# FEDERAL HIGHWAY ADMINISTRATION FINDING OF NO SIGNIFICANT IMPACT (FONSI) AND SECTION 4(F) *DE MINIMIS* IMPACT FINDING

**FOR** 

US14/US83/SD34 Bridge over the Missouri River and its approaches NH 0014(194)227, PCN 03WN

Hughes and Stanley Counties
Pierre and Fort Pierre
South Dakota

November 2016

Submitted Pursuant to 42 USC 4332(2)(c) and 49 USC 303 By

The U.S. Department of Transportation, Federal Highway Administration,
And South Dakota Department of Transportation

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# I. Introduction

The Federal Highway Administration (FHWA) has determined that in accordance with 23 CFR § 771.119 and § 771.121, the US14/US83/SD34 Bridge over the Missouri River and its approaches (the Project) will not have a significant impact on the human or natural environment. This Finding of No Significant Impact (FONSI) for Alternative N1.1, the preferred alternative, is based on the Final Environmental Assessment (EA) and Section 4(f) *De Minimis* Analysis, signed by FHWA on May 20, 2016, and made available to stakeholders, agencies, and the public for a 30-day comment period. A Public Meeting was held on June 16, 2016 to discuss the EA and provide the public an opportunity to comment on the Project.

A summary of agency and public comments received during the comment period is included in this FONSI. No agency or public comments were received that necessitated revisions to the document, therefore, the document will not be republished. This EA has been independently evaluated by the FHWA, who has determined that it accurately discusses the need, purpose, alternatives, environmental resources, and impacts of the Project and appropriate mitigation measures. The EA and referenced reports have provided sufficient evidence for determining that an Environmental Impact Statement (EIS) is not required. The EA and supporting documents are incorporated by reference into this document.

The Project was developed in accordance with the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality's (CEQ's) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] §1500-1508) and the corresponding regulations and guidelines of the U.S. Department of Transportation (USDOT) and (FHWA).

# II. Description of the Proposed Project

The South Dakota Department of Transportation (SDDOT) is proposing to replace the US14/US83/SD34 Bridge (Bridge No. 33-100-118), also known as the Lt. Commander John C. Waldron Bridge, connecting Fort Pierre and Pierre, SD over the Missouri River (Figure 1) as it is reaching the end of its useful life. Several alternatives for the location and bridge type of the proposed bridge have been considered within the project study area, including those to the north of the existing bridge, south of the existing bridge, in the same location as the existing bridge, and the no build alternative. The alternatives included options for the approaches in the cities of Fort Pierre and Pierre, and the removal of a slip ramp to Dakota Avenue in the city of Pierre. This proposed bridge will accommodate a 100-year design life that will serve the communities of Pierre and Fort Pierre, and will continue to link the region, state and nation via US14, US 83, and SD34.

# a. Project Purpose and Need

# 1. Purpose of the Project

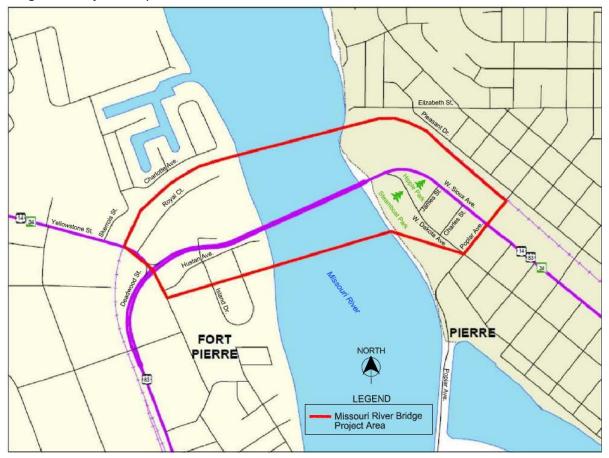
The purpose of this project is to maintain the intercity, intrastate, and interstate highway bridge crossing between Pierre and Fort Pierre, consistent with local, state, and regional transportation and development plans, while improving public safety and mobility.

# 2. Project Need

The need for this bridge study is demonstrated through a combination of factors, including the following:

- Structural Deficiencies
- Geometric Deficiencies
- System Linkage and Route Importance

Figure 1. Project Study Area



#### b. Alternatives Considered

The alternatives considered for the bridge are all located either north or south, within the vicinity of existing bridge, in Pierre and Fort Pierre, and to "...maintain the intercity, intrastate, and interstate highway bridge crossing between Pierre and Fort Pierre" as stated in the project's purpose. These Alternatives include N1, N2, N3, N4, N5, N6, N7, E2, M1, M2, and S1 – S7.

