

Cold Spring Canyon Bridge Suicide Barrier

On State Route 154 at Cold Spring Canyon Bridge

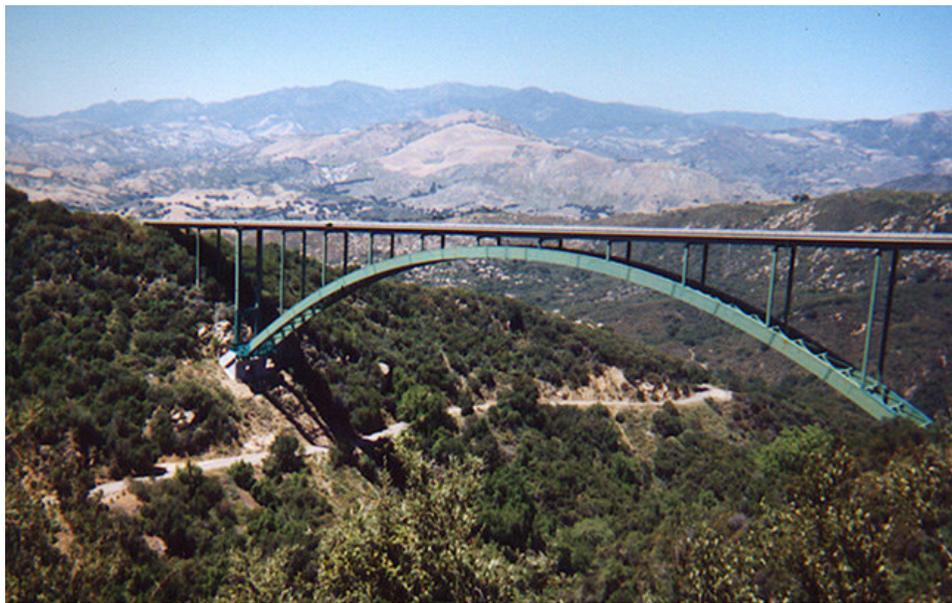
05-SB-154-PM 22.9/23.1

05-0P9100

SCH# 2008011060

Final Supplemental Environmental Impact Report

Volume 1 of 3



Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the California Department of Transportation under its assumption of responsibility pursuant to 23 U.S. Code 327.

April 2011



General Information About This Document

What's in this document?

This document contains the Final Supplemental Environmental Impact Report, which examines the environmental effects of a proposed project on State Route 154 at Cold Spring Canyon Bridge in Santa Barbara County.

The Draft Environmental Supplemental Impact Report was circulated to the public from December 9, 2010, to January 24, 2011. A public hearing was held Wednesday, January 5, 2011, from 5:30 p.m. to 7:30 p.m. in the San Marcos High School cafeteria, 4750 Hollister Avenue, Santa Barbara, CA 93110. Comments received during the public comment period were taken into consideration in the selection of the preferred alternative. Comments received and responses to comments are shown in the Comments and Responses section of this document, which has been added since the draft Supplemental Environmental Impact Report was circulated. Elsewhere in the document, a vertical line in the margin indicates changes or additions made since the draft document was circulated.

What happens after this?

The proposed project has completed environmental compliance after the circulation of this document.

Caltrans will file with the court a Return to the Writ for the court's determination that Caltrans has fully complied with the California Environmental Quality Act and can resume project activities.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Matt Fowler, Central Coast Environmental Analysis, 50 Higuera Street, San Luis Obispo, CA 93401; (805) 542-4603 Voice, or use the California Relay Service TTY number, 1-800-735-2929.

REPORT NUMBER:

05-SB-154-PM22.9/23.1
State Clearinghouse Number: 2008011060

Construct a suicide barrier on the Cold Spring Canyon Bridge
on State Route 154 from post miles 22.9 to 23.1

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Submitted Pursuant to: State Division 13, Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

4/18/11
Date of Approval


RICHARD KRUMHOLZ
Director, Caltrans District 5
California Department of Transportation

The following person may be contacted for additional information concerning this document:

MATT FOWLER, Senior Environmental Planner
Central Coast Environmental Analysis
50 Higuera Street
San Luis Obispo, CA 93401

Abstract

The proposed project consists of the installation of a physical suicide barrier on each side of the Cold Spring Canyon Bridge on State Route 154 near San Marcos Pass in Santa Barbara County. This Final Supplemental Environmental Impact Report has been prepared in accordance with the Judgment of the Superior Court of California for the County of Santa Barbara. In its Judgment, the court ruled that the Draft Environmental Impact Report impermissibly deferred the development of measures mitigating impacts to cultural and visual/aesthetic resources to the Final Environmental Impact Report, thereby effectively precluding any public comment about or public participation in the development of such mitigation measures. This Final Supplemental Environmental Impact Report is being prepared and publicly circulated to comply with the court's Judgment and Writ issued thereon.



Table of Contents

It is anticipated that readers will review this Final Supplemental Environmental Impact Report together with the 2009 Final Environmental Impact Report. The chapters and sections in this document correspond to the 2009 Final Environmental Impact Report as shown in the concordance below.

Numbering/Title Concordance for Sections of the Supplemental Environmental Impact Report and 2009 Final Environmental Impact Report	
Number/Title in the Supplemental Environmental Impact Report	Number/Title in the 2009 Final Environmental Impact Report
Chapter 1 Introduction	Chapter 1 Proposed Project
1.1 Type of Environmental Document	1.1 Introduction
1.2 Incorporation by Reference	1.2 Purpose and Need
1.3 Public Review	1.3 Background
1.4 Supplemental Environmental Impact Report Certification	1.4 Alternatives
1.5 Supplemental Environmental Impact Report Organization	1.5 Permits and Approvals Needed
1.5.1 Alternatives Considered But Eliminated from Further Discussion	1.4.6 Alternatives Considered But Eliminated from Further Discussion
2.1 Visual/Aesthetics	2.1.2 Visual/Aesthetics
2.2 Cultural Resources	2.1.3 Cultural Resources
3.1 Discussion of Significant Impacts	3.2 Discussion of Significant Impacts
3.1.1 Significant Environmental Effects of the Proposed Project	3.2.2 Significant Environmental Effects of the Proposed Project
3.1.2 Unavoidable Significant Environmental Effects	3.2.3 Unavoidable Significant Environmental Effects
3.2 Mitigation Measures for Significant Impacts Under the California Environmental Quality Act	3.3 Mitigation Measures for Significant Impacts Under the California Environmental Quality Act
Appendix G Updated Visual Impact Assessment	Visual Impact Assessment was bound separately
Appendix H Cultural Reports and Coordination Efforts	n/a
Appendix I Comments and Responses	Appendix F Comments and Responses

Table of Contents	iii
List of Figures	vi
Chapter 1 Introduction.....	1

1.1	Type of Environmental Review	1
1.2	Incorporation by Reference	3
1.3	Public Review	3
1.4	Supplemental Environmental Impact Report Certification	4
1.5	Supplemental Environmental Impact Report Organization	4
1.5.1	Alternatives Considered but Eliminated from Further Discussion	4
Chapter 2	Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	9
2.1	Visual/Aesthetics	9
2.2	Cultural Resources	25
Chapter 3	California Environmental Quality Act Evaluation	35
3.1	Discussion of Significant Impacts	35
3.1.1	Significant Environmental Effects of the Proposed Project	35
3.1.2	Unavoidable Significant Environmental Effects	36
3.2	Mitigation Measures for Significant Impacts under the California Environmental Quality Act	37
Chapter 4	Comments and Coordination: This chapter is intentionally omitted because it was not necessary to supplement Chapter 4 of the 2009 Final Environmental Impact Report	39
Chapter 5	List of Preparers: This chapter is intentionally omitted because it was not necessary to supplement Chapter 5 of the 2009 Final Environmental Impact Report	41
Chapter 6	Distribution List: This chapter is intentionally omitted because it was not necessary to supplement Chapter 6 of the 2009 Final Environmental Impact Report	43
Chapter 7	References: This chapter is intentionally omitted because it was not necessary to supplement Chapter 7 of the 2009 Final Environmental Impact Report	45
Appendix A	California Environmental Quality Act Checklist: This appendix is intentionally omitted because it was not necessary to supplement Appendix A of the 2009 Final Environmental Impact Report	47
Appendix B	Section 4(f) Evaluation: This appendix is intentionally omitted because it was not necessary to supplement Appendix B of the 2009 Final Environmental Impact Report	49
Appendix C	Title VI Policy Statement	51
Appendix D	Minimization and/or Mitigation Summary	53
Appendix E	Letters of Concurrence and Correspondence with the State Historic Preservation Officer, Advisory Council on Historic Preservation, and Memorandum of Agreement	57
Appendix F	Selected Comments and Responses from Appendix F of the 2009 Final Environmental Impact Report	71
Appendix G	Updated Visual Impact Assessment	See Volume 2
Appendix H	Cultural Reports and Coordination Efforts	See Volume 2

Appendix I Comments and Responses See Volume 3
List of Abbreviated Terms for Appendix I See Volume 3

List of Figures

Figure 2-1 Map of Viewpoint Locations	13
Figure 2-2 Existing View from Viewpoint 1	14
Figure 2-3 Simulation of Grid/Mesh Alternative from Viewpoint 1	15
Figure 2-4 Simulation of Vertical Picket Alternative from Viewpoint 1	15
Figure 2-5 Existing View from Viewpoint 2	16
Figure 2-6 Simulation of Grid/Mesh Alternative from Viewpoint 2	17
Figure 2-7 Simulation of Vertical Picket Alternative from Viewpoint 2	17
Figure 2-8 Existing View from Viewpoint 3	18
Figure 2-9 Simulation of Grid/Mesh Alternative from Viewpoint 3	19
Figure 2-10 Simulation of Vertical Picket Alternative from Viewpoint 3	19
Figure 2-11 Simulation of Grid/Mesh Alternative from Viewpoint 1 with Mitigation/Minimization Measures Applied.....	23
Figure 2-12 Simulation of Grid/Mesh Alternative from Viewpoint 2 with Mitigation/Minimization Measures Applied.....	24
Figure 2-13 Simulation of Grid/Mesh Alternative from Viewpoint 3 with Mitigation/Minimization Measures Applied.....	25
Figure 2-14 Graffiti on the Cold Spring Canyon Bridge	See Volume 3
Figure 2-15 Graffiti on the Cold Spring Canyon Bridge	See Volume 3



Chapter 1 Introduction

1.1 Type of Environmental Review

This Final Supplemental Environmental Impact Report to the previously prepared and certified Cold Spring Canyon Bridge Suicide Barrier 2009 Final Environmental Impact Report presents information about Visual/Aesthetics and Cultural Resources impacts. This information and analysis has been completed in accordance with the Judgment of the Superior Court of California for the County of Santa Barbara [Friends of the Bridge vs. California Department of Transportation (“Caltrans”), et al, dated July 23, 2010, Case No. 1338496], and subsequent order on Caltrans’ Motion for Specific Recirculation on August 24, 2010, and the trial court’s Peremptory Writ of Mandate issued on September 15, 2010. In its Judgment, the court ruled that the Draft Environmental Impact Report (May 2008) impermissibly deferred mitigation measures to the 2009 Final Environmental Impact Report and that Caltrans therefore improperly certified the 2009 Final Environmental Impact Report and approved the project without public comment about or public participation in the development of mitigation measures related to the project’s significant environmental impacts to visual/aesthetic and cultural resources.

In the July 23, 2010, Judgment Granting Peremptory Writ of Mandate, the court specifically ruled:

[Petition] granted as to the argument that the DEIR impermissibly deferred the development of mitigation measures to the FEIR, thereby effectively precluding any public comment about or public participation in the development of mitigation measures. This finding requires vacation of both the project approval and the certification of the FEIR, and the return of the matter to Caltrans to comply with CEQA’s requirements in this respect. The ruling moots the petition’s contentions with respect to the inclusion of significant new information in the FEIR that was not contained in the DEIR, and the failure of Caltrans to recirculate the EIR for public comment on the new information, and partially moots the petition’s contentions with respect to the failure of the DEIR to discuss policy inconsistencies. All remaining grounds raised by the petition, which were not mooted by the ruling, are denied.

The Court feels compelled to note what its tentative decision in this matter does not mean. The Court is ruling only on the issue of Caltrans’ compliance with the California Environmental Quality Act. It is not expressing any opinion, and is not in any way ruling,

on the propriety or advisability of the construction of a suicide-prevention barrier on the Cold Springs Bridge. The Court's tentative ruling also will likely have not impact on the ultimate determination of whether or not a suicide barrier will be constructed on the Cold Springs Bridge. It only reflects this court's analysis of the issues of Caltrans' compliance with the mandates of CEQA.

After reviewing the Judgment and Peremptory Writ, considering the court's rulings and California Environmental Quality Act's requirements, Caltrans prepared, circulated, analyzed, and certified this Supplemental Environmental Impact Report to fully comply with the California Environmental Quality Act and to disclose to the public for review and comment the mitigation measures included in the 2009 Final Environmental Impact Report, as required by the court.

The court's writ directed Caltrans to circulate the 2009 Final Environmental Impact Report as to the issues more specifically set forth in the court's Judgment and associated orders. Accordingly, Caltrans has prepared and has circulated this Supplemental Environmental Impact Report. This-Final Supplemental Environmental Impact Report was prepared in compliance with the California Environmental Quality Act and the court's orders that required additional disclosure and analysis of parts of the 2009 Final Environmental Impact Report, but did not require the full recirculation of the entire Final Environmental Impact Report. Rather, the Supplemental Environmental Impact Report has recirculated the appropriate parts of the 2009 Final Environmental Impact Report, pursuant to the court's rulings, for public review and comment. In addition, the documentation provided herein and attached hereto supplements the existing analysis in the 2009 Final Environmental Impact Report.

Since it has received, considered, and responded to comments on the Draft Supplemental Environmental Impact Report, Caltrans has certified the Supplemental Environmental Impact Report and determined that substantial evidence supports the required findings for certification and approval. Project activities are suspended until Caltrans takes other steps to fully comply with the California Environmental Quality Act as set forth by the court.

Now that the Final Supplemental Environmental Impact Report has been certified and the project approved, Caltrans will file with the court a Return to the Writ for the court's determination that Caltrans has fully complied with the California Environmental Quality Act and can resume project activities.

1.2 Incorporation by Reference

In accordance with California Environmental Quality Act Guidelines Section 15150, the Supplemental Environmental Impact Report incorporates the following by reference: Final Environmental Impact Report/Environmental Assessment and Section 4(f) Evaluation with Finding of No Significant Impact (June 2009). These documents were previously distributed to interested parties and can additionally be reviewed at:

Caltrans District Office, 50 Higuera Street, San Luis Obispo, CA 93401
Santa Barbara Central Library, 40 East Anapamu Street, Santa Barbara, CA 93101
Solvang Branch Library, 1745 Mission Drive, Solvang, CA 93463
Goleta Branch Library, 500 North Fairview Avenue, Goleta, CA 93117
Montecito Branch Library, 1469 East Valley Road, Montecito, CA 93150

California Environmental Quality Act Guidelines Section 15150(a) states that an Environmental Impact Report “may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of the EIR.” The California Environmental Quality Act goes on to state that incorporated text shall be briefly summarized, and the entire document be made available for public review (California Environmental Quality Act Guidelines Section 15150[b] and [c]). As explained above, the 2009 Final Environmental Impact Report contains detailed environmental analysis of the proposed project, in compliance with the requirements of the California Environmental Quality Act, other than as set forth in the Court’s Judgment.

