-of-way acquisition, at great expense to the City. The need to acquire additional right-of-way would have necessitated greater disruption of already established business and residential areas.
- The construction of a new bridge would have the most significant impact on and disruption to rail traffic within Vicksburg, along the KCSRC right-of-way.
- Even in a new location, a bridge over the KCSRC right-of-way would require significant ongoing bridge maintenance and future repair costs due the instability of soil conditions on any bluff where the bridge would be constructed.

3.0 AFFECTED ENVIRONMENT

3.1 Physical Environment

3.1.1 Air Quality

The two components of the proposed project (Washington and Lee Streets) are wholly located in Warren County, MS, an area meeting all applicable Environmental Protection Agency National Ambient Air Quality Standards (NAAQS). Within the State of Mississippi, all locales are meeting all NAAQS for all monitored sites, with the exception of ground level ozone within DeSoto County.

3.1.2 Water Resources

The proposed project site is located entirely within the existing KCSRC right-of-way and/or the Mississippi Department of Transportation right-of-way. There are no surface water resources located within the proposed project limits. The project property limits for the two Build Alternatives are not located within any 100-year floodplain, and no part of the proposed project limits is designated as a floodway by any regulating entity. The Build Alternatives do not involve the use or disruption of any navigable waters of the

U.S. Runoff water resources have caused significant problems for the current Washington Street Bridge. Significant erosion has led to instability of soil on the bluff where the support pillars are located. Continued erosion is projected given the nature of the embankment and bridge characteristics.

3.1.3 Noise and Vibration

Railroad activity and street level traffic account for the majority of the noise and vibration present at the bridge site. Street level traffic typical of a commercial area and railroad operations account for the noise present at the proposed Lee Street extension site.

3.1.4 Geology and Soils

Soil conditions associated with the current Washington Street Bridge base pillars are inadequate to support continued full operation of the bridge. Erosion at the base of the bridge, located on steep banks adjacent to the KCSRC tracks has led to unsafe instability and movement of the bridge. Continued bluff erosion is expected, and is considered a risk characteristic associated with bridges placed on the bluff area within Vicksburg. Because of the unstable bridge conditions, the bridge has been closed to large truck traffic since April, 2006.

3.2 Biological Environment

3.2.1 Ecological Systems

The two components of the proposed project (Washington and Lee Streets) are located within the near immediate vicinity of the downtown Vicksburg area. Adjoining properties are of mixed commercial and residential nature, with the area west of the KCSRC right-of-way being exclusively commercial.

As the project limits are completely within already established railroad or highway right-of-ways, the proposed site does not provide significant habitat for plant, animal or bird species. Both the Washington Street Bridge site and the Lee Street extension site are located in areas that have been heavily developed for many years.

3.2.2 Wetlands

The two components of the proposed project (Washington and Lee Streets) are not located within any wetland region. Coordination with the U.S. Army Corps of Engineers will not be necessary.

3.2.3 Threatened or Endangered Species

In a letter dated March 14, 2008, the Mississippi Department of Wildlife, Fisheries and Parks determined that the proposed project (Washington and Lee Streets) would likely pose little threat to any threatened or endangered species or their habitats.

3.3 Human Environment

3.3.1 Transportation

Washington Street

Within the City of Vicksburg and Warren County, Washington Street historically has operated as a designated truck route, acting as the primary truck connection for U.S. Interstate 20 and U.S. Highway 61. The Washington Street Bridge has been closed to all truck traffic since April, 2006, forcing truck traffic to be re-routed through other arterial roads in order to cross the KCSRC tracks. Significant erosion at steep banks of the bridge caused instability and movement of the bridge structure, mandating the closure to large truck traffic. The Warren County Bridge Inventory Assessment Annotated Report detailed the results of the 2/20/07 Washington Street Bridge inspection. At that time, the deck, superstructure and substructure were individually rated each as being in “Poor Condition.” Shifting on the bridge has resulted in misalignment of guardrails on deck. Erosion on the north end of the structure has exposed approximately 15’ of steel piling, while erosion on the south side has exposed approximately 20’ steel piles at abutment.

Lee Street

Currently there are two non-contiguous sections of Lee Street. The “northern” segment of Lee Street runs generally east/west, with grade crossing over the KCSRC tracks several blocks north of the proposed Washington Street right-of-way crossing. The “southern” segment of Lee Street runs generally north/south along the west boundary of the KCSRC right-of-way and currently provides access to local businesses located west of the KCSRC right-of-way. The Lee Street grade crossing on the “northern” segment of Lee Street provides limited access to the general commercial area west of the KCSRC right-of-way. Approximately 40 trains cross Lee Street each day on the KCSRC tracks. Over 1000 vehicles cross the KCSRC tracks each day via the Lee Street grade crossing.