After evaluation early in the study, alternatives N5, N6, N7, E2, M1, M2, and S1 – S7 were eliminated from evaluation due to construction impacts, including visual and utility impacts, and/or a required 17-mile detour during construction (see Appendix A for detailed information regarding these alternatives). A detour for any of the alternatives considered would involve impacts to both the public and local businesses, and would affect access to the hospital and other community services. The No-Build Alternative (E1) and Build Alternatives N1, N2, N4, N7, E2, were evaluated in further detail in the EA.

#### Alternative N4: Overlapping, Non-parallel to Existing Bridge, Matching on Pierre Side

N4 was eliminated from consideration due to the community disruption of a 17-mile detour and ROW impacts, which include parkland impacts.

#### Alternative N7: Parallel to Existing Bridge with some Overlap

Alternative N7 was evaluated as an alternative that would not require a detour during construction, but after further evaluation, it was confirmed that a detour would be required in order to construct the bridge. N7 was eliminated from further consideration due to the detour during construction. In addition, this alternative would incur ROW impacts, which include parkland impacts.

#### Alternative E2: On Existing Alignment, Accommodates Future Widening

Alternative E2 was developed as an alternative that had the potential to avoid any impacts to the 4(f)/6(f) resource Steamboat Park and the 4(f) resource disc golf course, known as Outlot "F". However, after further investigation, it was determined that the expanded cross section and resulting wider bridge would impact Steamboat Park and parkland. E2 was eliminated from consideration due to the detour during construction and parkland impacts.

Alternatives N1 and N2 were retained for further analysis and refinement, and were consequently renamed to N1.1, and N2.1.

#### N1/N1.1 Alternative: 50' to the North of the Existing Bridge

The N1 build alternative is located 50 feet to the north of the existing bridge, with a 10 foot gap between the edges of the structures allowing the existing bridge to remain in operation, without requiring a detour, during construction. This alternative also would have minimal impact to the existing gas line. N1.1 has ROW impacts on the east side to the Ramkota Hotel Parking area and to parkland, including the 4(f) resource disc golf course, Outlot "F".

Refinements were made to Alternative N1, resulting in the N1.1 Alternative. These refinements included utilizing retaining walls on the east side rather than slopes, reducing the footprint of the ROW for the approach in Pierre. This minimizes the use of parkland in Outlot "F", and allows for excess highway ROW on the south side of the roadway to be added to Steamboat Park. On the west side, private property ROW would be required in Fort Pierre. In addition, a portion of the existing ROW FONSI

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on the south side of US14/US83/SD34 in Fort Pierre would no longer be needed, resulting in excess ROW that would be transferred from SDDOT to the City of Fort Pierre.

#### N2/N2.1 Alternative: 120' to the North of the Existing Bridge

The N2 Alternative is located 120 feet to the north of the existing bridge, with an 80 foot gap between the proposed and existing structures. This alternative has ROW impacts in Fort Pierre and Pierre. The approach on the west side would shift north of the current alignment, providing an improvement to the S-curve. The approach on the east side would include a flattened curve that would join the existing alignment of Sioux Avenue near the Ramkota driveway entrance.

Refinements, such as retaining walls, were made to N2, resulting in Alternative N2.1 that reduced ROW impacts on the east side to the Ramkota Hotel Parking and to parkland, the 4(f) resource disc golf park, Outlot "F". The west side in Fort Pierre would have ROW impacts north of US14/US83/SD34, but would result in excess ROW on the south side of US14/US83/SD34 in Fort Pierre. This alternative can be constructed while the existing bridge is in operation, without requiring a detour and allowing for minimal traffic impacts during construction.

#### c. Preferred Alternative

With consideration of the Purpose and Need factors, reduced impacts and public support, N1.1 was identified as the preferred alternative. Refinements included the use of retaining walls on the east side that reduced the footprint of the ROW for the approach in Pierre. This also reduced the use of parkland in Outlot "F" to 0.892 acres, and includes 1.056 acres of excess highway ROW on the south to be added to Steamboat Park. These changes resulted in a net gain to parkland in Pierre city parks.

On the west side, .377 acres of private property ROW would be required for a 4:1 slope on the north side of US14/US83/SD34 in Fort Pierre. Retaining walls were considered on the west side, but were eliminated from consideration due to the increased cost compared to purchasing 0.377 acres of adjacent property north of the existing US14/US83/SD34. In addition, previously reserved ROW for the bridge replacement on the south side of US14/US83/SD34 in Fort Pierre would no longer need to be reserved, resulting in a total of 5.242 acres of excess ROW that would be transferred from SDDOT to the City of Fort Pierre.

