

Appendix A. Final Section 4(f) Evaluation

**FINAL SECTION 4(f) EVALUATION
FOR THE PROPOSED PEDESTRIAN/BICYCLE IMPROVEMENTS PROJECT
ON TOWER BRIDGE ON CAPITOL MALL/WEST CAPITOL AVENUE,
BRIDGE NO. 22-0021
SACRAMENTO AND WEST SACRAMENTO
SACRAMENTO AND YOLO COUNTIES, CALIFORNIA**

03-Yol-275, KP 20.87 (PM 12.97)/Sac-275, KP 0.10 (PM 0.06)

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**Tower Bridge
Pedestrian/Bicycle Improvement Project**

Final Section 4(f) Evaluation

Submitted pursuant to 49 U.S.C., SEC 303

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

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Abstract: The project involves widening the existing sidewalks on each side of the bridge to provide a typical width of 3 meters (10 feet) to provide increased capacity for mixed pedestrian and bicycle use.

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ACRONYMS AND ABBREVIATIONS

APE	area of potential effects
ASR	Archaeological Survey Report
Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
Cities	Cities of Sacramento and West Sacramento
CMAQ	Congestion Mitigation and Air Quality
Delta	Sacramento-San Joaquin River Delta
DRPB	Sacramento Design Review and Preservation Board
EA	environmental assessment
EIR	environmental impact report
FHWA	Federal Highway Administration
ft	foot/ft
HAER	Historic American Engineering Record
HPSR	Historic Property Survey Report
ITE	Institute of Transportation Engineers
km	kilometer/kilometers
m	meter/meters
mm	millimeters
NHL	National Historic Landmark District
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOP	Notice of Preparation of an EIR
NPS	National Park Service
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PAR	PAR Environmental Services, Inc.
PDT	project development team
PRC	Public Resources Code
ROW	right-of-way
RT	Regional Transit
SABA	Sacramento Area Bicycle Advocates

SACBAC	Sacramento City/County Bicycle Advisory Committee
SHBSB	State Historical Building Safety Board
SHPO	State Historic Preservation Officer
SMUD	Sacramento Municipal Utility District
SOCA	Sacramento Old City Association
Standards	Secretary of the Interior's Standards for the Treatment of Historic Properties
STIP	State Transportation Improvement Program
TCSP	Transportation and Community System Preservation Program
TEA	Transportation Equity Act
TIP	Transportation Improvement Program

Final Section 4(f) Evaluation

A. INTRODUCTION

This document is the Final Section 4(f) Evaluation for the Tower Bridge Pedestrian/Bicycle Improvements project. This evaluation is being circulated as part of the Final EIR and Finding of No Significant Impact to satisfy the requirements of Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

This document has also been written to satisfy the California Department of Transportation requirements to comply with Public Resources Code (PRC) Section 5024.

The Final Section 4(f) Evaluation represents the culmination of analysis initiated during preparation of the EA/Draft EIR. This Final Section 4(f) Evaluation presents: an overview of the Draft Section 4(f) Evaluation; a description of work completed since issuance of the Draft Evaluation to minimize impacts; and a detailed description of the measures proposed to minimize potential harm.

B. APPLICABILITY OF SECTION 4(F)

Section 4(f) of the U.S. Department of Transportation Act of 1966, codified in federal law as 49 USC Section 303, declares that “[i]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) prohibits the Secretary of Transportation from approving any program or project that:

. . . [requires] the use of any publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State or local significance or land of a historic site of national, State or local significance (as determined by the Federal, State or local officials having jurisdiction over the park, area, refuge, or site [unless] (1) there is no prudent and feasible alternative to using that land, and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use. . .

The FHWA regulations interpreting Section 4(f) state, “any use of lands from a Section 4(f) property shall be evaluated early in the development of the action when alternatives to the proposed action are under study” (23 Code of Federal Regulations [CFR] 777.135[b]). A project “uses” a Section 4(f) resource when: (1) it permanently incorporates land from the resource into a transportation facility; (2) it temporarily but adversely occupies land that is part of the resource; or (3) it “constructively” uses the resource. A “constructive” use occurs “when the transportation project does not incorporate land from a Section 4(f) resource, but the proximity impacts are so severe

that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired.” (23 CFR 771.135(p)).