1.3 Public Review

In compliance with the California Environmental Quality Act and the California Environmental Quality Act Guidelines, the Draft Supplemental Environmental Impact Report was circulated for 45 days to local, state, and federal agencies and to interested organizations and individuals who wished to review and comment on it. Pursuant to California Environmental Quality Act Guidelines Section 15163(b), the Supplemental Environmental Impact Report contains only the information necessary to make the previous Environmental Impact Report adequate. In this instance, that information is precisely defined by the court’s Judgment, post-Judgment order on recirculation and Peremptory Writ. The public was able to review this information at the addresses listed in Section 1.2.

1.4 Supplemental Environmental Impact Report Certification

The Draft Supplemental Environmental Impact Report, together with responses to comments on the Draft Supplemental Environmental Impact Report, and any changes or corrections made to the Draft Supplemental Environmental Impact Report in response to comments, will constitute the Final Supplemental Environmental Impact Report. Caltrans reviewed the project, the Final Supplemental Environmental Impact Report, the 2009 Final Environmental Impact Report, and all public testimony or comments and, based on that information and all other substantial record evidence, decided to certify the Final Supplemental Environmental Impact Report and approve the project. As California Environmental Quality Act Guidelines Section 15163(e) requires, Caltrans made a finding on each potentially significant effect shown in the 2009 Final Environmental Impact Report as revised, as well as the Final Supplemental Environmental Impact Report.

1.5 Supplemental Environmental Impact Report Organization

It is anticipated that readers reviewed the Draft Supplemental Environmental Impact Report together with the 2009 Final Environmental Impact Report. The chapters and sections in this document are numbered to correspond to the 2009 Final Environmental Impact Report (see Table of Contents). The sequence of the environmental issues discussed herein also follows the court's rulings. In addition, Appendix G contains the Updated Visual Impact Assessment and Appendix H contains Cultural Reports and Coordination Efforts; Appendix I contains Comments and Responses.

1.5.1 Alternatives Considered but Eliminated from Further Discussion

Considered but rejected alternatives were described in the 2009 Final Environmental Impact Report under Section 1.4.6. Below is additional information regarding the Safety Net Alternative, including a "cantilever arc barrier net design," that was considered but eliminated from further discussion by Caltrans.

Safety Net Alternative

The safety net alternative involved extensive investigation and evaluation of a number of safety net design variations but was ultimately withdrawn from consideration as a viable project alternative. All variations were designed to be installed below the elevation of the road deck, on each side of the bridge, and without modification to the existing bridge rail height. The safety net variations were:

1. A cantilever structure with a vertical barrier at the outside edge of the cantilever arm;
2. A net system below the road bed elevation;
3. A 20-foot wide, steel-frame net, either 13 feet or 20 feet below the deck;
4. A “swoop” or arc net design that would arc away from the bridge structure and back towards the existing tube rail;
5. A cantilever arc barrier net design, which ultimately included some elements of the “swoop” arc net design.

The first two safety net variations were considered prior to the release of the draft environmental document. The remaining three safety net variations were investigated and more fully developed as a result of meetings between Caltrans, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation following the release of the draft environmental document. (See Supplemental Report, Appendix H, Attachment 20, and Feasibility Study Conducted for the Proposed Cantilever Arc Barrier Net Alternative, Appendix H, Attachment 39.)

Despite the extensive consideration and additional analysis of the safety net barrier variations, this alternative was rejected for the following reasons:

- Unacceptable rescue response times – A safety net suicide prevention device requires immediate response so that those who have fallen into the net can be rescued while they are still stunned from the fall. The remote location of the bridge can result in lengthy emergency response times, which could allow a suicidal person caught in the net to make their way to its edge and jump again, before rescue crews arrive.
- Increased danger to individuals attempting suicide – The safety net itself may be a danger if those who fall into it are injured by impact with the metal netting. Persons who fall into the net at night may not be seen for an extended period of time, potentially exposing them to cold, heat, wind, rain, and further psychological trauma.
- Unacceptable risk to emergency response and rescue personnel – Emergency response personnel are at risk of being pulled over the low bridge rail during rescue operations. Rescuing a person from a safety net requires personnel to rappel over the edge of the bridge into the net, using technical rescue equipment, a complex system of climbing ropes and hardware. A safety net by design is difficult to walk on or stand in, and maintaining balance while standing in the net may not be possible. The rescuers would need to secure the suicidal person for removal from the net. If the suicidal person is distraught, uncooperative, or violent, subduing him

or her while maintaining balance in the safety net and then securing and hoisting the person to the top of the bridge would entail unacceptable risk to rescue personnel. Search and Rescue Team members are not in law enforcement or trained to confront potential combatants. Conversely, the Santa Barbara County Sheriff's Deputies are not trained in the specialized field of search and rescue and depend on the Search and Rescue Team for rescue and recovery operations.

- Increased impacts to the historic substructure – Installation of a safety net involves drilling holes in the face of the bridge and adding and suspending a large horizontal metal net below the bridge deck. This would diminish the bridge's historic integrity by permanently altering the appearance of the bridge's most significant character-defining feature, its substructure. Safety net installation would also require substantial retrofit of the substructure, which additionally diminishes the integrity of the historic property. Permanent alterations of this magnitude would not be reversible. (See Cultural Resources Section 2.1.3; Supplemental Report, Appendix H, Attachment 20; and Feasibility Study Conducted for the Proposed Cantilever Arc Barrier Net Alternative, Appendix H, Attachment 39.)
- Liability associated with an attractive nuisance – A safety net may constitute a possible lure to thrill seekers. The net would be located 400 feet above the ground and be designed for a human to fall into it with relative safety. Unauthorized entry into the net would be difficult to prevent, as access could easily be achieved by persons lowering themselves over the rail and free falling a few feet into the net. The easily accessible platform created by a safety net could potentially become an attractive nuisance or magnet for unauthorized use or activities. This is not a liability that Caltrans can knowingly assume, nor would the Department design for an attractive nuisance as represented by a safety net. (See Cultural Resources Section 2.1.3; Supplemental Report, Appendix H, Attachment 20; and Feasibility Study Conducted for the Proposed Cantilever Arc Barrier Net Alternative, Appendix H, Attachment 39.)
- Design load limitations – Although the barrier could support at least one individual, the barrier would not be able to withstand the weight associated with multiple persons, including a rescue team. A design for the greater load would entail retrofitting the structure, including replacing the existing concrete rails and bridge deck. Construction of the barriers would also entail retrofitting the substructure. This would lead to greater permanent and irreversible structural changes to the Cold Spring Canyon Bridge; further decreasing the integrity and historic qualities that make the bridge eligible for listing in the National Register of Historic Places. (See Cultural Resources Section 2.1.3; Historic Resources Evaluation Report, Appendix H, Attachment 1; Finding of Effect, Appendix H, Attachment 4; Supplemental

Report, Appendix H, Attachment 20; and Feasibility Study Conducted for the Proposed Cantilever Arc Barrier Net Alternative, Appendix H, Attachment 39.)

- Unacceptable risks associated with safety net maintenance – A safety net would be difficult and dangerous to maintain. Routine maintenance to remove items that would collect in the netting material would require maintenance personnel to rappel from the bridge deck down into the net, collect, secure and remove the material, and then ascend back up climbing ropes to the top of the bridge. These maintenance techniques represent extraordinary conditions and risk to highway personnel.
- Increased Costs associated with need to replace safety net – A safety net would be deformed by the impact of a heavy object, reducing the net's effectiveness and requiring periodic replacement.



Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

Per the aforementioned Judgment by the Superior Court of Santa Barbara County, specific parts of the 2009 Final Environmental Impact Report were recirculated herein. Therefore, this supplement to the 2009 Final Environmental Impact Report contains only the information necessary to make the 2009 Final Environmental Impact Report adequate for the project. This chapter will list mitigation measures from the 2009 Final Environmental Impact Report which allowed the opportunity for public review and comment and public participation in the development of the final mitigation measures as to the visual/aesthetic and cultural/historical impacts of the project as directed by the court.

2.1 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically (emphasis added) and culturally pleasing surroundings [42 U.S. Code 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of the National Environmental Policy Act [23 U.S. Code 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities” [California Public Resources Code Section 21001(b)].

Affected Environment

The aesthetic section is based on the Visual Impact Assessment prepared by the Caltrans Landscape Architecture Branch in January 2008 and updated in November

2010. The Visual Impact Assessment was prepared using a process developed by the Federal Highway Administration in conjunction with the American Society of Landscape Architects, specifically for assessing projects related to highways and roadway corridors. (See the updated Visual Impact Assessment dated November 2010 which is bound separately.)

State Route 154 through the project limits is classified as an Officially Designated State Scenic Highway. The State Scenic Highway Program designates routes based on high quality views of the natural landscape along the route, and on the local governing body's implementation of a Corridor Protection Plan. The Corridor Protection Plan does not preclude development, but includes policies and ordinances addressing land use, design review, billboards, earthwork and landscaping, and utility structures. The State Scenic Highway designation is recognition of the route's visual quality, which indicates a higher level of interest in the aesthetic character of the highway corridor.

In addition, sensitivity regarding aesthetic issues is reflected in applicable planning policies and guidelines. Although this state-owned route is not under the jurisdiction of the local planning authority, the Santa Barbara County Comprehensive Plan Land Use Element, Visual Resource Policy is an indicator of the general level of community sensitivity regarding the aesthetic character of the region and of the project area. The Santa Barbara County Comprehensive Plan Land Use Element, Visual Resource Policy No. 2 states:

In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

This project would be inconsistent with this local policy due to the barrier's visual intrusion into the skyline as viewed from State Route 154.

The project site is within the Santa Ynez mountain range north of Santa Barbara. In general, the regional topography supports a mostly curving roadway, which produces views for the highway traveler ranging from close-in views of roadside slopes to mid-range hillside views and wide-open panoramas.

The project sits in generally steep topography, with the adjacent hillsides rising well above the roadside in certain areas and dropping below the highway at other spots. The project crosses Cold Spring Canyon, which allows sweeping vistas of the Santa Ynez Valley and mountains beyond. Throughout the region, vegetation is a primary component of overall visual character. Along much of State Route 154, the topography and density of the existing roadside vegetation blocks long-range views to and from the highway. In the vicinity of the project, however, the sloping topography and bridge elevation allow expansive views unhindered by roadside trees.

Along this section of State Route 154, the built development has a low to moderate visual presence in the landscape. Throughout much of this section of the highway, the scale and frequency of roadway elements and other built amenities are such that, although visible, they do not dominate the views when seen in the context of the overall landscape.

The quality of the existing visual environment through the project area is high. The quality of this view is due mainly to the varied topography and native vegetation along the roadsides and adjacent hills. The exaggerated landform, curved road alignment, and limited visibility of built elements outside of the roadway corridor also contribute to the existing visual quality. The alternating sweeping vistas of the Santa Ynez Valley and close-in views of the adjacent hillsides provide a dynamic viewing experience for the highway traveler. The Cold Spring Canyon Bridge offers some of the most memorable views along State Route 154 from the highway as well as from Stagecoach Road in the vicinity of the project. The dramatic topography and natural vegetative patterns combine in a classic representation of the natural landscape of the Central Coast of California. This natural landscape is in part the basis for the route's State Scenic Highway designation.

The views from the highway include the broad panoramas to the north and the wooded hillsides along the roadway to the south. The high quality of views from the roadway is emphasized by the elevated viewing position the bridge provides. While traveling across the bridge on top of the deck, the bridge arch and super-structure cannot be seen. In addition, the roadway is relatively straight approaching the bridge from both directions, which doesn't allow opportunities to see the lower part of the structure from the roadway elsewhere on State Route 154. As a result, the only bridge elements visible from the highway itself are the paved lanes, bridge rails, guardrail at each end of the bridge rail, and signs.

Although views from the highway to the bridge sub-structure are limited, the Cold Spring Canyon Bridge is considered a Scenic Resource per California Environmental Quality Act Guidelines due to its sculptural quality in the overall landscape and the memorable visual image it creates by its graceful and delicate arched form contrasting with the rugged, natural setting.

An unpaved pullout near the call box at the west end of the bridge allows an angled view to the side of the bridge. It should be noted that this area is signed for emergency parking only and not legally available for casual sight-seeing opportunities of the bridge or the surroundings. Guardrail along the other three approaches to the bridge prevents parking and limits side views of the bridge from those locations.

Views of the bridge are available from several locations on Stagecoach Road, which intersects with State Route 154 about 0.2 mile east of the Cold Spring Canyon Bridge and descends into the canyon in a southerly direction. A small, unpaved area off the roadway near the southern end of the bridge provides views of the structure for viewers willing to leave their vehicles and peek through the oak trees. Views of the bridge are also available from Stagecoach Road along the bottom of the canyon. These views provide a dramatic picture of the bridge's steel arch and support structure as it spans the canyon walls about 400 feet overhead.

Environmental Consequences

Figure 2-1 shows the three major viewpoints of Cold Spring Canyon Bridge that were assessed for visual impacts:

- Viewpoint 1 is the view from the bridge deck.
- Viewpoint 2 is the view from the emergency pullout near the call box at the west end of the bridge.
- Viewpoint 3 is the view from below the bridge.



Conceptual Photo-Simulations
Cold Spring Canyon Bridge - Highway 154

Viewpoint

Figure 2-1 Map of Viewpoint Locations

Viewpoint 1 - Since few critical offsite views of the bridge exist, the main affected viewers are those who travel the highway and are in the immediate vicinity of the project. In general, viewers along State Route 154 are considered to be sensitive to changes in the visual environment based on the high quality of views along the route, as well as increased viewing expectations associated with the State Scenic Highway designation. Views from the bridge deck would be the most affected.

Figure 2-2 shows the existing view from Viewpoint 1. Figures 2-3 and 2-4 show simulated photos of the same view with the Grid/Mesh Alternative and Vertical Picket Alternative, respectively.