Other features and reduced impacts of N1.1 also include:

- 1) Location N.1.1 least amount of ROW and utility impacts, lowest construction cost, improved geometry and safety, no detour required
- 2) Steel or Concrete Girder-Type Bridge long parabolic haunches for aesthetics, low maintenance, greater redundancy, greater live load carrying capacity, increased durability of beams, allows widening in the future, low visual impacts, low cost, context sensitive
- 3) Bridge/Roadway Cross-Section four lanes to accommodate future traffic growth for the design year 2045 and beyond, larger shoulders for increased space for incidents to improve safety, raised, curbed median for safety and flexibility, widened path/trail on south to accommodate bi-directional bicycle and pedestrian traffic and SDDOT bridge inspection equipment, lighting position along outside of bridge at piers for easier maintenance, aesthetic metal railing along the path

4) Other – less river piers for improved river navigation and lower construction cost, abutment walls to be incorporated to provide more useable space under the bridges, classical twocolumn piers designed for aesthetics, stair and ADA ramps at both ends of the bridge for improved bicycle and pedestrian access

The social, economic, and environmental impacts associated with Alternative N1.1 were evaluated in the EA.

The preferred alternative will have no effect on the following resources:

 Energy and Green House Gases, Climate Change, Vibration, Wild and Scenic Rivers, Coastal Barriers and Zones, Wetlands, Air Quality, Railroads, Environmental Justice, Visual Aesthetics, and Agriculture.

Table 1 summarizes the impacts and cost associated with the preferred alternative.

**Table 1.** Impacts Associated with the Preferred Alternative

Impacts	Alternative N1.1
COST	
Roadway and Utility Cost	\$3,700,000
Structure Cost	32,200,000
Structure Removal Cost	\$2,500,000
Subtotal Construction Cost	\$38,400,000
Permanent ROW Costs	\$80,000
Temporary ROW Costs	\$50,000
Total Roadway, Structure, Utility and ROW Costs	\$38,530,000
ACREAGE	
ROW Impacts	1.7 acres*
Parkland/4(f) Use: DeMinimis Use and added parkland and greenspace at Steamboat Park	1.1 acres*
Wetland Impacts	0.0 acres

<sup>\*</sup>Impacts calculated with use of retaining walls on east side, no retaining walls on west side

# III. Coordination and Public Involvement

As indicated in the EA and supporting documentation, SDDOT coordinated with Federal, State, local agencies, and tribes during the development of the EA.

# a. Agency and Tribal Coordination

Federal and State agencies that were consulted regarding the build alternatives include:

- US Fish & Wildlife Service (USFWS)
- US Army Corps of Engineers (Corps)
- US Coast Guard (USCG)
- SD Deptartment of Environment & Natural Resources (SDDENR)

- SD Department of Game, Fish & Parks (SDGFP)
- SD Division of Parks & Recreation
- State Historic Preservation Office
- Pierre Historic Preservation Commission
- City of Pierre, Department of Parks and Recreation
- · City of Pierre Eng./Planning Services
- · City of Fort Pierre
- Fort Pierre Parks and Recreation
- Hughes County Planning & Zoning
- Stanley County Planning & Zoning

In addition, the National Park Service provided comments on the project regarding the Lewis and Clark National Historic Trail.

Table 5-1 Communication and Coordination, in the EA, summarizes the agency and local government coordination regarding the US14/US83/SD34 Bridge over the Missouri River and its approaches.

The following Tribes were invited to scoping meeting and were requested to provide information regarding the project study area sent on 10/18/2013. No Tribes responded.

- Cheyenne River Sioux Tribe
- Crow Creek Sioux Tribe
- Lower Brule Sioux Tribe
- Oglala Sioux Tribe
- Sisseton-Wahpeton Oyate
- Standing Rock Sioux Tribe
- Yankton Sioux Tribe
- Three Affiliated Tribes

Section 106 Consultation letters were sent to the following Tribes on 11/1/2013 regarding archaeological and cultural resources that were inventoried in the project study area. No Tribes responded.

- Cheyenne River Sioux Tribe
- Crow Creek Sioux Tribe
- Lower Brule Sioux Tribe
- Oglala Sioux Tribe
- Sisseton-Wahpeton Oyate
- Standing Rock Sioux Tribe
- Yankton Sioux Tribe
- Three Affiliated Tribes

# b. Public Participation

A Public Information Meeting was held on June 16, 2016 following the release of the EA and Section 4(f) De Minimis Analysis for public comment.

The public was able to comment through four different methods:

- Informal discussion with the project team during the open house portion of the public information meeting/open house.
- Verbal questions and comments received following the presentation during the public information meeting/open house.
- Comment forms received during and after the public information meeting/open house.
- Contacting the Consultant's Project Manager, Jon Schelkoph, at (612) 376-2000 or Jon.Schelkoph@aecom.com.

Public comments received during the public comment period are summarized in Appendix A.