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use land protected by Section 4(f). (49 USC 303(b); 23 CFR 771.135(i)).

Section 4(f) is also applicable to historic properties and archaeological resources when the resource is included in, or eligible for listing in, the National Register of Historic Places (23 CFR 771.135(e)). Since the Tower Bridge is listed in the National Register of Historic Places, it qualifies as a Section 4(f) resource.

After public comment on the draft Section 4(f) evaluation is received, a final Section 4(f) evaluation is prepared. The final Section 4(f) evaluation must contain the conclusions of the Section 4(f) evaluation, encompassing: 1) a description of the basis for concluding that there are no prudent and feasible alternatives to the use of the Section 4(f) property, including a demonstration that there are unique problems or unusual factors involved in the use of alternatives that avoid these properties, or that the cost, social, economic, and environmental impacts or community disruption resulting from the alternatives reach extraordinary magnitudes (23 CFR 771.135(a)); 2) a description of the basis for concluding that the proposed action includes all possible planning to minimize harm; and 3) a summary of appropriate formal coordination with the U.S. Department of the Interior.

No formal comments were received on the Draft Section 4(f) Evaluation; however, the State Historic Preservation Officer (SHPO) did not concur with the finding of Caltrans and the FHWA that the proposed project incorporated all measures to mitigate the adverse effects of the proposed project on the Tower Bridge. In particular, the SHPO objected to FHWA’s proposal to widen the sidewalks on both sides of the bridge to 10 feet. The sidewalks are an important contributing element to the bridge’s integrity of design and the FHWA has acknowledged that the proposed change would be an adverse effect to the Tower Bridge. The SHPO, therefore, has not entered into a Memorandum of Agreement (MOA) based on the design as identified in the EA/Draft EIR and Draft Section 4(f) Evaluation. The MOA included as Appendix B of the Final EIR/EA is an agreement that generally specifies how the historic properties affected by this project will be preserved and/or protected. The historic interests of the Tower Bridge project are represented by the Federal Advisory Council on Historic Preservation (ACHP). The ACHP is a signature party to the MOA.

According to the implementing guidelines for Section 106 of the National Historic Preservation Act [36 CFR Part 800.6(a)(1)], the FHWA is required to notify the Advisory Council on Historic Preservation (ACHP) in the event of an adverse effect finding for a proposed project. The FHWA notified the ACHP of the Finding of Adverse Effect for the Tower Bridge Pedestrian/Bicycle Improvements project in a letter dated September 2, 2004. The ACHP responded that it would participate in the Section 106 process in a letter to FHWA dated September 22, 2004. On November 12, 2004, Caltrans and FHWA

led a field review of the project area for the ACHP representative. During the review, Caltrans and FHWA described the project and Section 106 compliance activities accomplished to date, including the result of on-going consultation with the California State Historic Preservation Officer (SHPO). In a letter dated December 14, 2004, the ACHP recommended minor modifications to the project design to further minimize adverse effects, which were then incorporated into the project. The letter also acknowledged that further consultation with the SHPO would not be productive and stated that the ACHP would consult with the FHWA in the preparation of a Memorandum of Agreement (MOA) for the proposed project, as allowed by law [36 CFR Part 800.7(a)(2)]. Following ACHP's advice, FHWA negotiated an MOA with the Cities of Sacramento and West Sacramento, Caltrans, and ACHP. The SHPO also sent a letter to the FHWA on March 9, 2005, terminating consultation with the FHWA for the purpose of allowing the ACHP to conclude consultation with the FHWA.

As stipulated in the MOA, Caltrans will transmit reviewed preliminary design drawings at the 35 percent design phase to the ACHP for review and comment. A complete copy of the executed MOA is contained in Appendix B to the Final EIR and FONSI.