Figure 2-2 Existing View from Viewpoint 1



Figure 2-3 Simulation of Grid/Mesh Alternative from Viewpoint 1

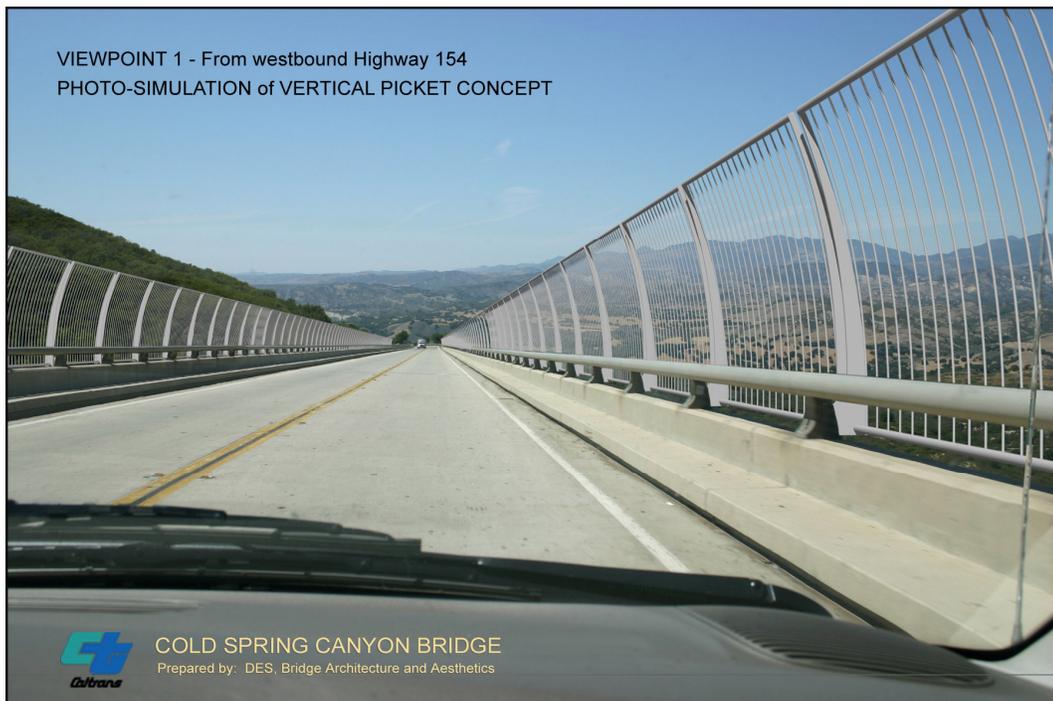


Figure 2-4 Simulation of Vertical Picket Alternative from Viewpoint 1

Viewpoint 2 - Viewers from the adjacent highway pullout would see the proposed barrier in the context of the bridge's historic super-structure.

Figure 2-5 shows the existing view from Viewpoint 2. Figures 2-6 and 2-7 show simulated photos of the same view with the Grid/Mesh Alternative and Vertical Picket Alternative, respectively.

It should be noted that this area is signed for emergency parking only and is not legally available for casual sight-seeing opportunities of the bridge or the surroundings.

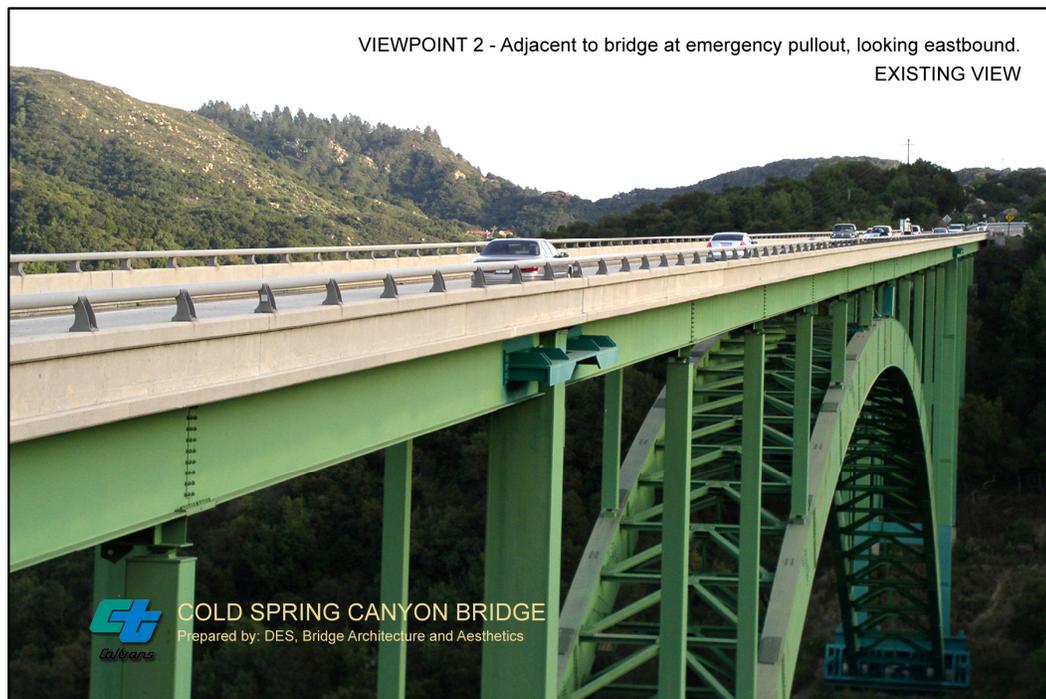


Figure 2-5 Existing View from Viewpoint 2

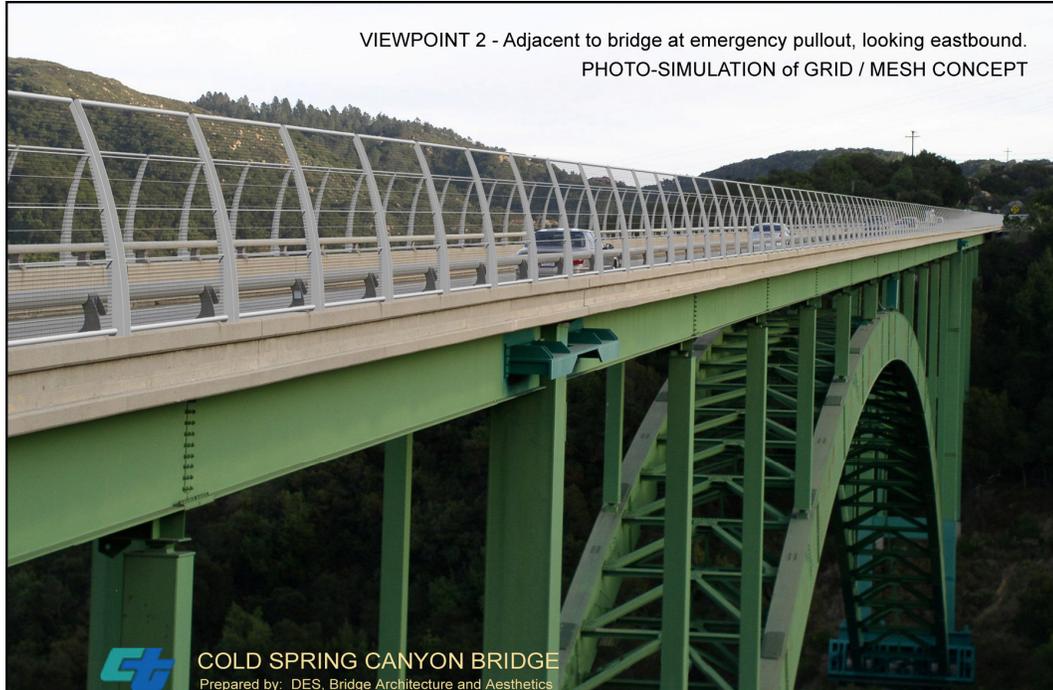


Figure 2-6 Simulation of Grid/Mesh Alternative from Viewpoint 2



Figure 2-7 Simulation of Vertical Picket Alternative from Viewpoint 2

Viewpoint 3 - Changes to the bridge would be least noticeable from the more distant views on Stagecoach Road.

Figure 2-8 shows the existing view from Viewpoint 3. Figures 2-9 and 2-10 show simulated photos of the same view with the Grid/Mesh Alternative and Vertical Picket Alternative, respectively.



Figure 2-8 Existing View from Viewpoint 3



Figure 2-9 Simulation of Grid/Mesh Alternative from Viewpoint 3



Figure 2-10 Simulation of Vertical Picket Alternative from Viewpoint 3

Summary of Visual/Aesthetic Impacts

Visual quality evaluation ratings done for the project indicate that a substantial change in visual resources would occur as a result of the proposed project. Although high-quality views from the highway while not on the bridge would remain mostly intact, the construction of a barrier would have an effect on as much as 70 percent of the existing view as seen specifically from the bridge deck.

The visual quality evaluation identified two distinct potential visual effects/impacts the barrier would have: 1) the view blockage (or opacity) caused by the barrier and 2) the visual detracting to the existing setting caused by the barrier itself. The extent to which the barrier blocks views and/or detracts from the setting would depend on the physical characteristics of the barrier itself. Differences in opacity and compatibility were discovered with each of the two proposed alternatives.

Evaluations revealed that the Grid/Mesh Alternative would result in the least overall adverse affect to visual quality. The mesh barrier would be the least noticeable of the two alternatives because the mesh itself would tend to recede and visually blend with the background. Although the mesh alternative would be somewhat opaque, it would not completely block views, and the surrounding landscape would still be seen through the mesh.

The Vertical Picket Alternative would result in the barrier itself being more noticeable. The visual quality evaluation found that the vertical pickets would themselves be distinguishable elements that would draw attention to the barrier. The vertical pickets would not blend with the background and would be seen more as distinct architectural features that define the barrier. As seen from a moving vehicle, vertical pickets would be somewhat opaque, especially when viewed at an angle. The visual quality evaluation found that the Vertical Picket Alternative contributed to the urban, somewhat futuristic appearance of the barrier.

In the short-term, the visual character of the project site and views of the surrounding area would be temporarily affected during the construction phase of the project, which is to last approximately 60 days. Short-term impacts would be related to features such as construction vehicles and equipment, storage of construction materials, and required safety devices including temporary fencing and signage. The appearance of construction-related features would be necessitated by the physical requirements of doing the required work and/or mandated by state and federal safety requirements. These activities and visual conditions, however, would be short term

and would stop at the end of construction. In addition, these short-term activities and visual conditions would not be unexpected visual elements typically seen at a construction site and would be understood by most viewers to be temporary.

Although partial view blockage specifically caused by safety fencing placed along the existing bridge rails would be temporary, views from the highway bridge-deck would continue to be affected after construction as previously described because the safety fencing would ultimately be replaced by permanent barriers at the same approximate locations.

Regardless of the alternative, the barrier would be incompatible with the natural character of the surrounding landscape and would distract from the existing architectural style of the bridge. Both alternatives would result in some combination of view blockage (opacity) and visual intrusion due to the intervening barrier elements and architecture. Because of the expected high level of viewer sensitivity associated with the bridge and State Route 154 and the magnitude of visual change, the project is anticipated to result in substantial and significant adverse impacts to the visual environment.

Avoidance, Minimization, and/or Mitigation Measures

After circulation of the Draft Environmental Impact Report/Environmental Assessment, Caltrans identified the Grid/Mesh Alternative as the Preferred Alternative. This alternative would be a physical barrier consisting of a continuous series of in-curving, steel grid/mesh panels framed and supported by steel posts and rails. The Grid/Mesh Alternative results in less view blockage than the Vertical Picket Alternative because it avoids the “stacking” effect created when closely spaced vertical pickets are viewed from an oblique angle.

Minimization/mitigation measures as to the proposed Grid/Mesh Alternative were identified with recommendations provided by the Aesthetics Design Advisory Committee, convened specifically for the project. The purpose of the design committee was to make recommendations to the Caltrans design team regarding the appearance of the barrier and to lessen the project’s adverse visual effects; Caltrans makes the final design determination. The committee was composed of Caltrans staff and members from the local community, including a representative of the Santa Barbara County Historic Landmarks Advisory Commission, architects, landscape architects, and County Public Works and Planning staff. The committee met six times between March 19 and August 18, 2008. Refer to Appendix B of the Updated Visual

Impact Assessment for the Aesthetics Design Advisory Committee charter and meeting summaries (Appendix G).

The Aesthetics Design Advisory Committee concurred that the Grid/Mesh Alternative would result in less view blockage than the Vertical Picket Alternative.

The resulting recommendations of the Aesthetics Design Advisory Committee did not change the fundamental design of the barrier, but helped refine detailed aspects of the barrier's design in order to minimize/mitigate the project's visual impacts. The committee's recommendations did not change the fundamental mitigation concepts that were presented in the draft Environmental Impact Report/Environmental Assessment previously circulated to the public. The barrier is designed to be reversible, with minimal permanent impact to the historical fabric of the bridge structure if the panels were to be removed.

Through implementation of the following mitigation/minimization measures, potential visual impacts related to construction of the barrier would be minimized. Photo-simulations of the project with these measures applied are shown in Figures 2-11, 2-12, and 2-13.

- The in-curving grid/mesh panels would have 2-inch-square openings, which is the largest opening possible that would not provide convenient finger-holds and toe-holds for climbing.
- The cross-section dimensions of the vertical and horizontal framing members would be minimized as much as possible without jeopardizing the structural integrity of the panels.
- The horizontal length of the individual panels would be increased as much as possible, to reduce the number of vertical elements, without jeopardizing structural integrity.
- The barrier panels would be attached to the outside of the existing concrete railings to minimize physical impacts on the original rails.
- The barrier panel attachment points and the lowest rail (bottom framing member) of the individual barrier panels would be situated below the top of the existing concrete barrier. The attachment points would be out of the line-of-sight of motorists on the bridge.

- The individual barrier panels would be custom-made to conform to the irregular intervals between the existing bridge-railing supports, so that the vertical supports would be in alignment with the existing bridge rail supports, rather than staggered.
- The steel would be coated with a low-reflectivity finish to help reduce glare and to allow the grid/mesh to recede visually.



Figure 2-11 Simulation of Grid/Mesh Alternative from Viewpoint 1 with Mitigation/Minimization Measures Applied

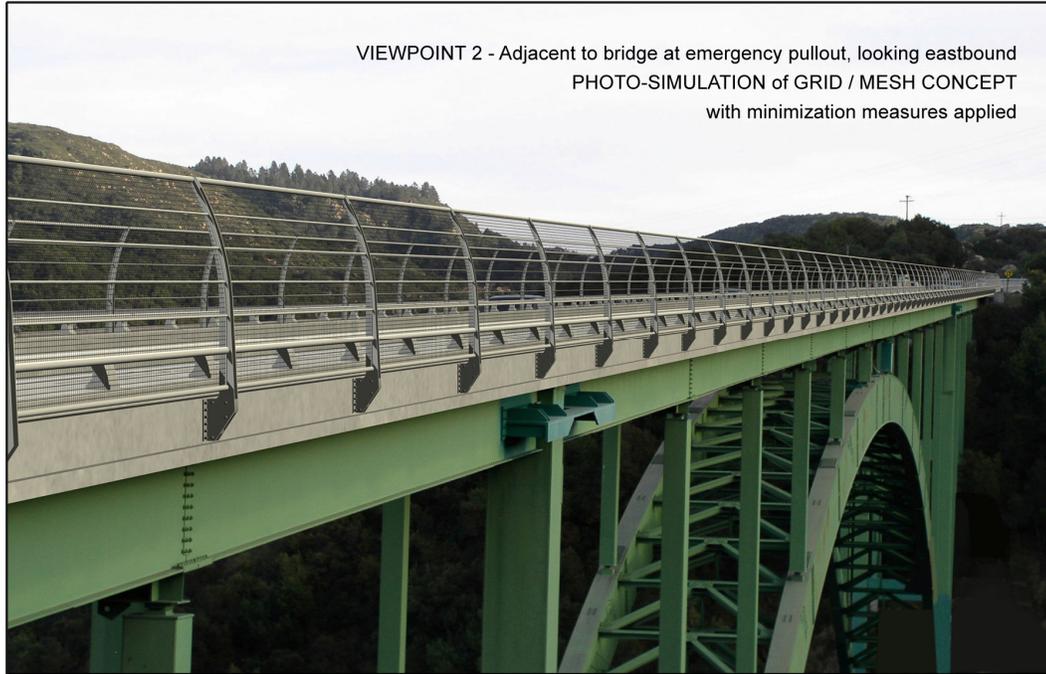


Figure 2-12 Simulation of Grid/Mesh Alternative from Viewpoint 2 with Mitigation/Minimization Measures Applied



Figure 2-13 Simulation of Grid/Mesh Alternative from Viewpoint 3 with Mitigation/Minimization Measures Applied

Residual Visual/Aesthetic Effects

In spite of the mitigation/minimization measures listed above, because the barrier would continue to partially block views from the bridge and would still be highly noticeable along the roadside, significant adverse visual impacts would remain.