Rail Right-of-Way

KCSRC trains are operated on the KCSRC right-of-way. The tracks serve the local general commercial area east of the Mississippi River and west of proposed project site.

3.3.2 Land Status, Land Use, and Zoning

Washington Street

The Mississippi Department of Transportation and/or the KCSRC has exclusive control over the rail right-of-way where all proposed construction activities would take place. Bordering neighborhoods have been long established through city zoning and development as general commercial to the west and mixed use residential/commercial to the east of the KCSRC right-of-way.

Lee Street

The proposed Lee Street extension would take place wholly within the Mississippi Department of Transportation and/or the KCSRC right-of-way.

3.3.3 Socioeconomic Conditions

The City of Vicksburg is a community of 26,000 residents. Vicksburg acts as an important transportation hub, with Interstate 20, U.S. highways 80 and 61 and Mississippi highway 20 all converging within city limits. Vicksburg borders the eastern banks of the Mississippi River, and is home to the Vicksburg National Military Park. Services, government and manufacturing are the predominant sectors providing earnings through work.

3.3.4 Environmental Justice

Washington Street

The proposed project is within a Mississippi Department of Transportation and/or KCSRC controlled-right-of-way. There are no residential properties within the project area, and thus no minority or low-income populations within the proposed project limits. Residences in close proximity to the project site would benefit from safety and efficiency improvements that would accrue under the proposed project.

Lee Street

The proposed Lee Street extension would connect the two segments of Lee Street, both of which operate in general commercial-zoned areas. There are no residential properties within the project area, and thus no minority or low-income populations within the proposed Lee Street extension project limits.

3.3.5 Public Health and Safety

The current state of the Washington Street Bridge threatens the safety of users within the City of Vicksburg. As the bridge ages, and water runoff and other environmental factors cause continuous basal erosion, safety concerns increase. The bridge was closed to large truck traffic due to safety and stability concerns in April, 2006. The Lee Street grade crossing also presents a persistent safety concern. The at-grade crossing, which connects business districts east and west of the KCSRC right-of-way, is not equipped with either automated flashing signals or crossing arms. Replacement of the bridge, along with the extension of Lee Street allowing for the closing of the Lee Street crossing, would allow for greater safety and efficiency of traffic operations within Vicksburg.

3.3.6 Contaminated Sites

There are no contaminated sites within the proposed project area.

3.3.7 Recreation and Section 4(f) Properties

Section. 4(f) of the Department of Transportation Act does not apply, as this proposed project will be fully constructed within the existing Mississippi Department of Transportation and/or the KCSRC controlled right-of-ways and no Section 4(f) covered

properties (e.g., parks, wildlife refuges, historic sites) would be used by the Build Alternatives.

Washington Street

The proposed tunnel project would be executed and maintained wholly within Mississippi Department of Transportation and/or the KCSRC controlled railroad right-of-way, and thus does not support recreation activities or other section 4(f) protected properties.

Lee Street

The Lee Street extension, proposed to run west of the right-of-way, would be constructed entirely within the Mississippi Department of Transportation and/or the KCSRC right-of-way, in an area zoned general for general commercial development and designed to provide access to local commercial businesses. West of the commercial zoned area is the Mississippi River, which provides a wide variety of recreational opportunities. Lee Street currently does not and would not under the proposed extension project provide access to the banks of the Mississippi River or any designated recreation areas. No section 4(f) protected properties are present.

3.3.8 Cultural and Historic Resources

The project site is located within the near immediate vicinity of the downtown Vicksburg area. Adjoining properties are of mixed commercial and residential nature. The Mississippi Department of Archives and History has been contacted regarding the possible historic and cultural significance of the Washington Street Bridge and the Lee Street extension proposal. The Department concurred that no historic properties would be affected and expressed no objections regarding the Lee Street extension of the project or the demolition of the Washington Street Bridge.

Archaeology, Inc. completed a Cultural Resources Survey on May 14, 2007 covering the limits of the proposed project. The results of this review determined the areas bordering the existing railroad right-of-way and the proposed project limits were to be considered clear of cultural resources.

3.3.9 Utilities

Construction of the proposed project as planned will require the relocation of utilities located along the KCSRC right-of-way.

4.0 ENVIRONMENTAL CONSEQUENCES

This section discusses the potential environmental impacts, including direct and indirect effects of Alternative 1 (the Preferred Alternative), Alternative 2 and the no-action alternative on the environmental resources presented in Section 3.0 of this EA. The discussion also identifies the mitigation measures that would be implemented to reduce impacts to the environment.

4.1 Physical Resources

4.1.1 Air Quality

The two components of the proposed project (Washington and Lee Streets) are located in Warren County, MS, an area that meets all Environmental Protection Agency's NAAQS. Because the proposed project tunnel is designed only to improve and not expand existing infrastructure systems, significant increases in the amount of emissions-producing traffic are not expected. The proposed project will have no significant impact on current or future air quality standards or lead to the establishment of a non-attainment area.