# IV. Section 4(f) and Section 6(f) Properties

The following describes the preferred alternative's impacts to Section 4(f) properties:

During the development of alternatives for the US83/US14/SD34 Missouri River Bridge EA, it was determined that portions of 6(f) and 4(f) parkland in the City of Pierre would be used for the placement of the bridge, while excess ROW would remain, adjacent to the parks, resulting from the removal of the existing bridge. This excess ROW is located between Steamboat Park and Outlot "F" in the City of Pierre. Refinements to N1.1 resulted in the following uses and benefits to 6(f) and 4(f) resources, considered a 4(f) *De Minimis* finding:

- Transportation ROW, approximately 1.056 acres, adjacent to the north side of Steamboat Park, a 4(f) resource, will be vacated through the removal of the existing roadway and will become park land. This additional property will result in a net gain of 0.16 acres to the total square footage of park property in the City of Pierre.
- New, ADA accessible path connections to existing trails in Pierre and Fort Pierre would be considered an enhancement to the 4(f) parkland.
- For Steamboat Park, Section 6(f) applies to the project boundary established in the Land and Water Conservation funds (LWCF) Project Agreement #46-00518. Connection of the path from the bridge to Steamboat Park, depending on the final design, may result in a Temporary Nonconforming Use of LWCF property. Use of the path will be maintained or a detour providing access will be provided during construction. A new, ADA accessible path connection would be considered an enhancement to the LWCF property and therefore would not require a conversion as it would remain as public outdoor recreational use.
- As long as access to and use of the trails can be maintained or a detour providing access during and after construction, minor changes to the trail system would be considered a De Minimis impact under Section 4(f).
- 0.892 acres in the south portion of Outlot "F" would be converted for highway use. Minor modifications to the existing sidewalks and possibly the disc golf course may be required.

# V. Summary of Mitigation Measures and Commitments

This Section includes a summary of the mitigation measures and environmental commitments, listed in Table 2, that were made during the project. These commitments will be carried forward into final design and construction for the project. In addition, a summary of anticipated permits that will be required prior to construction are listed in Table 3.

Table 2. Mitigation Measures and Commitments

Environmental	
Commitment	Description
Utilities	Utilities that are located along, or within the US14/US83/SD34 roadway ROW of the existing bridge will be relocated if necessary during construction. Some utilities located within the ROW may require permanent easements. During the design phase of the project, SDDOT and FHWA will coordinate with utilities, municipalities, and the counties to avoid or minimize interruptions in service during construction.
Bicycle and Pedestrian Paths	Connections from the bicycle and pedestrian path on the bridge to the paths within the parks in Pierre and to the Lewis and Clark Bicentennial paths will be enhanced, including providing ADA access to the paths. During construction, detours will be provided to maintain access to the bicycle and pedestrian paths within the project study area.
Historical and Archaeological Resources	If the project study area changes in final design, the area will be surveyed for cultural resources.  If during construction, evidence of cultural resources is encountered, construction activities will immediately cease and SDDOT will be contacted to determine the appropriate course of action.
Relocations/Property Acquisition	No relocations of residences or business will occur from this project. However, some land will need to be acquired from a local business and a private property for this project. All property acquisition will conform to the Uniform Act of 1970 (UA), as amended by the Surface Transportation Assistance Act of 1987 and as codified in 49 CFR 24, effective April 1989. SDDOT's ROW Program is responsible for acquiring any property necessary for highway purposes and for acquisitions per the UA.
Wetlands and Other	While no wetlands will be filled for this project, if design changes require an impact to wetlands, a USACE Section 404 permit with 401 Water Quality Certification from SDDENR will be required. The Missouri River is listed as a Navigable Water by USACE, regulated as a Water of the United States under Section 10 of the Rivers and Harbors Act. Requirements for Section 10, Section 404/401, and USCG permits regarding the demolition and replacement of the bridge in the Missouri River will be determined and provided in later phases of the project. The Least Environmentally Damaging Practicable Alternative (LEDPA) documentation will be submitted with the 404 permit application.
Waters of the U.S.	If required by USACE, mitigation measures will be undertaken. In that case, a wetland mitigation plan would be prepared for the Section 404/401 permit application, and a mitigation plan will be developed and coordinated with the resource agencies. For wetlands found not under the jurisdiction of the USACE, FHWA regulations (23 CFR 777.9) will apply and mitigation for permanent impacts to wetlands will be required. Mitigation will occur through on-site mitigation, off-site mitigation, or a mitigation bank.
	Once a full project plan is developed for the removal and construction of a new Missouri River bridge, it should be sent to USCG and USACE immediately to avoid possible delays regarding permitting.
Water Quality	BMP's such as sump catch basins on approach roadways, and swales within green spaces on approach ROW at select locations will be utilized where feasible during final design to provide water quality.
	BMP's will be implemented through the NPDES General Permit for Storm Water Discharges Associated with Construction Activities to minimize impacts to the Missouri River. In addition, BMP's will ensure the water source protections areas are accounted for during the Project and