2.2 Cultural Resources

Regulatory Setting

“Cultural resources” as used in this document refers to historic-period and archaeological resources, regardless of significance. Laws and regulations dealing with historic and archaeological resources include the following:

The National Historic Preservation Act of 1966, as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment

on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 Code of Federal Regulations 800).

On January 1, 2004, a Section 106 Programmatic Agreement among the Advisory Council, the Federal Highway Administration, the State Historic Preservation Officer, and Caltrans went into effect for Caltrans projects, both state and local, with Federal Highway Administration involvement. The Programmatic Agreement implements the Advisory Council's regulations, 36 Code of Federal Regulations 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The Federal Highway Administration's responsibilities under the agreement have been assigned to Caltrans as part of the Surface Transportation Delivery Pilot Program (23 Code of Federal Regulations 773) (July 1, 2007).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B of the 2009 Final Environmental Impact Report for specific information regarding Section 4(f).

Historical resources are considered under the California Environmental Quality Act, as well as California Public Resources Code Section 5024.1, which established the California Register of Historical Resources. Section 5024 of the Public Resources Code requires state agencies to identify and protect state-owned resources that meet listing criteria for the National Register of Historic Places. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Affected Environment

The Area of Potential Effect represents the area within which the proposed project has the potential to affect, either directly or indirectly, any significant archaeological or historic-period resources. Cold Spring Canyon Bridge is the only cultural resource and the only historic property present in the project's Area of Potential Effect. Therefore, an assessment of the proposed project's effects on the bridge was required.

In general, cultural resources that are not yet 50 years old are not evaluated for National Register eligibility. Although the Cold Spring Canyon Bridge was at the

time only 43 years old, it was formally evaluated in 2007 in a Historical Resources Evaluation Report in connection with the barrier. This decision was made because the bridge is a notable structure, it is central to the proposed project, and sufficient time has elapsed since the bridge was built to allow an assessment of its place in the historic record. Copies of the cultural reports submitted to the State Historic Preservation Officer and the Advisory Council on Historic Preservation, as well as extensive documentation of Caltrans' coordination with these agencies, are included in Appendix H of this Draft Supplemental Environmental Impact Report. The 2007 Historical Resources Evaluation Report cited here, for example, is part of the Historic Property Survey Report found in Appendix H, Attachment 1.

Cold Spring Canyon Bridge is the largest steel arch bridge in California (it has a main span of 700 feet and a total length of more than 1,200 feet, and rises more than 400 feet above the canyon floor). At the time it was built, it was one of the 10 longest steel arch bridges in the United States, and it was twice as long as any existing steel arch bridge in California. Cold Spring Canyon Bridge was also one of the first major arch structures in the United States and one of only two steel arch bridges on California roadways to be built with all-welded steel components.

In August 2007, the State Historic Preservation Officer concurred with the Caltrans finding that the Cold Spring Canyon Bridge is eligible for listing in the National Register of Historic Places under Criterion C and under Criteria Consideration G (Appendix H, Attachment 3). The bridge is eligible under Criterion C for its type, period, and method of construction as an important example of bridge design and engineering. The bridge demonstrates the maturation of steel arch bridge design and welded steel technology in California, and it also represents a high aesthetic quality of contemporary design from its period. It is an important work of the Division of Highways Bridge Department, considered a "master" engineer of the period, and it is an important work of the American Bridge Division of U.S. Steel, considered a "master" builder of the period.

The bridge also possesses exceptional significance that meets the standards for eligibility under Criteria Consideration G, for properties that have achieved significance within the past 50 years. Although the bridge is not yet 50 years old, its significance can be viewed with historical perspective: the structure illustrates a defined period of bridge engineering and architecture in California that reflects the refined development of steel arch bridge technology and the aesthetic of the post-World War II Modern era.

The bridge was also evaluated in accordance with California Environmental Quality Act Guidelines Section 15064.5(a)(2)-(3), using the criteria outlined in Public Resources Code 5024.1, and it meets the significance criteria as outlined in those guidelines. Compliance with the California Environmental Quality Act and Public Resources Code 5024 et seq. follows the same procedures for level of effort, identification, evaluation, assessment of effects and developing mitigation measures as for federal undertakings.

Environmental Consequences

The character-defining features that make the Cold Spring Canyon Bridge eligible for the National Register of Historic Places are those components that are part of its original design and overall design effect, including the arch ribs with their cross bracing, the towers and columns, floor beam girders, skewbacks, abutments, railings, and road deck. Some of these original design features (the substructure's arch ribs, towers, columns, and girders, for example) are more significant than others (such as the standard-type railings and concrete road deck) in conveying the bridge's significance. These differences in relative significance are taken into account in assessing the proposed project's effects/impacts on this historic property.

Both of the proposed project alternatives would attach a physical barrier 6 feet high outside the existing deck rails of the bridge. The resulting rail height above the bridge deck would be about 9 feet, 7 inches. This would constitute a direct and adverse effect/impact on the integrity of some of the bridge's character-defining features because it would introduce a visual element that diminishes the property's historic integrity of design, feeling, and association.

Because the proposed project would affect a historic property, additional analysis pursuant to Section 4(f) of the Federal Department of Transportation Act of 1966 is necessary. The Section 4(f) analysis is found in Appendix B of the 2009 Final Environmental Impact Report.

Following State Historic Preservation Officer concurrence on the eligibility of the Cold Spring Canyon Bridge in August 2007, and pursuant to the Section 106 Programmatic Agreement (Section 106 PA), Caltrans prepared a Finding of Effect to assess the effects the proposed Cold Spring Canyon Bridge Barrier would have on the historic property (Appendix H, Attachments 4 and 5). Stipulation IX.B of the Section 106 Programmatic Agreement states that if there are historic properties in the Area of Potential Effect that may be affected by a federal undertaking, Caltrans shall assess

adverse effects, if any, in accordance with Section 106 Programmatic Agreement Stipulation X, which enjoins Caltrans to apply the Criteria of Adverse Effect set forth in Chapter 36 of the Code of Federal Regulations, 36 CFR 800.5(a)(1). This regulation states that an “adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.”

As noted, the Finding of Effect report concluded that the project would cause an adverse effect on the historic property. The report also concluded that there are several aspects of the bridge’s historic integrity that would not be adversely affected by the project. The project would not affect the bridge’s historical integrity of location or setting, as it would not cause the structure to be moved, and it would not affect the physical environment around the historic property. The structure’s integrity of materials and workmanship would also not be significantly diminished. The barrier would have no effect on the vast majority of materials on this structure, particularly those elements of the substructure that exhibit the most important components of the bridge’s structural type and design and the primary components that demonstrate the structure’s aesthetic achievement.

The Secretary of the Interior’s Standards

Section 106 regulations outline the process of assessing adverse effects to historic properties (36 CFR 800.5) and provide examples of adverse effects. These examples include alterations to historic properties that are not consistent with the Secretary of Interior’s Standards for the Treatment of Historic Properties (Standards) (36 CFR 68). The Standards establish treatment parameters for historic properties. Following careful consideration, and based on the proposed project and the nature of the historic property (Cold Spring Canyon Bridge), Caltrans determined that Rehabilitation – rather than Preservation, Restoration, or Reconstruction – was the most appropriate of the four treatment options for which there are Standards. The 10 Standards for Rehabilitation were accordingly applied to the project. The Finding of Effect concluded that the project design complies with Rehabilitation Standards 1, 3, and 10; that Rehabilitation Standards 4, 5, 6, 7, and 8 were not applicable to the project; and that the project – in order to meet the project purpose and need – was unable to fully comply with Rehabilitation Standards 2 and 9:

Standard 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

Standard 9. New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

Avoidance, Minimization, and/or Mitigation Measures

The State Historic Preservation Officer concurred with Caltrans' adverse effect finding in a response dated July 24, 2008 (Appendix H, Attachment 6). The State Historic Preservation Officer requested that Caltrans consider these comments to be his comments under PRC 5024.5 as well. The State Historic Preservation Officer stated that a Memorandum of Agreement be written, in order to satisfy 36 CFR 800, would constitute prudent and feasible measures under PRC 5024.5. In addition, the State Historic Preservation Officer agreed to add the Cold Spring Canyon Bridge to the State's Master List of Historical Resources.

The installation of the proposed barrier on the Cold Spring Canyon Bridge will result in certain specific unavoidable and significant adverse effects, as documented in the Finding of Effect. Caltrans, in consultation with the State Historic Preservation Officer and the Advisory Council on Historic Preservation, therefore developed mitigation/minimization measures to lessen the adverse effects created by the barrier design, along with off-site mitigation measures to compensate for some of the adverse effects/impacts.

To mitigate the unavoidable adverse effects/impacts of the build alternatives on the historic property, Caltrans consulted with the State Historic Preservation Officer and the Advisory Council on Historic Preservation in compliance with the Section 106 Programmatic Agreement. The mitigation consultation process, summarized here and documented in detail in Appendix H, Attachments 7-44, included a review of public participation in the project and the evaluation of safety net barrier designs proposed by the State Historic Preservation Officer.

Formal consultation began on July 29, 2008, when Caltrans (pursuant to their assumption of Federal Highway Administration's responsibilities under the Section

106 Programmatic Agreement, assigned to Caltrans as part of the Surface Transportation Delivery Pilot Program [23 CFR 773]), sent a draft Memorandum of Agreement to the State Historic Preservation Officer (Appendix H, Attachment 8). On September 11, 2008, the State Historic Preservation Officer declined to sign the draft Memorandum of Agreement. Caltrans subsequently requested the Advisory Council on Historic Preservation participate in the consultation process, and on September 23, 2008, the Advisory Council on Historic Preservation agreed to participate. The consulting parties held a meeting in Santa Barbara County, including a site visit to the Cold Spring Canyon Bridge, on November 19, 2008.

Caltrans prepared a Supplemental Report and submitted it to the State Historic Preservation Officer on December 8, 2008 (Appendix H, Attachment 20). The Supplemental Report concluded that a safety net alternative similar to that proposed for the Golden Gate Bridge in San Francisco Bay would diminish more aspects of the bridge's integrity than the vertical barrier and would be non-compliant with more of the Secretary of Interior Standards for Rehabilitation.

Caltrans again met with the State Historic Preservation Officer and Advisory Council on Historic Preservation on February 25, 2009, to discuss two additional safety net design concepts proposed by the State Historic Preservation Officer, which were consolidated into a single cantilever arc barrier net alternative. As stipulated in the proposed Memorandum of Agreement, Caltrans was required to prepare a Feasibility Study to evaluate the cantilever barrier net alternative. The Memorandum of Agreement which addressed the adverse effects/impacts of the project was signed by the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and Caltrans in March 2009 (Appendix H, Attachment 7). The Feasibility Study prepared by Caltrans which evaluated the State Historic Preservation Officer's cantilever arc barrier net alternative concluded that, while the cantilever arc barrier net alternative could be a credible suicide deterrent, it was not feasible for the Cold Spring Canyon Bridge (Appendix H, Attachment 39). After further discussion with Caltrans, the State Historic Preservation Officer invoked Stipulation V.B. (Dispute Resolution) of the Memorandum of Agreement, referring the matter to the Advisory Council on Historic Preservation (Appendix H, Attachment 42).

On July 1, 2009, the Advisory Council on Historic Preservation responded with their recommendations (Appendix H, Attachment 43), reiterating that, under Stipulation II of the Memorandum of Agreement, Caltrans was required, in consultation with the

State Historic Preservation Officer, to examine the feasibility of the State Historic Preservation Officer's proposed barrier design. The Advisory Council on Historic Preservation concluded:

“Despite the lack of a more detailed analysis for the retrofit of the bridge rails, deck, and substructure, it is evident that the cantilever arc net barrier design would cost substantially more to construct than a fence-type barrier. In addition, the Advisory Council on Historic Preservation is concerned about the extent to which the historic bridge would need to be altered to accommodate the State Historic Preservation Officer's preferred design. Given the greater costs associated with the cantilever arc net design, and the fact that Caltrans has examined the feasibility of the alternative design, as required in the Memorandum of Agreement, the Advisory Council on Historic Preservation does not object to Caltrans' approval of its preferred alternative design [the Grid/Mesh Alternative] for this project.”

On July 14, 2009, Caltrans notified the Advisory Council on Historic Preservation that they had taken the views of the Advisory Council on Historic Preservation and State Historic Preservation Officer into account, including the Advisory Council on Historic Preservation concurrence and lack of objection to the Grid/Mesh Alternative, and had decided to proceed with the vertical grid/mesh barrier design as illustrated in the draft environmental document (Appendix H, Attachment 44).

Mitigation and Minimization Measures Required by the Memorandum of Agreement

The Memorandum of Agreement includes specific measures that would be implemented to mitigate/minimize the project's adverse effects to the bridge:

- Large-format photographs will be taken showing the Cold Spring Canyon Bridge in context as well as details of its historic engineering features. All photographs will be processed for archival permanence in accordance with Historic American Engineering Record photographic specifications.
- Caltrans will photographically reproduce plans, elevations, and selected details from construction drawings in accordance with Historic American Engineering Record photographic specifications that are not deemed confidential for security reasons.

- Written documentation following the National Park Service *Historic American Engineering Record Guidelines for Preparing Written Historical and Descriptive Data* (September 1993).
- The copies and negatives will be made available to appropriate agencies and local archives in Santa Barbara County.
- Publication of 500 copies and distribution of the Historic Resources Evaluation Report: Cold Spring Canyon Bridge (51-0037), prepared by JRP Historical Consulting.
- Caltrans will produce four sets of an interpretive display, which consists of a three-panel interpretive exhibit that illustrates the history of the San Marcos Pass and the construction of the Cold Spring Canyon Bridge, and make these displays available to appropriate agencies in Santa Barbara County.



Chapter 3 California Environmental Quality Act Evaluation

3.1 Discussion of Significant Impacts

3.1.1 Significant Environmental Effects of the Proposed Project

The process of developing the project alternative included measures to avoid and minimize impacts to environmental resources, as presented in Chapters 1 and 2. The project was unable to avoid all impacts. Those project impacts that would have a significant effect/impact on the environment are discussed below.