This Final Section 4(f) Evaluation has been prepared for historic resource for which there would be a Section 4(f) use by the Tower Bridge Pedestrian/Bicycle Improvements project, based on the design developed to date. It incorporates refinements to the project design that have occurred since publication of the EA/Draft EIR and Draft Section 4(f) Evaluation.

The California Department of Transportation will make its final finding of compliance with Public Resources Code Section 5024 when it certifies the EIR.

C. DRAFT SECTION 4(F) EVALUATION

The Draft Evaluation stated that the proposed project would require the “use” of three Section 4(f) resources. Those resources include two different categories of resources: (1) historic resources (i.e., the Tower Bridge) and (2) public parks that would be used temporarily during construction.

The public parks that would be used during construction are the Promenade along the Sacramento River in the City of Sacramento and the River Walk along the Sacramento River in the City of West Sacramento. As stated in the Draft Section 4(f) Evaluation, these two publicly owned recreational lands (i.e., pedestrian paths and bicycle routes paralleling the Sacramento River), will be impacted during construction (i.e., temporary construction easements). The duration of the occupancy of these resources will be less than the total time needed for construction; there will be no change in the ownership of the land. The scope of work is minor and there are no unanticipated permanent adverse physical impacts to the property. The land will be fully restored and both the City of Sacramento and the City of West Sacramento have reviewed and agreed to the use of this land. Therefore, no additional evaluation is required. In order to minimize impacts to the lands, storage of equipment and materials will be on other staging areas that are not considered Section 4(f) resources.

D. AVOIDANCE ALTERNATIVES AND ALTERNATIVES CONSIDERED AND WITHDRAWN

The EA/Draft EIR and Draft Section 4(F) Evaluation contains detailed descriptions of alternatives to the proposed project that would avoid use of the Section 4(f) resource (Tower Bridge) or would have less impact to the Section 4(f) resource than the proposed project. The following is a summary of the alternatives that were considered and withdrawn.

- **Alternative 2: No Project Alternative**—this alternative was considered and withdrawn because it would not achieve the project purpose and need.
- **Alternative 3: Improve Pedestrian/Bicycle Crossing on Nearby Structure**—this alternative was considered and withdrawn because modification of the nearby structures, the Interstate 80 Pioneer Bridge over the Sacramento River and the I Street Bridge over the Sacramento River, would not improve the pedestrian and bicycle linkage between Old Sacramento and West Sacramento riverfronts along the Capitol Mall corridor. In addition, pedestrian and bicycle travel is not allowed on the Interstate 80 Pioneer Bridge over the Sacramento River because of the high-speed and high-volume traffic, and the I Street Bridge is a historic structure that is also listed in the National Register of Historic Places.
- **Alternatives 4 and 5: Provide Traffic Control During Events**—this alternative was considered and withdrawn because they do not aid in the improved everyday use of the structure for bicycle commuters or pedestrians, and do not satisfy the purpose of and need for the project.
- **Alternatives 6/7: Reduce to One Lane Each Direction**—this alternative was considered and withdrawn because the existing and future traffic volumes indicate that the amount of delay associated with for the future traffic volumes indicate the traffic would divert into the residential neighborhoods in West Sacramento. In addition, traffic engineers for both Cities expressed strong concern that this alternative would result in delays and backup of traffic into Sacramento and West Sacramento.
- **Alternative 8: Reduce to One Lane Each Direction; Introduce Reversible Lane Down Center**—this alternative was considered and withdrawn because it would require substantial signage on the structure and a moveable barrier system such that the reversible lane could change depending on the peak traffic movements. Although the current AM peak movement is eastbound into Sacramento and the current PM peak movement is outbound from Sacramento, future 2025 traffic forecasts show fairly equal peak directional splits. This type of alternative is also best used when the traffic is primarily local traffic that can become familiar with the system as opposed to the traffic on Capitol Mall that includes a high percentage of visitors to the Capitol. Caltrans staff expressed concern with this reversible lane alternative based on issues related to accidents,

driver confusion, merge/diverge distance constraints, operation and maintenance costs, signal operations, enforcement, and cost effectiveness.