Alternative 2, like Alternative 1, seeks to improve already-existing infrastructure. Replacing the deficient bridge with a newly constructed bridge would not drastically alter area characteristics, and significant increases in the amount of emissions-producing traffic are not expected.

The no-action alternative would have no impact on air quality within the project region.

4.1.2 Water Resources

The proposed Washington Street tunnel project would be constructed and maintained entirely within the Mississippi Department of Transportation and/or the KCSRC right-of-way, and is not located in an area where surface water resources are present or would be affected. Runoff water management would be greatly improved by execution of the proposed project tunnel, as the Washington Street traffic running atop of the tunnel would be constructed on an at-grade road. Construction of a tunnel in lieu of a bridge would avoid the channeling of runoff water toward the bridge end footings and the unstable bluff soils.

Alternative 2 would not be constructed in an area where surface water resources are present. Under Alternative 2, runoff problems would be addressed adequately in the short-term, but would still pose long term erosion problems and threaten bridge stability. As documented by the study of build alternatives prepared by Neel-Schaffer, the bluff where any KCSRC bridge crossing would be constructed is subject to significant erosion and runoff concerns not specific to the Washington Street crossing. Instability of bluff soils in which the bridge pillars must be placed would lead to future maintenance costs and fill concerns.

There would no impact on water resources with the no-action alternative.

4.1.3 Noise and Vibration

Washington Street

Construction of the proposed Washington Street tunnel project or Alternative 2 would have minimal long term impacts on noise. Anticipated increases in noise can be

accredited predominantly to the re-opening of Washington Street to large truck traffic. Increased noise levels due to large truck use would conform to the expected and historic use of the crossing; significant increases in noise would be present only in comparison to the recent period where trucks were prohibited from using the bridge. Increased noise can also be expected from the increased use of Washington Street once project construction is complete, given that Lee Street will no longer be accessible as a grade crossing. These increased noise and vibration levels are not expected to be substantial when compared with noise and vibration levels of the bridge prior to April, 2006, when the bridge was structurally sufficient to accommodate large truck travel. Because the rail volume is expected to remain unchanged under the Build Alternatives, it is not expected that there will be a significant increase in railroad noise and vibration impacts under either the Preferred Alternative.

Under the no-action alternative, no changes in ambient noise or vibration levels would occur, and there would be no noise impacts.

Lee Street

Both Build Alternatives call for the closing of the Lee Street grade crossing. Removing the crossing would reduce noise impacts in the area adjacent to the crossing through the elimination of horn noise associated with trains pass through the existing grade crossing. Increases in Lee Street traffic once the extension is complete would add minimal noise impacts, but these impacts would not be substantial given the commercial nature of the surrounding properties.

Under the no-action alternative, no changes in ambient noise or vibration levels would occur, and there would be no noise impacts.

4.1.4 Geology and Soils

Washington Street

Under the Preferred Alternative, a tunnel would be constructed to replace a bridge that has experienced significant erosion-related difficulties. The tunnel would be constructed in place of the existing bridge, which would be removed once the tunnel construction was completed. The current bridge is located on a steep bluff, in an area of unstable soil conditions. Base erosion allows the bridge to shift and move. Construction of a tunnel in place of the bridge would alleviate significant soil-related concerns. By adopting a tunnel plan, the use of steep fill slopes can be avoided. The tunnel would be supported on concrete footings on drilled shafts, with retaining walls used to help transition the fill slopes down the existing grade. Based on these mitigation efforts, the Preferred Alternative would significantly improve geology or soil conditions surrounding the project parameters.

Alternative 2 would construct a 60' longer bridge in the same location as the current Washington Street Bridge. Lengthening the bridge allows the end foundations to be placed in material more stable than the location of the existing bridge foundations. The bridge will consist of a single unit in order to minimize the potential for water runoff

from the bridge deck eroding soil surrounding the bridge supports. The interior bents would be constructed on piers drilled to minimize movement or disturbance of the known unstable bluff soil conditions surrounding the rail bed. These mitigation measures would minimize the immediate and short term geologic and soil impacts associated with the project. Based on the soil conditions surrounding the bridge in which the footings must be placed, in the long term, construction of the bridge and associated runoff would contribute to continued soil degradation.

Significant erosion of the Washington Street Bridge infrastructure bases will continue to occur under the no-action alternative, requiring significant maintenance and threatening bridge stability and safety.

Lee Street

Under the proposed Lee Street extension, there would be no impact to geology or soils. The proposed extensions would be constructed in a heavily developed commercial area within Mississippi Department of Transportation and/or the KCSRC right-of-way.

Under the Alternative 2 proposed Lee Street extension, given the commercial and developed nature of the site, there would also be no impact to geology or soils.