Visual/Aesthetic – The project would be incompatible with the natural character of the surrounding landscape and would distract from the existing architectural style of the bridge. Both alternatives would result in some combination of view blockage (opacity) and visual intrusion due to the intervening barrier elements and architecture. Because of the expected high level of viewer sensitivity associated with the bridge and State Route 154 (a Designated State Scenic Highway) and the magnitude of visual change, the project would result in substantial and significant adverse impacts to the visual environment.

In addition, the visual character of the project site and views of the surrounding area would be temporarily affected during the construction phase of the project, as described on pages 20 and 21. Although partial view blockage specifically caused by safety fencing placed along the existing bridge rails would be temporary, views from the highway bridge-deck would continue to be affected after construction as previously described since the safety fencing would ultimately be replaced by permanent barriers at the same approximate locations.

Cultural – Adverse effects are alterations to character-defining features that diminish the integrity of a historic property. Some of the character-defining features of the Cold Spring Canyon Bridge are more significant than others. Features such as the steel arch, columns, towers and other elements of the bridge's substructure, which were designed specifically for the Cold Spring Canyon location, are especially significant. Of lesser significance are the concrete deck and railings, which were selected from standard types to complement the substructure's spare design. Views from the bridge are not considered character-defining features.

The integrity of a historic property is made up of seven aspects: location, design, setting, materials, workmanship, feeling, and association. Although Caltrans incorporated measures to mitigate/minimize impacts to the bridge's integrity, the installation of either one of the build alternatives would alter the bridge's form, plan, and proportions. Adding a barrier would reduce the uncluttered appearance of the bridge and visually thicken the bridge deck's appearance in relation to the substructure. This would diminish the bridge's historic integrity of design, feeling, and association because it would adversely affect the bridge's ability to convey its importance as a significant example of mid-twentieth century Modernism and a significant example of the work of the Division of Highways Bridge Department and American Bridge Division of U.S. Steel. The proposed project would thus cause a direct adverse effect/impact on the Cold Spring Canyon Bridge because it introduces a visual element that diminishes the property's historic integrity of design, feeling, and association. For the same reasons, under California Environmental Quality Act Guidelines Section 15064.5, the proposed project will cause a substantial and significant adverse change to a historical resource.

In developing mitigation measures that comply with both federal and state law, it is Caltrans' policy to use the Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings. Caltrans has determined that Rehabilitation is the most appropriate treatment Standard for the proposed project. Caltrans recognizes, however, that the addition of a physical barrier of any kind is an alteration to the historic property that is not entirely consistent with the Secretary of Interior's Standards for Rehabilitation. For these reasons, Caltrans, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation have signed a Memorandum of Agreement that specifies the mitigation measures that Caltrans must carry out (see Appendix E).

3.1.2 Unavoidable Significant Environmental Effects

The construction of the Grid/Mesh Alternative on Cold Spring Canyon Bridge would introduce a new structure that would significantly impact the bridge's historic character, appearance, and scenic views (see Chapter 2, Section 2.1 *Visual/Aesthetics* and Section 2.2 *Cultural Resources*). Measures have been proposed to minimize and mitigate these significant impacts. It is not possible, however, to reduce the unavoidable visual, aesthetic, and cultural impacts to the bridge to a less than significant level.

3.2 Mitigation Measures for Significant Impacts under the California Environmental Quality Act

Measures are proposed to minimize and mitigate the significant visual, aesthetic, and cultural impacts of the construction of physical barriers on Cold Spring Canyon Bridge. These measures are presented in Section 2.1 Visual/Aesthetics, Section 2.2 Cultural Resources, and Appendix D, Minimization and/or Mitigation Summary.



Chapter 4

Comments and Coordination:
This chapter is intentionally omitted because it was not necessary to supplement Chapter 4 of the 2009 Final Environmental Impact Report



Chapter 5

List of Preparers: This chapter is intentionally omitted because it was not necessary to supplement Chapter 5 of the 2009 Final Environmental Impact Report



Chapter 6

Distribution List: This chapter is intentionally omitted because it was not necessary to supplement Chapter 6 of the 2009 Final Environmental Impact Report



Chapter 7

References: This chapter is intentionally omitted because it was not necessary to supplement Chapter 7 of the 2009 Final Environmental Impact Report



Appendix A California Environmental Quality Act Checklist: This appendix is intentionally omitted because it was not necessary to supplement Appendix A of the 2009 Final Environmental Impact Report



Appendix B Section 4(f) Evaluation: This appendix is intentionally omitted because it was not necessary to supplement Appendix B of the 2009 Final Environmental Impact Report



Appendix C Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086



*Flex your power!
Be energy efficient!*

August 25, 2009

TITLE VI POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.


RANDELL H. IWASAKI
Director

"Caltrans improves mobility across California"



Appendix D Minimization and/or Mitigation Summary

Visual/Aesthetics

The Preferred Alternative and the recommendations from the Aesthetics Design Advisory Committee are being incorporated into the final design (see Visual/Aesthetics Section, Section 2.12, and Memorandum of Agreement, Appendix E). The Aesthetics Design Advisory Committee concurred that the Grid/Mesh Alternative would result in less view blockage than the Vertical Picket Alternative because it would avoid the “stacking” effect created when closely spaced vertical pickets are viewed from an oblique angle.

The barrier would consist of a continuous series of in-curving, steel grid/mesh panels framed and supported by steel posts and rails. The design committee’s recommendations did not change the fundamental design of the barrier, but helped refine detailed aspects of the barrier’s design. The barrier is designed to be reversible, with minimal permanent impact to the historical fabric of the bridge structure if the panels were to be removed. The committee recommended and Caltrans has adopted the following measures:

Through implementation of the following mitigation/minimization measures, visual impacts related to construction of the barrier would be minimized. In spite of these minimization measures, however, since the barrier would continue to partially block views from the bridge and would still be highly noticeable along the roadside, adverse significant visual impacts would remain.

- The in-curving grid/mesh panels will have 2-inch-square openings, which is the largest opening possible that does not provide convenient finger-holds and toe-holds for climbing.
- The cross-section dimensions of the vertical and horizontal framing members will be minimized as much as possible without jeopardizing the structural integrity of the panels.
- The horizontal length of the individual panels will be increased as much as possible, to reduce the number of vertical elements, without jeopardizing structural integrity.

- The barrier panels will be attached to the outside of the existing concrete railings to minimize physical impacts on the original rails.
- The barrier panel attachment points and the lowest rail (bottom framing member) of the individual barrier panels will be situated below the top of the existing concrete barrier. The attachment points will be out of the line-of-sight of motorists on the bridge.
- The individual barrier panels will be custom-made to conform to the irregular intervals between the existing bridge-railing supports, so that the vertical supports will be in alignment, rather than staggered.
- The steel will be coated with a low-reflectivity finish to help reduce glare and to allow the grid/mesh to recede visually.

Cultural Resources

A Finding of Effect document was prepared to fully evaluate the nature and severity of the build alternatives' impacts on the bridge's character-defining features. The Memorandum of Agreement documents specific off-site measures that would be implemented to compensate for the project's adverse effects/impacts to the bridge:

- Large-format photographs will be taken showing the Cold Spring Canyon Bridge in context as well as details of its historic engineering features. All photographs will be processed for archival permanence in accordance with Historic American Engineering Record photographic specifications.
- Caltrans will photographically reproduce plans, elevations, and selected details from construction drawings in accordance with Historic American Engineering Record photographic specifications that are not deemed confidential for security reasons.
- Written documentation will follow the National Park Service *Historic American Engineering Record Guidelines for Preparing Written Historical and Descriptive Data* (September 1993).
- The copies and negatives will be made available to appropriate agencies and local archives in Santa Barbara County.
- Publication of 500 copies and distribution of the Historic Resources Evaluation Report: Cold Spring Canyon Bridge (51-0037), prepared by JRP Historical Consulting.

- Caltrans will produce four sets of an interpretive display, which consists of a three-panel interpretive exhibit that illustrates the history of the San Marcos Pass and the construction of the Cold Spring Canyon Bridge, and make these displays available to appropriate agencies in Santa Barbara County.

Additional Cultural Resources mitigation measures include:

- If cultural materials were discovered during construction, all activity within and around the immediate discovery area would be diverted until a qualified archaeologist could assess the nature and significance of the find.
- If human remains were discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains were thought to be Native American, the coroner would notify the Native American Heritage Commission, which would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact Valerie A. Levulett, Heritage Resource Coordinator for Caltrans District 5, so that she may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.



Appendix E Letters of Concurrence and Correspondence with the State Historic Preservation Officer, Advisory Council on Historic Preservation, and Memorandum of Agreement

STATE OF CALIFORNIA – THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-8624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



August 13, 2007

Reply To: FHWA070618A

Valerie Levulett
Chief, Central Region Technical Studies Branch
Department of Transportation
50 Higuera Street
San Luis Obispo, CA 93401-5415

Re: Determination of Eligibility for the Proposed Cold Spring Canyon Bridge Pedestrian Barrier, Santa Barbara County, CA [05-SB-154 PM 22.95/23.19, EA 05-0P910]

Dear Ms. Levulett:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The California Department of Transportation (Caltrans) is requesting my concurrence, pursuant to Stipulation VIII.C.5 of the PA, that the Cold Spring Canyon Bridge (bridge No. 51 0037) is eligible for the National Register of Historic Places (NRHP) under criterion C at the state level of significance as an important example of bridge design and welded steel technology in California, and that represents a high aesthetic quality of contemporary design from its period. It is also significant as an important work of the Division of Highways Bridge Department, which is considered a master engineer of the period, and it is an important work of the American Bridge Division of US Steel, which is considered a master builder of the period.

The bridge has exceptional importance that meets the standards under Criteria Consideration G for properties that have achieved significance within the past fifty years. The period of significance is 1962-1964 and the historic property boundaries are the horizontal and vertical footprints of the bridge structure.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94298-0001
(916) 653-6624 Fax: (916) 653-9824
caleshpo@ohp.parks.ca.gov www.ohp.parks.ca.gov



July 24, 2008

Reply To: FHWA070618A

Gregory P. King, Chief
Cultural and Community Studies Office
Division of Environmental Analysis
Department of Transportation
PO Box 942874
Sacramento, CA 94274-0001

Re: Finding of Effect for the Proposed Cold Springs Canyon Bridge (#51-0037) Suicide Barrier Project, Santa Barbara County, CA

Dear Mr. King:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

Caltrans is requesting my concurrence that the proposed project will have an adverse effect on historic properties, specifically the Cold Springs Canyon Bridge, a property previously determined eligible for the National Register of Historic Places under Criterion C at the state level of significance. The bridge has exceptional importance that meets the NRHP standards under Criterion Consideration G for properties that have achieved significance within the past fifty years. Additionally, under PRC §5024.5, Caltrans is providing notice to and seeking comments from me regarding the proposed suicide barrier project. Caltrans is also requesting that the SHPO add the Cold Springs Canyon Bridge to the Master List of Historical Resources pursuant to PRC §5024(d).

Based on my review of the submitted documentation I concur that the undertaking will have an adverse effect on historic properties. Please consider these comments to be my comments under PRC § 5024.5 as well. The Memorandum of Agreement written for this document in order to satisfy 36 CFR Part 800 will constitute prudent and feasible measures under 5024.5. In addition I will add the Cold Springs Canyon Bridge to the State's Master List of Historical Resources.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov or Dwight Dutschke at (916) 653-9134 or ddutschke@parks.ca.gov.

Sincerely,

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

M. Wayne Donaldson, FAIA
April 13, 2009
2

Enclosure

cc: Jill Hupp – HQ; Valerie Levulett – District 5; Paula Julke Carr – District 5

JH/jh

"Caltrans improves mobility across California"

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-7507
FAX (916) 653-7757
TTY (916) 653-4086



Flex your power!
Be energy efficient!

April 13, 2009

Ms. Carol Legard
FHWA Liaison
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 803
Washington, DC 20004

05-SB-154
PM 22.9-23.1
EA 05-0P9100
Cold Spring Canyon Bridge
Suicide Barrier Project

Dear Ms Legard:

SUBJECT: Submittal of Signed Memorandum of Agreement for the Cold Spring Canyon Bridge (#51-0037) Suicide Barrier Project, Santa Barbara County, California

Enclosed for the Advisory Council for Historic Preservation's records is a copy of the executed Memorandum of Agreement (MOA) for the above referenced project.

Caltrans is transmitting this as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under NEPA as well as consultation and coordination responsibilities under other Federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans

If you have any questions, please contact Jill Hupp at (916) 654-3567/jill_hupp@dot.ca.gov. Thank you for all of your assistance with this undertaking.

Sincerely,

GREGORY P. KING
Chief
Cultural and Community Studies Office
Division of Environmental Analysis

"Caltrans improves mobility across California"

**MEMORANDUM OF AGREEMENT
AMONG THE CALIFORNIA DEPARTMENT OF TRANSPORTATION,
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE COLD SPRING CANYON BRIDGE SUICIDE BARRIER PROJECT
ON STATE ROUTE 154 IN SANTA BARBARA COUNTY, CALIFORNIA**

WHEREAS, the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007, and applies to this project; and

WHEREAS, Caltrans has determined that the Cold Spring Canyon Bridge Suicide Barrier Project (Undertaking) will have an adverse effect on the Cold Spring Canyon Bridge (Bridge No. 51 0037), which Caltrans has determined, in consultation with the California State Historic Preservation Officer (SHPO) to be eligible for inclusion in the National Register of Historic Places (National Register) and therefore a historic property as defined at 36 CFR § 800.16(l)(1); and

WHEREAS, Caltrans has consulted with the SHPO and the Advisory Council on Historic Preservation (ACHP) pursuant to Stipulations X.C, and X.I of the January 1, 2004, *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*, and where the PA so directs, in accordance with 36 CFR §800, the regulations implementing Section 106 of the National Historic Preservation Act (16 USC Section 470f), as amended (NHPA), regarding the Undertaking's effects on historic properties and has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to 36CFR§800.6(a)(1); and

WHEREAS, Caltrans has thoroughly considered alternatives to the Undertaking, has determined that the engineering constraints on the design of the Undertaking preclude the possibility of avoiding adverse effects to the historic property during the Undertaking's implementation; and has further determined that it will resolve adverse effects of the Undertaking on the subject historic property through the execution and implementation of this Memorandum of Agreement (MOA); and

WHEREAS, Caltrans District 5 (District 5) has participated in the consultation and has been invited to concur in this MOA;

NOW, THEREFORE, Caltrans, the SHPO and the ACHP agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on the historic property, and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

I. AREA OF POTENTIAL EFFECT

- A. The Undertaking's area of potential effect (APE) is shown in Figure 3 of the May 2008 *Finding of Adverse Effect for the Cold Spring Canyon Bridge Suicide Barrier Project*. The APE includes the entirety of the bridge structure itself, which is the sole historic property.
- B. If modifications to the Undertaking, subsequent to the execution of this MOA, necessitate the revision of the APE, Caltrans will consult with District 5 and the SHPO to facilitate mutual agreement on the proposed revisions. If Caltrans and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with Stipulation V.B, below. If Caltrans, District 5, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of Stipulation VIII.A and Attachment 3 of the PA, no later than 30 days following such agreement.