Environmental Commitment	Description
	that the total suspended solids standard of 30mg/L is not violated. Any groundwater wells will be confirmed during physical survey, and if impacted, will be properly capped and sealed. Any impacted wells and connections will be replaced for properties that were not fully acquired. It is anticipated that the Build Alternatives will not impact the water resources in the area due to the incorporation of BMPs into final design and construction.
	All material identified as waste, material stockpiles, dredged or excavated materials, for either temporary or permanent disposal, should be placed in an upland site that is not a wetland, and measures should be taken to ensure the material cannot enter a watercourse through erosion or any other means.
Floodplain	The floodplain as currently mapped would not be impacted by the proposed bridge. However, as part of the final design process the SDDOT may be required to complete, depending on the 10-year cycle of updated FEMA maps, a floodplain analysis and issuance of a "no-rise" certification that will be sent to FEMA (Region 8), Pierre and Fort Pierre. The cities of Pierre and Fort Pierre participate in the FEMA National Flood Insurance Program.
	Existing bridge demolition may impact roosting. SDDOT will follow the most current Programmatic Agreement between FHWA and the USFWS to determine the preservation practices to be used during the construction of the bridge.
Vegetation, Fish & Wildlife	Fish may be impacted by debris caused by demolition and construction in the water. Construction activities in water are restricted from April 15 to June 1 to avoid impacts to fish spawning. If construction is planned within the nesting season, surveys for migratory birds should be conducted prior to construction. SDDOT will coordinate with the USFWS to determine appropriate offsetting measures for impacts to migratory birds after potential impacts have been identified. Surveys will be conducted within the same year, but prior to construction start in order to capture the current conditions and address possible affects more concisely. If birds (e.g. cliff swallows, other species) are using the existing bridge for breeding, netting and other barriers will be installed during the non-breeding season to ensure that the existing bridge will not be used to support nesting activities during removal of the existing bridge.
	Removal of vegetation should be confined to those areas absolutely necessary for construction. For any construction areas that would remain un-vegetated for an extended period of time, such as over the winter, temporary seeding would be required in accordance with the Storm Water Pollution Prevention Plan (SWPPP).
Threatened and Endangered Species	Further coordination with SDDENR and USFWS will occur during final design to determine whether species have been added to, or removed from the list of threatened and endangered species, whether they are likely present in the vicinity of the constructions limits of the preferred alternative, and whether they will be impacted by construction activities. Due to the length of time between this EA and planned construction, planned to begin in 2023, letters soliciting formal Section 7 consultation and "affect" determinations are premature. SDDOT will solicit formal determination from SDGFP & USFWS, based on the recommendations in this document, including updates to listed species, closer to the planned construction activities. Prior to construction, surveys for the presence of Bald Eagles and Northern Long-eared Bats will be conducted.
4(f)/6(f) Resources	This project will, at a minimum, replace the 4(f) park features in Steamboat Park with similar or better features at a time and in a location that results in no adverse effect to the recreational activities. In addition, the project will make property available for park use including an area under the new bridge abutment that will remain as Transportation ROW, reserved for future transportation purposes. Some of the land, adjacent to the north side of Steamboat Park, will be vacated through the removal of the existing roadway and will become park land. ADA access to the paths within the parks will be provided. During construction, detours will be provided to maintain access to the bicycle and pedestrian paths within the project study area. Dakota Avenue pavement will be removed as part of this project. Also within Steamboat Park, Section 6(f) applies to the project boundary established in the Land and Water Conservation funds (LWCF) Project Agreement #46-00518. Connection of the path from the bridge to Steamboat Park, depending on the final design, may result in a Temporary Non-Conforming Use of LWCF