The no-action alternative would not produce geologic or soil impacts.

4.2 Biological Resources

4.2.1 Ecological Systems

Development of the two components of the Preferred Alternative (Washington and Lee Streets) would have no impact on ecological systems. Both areas of the proposed project are located in a commercially zoned area and have been generally cleared of vegetation.

Neither components of Alternative 2 (Washington and Lee Streets) would have any impact on existing ecological systems. Construction of a replacement bridge would occur at the same site of the current Washington Street Bridge, an area that for many years has been commercially zones and cleared of vegetation.

The no-action alternative would have no impact on ecological systems.

4.2.2 Wetlands

No wetlands are present either within the proposed project limits (Washington and Lee Streets). Therefore, neither the Preferred Alternative nor Alternative 2 would have any potential effect on any wetlands. The proposed action is in compliance with Executive Order 11990, Protection of Wetlands. Coordination with the U.S. Army Corps of Engineers is not required.

The no-action alternative would also have no impact on wetlands.

4.2.3 Threatened or Endangered Species

The U.S. Department of Fish and Wildlife Service indicated in a letter dated March 14, 2008 that there are no federally listed threatened or endangered species in the proposed project area (Washington and Lee Streets). Therefore, neither the Preferred Alternative nor Alternative 2 would have any effect on populations or habitat of species listed as threatened or endangered under the Endangered Species Act.

The no-action alternative would have no impact on threatened or endangered species.

4.3 Human Resources

4.3.1 Transportation

Washington Street

The Preferred Alternative would have substantial beneficial impacts on transportation within Vicksburg. The proposed tunnel construction project would provide safer, more reliable street traffic access over the KCSRC tracks, allowing road users better access to the business areas west of KCSRC right-of-way. Upon completion of the proposed tunnel project, Washington Street could once again accommodate large truck traffic, which has not been permitted since April, 2006. Transportation patterns would become streamlined and more efficient, as large truck traffic between Interstate 20 and U.S. Highway 61 could cease diversion to other KCSRC crossing sites. This will in turn reduce large truck traffic in other areas of the City, helping to relieve congestion associated with diverted large truck traffic. The Washington Street Bridge would generally remain open during the construction of the new tunnel which would minimize transportation impacts during the construction phase. Under the Preferred Alternative railroad operations would remain unchanged, with approximately 40 trains passing under Washington Street per day.

Alternative 2 would also have substantial beneficial impacts on transportation within Vicksburg. Once completed, vehicular transportation under this Alternative would improve substantially, but given the unstable soil conditions along the KCSRC right-of-way and adjacent bluff, would not be sustained in the long term as successfully as the improvements proposed in the preferred alternative. Alternative 2 would require additional long term maintenance, during which traffic patterns could be disrupted. Construction of a new bridge is unlikely to accommodate long term transportation growth demands, given the history of unstable soil conditions and documented bridge difficulties. Washington Street would have to be closed in order to accommodate the construction of a new bridge under Alternative 2, with traffic detoured to alternative routes. Under Alternative 2, rail traffic would also be disrupted during the construction period, with normal operations to resume for both rail and vehicular traffic upon construction completion.

Under the no-action alternative, transportation safety and efficiency will be threatened. The current Washington Street Bridge is aging, and shows sign of significant damage and

structural deficiency. The compromised Washington Street Bridge cannot accommodate any large truck traffic. The Washington Street Bridge is designated as requiring critical maintenance, and continued use of the Washington Street Bridge will further strain the bridge structure, threatening safety and transportation efficiency.

Lee Street

The Lee Street extension should benefit transportation through improved business access to locations west of the KCSRC right-of-way under the Preferred Alternative. Currently transportation west of the KCSRC is fragmented. There is no through street running the length of the KCSRC right-of-way boundary west of the right-of-way. The Lee Street extension would interconnect two already existing segments of road, creating through access along the length of the Washington Street/Lee Street area west KCSRC boundary. It would eliminate the need for backtracking and additional right-of-way crossings for those wishing to travel in a north/south direction entirely west of the right-of-way.

Execution of the Lee Street extension under Alternative 2 would produce transportation impacts, including improved accessibility to commercial districts, very similar to what would occur under the Preferred Alternative.

There would be no transportation improvement under the no-action alternative and transportation west of the KCSRC would remain fragmented and the at grade rail crossing at Lee Street would remain.

4.3.2 Land Status, Land Use and Zoning

Washington Street

The current Washington Street Bridge, site of the proposed tunnel construction project, is located entirely in a general commercial zoned area. Adjacent to the southeast lays an area of residential zoning. The Preferred Alternative, Alternative 2 and the no-action alternative would each comply with the current zoning and be compatible with surrounding land uses. Under no alternative would any zoning designations change. No alternative would have impact on land status, land use or zoning.