II. CONSULTATION TO FINALIZE BARRIER DESIGN

- A. In consultation with the SHPO, Caltrans will examine the feasibility of developing a platform cantilever or arc design barrier as proposed by SHPO at a meeting among SHPO, ACHP, Caltrans and District 5 held in Sacramento on February 25, 2009.
- B. Within 30 days following execution of this MOA, Caltrans will notify the signatories regarding the results of its feasibility study for the barrier designs referenced in section A of this stipulation and its recommendation for finalizing the design of a fence-type barrier.
- C. Any objections to Caltrans' recommendations shall be resolved in accordance with Stipulation V.B of this MOA.

III. TREATMENT OF HISTORIC PROPERTIES

A. Photography and Construction Drawings

1. Prior to the start of any work that could adversely affect characteristics that qualify the Cold Springs Bridge as a historic property Caltrans shall ensure that large-format (4" by 5" or larger negative size) photographs are taken showing the Cold Spring Canyon Bridge in context as well as details of its historic engineering features. Photographs shall be processed for archival permanence in accordance with the Historic American Engineering Record (HAER) photographic specifications. Views of the Cold Spring Bridge shall include:
 - a. Contextual views showing the Cold Spring Bridge in its setting;
 - b. Elevation views;
 - c. Views of the Cold Spring Bridge approaches and abutments;
 - d. Detail views of significant engineering and design elements
 - e. Copies of the photographs and negatives will be retained by Caltrans District 5 and will be deposited with the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento. Copies of the photographs will also be deposited with the SHPO and offered to the University of California, Santa Barbara, Davidson Library, Special Collections; the Santa Barbara County Public Library; the Santa Barbara Historical Society Gledhill Library; and the Santa Ynez Valley Historical Society.
2. Caltrans shall photographically reproduce plans, elevations and selected details from these drawings in accordance with HAER photographic specifications that are not deemed confidential for security reasons. If they are legible in this format, reduced size (8 1/2" by 11") copies of construction drawings may be included as pages of the report cited in subsection B of this stipulation rather than photographed and included as photographic documentation.

B. Written Documentation following the NPS HAER Guidelines for Preparing Written Historical and Descriptive Data, September 1993.

1. A written historical descriptive report for the Cold Spring Canyon Bridge will be completed by Caltrans at the Professionally Qualified Staff level of Principal Architectural Historian. This report will provide a physical description of the bridge, discuss its construction and its significance under applicable National Register criteria, and address the historical context for its construction following the format and instructions in the above-referenced HAER guidelines for written documentation.
2. Caltrans will concurrently distribute the draft HAER report to the other MOA parties for review and comment. The other MOA parties will be afforded 30 days following receipt of the draft HAER report to submit any written comments to Caltrans. Caltrans will provide the other MOA parties with written documentation indicating whether and how the draft HAER report will be modified in accordance with any comments received from the other MOA parties. Unless any MOA party objects to this documentation in writing to Caltrans within 30 days following receipt, Caltrans may modify the draft report, as Caltrans may deem appropriate. Thereafter, Caltrans may issue the HAER report in final form and distribute this document in accordance with paragraph B.3 of this stipulation.
3. Copies of the documentation will be offered to the Santa Barbara County Historic Landmarks Advisory Commission; City of Santa Barbara Historic Landmarks Commission; Santa Barbara County Public Library, Central Library and local branches; University of California, Santa Barbara, Davidson Library, Special Collections; University of California, Santa Barbara, Public History Information Unit; Santa Barbara City College Library; American Society of Civil Engineers, Los Angeles Section, History and Heritage Committee; and the American Society of Civil Engineers, Santa Barbara/Ventura Branch.

C. Publication and Distribution of Historic Resource Evaluation Report: Cold Spring Canyon Bridge (51-0037), prepared by JRP Historical Consulting

1. Caltrans will print 500 copies of the May 2007 Historic Resources Evaluation Report (HRER) produced in an illustrated booklet format.
2. Caltrans will concurrently distribute the 2007 HRER to the other MOA parties for review and comment. The other MOA parties will be afforded 30 days following receipt of the 2007 HRER to submit any written comments to Caltrans. Caltrans will provide the other MOA parties with written documentation indicating whether and how the 2007 HRER will be modified in accordance with any comments received from the other MOA parties. Unless any MOA party objects

to this documentation in writing to Caltrans within 30 days following receipt. Caltrans may modify the HRER, as Caltrans may deem appropriate. Thereafter, Caltrans may issue the 2007 HRER in final form and distribute this document in accordance with paragraph C.3 of this stipulation.

3. Copies of this documentation will be offered to local historical societies and organizations including: Santa Barbara County Historic Landmarks Advisory Commission; City of Santa Barbara Historic Landmarks Commission; Santa Barbara County Public Library, Central Library and local branches; Santa Barbara Historical Society; Santa Barbara Trust for Historic Preservation; Santa Ynez Valley Historical Society; Goleta Valley Historical Society; University of California, Santa Barbara, Davidson Library, Special Collections; University of California, Santa Barbara, Public History Information Unit; Santa Barbara City College Library; American Society of Civil Engineers, Los Angeles Section, History and Heritage Committee; American Society of Civil Engineers, Santa Barbara/Ventura Branch; Los Padres National Forest; Los Angeles Conservancy, Modern Committee; Society of Architectural Historians, Southern California Chapter; and Automobile Club of Southern California, Archives) The report will also be posted on the District 5 website.

D. Interpretive Display

1. Four sets of a three-panel interpretive exhibit will be produced by Caltrans. The exhibit panels will be drymounted and framed for greater permanence. The panels will feature text and illustrations on the history of San Marcos Pass, the construction history of the Cold Spring Canyon Bridge, and the bridge's enduring architectural engineering significance.
2. Caltrans will concurrently distribute the draft interpretive display to the other MOA parties for review and comment. The other MOA parties will be afforded 30 days following receipt of the proposed interpretive display to submit any written comments to Caltrans. Caltrans will provide the other MOA parties with written documentation indicating whether and how the interpretive display will be modified in accordance with any comments received from the other MOA parties. Unless any MOA party objects to this documentation in writing to Caltrans within 30 days following receipt, Caltrans may modify the interpretive display, as Caltrans may deem appropriate. Thereafter, Caltrans may issue the interpretive display in final form and distribute this document in accordance with paragraph D.3 of this stipulation.
3. The exhibit will be distributed as follows: two sets to the Santa Barbara County Public Library, one set to the Santa Barbara County General Services Department, and one set to the District 5 Office.

IV. DISCOVERIES AND UNANTICIPATED EFFECTS

If Caltrans determines after construction of the Undertaking has commenced that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans shall address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b). Caltrans at its discretion may hereunder and in accordance with 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

V. ADMINISTRATIVE PROVISIONS

A. Standards.

1. **Professional Qualifications.** All activities prescribed by stipulations I and III of this MOA shall be carried out under the authority of Caltrans by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's Standards *Professional Qualifications Standards* (48 FR 44738-39, September 29, 1983) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude Caltrans or any agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.
2. **Historic Preservation Standards.** Written documentation of activities prescribed by stipulations I, III, and IV of this MOA shall conform to the *Secretary of the Interior's Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as applicable standards and guidelines established by the SHPO.

B. Dispute Resolution

Should any signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, Caltrans shall consult with such party to resolve the objection. If Caltrans determines that such objection cannot be resolved within 15 calendar days, Caltrans shall:

1. Forward all documentation relevant to the dispute, including Caltrans' proposed resolution, to the ACHP. Caltrans will also provide a copy to all signatories and concurring parties. The ACHP shall provide Caltrans with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Caltrans shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties and

provide them with a copy of this written response. Caltrans will then proceed according to its final decision.

2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, Caltrans may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Caltrans shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response
3. Caltrans' responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged

C. Amendments.

If any signatory party to this MOA proposes an amendment to its terms, that party shall consult with the other parties to consider such amendment. The amendment will be effective on the last date a copy of it is signed by all of the signatories in counterpoint. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with section D, below.

D. Termination.

1. If any signatory believes that the terms of this MOA are not being carried out or cannot be carried out, they may request that construction stop where historic properties are threatened while the terms of the MOA are amended per section C, above. If within thirty (30) days, or another time period agreed to by all signatories, an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.
2. If this MOA is terminated for any reason, and Caltrans determines that the Undertaking will proceed, Caltrans will either execute a new MOA with the signatories under 36 CFR § 800.6(c)(1), or request, take into account, and respond to, the comments of the ACHP pursuant to 36 CFR § 800.7 Caltrans shall notify the signatories as to the course of action it will pursue.

E. Duration of MOA.

1. If Caltrans determines that construction of the Undertaking has not been initiated within ten years following execution of this MOA, the signatories shall consult to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment, or termination.
2. This MOA will be in effect through Caltrans implementation of the Undertaking, and will have no further force or effect when Caltrans, in consultation with the other signatories, determines that the terms of this MOA have been fulfilled in a

*Memorandum of Agreement
Cold Spring Canyon Bridge Suicide Barrier
05-0F9100*

satisfactory manner. Caltrans shall provide the other signatories with written notice of its determination that the terms of the agreement have been fulfilled. In the event that Caltrans is unable to comply with the terms of this MOA, Caltrans shall adhere to Stipulations V C or D as appropriate

F. Effective Date.

Caltrans shall ensure that each party is provided with a copy of the fully executed MOA. This MOA will become effective on the date that the last signatory has signed the MOA.

Execution and implementation of this MOA evidence that Caltrans has afforded the ACHP a reasonable opportunity to comment on the Undertaking and the effect of the Undertaking on historic properties, and have themselves taken into account the effect of the Undertaking on historic properties.

Memorandum of Agreement
Cold Spring Canyon Bridge Suicide Barrier
03-0P9100

SIGNATORY PARTIES:

California Department of Transportation

By [Signature] Date 3/10/09
Jay Norvell, Chief
Division of Environmental Analysis

California State Historic Preservation Officer

By [Signature] Date 13 MAR 2009
Milford Wayne Donaldson
State Historic Preservation Officer

Advisory Council on Historic Preservation

By [Signature] Date 3/23/2009
John Fowler (RONALD D ANZALONE)
Executive Director

CONCURRING PARTIES:

California Department of Transportation, District 5

By [Signature] Date 3/30/09
Richard Krumholz
District 5 Director



Appendix F Selected Comments and Responses from Appendix F of the 2009 Final Environmental Impact Report

Appendix F addresses selected comments received on the Draft Environmental Impact Report/Environmental Assessment for the Cold Spring Canyon Bridge Suicide Barrier project on State Route 154.

The following comments and responses, which were first published in the June 2009 Final Environmental Impact Report, are being provided as part of this Draft Supplemental Environmental Impact Report in accordance with the July 23, 2010 Judgment of the Superior Court of California for the County of Santa Barbara [Friends of the Bridge vs. California Department of Transportation (“Caltrans”), et al. [Case No. 1338496] and the court’s August 24, 2010, order on Caltrans’ Motion for Specific Recirculation. These specific comments and responses address the project’s inconsistency with the Santa Barbara County Comprehensive Plan Land Use Element, Visual Resource Policy No. 2 (as described more fully on page 78 herein), and the U.S. Secretary of the Interior Standards for Rehabilitation Nos. 2 and 9 (as described more fully on pages 83-85 herein).

For all comments received during the public commenting period (from May 9, 2008 to June 24, 2008), and Caltrans’ responses thereto, please refer to Appendix F of the June 2009 Final Environmental Impact Report.

COMMENT ON THE DRAFT ENVIRONMENTAL REPORT OF MAY 2008 FOR THE
COLD SPRING CANYON BRIDGE SUICIDE BARRIER ON STATE ROUTE 154 AT COLD
SPRING CANYON BRIDGE 05-SB-154-PM 22.9/23.1 05-OP9100

If the No-Build Alternative of the project is not selected, the project will “result in substantial adverse impacts to the visual environment” [p.v] because of “the expected high level of viewer sensitivity associated with the bridge and State Route 154 (a Designated State Scenic Highway) and the magnitude of the visual change [p.v].” These substantial adverse impacts are “view blockage (or opacity) [p.33]” and “visual detractor to the existing setting caused by the barrier itself [p.33].” It is not made clear in the Draft Environmental Report [DER] that the first concerns primarily the scenic panorama viewed **from** the bridge [Viewpoint 1, p.26], and the second, the character of the bridge itself as seen not only when on the bridge [Viewpoint 1, p.26], but also when looking at the bridge from elsewhere [Viewpoints 2 & 3, p.26].

Since the proposal in question is a “joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration and is subject to state and federal environmental review requirements [p.42],” the project documentation is supposed to be prepared “in compliance with both the California Environmental Quality Act and the National Environmental Policy Act [p.42].” Under the National Environmental Policy Act 42 U.S.C. §§4321, *et seq.*, decisions undertaken by federal agencies must be based on complete analysis so that they are fully informed and well-considered. The analysis in the DER of the “view blockage (or opacity),” based on the *Visual Impact Assessment [VIA]* of January 2008 by the Caltrans Landscape Architecture branch [p.24], is incomplete and faulty.

The DER, in discussing the “visual environment through the project area [p.25],” refers only to features of the **landscape** and never mentions the **skyscape**, as, for example, in the following summarizing sentence: “The dramatic topography and natural vegetative patterns combine in a classic representation of the natural landscape of the central coast of California [p.25, from *VIA*, p.3].” The sky with its changing colors, cloudforms, and qualities of light (including **starlight** and **moonlight**), and the sky’s interface with landscape forms at the horizon are also major components of the views in question, especially **from** the bridge, and should be taken into consideration in the analysis of the opacity of the barrier and the way it disrupts the balance between the sky and the land forms and interferes with the horizon. When the DER remarks that “the construction of a barrier would have an effect on as much as **70 percent** of the existing view as seen from the bridge deck [p.33, from *VIA*, p.7, my emphasis],” does the “existing view” referred to here also include the skyscape, or would the figure, as depressingly high as it is, be even higher when the skyscape is taken into consideration? The three evaluative criteria on page 6 of the previously mentioned *Visual Impact Assessment*, and used in the Visual Quality Evaluation in that same document, are defined only in terms of landscape features, and thus prevent the extensive views of the skyscape from raising the rating for all three criteria for the existing views, and correspondingly lowering the rating in those criteria for the proposed views. Indeed, the barrier from Viewpoint 2 actually **intrudes into the skyline** and thus violates the Visual Resource Policy of the Santa Barbara County Comprehensive Plan Land Use Element which says that “[structures] shall be sited so as not to intrude into the skyline as seen from public viewing places [*VIP*, p.4].”

Finally, as was suggested in the previous paragraph by boldface, the panoramic view from the bridge of the **night sky** with its stars and heavenly bodies is a significant aesthetic experience, and, even **after** a spectacular sunset and **before** sunrise, confers aesthetic value to the darkened landscape with its topographical features silhouetted beautifully against that same night sky. However, following the *VIA*, the DER offers no analysis of the effects of traffic **headlights** illuminating the barrier at night and adding to the opacity and interference of the views **from** the

bridge (and to the bridge); in addition, there is also no analysis of the potential adverse effects of barrier **shadows** at different times of the day. Grid/mesh barriers tend to **collect water** during and after rain and fog; there is no analysis of the potential obscuring effects of these collected water droplets themselves, or the tendency of wet surfaces to reflect light and add to the visual interference of such barriers, or the possibility of such collected water dripping or blowing onto the windshields and windows of passing traffic. [All of these potential negative effects of headlight illumination, shadows, and collected water have not been taken into consideration, either, in the pseudo-quantitative Visual Quality Evaluation of the *Visual Impact Assessment*, and there is no mention of the possible adverse effects water collection will have on the maintenance of both the barrier and the bridge.]