- **Alternative 9: Reduce Lane Widths and Stripe Bike Lanes on Pavement**—this alternative was considered and withdrawn because it does not meet the purpose and need of the project; however, this alternative is being implemented by Caltrans as part of the Deck Rehabilitation Project.
- **Alternative 10: Separate Bicycles and Pedestrian Traffic; Bikes Use One Sidewalk and Pedestrians Use Other**—this alternative was considered and withdrawn because it would pose problems of its own. This alternative would require pedestrians and bicyclists to cross the road to reach the appropriate sidewalk or desired destination; it would be nearly possible to enforce; and the current width of the sidewalks is not adequate to accommodate two-way bicycle traffic or two-way wheelchair traffic.
- **Alternative 13: New Pedestrian Bridge over Sacramento River**—this alternative was considered and withdrawn because it does not meet the purpose and need of the project to improve connectivity along the Capitol Mall corridor. In addition, construction costs for a new bridge are estimated to be from 2.5 to 3.5 times the estimated construction costs of the proposed project.

E. OVERVIEW OF CHANGES TO THE PROPOSED PROJECT

The Draft Section 4(f) Evaluation identified widening the sidewalk to 10 feet as the proposed project. The Draft Evaluation also discussed several alternatives that were considered and withdrawn, including the No Build Alternative and construction of a new pedestrian bridge over the Sacramento River.

As a result of the public review and agency consultation process, the proposed project has been modified as summarized below; a detailed description of the proposed project is provided in the Final EIR.

- The typical sidewalk width on the outboard side of the pylons and walls at the western and eastern approach spans has been reduced from 10 feet (3 meters) to 8 feet (2.44 meters).
- The shape of the sidewalk as it transitions around the pylons at the approach spans has been revised from a curved design to a straight line/angular transition, more in keeping with the Moderne-style of the bridge.
- There will be no new light posts on the approach spans.
- There will be no lights on the outside (i.e., river side) of the new railing posts, however, the new railing on the approach spans will include downward lighting on the sidewalk side that would not detract from the outline of the trusses and

towers created by the existing lighting. No discussion of lighting on the approach spans was included in the draft environmental document.

- The existing concrete sidewalk on the lift span will be replaced with a sidewalk constructed of fiber reinforced polymer (FRP) composite material, if feasible; aluminum was the originally proposed material and will be used if FRP composite material is not feasible. The FRP composite material will be treated with a skid-resistant resin surface (similar to a concrete surface). This surface would provide traction for pedestrians and bicyclists, and blend the sidewalk with the concrete deck in the adjacent spans.
- The mounting brackets for the existing spotlights that illuminate the towers will be adjusted to maintain the relationship of existing light patterns and shadow effects.
- As a result of continuing navigational discussions with the United States Coast Guard, new channel delineation lights for navigational purposes will be added at the outermost portions of the bridge.
- To comply with Americans with Disabilities Act (ADA) requirements, provisions are proposed to barrier off areas of protruding elements of bridge truss members.
- All new elements or disturbed existing steel elements will be painted using the existing color scheme. Any new color scheme will require approval by the District Principal Architectural Historian.

These design changes still fulfill the purpose and need of the project while further reducing the effects of the proposed project on the Tower Bridge; however, they do not fully mitigate the adverse effects to the bridge.

F. MITIGATION AND MEASURES TO MINIMIZE HARM

The project includes the following mitigation and measures to reduce and minimize harm to the Section 4(f) property, the Tower Bridge; further details of each can be found in the Final EIR:

- Preserve in place the sidewalks on the fixed truss spans and approach spans.
- Preserve the sidewalk railing and relocate it to outside of the widened sidewalk.
- Upgrade the sidewalk railing to current safety standards in a reversible fashion (i.e., using a method that can be reversed at a later date, if desired, to restore the original appearance).
- Preserve in place the concrete barriers and pylons at the West Sacramento approach spans.