Lee Street

The proposed Lee Street Extension is located entirely in an area zoned for general commercial development. The Preferred Alternative and Alternative 2 would both extend and connect the non-contiguous sections of Lee Street and would be compatible with existing general commercial land uses. The Lee Street Extension would provide access to established businesses located west of the KCSRC right-of-way.

The no-action alternative for the Lee Street extension would have no impact on land status, land use or zoning.

4.3.3 Socioeconomic Conditions

Washington Street

The Preferred Alternative would not displace any local businesses or residences. The Preferred Alternative also would not affect the population or housing supply of the area. Since the proposed tunnel will replace already existing infrastructure, there will be no disruption or sectioning within established communities. The community residents will likely benefit from increased safety and utility of the Washington Street corridor. Construction of the proposed project would provide temporary work in the area, and require local expenditures on services, wages and materials. Such expenditures would be minor and short-term, and are not expected to have any significant effects on the local economy. Upon project completion, impacts experienced by local business economies will likely be beneficial, linked to the better business access permitted under the Preferred Alternative.

Alternative 2 would not displace any local businesses or residences. The lengthening of the new bridge, while requiring realignment of the Hanley/Washington Street intersection, would not require the relocation of any parcel property. Similar to the Preferred Alternative, residents would likely benefit from increased safety and utility of the Washington Street corridor associated with the new bridge. Construction of the proposed project would provide temporary work in the area, and require local expenditures on services, wages and materials. Such expenditures would be minor and short-term.

The no-action alternative would have no impact on socioeconomic conditions within the immediate vicinity of the proposed project. Long term the availability of a safe and secure crossing of the KCSRC rail line at Washington Street is important to the economic vitality of Vicksburg.

Lee Street

The proposed Lee Street extension project would not displace any local homes or residences. The Preferred Alternative also would not affect the population or housing supply of the area. Local businesses will likely experience beneficial impacts, as the proposed Lee Street extension will provide better access through the commercial district located west of the KCSRC right-of-way. All entrances to business will remain accessible throughout the construction phase. Construction of the proposed project would provide temporary work in the area, and require local expenditures on services, wages and materials. Such expenditures would be minor and short-term, and are not expected to have any significant effects on the local economy.

Alternative 2 proposes construction parameters for the Lee Street extension very similar to the Preferred Alternative. As such, there are no anticipated adverse socioeconomic impacts expected with Alternative 2.

The no-action alternative would maintain the disjointed, limited access present in the commercial district west of the KCSRC right-of-way.

4.3.4 Environmental Justice

Washington Street

Because the Preferred Alternative's project area is located entirely within the Mississippi Department of Transportation and/or KCSRC right-of-way and located in an area zoned for general commercial development, there are no residential properties located within the project development limits. Residents of the residential developments located to the southeast of the Washington Street site should benefit from improved access, safety and efficiency in crossing over the KCSRC tracks that will accrue from tunnel construction. Therefore, no adverse impacts on minority or low-income populations would occur as a result of the proposed Washington Street tunnel project. The project complies with Executive Order 12898 (Environmental Justice) and the Department of Transportation Order on Environmental Justice.

Based on location of the bridge construction under Alternative 2, there will no impacts environmental justice considerations. The construction would occur entirely within the Mississippi Department of Transportation and/or KCSRC right-of-way, located in an area zoned for general commercial development. This alternative would have similar benefits for areas residents and comply with the Executive and FRA Orders on Environmental Justice.

The no-action alternative would have no impact on environmental justice considerations.

Lee Street

The Preferred Alternative's proposed Lee Street extension is located entirely within a commercially zoned area. Residents should benefit from the improved connection and route that allows better access to local businesses. No adverse impacts on minority or low-income populations would occur as a result of the proposed Lee Street extension.

Because Lee Street is commercially zoned, Alternative 2 would likewise have no adverse impacts on environmental justice considerations.

The no-action alternative would have no impact on environmental justice considerations.

4.3.5 Public Health and Safety

Washington Street

The existing Washington Street Bridge is inadequate to meet current transportation safety needs. Major structural components of the bridge, including the deck, superstructure and substructure, were rated as in poor condition on the date most recent inspection. Critical maintenance is required to maintain limited use of the bridge, which has been closed to large truck traffic since April, 2006. The proposed tunnel project would allow for significantly safer travel by fully demolishing the current bridge and replacing it with a tunnel, on top of which runs an at-grade road to accommodate Washington Street traffic. The proposed tunnel project would eliminate the potential for erosion at the base of the bridge pillars, a documented problem associated with the current bridge structure. The Preferred Alternative would provide significant advantages in the long term, offering

more stability and less maintenance than a bridge alternative. The Preferred Alternative would also not establish any barriers to the elderly or disabled.