The *Visual Impact Assessment* does not discuss how the actual numerical ratings were assigned or whether these numbers were the subjective assessment of a single person or the pooled subjective assessments of a group, as in Olympic gymnastics judging. When the existing view from the Cold Spring Canyon Bridge from Viewpoint 1 is given a total score of 5.2 out of 7, are there other views in the California, or in the United States [or in the world?] which rate a total score of 7? How does the “quantified” 5.2 relate to other scenic views in the County, State, and country?

It was not emphasized enough in both documents, the *VIA* and the DER based on it, that since no suicide barrier of any kind has been constructed on Cold Spring Canyon Bridge, the proposed views cannot **actually** be looked at by anyone, let alone the “judges” who assigned numerical ratings for the three criteria of these proposed views. Were the color photo-simulations [they are called “Conceptual Views” in the *VIA*] that play such a prominent role in the DER [pp.27–32] used to make these numerical ratings and the decisions concerning the visual impacts of the proposed barrier in the DER? If so, besides being static one-point views that cannot capture the changing panoramic experience of driving over the bridge or on relevant sections of Highway 154, there is a **serious flaw** in using some of these photo-simulations because the opacity effect of the perspective **foreshortening** of the **grid/mesh vertical spaces** [not the vertical grid/mesh strut **support** spaces] is **not shown**: even though the view-angle gets progressively more acute, the simulated grid/mesh does **not** get progressively **more opaque** as it should according to the discussion in paragraph 3 of page 7 of the *Visual Impact Assessment*, but remains **the same** until the simulated convergence of the widely spaced grid/mesh support **struts** produces its own opacity near the end of the bridge, **long after** the grid/mesh would have become opaque from the convergence of its own verticals. Omitting this source of opacity from the photo-simulations makes the barrier appear less opaque than it really will be, especially from Viewpoint 1, which has the most increasingly acute view-angles. Now the DER maintains [p.33] that the “mesh variation would be the less noticeable of the two alternatives because the mesh itself would tend to recede and visually blend with the background,” which conclusion is based on the Visual Quality Evaluation of Viewpoint 1 [p.8 of the *VIA*], but this effect on the view **from** the bridge would only occur at a view-angle perpendicular to the bridge (incidentally, where motion past the grid/mesh would also blur the view), and not from the more acute view-angles which would produce **complete opacity** allowing no background at all to be seen.

There is a constant confusion in both documents of the visual impacts of the suicide barrier when considering the adverse effects of the barrier on the views **from** the bridge as opposed to the views **of** the bridge. The preferred grid/mesh barrier has slightly less adverse effects on the views **of** the bridge, but considerably more adverse effects on the views **from** the bridge. These two very different impacts should not be **evenly weighted** as they are in the *VIA* and the DER based on it. It should be obvious that the views **from** the bridge are more important, and since they are more important, it is an **oversight** of the analysis that a **passenger** viewpoint from vehicles traveling over the bridge should have been included.

Another shortcoming of the Visual Quality Analysis of the *VIA*, and thus of the conclusions of the DER, is that not only do barriers detract from the existing views to produce a “negative Visual Quality Difference,” but they have a negative effect **in themselves** (what one might call the “prison or asylum effect”) which is **independent** of the effect they have on the views **from** the bridge. Since the Landscape Architecture branch of Caltrans is skilled at numerically assessing imaginary views, I would ask them to imagine the effects of putting a grid/mesh over all the windows in their homes in order to discover that not only does the grid/mesh have blockage or opacity effects, but also the effect of making one feel imprisoned. The free and expansive feeling engendered by traveling over the Cold Spring Bridge would be replaced by a captive and claustrophobic feeling engendered by the barrier itself, independent of its negative effects on the panoramic scenery or an aesthetic consideration of the bridge structure. Perhaps a suitable experiment in barrier proposal modeling would be to transport the Landscape Architecture staff over Cold Springs Canyon Bridge in a police paddy wagon with grid/mesh windows. I await the quantified Visual Quality Analysis of this experiment.

To turn now briefly to the adverse effects of the suicide barrier on what are called “cultural resources,” the DER concludes that the “only historic property present is the bridge itself [p.v]” and concludes that the barrier “introduces a visual element that diminishes the property’s historic integrity of design, feeling, and association [p.v].” However, because the views **from** the bridge will suffer from “substantial adverse impacts [p.v],” two other criteria of adverse effect as defined in 36 Code of Federal Regulations 800.5 [p.v], the integrity of location and the setting, will suffer substantial adverse impacts, too, because the views **from** the bridge are a direct result of its special location and setting, and indeed, help to **constitute** its location and setting. To the extent those views are no longer possible, to that extent is the bridge removed from its location and its setting. One of the consequences of the Eiffel Tower and the Washington Monument trading places—that is, changing locations and settings—would be that the views from the Washington Monument would be of Paris and the views of the Eiffel Tower, of Washington, a thought experiment which demonstrates that scenic views are part of what constitute the “integrity of a historical property” and are inextricably tied to its location and setting. Ruin the view and you ruin the integrity of any historical property with a view. This shows that the views **from** the bridge are relevant to other cultural characteristics of the bridge than its integrity of design, feeling, and association. A portion of the historic Freemont Trail, for example, is presently visible **from** the bridge.

The DER (and the *VIA*) fail to point out that the “substantial adverse impacts” to both the views **from** the bridge and **of** the bridge will be suffered by those travelers over the relevant section of Highway 154 making the approximately **5,840,000** trips a year [that is a rough estimate based on the figure of 16,000 vehicles using the relevant section of Highway 154 a day, p.3 of the *VIA*; this figure is **not found** in the DER!]. Caltrans is supposed to possess the expertise to make this estimate [based on a simple multiplication by 365] more accurate, perhaps even to the extent of calculating the average number of passengers per vehicle in addition to the driver of each trip, but they have not done this analysis to make a “fully informed and well-considered” decision concerning the potential adverse impacts of their project to millions of people a year.

Admitting these “substantial adverse impacts to the visual environment,” what does the DER offer as “**minimization and/or mitigation**” [see Appendix D and also section 3.3, p.44 referencing section 2.1.2, p. 34; also *VIA*, p.11]? The formation of an Aesthetics Design Advisory Committee! Because these “substantial adverse impacts to the visual environment,” the aforementioned [my first paragraph] “view blockage (opacity) and visual intrusion [p.v],” (incompletely) analyzed in the DER [based on the *VIA*] will result from **any design** of the preferred Grid/Mesh Alternative [and indeed of **any design** of the Vertical Alternative] that

meets the **basic requirements** of the project, the formation of an Aesthetics Design Advisory Committee and their work **does not** constitute a **minimization and/or mitigation** of the “substantial adverse impacts to the visual environment.” This Committee could only mitigate other adverse effects **not** discussed in the DER, for example, by not painting the barrier fire-engine yellow, encrusting it with diamonds, illuminating it at night, or flying the Caltrans flag from the grid/mesh support struts! Unless this Committee could make the barrier **invisible**, I repeat, **THERE IS NO MITIGATION** of the substantial adverse visual impacts of the barrier. Let’s have the DER repeat it: “It is not possible, however, to reduce the unavoidable visual, aesthetic, and cultural impacts to the bridge to a less than significant level [p.44, Section 3.2.3, “Unavoidable Significant Environmental Impacts”].”

We have a Proposed Action with substantial adverse visual impacts on a Designated State Scenic Highway for which there is no mitigation, but how well does this project meet its Purpose and Need? Its purpose is stated [p.iii] to be twofold: 1) To “reduce the number of suicides at Cold Spring Canyon Bridge” and 2) To reduce the risks to “emergency personnel” when “attempting to prevent a suicide or when recovering a body.”

To take the second part of the Purpose first, the DER does not comply with the National Environmental Policy Act 42 U.S.C. §§4321, *et seq.*, because it does not offer a complete analysis of the so-called risks encountered by emergency personnel, nor are these “risks” compared to the “risks” encountered by the same personnel on other rescue jobs they respond to (for example, injured hikers in the backcountry, or other types of suicide attempts). The mere presence of a component factor (for example, dense manzanita, p.5) of the emergency job in question (preventing a suicide from the bridge or recovering a body below the bridge) does not constitute a **demonstrable** risk unless this factor has actually resulted in injury in the past. In the extremely sketchy injury “statistics” given by the DER, the only vaguely identified factors that have actually **resulted in injury** are poison oak and whatever caused the sprained ankles and knees [rocky ground? steep terrain? tripping?], and these injuries were among an unspecified number of rescue team members, and not, apparently, among law enforcement who have responded to “approximately 162 incidents in the past eight years” that were “suicide-related” at the bridge without a single injury [p.4]! How many cases of poison oak rash and sprains there were and over what period of time is not said; nor are these cases compared to the frequency of injuries of the same type for other types of jobs the same emergency personnel respond to, or even to injury statistics in general, such as the frequency of cases of poison oak rash among recreational hikers in Santa Barbara, or sprains from tripping in one’s own back yard. **No other factors** mentioned as risks on pages 4–5 of the DER **have resulted in injury** [and the fifth bullet point on page 5 is irrelevant because it does not concern emergency personnel]. These poorly documented injuries and anecdotes really substantiate the fact that the emergency personnel are **fully competent** to do their jobs **without significant injury**, and thus that they are **not at significant risk** because of their training, experience, and fitness. The DER does **not** substantiate the Need for the second part of the Purpose of the proposed project.

Concerning the first part of the Purpose, to “reduce the number of suicides at the Cold Spring Bridge,” the DER again fails to comply with the National Environmental Policy Act 42 U.S.C. §§4321, *et seq.*, because it offers an incomplete and indeed again flawed analysis concerning the Need for this part of the Purpose. It is stated on page 1 that at least 44 people have committed suicide at this location since the bridge was built in 1963. The DER offers **no other information** concerning these people or why their deaths have to be considered **suicides** and not rather **accidents** from one of the unsubstantiated risk factors sketched on pages 4 through 5 concerning the second part of the Purpose, for example, the supposedly “low ... existing bridge safety railing, lack of sidewalks, and noticeable swaying of the bridge from traffic and wind [p.5].” This is less than one person a year for 46 years and that statistic has not been

compared with the relevant accident rates or even with the suicide rates on other bridges, or with the rates of suicide using other methods. Where did these 44 people live? There is absolutely no demographic information at all given as a context for this magic number 44. The DER also offers the information that “in the past 25 years, at least 31 deaths have occurred [p.1],” but again offers absolutely no information concerning these deaths, or even whether these deaths are all suicides. This is a rate of 1.24 a year; again very small and not put into the context of population increases, or in any other demographic context.

If these opaque numbers are compared to the average number of trips across the bridge in a year, they pale into insignificance. For example, if we compare the **total number** of suicides over 46 years to the average number of trips across the bridge in a year, that number is .00075%! If we make the same comparison for .97 suicides per year we get .000016%, or for the 1.24 deaths in the last 25 years, .0000212%. **Millions** of travelers a year, including potential suicide victims, over the relevant section of Highway 154 will suffer from “substantial adverse visual impacts” because of an extremely tiny segment of the population who have been determined by the Sheriff/Coroner’s office to be suicides.

Despite the fact that there are 13 people who prepared the DER, not a single person is qualified by training or experience to evaluate the extensive literature on suicides, and yet the civil engineers, transportation engineers, engineering geologists, traffic planners, graphic designers, environmental planners, geologists, archaeologists, etc., who drafted the DER—all laypersons in the fields of psychiatry, psychology, and medicine—claim that “the **collective body of evidence** shows that a barrier on Cold Spring Canyon Bridge would meet the Purpose of the proposed project by reducing suicides at the site [p.17, my emphasis]” and then offer a short and contradictory medley of such research [pp.17–23] purporting to show that 1) “barriers are effective in reducing suicides [p.17; the conclusion on the same page is actually that “physical barriers have been effective **in helping** to prevent suicides”],” and 2) “suicidal people often do not seek another location [p.21; how often?].” A brief look at this material is sufficient to show how treacherous it can be for laypersons to assess its value and come to conclusions at the level of reliability required by an environmental impact document.

It is well-known that suicide rates vary considerably from country to country because of the complex relationship between a given society or culture and the mental health of its populace, yet, of the 8 studies cited in support of the first point (barrier effectiveness), 3 concern other nations than the United States and one is world-wide; in addition, 2 are not restricted to suicides from bridges. Of the 7 studies cited in support of the second point (method substitution), again 3 concern foreign countries, one is world-wide, and 3 are not restricted to suicides from bridges. Of the 12 **bridges** [other **monuments** are not relevant] with barriers listed on page 20, 7 (over half) are located in foreign countries.

Of the 2 American **studies** [though included in the total of 7 in the previous paragraph, the first citation on p.21 is not a study at all but a **policy statement**] cited to support the second point, Dr. Richard Seiden’s study concerns the Golden Gate Bridge, one of the most studied bridges and, according to page 12 of the DER, “the foremost suicide magnet in the world.” If the “collective body of evidence” for the effectiveness of suicide barrier installation on bridges were conclusive, why hasn’t a barrier been erected on the Golden Gate Bridge?

The 2005 article in the *Journal of the American Medical Association* by J. John Mann, et al., cited in support of the first point (barrier effectiveness) refers to the “**unresolved** questions about method substitution [p.19 of the DER, my emphasis],” a reference which calls into question the studies cited in support of the second point (method substitution) like the 2005 article in *Accident Analysis and Prevention* by Mark S. Daigle who concluded that “the risk of substitution towards an alternate method is small [p.22 of the DER].” And one of the English studies cited in support of this second point says that “...the impact of any intervention on what

is a relatively unusual method of suicide such as jumping may be difficult to measure in statistical terms...[p.23 of the DER,]" which hardly confers credibility on such research.

Nothing is said, either, in these citations, about the possibility that potential suicides on bridge who, prompted by the **natural fear** of high places, decide not to jump, may reconsider their decision to do away with themselves; whereas, if prevented from such an experience, may instead choose another method without a such high fear component, such as taking pills, and succeed. Such persons would not have the benefit, either, of the relatively successful interventions of emergency personnel like those who, at Cold Springs Bridge with a single suicide a year, respond 8 times a year to suicide-related calls.

One of the main assumptions of the fraction of the immense body of literature on suicide cited in the DER is that a suicide from a bridge is a sudden, impulsive act without a history in the previous life of the victim. If there were no history of any kind of mental disturbance in the previous life of the victim, how was it determined that 44 people since 1963 committed suicide by jumping from Cold Spring Canyon Bridge? Why weren't any of the deaths considered by the Coroner [p.6] to be **accidental**? If there were some previous history of mental disturbance, prevention of suicide **at the bridge** can occur **elsewhere**, and the cited studies were invoked only to support prevention **at the site**.