Environmental	
Commitment	Description
	property. Use of the path will be maintained or a detour providing access will be provided during construction. A new, ADA accessible path connection would be considered an enhancement to the LWCF property and therefore would not require a conversion as it would remain as public outdoor recreational use.  In addition, consideration will be given to the Lewis and Clark National Historic Trail regarding
Regulated Materials	construction, design, and lighting to avoid impacts to the Trail visitors' experience  Further investigation will be conducted on regulated materials in final design. Also, given that the project is located within an urban area, the SDDENR requested that their office be notified prior to construction. Any areas of soil staining, buried drums, or UST's found during construction will be reported to and coordinated with SDDOT and SDDENR prior to working in the area. All fill material should be free of substances in quantities, concentrations, or combinations which are toxic to life.  The existing presence of lead paint on the bridge requires that the lead-based paint and related debris must be disposed of in accordance with all applicable federal, state and local laws governing such disposal. All necessary measures and precautions shall be taken to ensure worker safety for work involving lead particles. Removal of lead-based paint should occur before torch cutting, grinding, rivet busting, or other lead-emitting tasks. Removal operations will need to be planned accordingly, and employees informed of the hazards of lead exposure.
Storm Water	The amount of sedimentation from soil erosion will not increase substantially due to the NPDES General Permit for Storm Water Discharges Associated with Construction Activities requirements that limit post construction erosion to preconstruction levels (typically achieved through reestablishment of vegetation, and structural devices such as berms and energy dissipation structures). BMP's will be implemented through the General Permit to minimize impacts to the Missouri River.
Noise	Defined BMP's, in accordance with SDDOT construction manuals, would be used to mitigate construction-related noise impacts.
Emissions	Emissions caused by vehicle delays, construction vehicles, and related equipment and activities generating dust would be minimized to the extent possible by implementing smooth traffic-flow patterns and water sprinkling. Equipment with point source emission may be required to have an air quality permit. Equipment should be evaluated to determine whether a permit is required by contacting the SDDNR Air Quality Program.
Sedimentation and Soil Erosion	The amount of sedimentation from soil erosion would not increase substantially due to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities requirements that limit post construction erosion to preconstruction levels (typically achieved through reestablishment of vegetation, and structural devices such as berms and energy dissipation structures). BMPs would be implemented through the General Permit to minimize impacts to the Missouri River.
Traffic	A traffic control plan would be developed during final bridge and roadway design. As part of this process, the traffic control plan developed during final design would minimize the amount of disruption to traffic while ensuring the safety of motorists. Due to the construction an off-alignment replacement bridge, traffic detours are anticipated to be minimal. Arterial roadways would remain open or closed for short durations throughout construction. Therefore, the amount of traffic to be detoured for the Project is anticipated to be minimal. Due to the distance of the construction zone and limited detour routes in the area, minimal sensitive noise receptors (i.e. schools, residences) may be located adjacent to the routes. This factor as well as the anticipation of any detours to be for short duration, the impacts to sensitive receptors would be minor and short term. Regarding economic impacts due to traffic detours, businesses located within the project study area rely upon the traveling public, so detours are recommended to be short-term. Part of the alternatives selection criteria was to limit detours, so impacts to these businesses during construction are anticipated to be minimal.

Environmental	
Commitment	Description
Lewis and Clark National Historic Trail	The design and aesthetic features of the bridge shall minimize or mitigate design, lighting, and construction impacts to the trail, and access improvements to the trails within the project study area that connect to the Lewis and Clark Trail system.
Navigation	USCG requires that a 150 foot wide channel be cleared for river navigation within 24 hours of demolition of the existing bridge.

**Table 3.** Anticipated Permits Required Prior to Construction

Permit Name/Type	Permit Description	Issuing Agency	Permit Requirements
Clean Water Act- Section 404 (Wetlands and Other Waters)	Regulates discharge of dredged or fill material into Waters of the United States	USACE	A permit application would be submitted to USACE prior to commencement of construction activities for the Project. If required, a mitigation plan would be prepared through coordination with the resource agencies for the 404 permit and the 401 certification. The Least Environmentally Damaging Practicable Alternative (LEDPA) documentation will be submitted with the 404 permit application.
401 Water Quality Certification	Regulates Water Quality	SDDENR	Permit requirements include ensuring that projects that involve dredging, or proposed discharges of dredged or fill material, protect public health and water resources.
USCG Section 9 Permit	Bridge Permit	USCG	Permit for bridge replacements in navigable waters.
USACE Section 10 of the Rivers and Harbors Act of 1899	Structures/work Permit	USACE	Section 10 permit required from the USACE for structures and/or work in or affecting navigable waters of the U.S.
Air Quality Permit	Emissions for Construction Equipment	SDDNR	Equipment with point source emission may be required to have an air quality permit. Equipment should be evaluated to determine whether a permit is required by contacting the SDDNR Air Quality Program.
Clean Water Act- NPDES General Permit for Stormwater Discharges Associated with Construction Activities	Regulates discharges of pollutants from non-point sources and construction sites greater than 1 acre	SDDENR	BMPs would be implemented to minimize impacts to Missouri River.

# VI. FHWA Decision

FHWA finds the EA and related documentation regarding replacement of the US14/US83/SD34 Bridge over the Missouri River and its approaches adequately and accurately address the need, environmental issues, impacts of the proposed action, and contains appropriate mitigation measures. Furthermore, FHWA finds that the EA, including the information listed above, documents full compliance with the NEPA and other related environmental laws, executive orders, and implementing regulations. The EA with the supplemental information in this Decision Document provides sufficient evidence and analyses for determining that the proposed project will have no significant impact on the environment and that an Environmental Impact Statement is not required.