Alternative 2 would provide immediate and short term public health and safety benefits upon project completion. The immediate structural problems associated with the current Washington Street Bridge that forced limited operation would be eliminated, and full traffic could resume. In the long-term, the replacement bridge would fail to offer reliable safety and stability benefits. As documented, the soil conditions surrounding the KCSRC right of way where the bridge would be constructed have difficulty sustaining secure bridge footings. Runoff leads to significant erosion on the bluff where bases are placed, causing instability and bridge shifting/movement. A replacement bridge would necessarily be subject to these hazards. The north end of the current Washington Street Bridge failed approximately 20 years ago, was replaced, and again is structurally deficient. Alternative 2 would similarly not establish any barriers to the elderly or disabled.

The no-action alternative would fail to address the need for critical maintenance identified as required for continued safe bridge operation.

Lee Street

The Lee Street extension would benefit public safety by closing the Lee Street grade crossing, thus ensuring that all traffic traversing the KCSRC right-of-way be diverted to the proposed Washington Street tunnel. This will eliminate potential for vehicle/train collisions encountered at the grade crossing, which does not have automated flashing signals or crossing arms.

Alternative 2, in extending Lee Street, would also force the closing of the Lee Street grade crossing. Benefits would be similar to those advanced with the Preferred Alternative.

The no-action alternative would have no direct impact on public safety but the existing crossing would remain with the potential for accidents.

4.3.6 Contaminated Sites

There are no contaminated sites within the proposed project area. Neither Build Alternative would introduce contaminants into the project area. There will be no contamination impact under either of the Build Alternative.

The no-action alternative would have no contamination impact.

4.3.7 Recreation and Section 4(f)

There are no recreation areas or parks located within or adjacent to the proposed project areas (Washington and Lee Streets). Therefore, there would be no impact to recreation.

No Section 4(f) properties (publicly owned parks or historic properties) would be affected by either the Preferred Alternative or Alternative 2.

The no-action alternative also would have no impact on recreation or Section 4(f) properties.

4.3.8 Cultural and Historic Resources

Washington Street

The Mississippi Department of Archives and History was contacted about the possible historic significance of the Washington Street Bridge and the immediately surrounding areas. The results of the investigation reveal that neither the bridge nor any structures within the project area are considered historic places (i.e., on or eligible for the National Register of Historic Places), so the Preferred Alternative will not have impact on any existing historic resources. Archaeology, Inc. completed a Cultural Resources Survey on May 14, 2007 covering the limits of the proposed project. The results of this review determined that the areas bordering the existing railroad right-of-way were clear of cultural resources. The Washington Street bridge area has been subject to significant excavation and fill, and it is very unlikely that the tunnel construction project will yield findings of cultural significance.

Because the Washington Street Bridge is not considered a historic resource, construction of a replacement bridge under Alternative 2 would have no impact on historical resources.

The no-action alternative will not have any impact on cultural or historic resources.

Lee Street

The Mississippi Department of Archives and History expressed no historic or cultural objections regarding the Lee Street extension of the project. There would be no historic or cultural impacts resulting from the proposed Lee Street extension with either the Preferred Alternative or Alternative 2.

The no-action alternative will also have no impact on cultural or historic resources.

4.3.9 Utilities

Washington Street

Electrical infrastructure and services are present within the proposed Washington Street project limits. The area is already developed to accommodate heavy traffic flow through the use of electric lights and signals. Relocation of above ground utilities located along the KCSRC right-of-way will be required, particularly at the north end of the current bridge. No other impacts are anticipated.

Alternative 2 would also require the relocation of some utilities, but not to the extent of the Preferred Alternative. No other impacts are anticipated.

Under the no-action alternative all utility services and locations would remain unchanged and there would be no utility impact.

Lee Street.

Electrical infrastructure and services are present at the proposed project site, which is located in a developed, commercially zoned area. Construction of the Lee Street extension under either the Preferred Alternative or Alternative 2 will have minimal impact on utilities.

Under the no-action alternative all utility services and locations would remain unchanged and there would be no utility impact.

4.3.10 Construction Impacts

The two components of the Preferred Alternative (Washington and Lee Streets) would take approximately nine months to complete. During this time Washington Street would remain open to traffic, with planned construction causing only minor traffic impacts commonly associated with transportation improvement projects. Bridge traffic may be halted temporarily during a 30-45 day period. Currently through traffic is not possible given the non-contiguous nature of the Lee Street segments, so any traffic impacts associated with the construction of the Lee Street extension should be minimal. The entrance to the Diamond Jack Casino, directly west of the area where the Washington/Lee Street connector is to be constructed, needs to remain open throughout construction. In order to permit business traffic, sheet piling would be required to accommodate traffic flow during the construction period.