- Preserve in place the concrete walls and pylons at the Sacramento approach span.
- Preserve in place the sidewalk lighting fixtures at the West Sacramento approach spans.
- Preserve and relocate the sidewalk lighting fixtures on the lift span, fixed truss spans, and Sacramento approach span.
- Preserve in place the sidewalk pedestrian gates.
- Preserve in place the sidewalk support members.
- Design the lighting on the approach spans such that it would not detract from the outline of the trusses and towers created by the existing lighting.
- Paint all new and disturbed existing steel elements using the existing color scheme. Any new color scheme will require approval by the District Principal Architectural Historian.
- Prepare supplemental Historic American Engineering Record documentation for the bridge, as may be determined by Caltrans, in consultation with the ACHP, to be needed to adequately document the historic characteristics of the structure. This includes supplemental photographs and supplemental written documentation describing in detail the contributive elements of the structure to be affected by the project as well as the proposed actions.
- Require a Caltrans Principal Architectural Historian to review the 35%, 65%, and 95% design drawings to ensure consistency with the project description contained in the environmental documentation.
- Submit the 35% design drawings to the ACHP for review and comment to ensure consistency with the project description contained in the environmental documentation.
- Design and install an interpretive display (kiosk, interpretive panel, or other interpretive device to be installed at or near the Tower Bridge) illustrating the history of the Tower Bridge.

G. COORDINATION

The Tower Bridge project will involve federal, state, regional and local agencies. The FHWA is the lead agency for the NEPA process, and Caltrans is the lead agency for the CEQA process and is responsible for implementation of the project. As part of the normal project development process as well as the environmental process, there has been coordination with various agencies including:

- City of Sacramento
- City of West Sacramento
- Sacramento Area Council of Governments
- Federal Advisory Council on Historic Preservation
- U.S. Department of Interior
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- California Department of Fish and Game
- California Public Utilities Commission
- California State Railroad Museum
- California Office of Historic Preservation
- State Lands Commission
- State Reclamation Board
- State Historic Building Safety Board

As described in the Final EIR/EA, permits and approval may be required from a number of these agencies. In addition, several on-site field reviews were conducted over the years as the project was developed and revised, as necessary, pursuant to the concerns of the staff from the agencies.

H. CONCLUSION

The following is a summary of the findings of the Final Section 4(f) Evaluation:

- The proposed project is a proactive enhancement project sponsored by the Cities of Sacramento and West Sacramento and supported by Caltrans and the FHWA to improve connectivity between the City of Sacramento and the City of West Sacramento.
- The purpose of the project is to improve pedestrian and bicycle access across the Sacramento River along the Capital Mall corridor.
- The project is needed to improve access and connectivity for pedestrians, recreational bicyclists, and commuter bicyclists.
- Although the project is needed now, the demand for the project is anticipated to increase. Tower Bridge is located in an area that has existing and future potential for substantial pedestrian and bicycle use of the bridge with no nearby alternatives for pedestrians or bicycles.
- There are no nearby bridges that can be used by pedestrians and bicyclists to achieve the same goals. Pedestrians and bicyclists are not allowed on closest downstream bridge (the Interstate 80 Pioneer Bridge over the Sacramento River). Although pedestrians and bicycles are allowed on the I Street Bridge over the

Sacramento River (the closest upstream bridge), the sidewalks are not wide enough to accommodate a substantial increase in usage and the narrow travel lanes on structure result in conflicts between bicyclists and vehicles.

- Despite an extensive alternatives process, no alternatives have been identified by the agencies or the public that would achieve the project's purpose and need while avoiding use of the Section 4(f) resource.
- Mitigation and minimization measures have been identified to reduce the effects to the historic qualities of the bridge to an acceptable level.

Based on the above considerations, the FHWA has concluded that there is no prudent and feasible alternative to the use of land from the Tower Bridge (Section 4(f) resource), and the proposed action includes all possible planning to minimize harm to the Tower Bridge resulting from such use.

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