# **APPENDIX A: Alternatives Eliminated from Consideration Early in the Study**

Alternative	Description	Reasons Alternative was Eliminated from Consideration
N3	Proposed alignment 200' north, parallel to the existing bridge	-Visual change to the historic Railroad Bridge due to close proximity -Longer and more costly approach roadways
N5	Proposed alignment 200' north, non-parallel to the existing bridge	-Visual change and navigational limits due to close proximity to the historic Railroad Bridge -Increased cost due to longer bridgeLonger and more costly approach roadways
N6	Proposed adjacent, non-parallel alignment to the north of the existing bridge	-Impacts the gas utility, requiring replacement of the gas line -Increased cost due to gas line replacement
M1	Proposed alignment of bridge on two separate structures: westbound lanes carried over the existing alignment, eastbound lanes carried on separate structure to the south, and connects to Dakota Avenue.	-Impacts to the gas utility, probable replacement of the gas line -Increased cost due to utility impacts and construction of two superstructures
M2	Proposed alignment of bridge on two separate structures: westbound lanes carried over the existing alignment, eastbound lanes carried on separate structure to the south with a modified western approach.	-Increased cost due to complex demolition of the existing bridge and construction of two structures -Community disruption due to detoured traffic during construction
S1	Proposed alignment south of the existing bridge, overlaps on the southwest corner of the existing bridge	-Creates a sharp curve on the eastern approach -Community disruption due to detoured traffic during construction -Increased cost due to complexity of demolition and construction
S2	Proposed alignment south of the existing bridge, south end would transform James Street.	-Creates a sharp curve on the eastern approach -Impacts to river navigation -Increased cost due to longer bridge
\$3	Proposed alignment south of the existing bridge with changes to James Street and Dakota Avenue	-Creates a need for additional intersection -Impacts to river navigation -Increased cost due to longer bridge.
S4	Proposed alignment of bridge on two separate structures: westbound lanes carried over the existing alignment, eastbound lanes carried on separate structure to the south of the existing bridge.	-Requires demolition of existing bridge before construction -Community disruption due to detoured traffic during construction -Increased cost due to construction of two structures
S5	Proposed alignment south of the existing bridge: overlapping south half of existing alignment	-Creates a sharp curve on the eastern approach -Requires demolition of existing bridge before construction -Community disruption due to detoured traffic during construction
\$6	Proposed alignment south of the existing bridge: overlapping south half of existing alignment, straightened western approach	-Creates a sharp curve on the eastern approach -Requires demolition of existing bridge before construction -Community disruption due to detoured traffic during construction
S7	Proposed alignment of bridge on two separate structures south of the existing bridge: westbound lanes carried over the existing alignment, eastbound lanes carried on separate structure to the south of the existing bridge.	-Requires demolition of existing bridge before construction -Community disruption due to detoured traffic during construction -Requires intersection upgrades at eastern approach -Increased cost due to construction of two structures

# **APPENDIX B: Public Comments and Responses**

Below are the questions and comments received by the project team. Our responses to the comments are listed below.

The following verbal comments during the public meeting on June 16, 2016:

How many "bumpouts" will there be on the bridge?

**Response:** The "bumpouts" or overlook resting areas on the bridge will only be on the south side of the bridge. There could be between two and eight bumpouts, but further public input will be taken as the project moves forward.

What's the cost difference between using concrete and steel for the bridge?

**Response:** The cost is almost the same with concrete being slightly higher. There would be extra temporary work involved with using concrete. However, SDDOT may move forward with either concrete or steel, or both concrete and steel. There may be extra competition to move forward with both, so overall it may result in lower bid prices.

With the amount of traffic on the bridge and with businesses on the east side of the bridge, I
question the removal of the Dakota Ramp, especially when there are events at the Ramkota.

**Response:** Traffic can be heavy during events, but overall the traffic did not warrant a need to keep the Dakota Avenue Ramp. Ultimately, the decision was to remove the ramp.

What is the completion date of the project?

**Response:** After the environmental process has completed, the design of the bridge will take two years, the letting of the bridge will take 1 year, and it will take three years to complete the construction of the bridge. The schedule could be compressed to finish sooner than that, or sometimes schedules get stretched out, so that is a general estimate of the time it will take to complete the bridge. The schedule for completion of the bridge is in year 2025.

The proposed bid letting will take place in Federal Fiscal Year 2025?

**Response:** No, bid letting is proposed to take place in Federal Fiscal Year 2021. The schedule for completion of the bridge is year 2025.

What are the next steps between today and bid letting to be accomplished for the bridge?

**Response:** Now that the EA has been signed, FHWA may issue a Finding of No Significant Impacts to continue the development of the project. Then a "Type, Size and Layout" (TS&L) Bridge Report will be produced which outlines the bridge features, or the skeleton of the bridge. Then the two-year design phase will begin, followed by a year for bid letting, and then three years to construct the bridge.

What is the offset of the proposed bridge from the existing bridge?

**Response:** The bridge centerline of the proposed bridge is 50' north of the centerline of the existing bridge, with a 10' gap in between the two structures.

Is a 10' gap between structures enough to construct?

**Response:** Yes, the contractors will have to be aware of the placement of the footings for the bridge, but contractors have experience doing this work.

 Will a constructability meeting be considered where contractors can comment on the preliminary design?