Construction of Alternative 2 would require the closure of Washington Street to traffic throughout the entire construction process. Traffic would necessarily be detoured to alternative routes. This would be disruptive to traffic conditions in the area. Construction would also require the realignment of Clark Street, from the Washington Street Intersection to the Hanley Street intersection. Partial relocation of the retaining wall located at the corner of Washington Street and Clark Street would also be necessary. Construction of the Lee Street extension portion of the project would be very similar as the preferred alternative.

Under the no-action alternative there would be no construction impacts.

4.3.11 Cumulative Impacts

No other significant projects are underway within the City of Vicksburg in the area surrounding the project construction site. The Preferred Alternative and Alternative 2 would contribute to the safety and efficiency of traffic and rail operations. Because no other projects are underway within Vicksburg, neither the Preferred Alternative nor Alternative 2 would add to cumulative impacts associated with multiple projects.

There would be no cumulative impacts under the no-action alternative.

5.0 REFERENCES

Archaeology Resources, Inc. 2007. Cultural Resource Survey of Washington Street Bridge over Kansas City Southern Railroad Vicksburg, Warren County, Mississippi.

Neel-Schaffer. Study of Alternatives for Washington Street Improvements.

Office of State Aid Road Construction. Warren County Bridge Inventory Annotated Report. 2007. Available online at:

<http://www.osarc.state.ms.us/DATA/75/SA75058s.HTM>.

Vicksburg-Warren County Chamber of Commerce. Available online at:

http://www.vicksburgchamber.org/vicksburg_demographics.htm

Tom Hartwell. The Vicksburg Post. 12/05/07.

APPENDIX A

Correspondences

March 12, 2008

Wildlife Technical Services, Inc.
P.O. Box 820188
Vicksburg, Mississippi 39182-0188



Re: Washington St. Bridge & Lee Rd. Project
Warren County

R# 6512

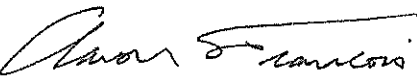
To Lisa Tillotson:

In response to your request for information dated February 29, 2008, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within two miles of the site of the proposed project. Please see the table below for a list of these species.

Based on the information provided, it appears that the proposed projects will occur in the already developed, urban setting of Vicksburg. Therefore, if best management practices are implemented, particularly measures to prevent or, at least, minimize negative impacts to water quality, the proposed project likely poses little threat to listed species or their habitats.

Please feel free to contact us if we can provide any additional information, resources, or assistance that will help minimize negative impacts to the species and/or ecological communities identified in this review. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Sincerely,


Aaron M. Francois, Associate Biologist
Mississippi Natural Heritage Program
(601) 354-6367, ext. 120

The Mississippi Natural Heritage Program (MNIHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, and endangered plants, animals, and ecological communities. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.

Preserving Natural Mississippi

W

2148 RIVERSIDE DRIVE * JACKSON, MS 39202-1353 * PHONE 601 354-7303 FAX 601 354-7227 * www.mdwfp.state.ms.us/museum

DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

United States Department of Agriculture



Natural Resources Conservation Service
2660 Sherman Ave.
Vicksburg, MS 39183

March 28, 2008

Lisa Tillotson, Project Manager
Wildlife Technical Services, Inc.
P.O. Box 820188
Vicksburg, MS 39182

Re: Kansas City Southern Railway Co.
Washington Street Bridge and Lee St. Project
Vicksburg, Warren County, MS
Environmental Assessment

Dear Mrs. Tillotson,

At your request, I have evaluated the above referenced property located in Vicksburg, MS. The evaluation revealed the following:

1. There are no prime farmland designations
2. There are no USDA program contracts

Please call, if our agency can be of additional assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ray Joyner", is written over the typed name.

Raymond Joyner, District Conservationist
USDA, Natural Resources Conservation Service
Warren County



PO Box 571, Jackson, MS 39205-0571
601-576-6850 • Fax 601-576-6975
mdah.state.ms.us
H. T. Holmes, Director

March 31, 2008

Lisa Tillotson
Wildlife Technical Services, Inc.
P.O. Box 820188
Vicksburg, Mississippi 39182-0188

RE: Proposed Washington Street Bridge and Lee Road Project in Vicksburg (Kansas City Southern Railway Company), MDAH Project Log #03-003-08, Warren County

Dear Lisa:

We received your request for a cultural resources assessment on March 3, 2008, for the above referenced project. Before our staff will be able to make a determination, we need photographs and a construction date for the Washington Street bridge. In addition, we need to know what activity is planned for the bridge. Upon receipt of this information, we will comment accordingly. (We have no objection with the Lee Road extension portion of the project.)

In providing the additional information, please make reference to the MDAH Project Log Number above. If you have any questions, please do not hesitate to call.