**Response:** Yes, so that contractors are aware of the project and can offer their ideas for construction.

• How long before the extra amenities and embellishments for the bridge will be discussed?

**Response:** A Memorandum of Understanding (MOU) can be developed with the SDDOT for extra amenities such as lighting, fishing piers, etc., by the end of this year (2016). The MOU starts the discussion of what could be added, or the "wish list" of items. Part of the MOU discussion and agreement will include what funding is available. Some of the "wish list" items could also be phased in as funding becomes available.

The following written comments were received by the project team:

• I have lived in the Pierre Community for more than 50 years and have been part of planning discussions during the past 30 years. The traffic count on Sioux Avenue is not going to lessen during the next 50 plus years and to not have the option of exiting onto Dakota Ave. could/will make for some extraordinary traffic issues due to the existing businesses on the east end of the Missouri River Bridge. Conversations in the past have looked at a second bridge east of Pierre and also relocating the truck route. I like the bridge as currently proposed with the exception of eliminating Dakota Ave. access.

**Response:** SDDOT considered future traffic volumes on the US14/US83/SD34 bridge as well as on Dakota Avenue. The traffic impact related to the removal of Dakota Avenue is low. Meanwhile, discussions with the Discovery Center, the Chamber of Commerce and the Pierre Parks department indicated benefits to the recreational areas adjacent to Steamboat Park and the Missouri River were preferred.

• I was told by the Mayor of Fort Pierre that you are deleting the Pierre "Dakota Ave." exit in the new "Waldron Bridge" plan. I am writing this letter requesting that reconsideration be given to this decision. I have used this exit several times to take my wife and employees of the company I retired from to the hospital emergency room. Dakota Ave. is also an easy way for my wife and myself to get to Avera Medical Associates Clinic. I have had parents and relatives who have lived in assisted living homes and Mary House on Dakota Ave. and I used Dakota Ave almost exclusively to visit them during these times. One also has to wonder what would

happen if there was a major truck accident off of the east end of the bridge and all ambulance service from the west river had to go around the Dam during the time Hiway 14 was shut down. We also need to remember what took place during the reconstruction of Hiway 14 through Pierre which will also happen again in the lifespan of the new "Waldron Bridge". Remember how much traffic Dakota Ave. got as the reconstruction got closer to the bridge. I would appreciate your reconsideration of the future exit onto Dakota Ave. off of the east end of the "Waldron Bridge".

**Response:** SDDOT considered future traffic volumes on the US14/US83/SD34 bridge as well as on Dakota Avenue. The traffic impact related to the removal of Dakota Avenue is low. The bridge will include two lanes in each direction so that in the event of an incident or roadway construction, traffic could be moved to one side of the bridge, and one lane could remain open in each direction. Meanwhile, discussions with the Discovery Center, the Chamber of Commerce and the Pierre Parks department indicated benefits to the recreational areas adjacent to Steamboat Park and the Missouri River were preferred.

• 1). For pedestrians/bikers: no steps please (not bike friendly). 2.) Keep the Dakota avenue exit 3.) Would like LED lighting (accent solar? lighting) to enhance the look in the evening. Especially when boating.

**Response:** 1.) The trails to the river on each bank of the Missouri River will be designed to comply with the Americans with Disabilities Act (ADA), so there will be an alternative to stairs to the riverfront. 2.) The removal of the Dakota Avenue exit would have little impact on traffic in the area while providing benefits to the parks and adding greenspace to the riverfront. 3.) LED or accent lighting would be considered an aesthetic treatment, and would require local funding for the design, installation, operation and maintenance of the aesthetic lighting. SDDOT does not object to aesthetic treatments as long as they do not interfere with traffic operations or the safety of the traveling public.

• Thanks for the opportunity to comment on the Missouri River bridge project in Pierre and Fort Pierre, SD. My comment is short, but I feel critically important to the communities and residents of this area. I would like to see a fishing pier, or some other type of structure to enable angling opportunities, under one end of the bridge or under both ends if possible. The Missouri River is extremely important to the communities of Pierre and Fort Pierre and to residents of Central South Dakota. Developing increased opportunities for people to experience the recreational benefits the river provides should be a component of the new bridge project. At the meeting it was stated that funds for angling access under the bridge would not be part of the project costs. I would urge the SD DOT to work with the Game, Fish and Parks Department, the cities of Pierre and Fort Pierre and area conservation and sportsmen groups to find ways to make fishing access a part of the new bridge project. Given the location of the project and its accessibility to residents of all ages and physical abilities this would be an excellent location for additional angling opportunities.

**Response:** Fishing Piers are not considered part of this project and would require local funding for the design, installation, operation and maintenance of the piers. SDDOT

does not object to the addition of fishing piers as long as they do not interfere with the safety of the public. SDDOT will work with the local communities regarding concurrent or adjacent local projects.