Sincerely,


Jim Woodrick
Review and Compliance Officer

June 4, 2008

Clay Cromwell
Wildlife Technical Services, Inc.
P.O. Box 820188
Vicksburg, Mississippi 39182-0188

RE: Proposed Washington Street Bridge and Lee Road Project in Vicksburg (Kansas City Southern Railway Company), MDAH Project Log #03-003-08, Warren County

Dear Clay:

We received your original request for a cultural resources assessment on March 3, 2008, and the additional information requested on May 16, 2008, for the above referenced project. After reviewing the information provided, it is our determination that no properties within the area of potential effect are listed in or eligible for listing in the National Register of Historic Places. Therefore, we have no objections with the proposed undertaking.

Should there be additional work in connection with the project, or any changes in the scope of work, please let us know in order that we may provide you with appropriate comments in compliance with the above referenced regulations.

If we can be of further assistance, please do not hesitate to contact us at (601) 576-6940.

Sincerely,


Jim Woodrick
Review and Compliance Officer

FOR: H.T. Holmes
State Historic Preservation Officer

c: Clearinghouse for Federal Programs

APPENDIX B

Warren County Bridge Inventory

This page created: 05/07/2007

[Click here for Comprehensive Report](#)

COUNTY: WARREN

DATE OF LAST INSPECTION.: 02/20/2007

STRUCTURE NUMBER...: SA7500000000058
LOCATION.....: SEC 29 T16N R 3E
FACILITY CARRIED...: WASHINGTON ST
FEATURE INTERSECTED: MIDSOUTH RAILROAD
BRIDGE OWNER.....: 04 - CITY OR MUNICIPAL HIGHWAY AGENCY
MAIN STRUCTURE TYPE: 502

PRESTRESSED CONCRETE STRINGER/MULTI-BEAM OR GIRDER

YEAR BUILT.....: 1984
YEAR OF REHABILITATION OR REPAIR:
PROJECT NUMBER.....: UNKNOWN
AVERAGE DAILY TRAFFIC: 7,200
BYPASS/DETOUR LENGTH.: 1 MI.

DECK RATING.....: 4 - POOR CONDITION
SUPERSTRUCTURE RATING: 4 - POOR CONDITION
SUBSTRUCTURE RATING...: 4 - POOR CONDITION
CULVERT RATING.....: N - NOT APPLICABLE
CHANNEL RATING.....: N - NOT APPLICABLE

SUFFICIENCY RATING.....: 48.1
REPLACEMENT PRIORITY.....: THIS IS NOT YET AVAILABLE
ELIGIBLE FOR LSBP FUNDING?: NO

COUNTY ENGINEER'S RECOMMENDED POSTING: R12-5 - 12T 28T 24T
POSTING SIGNS IN PLACE, SOUTH / WEST.: R12-4 - 12T 28T 24T
NORTH / EAST.: R12-4 - 12T 28T 24T

MAINTENANCE REQUIREMENTS: C - CRITICAL

----- COMMENTS, MAINTENANCE and CRITICAL FEATURES -----

[-- COMMENTS --]

EROSION ON NORTH END HAS EXPOSED APPROXIMATELY 15' OF STEEL PILING.

EROSION ON SOUTH END HAS EXPOSED STEEL PILES @ ABUTMENT

THIS INSPECTON ON 02/20/2007 REVEALED DRAMATIC INCREASE IN EROSION AT SOUTH ABUTMENT, EXPOSING 20 FT. OF STEEL PILINGS.

[-- MAINTENANCE --]

[-- CRITICAL MAINTENANCE REQUIRED --]

INSPECTION HAS REVEALED THAT THE CENTER SPAN HAS SHIFTED APPROXIMATELY 1" TO 1 1/2" TO THE EAST.

UNCLEAR AT THIS TIME WHAT HAS CAUSED THIS SHIFT IN THE SPAN.

SHIFT HAS RESULTED IN MISALIGNMENT OF GUARDRAIL. RECOMMEND CLOSE MONITORING OF THIS STRUCTURE TO DETERMINE IF THIS SHIFT HAS STABILIZED OR IS CONTINUING.

IF CONTINUING, CLOSURE OF STRUCTURE AND FURTHER INVESTIGATION WILL BE NECESSARY...LAST INSPECTION HAS REVEALED FURTHER SHIFTING ...2 3/8" TO 2 9/16"

INSPECTION ON 02/24/2005 REVEALED NO ADDITIONAL SHIFTING.
INSPECTION ON 02/20/2007 REVEALED INCREASE TO 2 3/4"
IN SHIFTING. ALSO SEVERE EROSION AT SOUTH ABUTMENT, EXPOSING APPROX. 20' OF
STEEL PILINGS.

[-- OTHER CRITICAL FEATURES OR DEFICIENT STRUCTURAL COMPONENTS --]
CENTER SPAN IS SHIFTING. MEASUREMENTS TAKEN SHOW FURTHER MOVEMENT OF 1/4 INCH
SINCE LAST INSPECTION ON 02/24/2005

□