Indeed, all (including those rejected as infeasible) of the *Draft Environmental Report* Alternatives to reduce the number of suicides at Cold Spring Canyon Bridge concern prevention methods **at the bridge itself** and none are **off-site** prevention methods that would, for example, involve the identification, timely intervention, and treatment by mental health professionals of persons-at-risk **before the crisis situation** occurs. Absolutely no evidence has been offered in the DER that **on-site** prevention measures are **more effective** at reducing suicides at the bridge than the many **off-site** prevention alternatives that could be instituted. This is the **greatest deficiency** of the DER. At just the time when mental health funding in the County of Santa Barbara is being severely cut, a proposal is put forth to reduce suicide that does not consider mental health programs at all!

It might be replied that the effectiveness of such mental health programs is not the business of Caltrans and the Federal Highway Administration, but is suicide prevention their business? I would argue that it is not. According to the DER: "The proposed project would be built under Caltrans' Safety Improvement Program. The purpose of this program is to reduce the number and severity of accidents on the State's highway system by implementing safety improvements to existing roadways [p.6]."

The simple fact is that **SUICIDES ARE NOT ACCIDENTS**, nor are they to be considered **traffic fatalities!** They are deliberate acts which are not the **intended use** of the State's highway system and existing roadways, including bridges. There is no mandate from any governmental body that Caltrans prevent the deliberate misuse of their highway system. A suicide from Cold Spring Canyon Bridge is absolutely **no evidence** that the bridge is not **safe!** There are "approximately 16,000 vehicles a day using this section of Highway 154 [p.3 of the *Visual Impact Assessment*]," which roughly amounts to 5,840,000 vehicles a year. What **would** constitute evidence that the bridge is unsafe would be statistics showing that there are too many **traffic accidents** for this volume of traffic. No figures to this effect figures are offered by the *Draft Environmental Report*.

There is, however, a brief and **unquantified** discussion of three benefits to highway safety of the proposed barrier on page 17. The first is that the barrier would protect bicyclists and pedestrians from "falling over the side of the bridge when it sways during windy weather." Since no evidence is offered that any of the few [?] bicyclists or pedestrians who use the bridge has ever fallen over during windy weather [nor how often the weather is windy], the present barrier

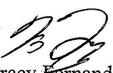
whose height given on page 11 [3 feet 7 inches from the road and 2 feet 7 inches from the curb] is **already** sufficiently **safe**.

The second purported benefit is supposed to be increased traffic safety in the case where a suicide intender has abandoned their car on the bridge deck, blocking either one or two lanes. Considering that there is less than one suicide per year (p.1) and recently only 8 suicide-related incidents per year (p.4), no statistics are given as to **how often** cars have been abandoned (in one or both lanes) or what the traffic flow was **at the time** of such an incident, for example, late at night. No statistics are given as to whether these rare events actually **resulted in an accident**, showing that such abandonment was unsafe, nor are statistics given to show that **decreased traffic flow** controlled by emergency personnel is **unsafe**.

The third purported benefit to traffic safety is supposed to be the reduction of traffic delays. No evidence is given to show that delaying traffic is inherently **unsafe**. Again, no statistics are given as to how often suicide-related events result in the partial or complete closure of the bridge or, if such closures have indeed occurred, for how long. If it is true that reduced traffic flow or traffic delays are **unsafe**, it will be **unsafe to build** the suicide barrier because its construction will entail at least **420 hours** of single lane traffic with 5 minute delays on the bridge. No comparable statistics concerning closures, partial or otherwise, have been given for routine maintenance on the bridge, or for the **additional maintenance** that the suicide barrier will involve [which additional maintenance **costs** have unaccountably been omitted from Table 1.1 on p.9 of the DER].

Since all three of the purported benefits to traffic **safety** of the proposed project have not been sufficiently demonstrated in the DER, it would be a misuse of Caltrans Safety Improvement Program funds to use them to build a suicide barrier. Traffic safety, at any rate, is **not** the Purpose of the proposed project as stated on page 1 of the *Draft Environmental Report*.

It can be concluded that a proposed project with significant and substantial environmental impacts which cannot be mitigated, whose Purpose is misguided and inappropriate to the lead agency, and whose Need has not been sufficiently demonstrated by its draft environmental report, should not be built.

 6/24/08
Tracy Fernandez
302 Palisades Dr
Santa Barbara CA 93109
(805)966-5250

Caltrans' Response to Fernandez Comment #2, relating to the project's inconsistency with Visual Resource Policy No. 2 of the Santa Barbara Comprehensive Plan:

The project includes no new source of light that might affect nighttime views. Views of headlights from off-site locations would diminish because the barrier would visually block a percentage of headlight glare. The barrier would not become back-lit or glow as with a solid opaque screen. Because of the viewing angles upward, over, and between the barriers as seen from the bridge deck, views of the night sky would not be obscured. Because of the proposed barriers' partial opacity, visibility of headlight glare as seen from the surrounding areas is expected to be partially reduced by a corresponding amount. The barrier finish will be darkened to reduce reflectivity from both headlights and from the sun. The grid/mesh alternative proposes an approximately 2-inch square mesh, which would place the individual wires too far apart to collect moisture by surface tension, and too far apart to create a "glow" effect for viewers on or off the bridge.

The Santa Barbara Comprehensive Plan Land Use Element Section IV, Goals and Policies, Subsection 2, Visual Resource Policies states: "In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places."

The VIA references the above County policy in the Viewer Sensitivity section (page 4). Neither the VIA nor the EIR/EA claims that the project does not violate portions of the referenced visual resources policy. The VIA and environmental document fully disclose the potential affect of the project on the skyline and hillsides in photo-simulations and in the analysis. Page 7 of the VIA states "The proposed barrier would affect approximately 70 percent of the existing views of the valley and hills as seen from the bridge deck." Furthermore, the VIA and EIR/EA find that significant visual impacts would be the result of "The partial blockage of high-quality views from an Officially Designated State Scenic Highway."

3069 Calle Mariposa
Santa Barbara, California 93105-2740
June 17, 2008

Ms. Cathy Stettler, Senior Environmental Planner
Caltrans District 5
50 Higuera Street
San Luis Obispo, California 93401

Via U.S. Mail and e-mail attachment (cathy_stettler@dot.ca.gov)

RE: Comments on Draft Environmental Impact Report, Environmental Assessment
and Section 4(f) Evaluation, Proposed Suicide Barrier on Cold Spring Canyon
Arch Bridge, State Highway 154, Santa Barbara County

Dear Ms. Stettler:

Thank you for the chance to review and comment on this draft environmental document. I've organized the following comments in the order that the subject sections appear in the document, and reserve overall comments on the project until the end of this letter.

- Pg. 1, Need.** This section, based on a NEPA format, rather than CEQA's requirement for defining Project Objectives, is essentially just that. Therefore, the proposed "Human Barrier" alternative can be shown to address both Project Objectives: to reduce suicides; and to reduce potential hazards to law enforcement. Since the No Barriers Alternative addresses both objectives, it meets "most of the proposed project's objectives." Therefore, under CEQA Guidelines Section 15126.6(a), it must be identified as an alternative to the proposed action, as it achieves this requirement, while also avoiding or reducing potentially significant impacts on visual resources and historic resources. The central court ruling, *Citizens of Goleta Valley v. Santa Barbara County Board of Supervisors* (1990), regarding the need for evaluating reasonable and feasible alternatives to the project at the Bacara Hotel, is cited in CEQA Guidelines Section 15126.6(a) for just this reason.
- Pg. 6, Common Design Features.** The "experts in the fields of suicidology and mental health" are not identified, and therefore the basis for including those perspectives exclusively, while not including those of Dr. Glasgow at UCSB, is faulty. CEQA Guidelines Section 15064.5(f)(g) requires that a disagreement among experts be clearly discussed in the context of an EIR.
- Pg. 9, end of first paragraph (Comparison of Alternatives).** This statement should also reflect that, should Caltrans find that the NEPA action *does* significantly affect the environment, a full Environmental Impact Statement would be prepared.

4. **Pg. 11-14, Human Barrier Alternative.** The document seeks to characterize this alternative as infeasible due to its inability to be implemented successfully. This needs to be more fully addressed, especially in light of Dr. Glasgow’s research findings.
5. **Pg. 14, Permits and Approvals Needed.** “None required” is wholly implausible—someone, somewhere has to decide whether or not to implement a project and, if so, how to implement it. This critical fact must be disclosed in the document.
6. **Pg. 34, Sec. 2.1.2, Visual/Aesthetics, Avoidance, Minimization, and/or Mitigation Measures.** On its face, the statement “Once the Preferred Alternative is identified, the final design and appearance of the barrier would be developed with input from an Aesthetics design Advisory Committee” betrays a strong bias that assumes a barrier would be constructed. Regardless, this measure would be neither effective nor feasible because no specific beneficial outcome would be assured. Also, should a physical barrier be pursued, it appears that the public would be deprived of the chance to review and comment upon a final design. This would impermissibly defer specific mitigation until after the conclusion of CEQA and NEPA review.
7. **Pg. 36-37, Sec. 2.1.3, Cultural Resources, Environmental Consequences.** As defined, the proposed project action requires either of two barriers that would create an additional rail height of over 9.5 feet high (pg. 37). The adverse effect to those qualities that make the Cold Springs Bridge eligible for the National Register of Historic Places also make it eligible for the California Register of Historic Resources (see CEQA Guidelines Section 15064.5(3)(C)). The EIR must note that the proposed project would have a significant impact on the historic resource because it would:

“Demolish or materially alter in an adverse manner those physical characteristics that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historic Resources.” CEQA Guidelines Section 15064.5(b)(2)(A)
8. **Pg 37, Sec. 2.1.3, Cultural Resources, Avoidance, Minimization, and/or Mitigation Measures.** The EIR must note that the mitigation of the significant impact on the Cold Springs Bridge’s historic properties shall comply with the following:

“Generally, a project that follows the Secretary of Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings or Secretary of Interior’s Standards for Rehabilitation and Guidelines for

7

8a

Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historic resource.” CEQA Guidelines Section 15064.5(b)(3)

There is no indication that the significant impact on the Cold Springs Bridge, a historic resource as defined by the National Historic Preservation Act, NEPA, and CEQA, would be feasibly mitigated by any of the “suggestions” identified in this section. The Memorandum of Agreement (MOA) referenced as mitigation is only a mechanism used to implement specific measures that avoid or reduce impacts consistent with the Secretary of Interior’s Standards defined above. The MOA does not in itself describe the ways in which modifications to the proposed bridge barriers would preserve the character defining features that make the Cold Springs Bridge significant.

Also, the later completion of “a Finding of Effect document” and “Memorandum of Agreement” would defer important facts and analysis until after the conclusion of CEQA and NEPA review. This would deprive the public of the chance to review and comment upon such important facts and analysis, and would impermissibly defer specific mitigation.

The introduction of the new barriers would irreparably compromise the integrity of the “original design features (the arch ribs, towers, columns, and girders, for example)” (EIR pg. 36, paragraph 4). There is no feasible mitigation to preserve the integrity of these original design features, consistent with the Secretary of Interior’s Standards defined above.

The resulting Finding of Adverse Effect, given the fact that there is no potential for feasible mitigation to address the proposed project’s impacts on the Cold Springs Bridge, must require the preparation of an Environmental Impact Statement.

9. **Pg. 38, Sec. 2.2.1, Natural Communities, Environmental Consequences.** The extent to which a physical barrier could increase the chance of bird strikes must be addressed, especially considering the local presence of endangered and threatened species such as the Bald Eagle and California Condor.
10. **Pg. 43, Sec. 3.2.2, Significant Environmental Effects of the Proposed Project – Cultural.** The document states that the proposed project safety barriers is “rehabilitation,” as defined in the Secretary of Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings. This is clearly inappropriate, as the bridge does not require any improvements to maintain its structural integrity and safety to travelers. The proposed modification to the bridge is appropriately assessed in terms of the *Preservation* of its original design features, as discussed in comment no. 8 above.

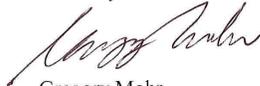
Also, as previously described, deferring the development of “additional mitigation measures... for the Memorandum of Agreement” would impermissibly preclude the public from reviewing and commenting on such measures.

11. **Pg. 44, Sec. 3.2.3, Unavoidable Significant Environmental Effects.** The EIR properly identifies impacts on cultural (historic) resources as significant and unavoidable. This finding applies to the NEPA characterization of Finding of Adverse Effect, as no feasible mitigation exists to reduce impacts on the National Register-eligible property. The EIR/EA Section 4(f) analysis (Appendix B) already acknowledges this (page 77, paragraph 5): “A Finding of Effects evaluation (pending) is expected to find that the installation of a physical barrier on the bridge deck—of a size and shape necessary to meet the project’s purpose and need—would constitute an adverse effect on this historic property.”
12. **Pg. 50, Chapter 5, List of Preparers.** It is unclear as to who prepared the historic resources studies for this EIR/EA, including the Historic Resources Evaluation Report and Historic Property Survey Report.

I hope that these comments are helpful in preparing a final environmental document that fully complies with both CEQA and NEPA requirements.

In conclusion, I find it disturbing that the carefully-formulated “ ‘Human Barrier’ Alternative” put forth by the Friends of the Cold Spring Canyon Bridge has been dismissed from consideration in this document, given the significant and unavoidable impacts associated with the physical barrier alternatives. It clearly appears that Caltrans is on a pre-determined course toward constructing a physical barrier. I strongly advocate trying the components of the “human barrier” alternative first; should these measures prove to be ineffective, then a physical barrier might be reconsidered.

Sincerely,



Gregory Mohr

Caltrans' Response to Mohr Comment #7, relating to the project's inconsistency with the U.S. Secretary of the Interior Standards for Rehabilitation:

The draft EIR/EA identified the unavoidable significant impacts under the California Environmental Quality Act in Chapter 3. The impact mentioned in this comment was covered in Sections 3.2.2 and 3.2.3. Adverse effects are defined as the direct or indirect alteration of the characteristics that qualify a historic property for inclusion in the National Register of Historic Places in a manner that diminishes the historic property's integrity. The integrity of a historic property is made up of seven aspects: location, design, setting, materials, workmanship, feeling, and association. The proposed project would cause a direct adverse effect on Cold Spring Canyon Bridge because it introduces a visual element that diminishes the property's historic integrity of design, feeling, and association.

Of the four Secretary of the Interior Standards for the Treatment of Historic Properties (Preservation, Restoration, Reconstruction, and Rehabilitation), Caltrans has determined that rehabilitation is the most appropriate treatment standard for the proposed project. However, Caltrans recognizes that the addition of a physical barrier of any kind is an alteration to the historic property that is not entirely consistent with the Secretary of the Interior's Standards for Rehabilitation. For these reasons, additional minimization and mitigation measures have been developed in a Memorandum of Agreement (see Appendix E).

The construction of the Grid/Mesh Alternative on Cold Spring Canyon Bridge would introduce a new structure that would significantly affect the bridge's historic character, appearance, and scenic views (as defined under the California Environmental Quality Act). Measures have been proposed to mitigate these significant impacts. It is not possible, however, to reduce the unavoidable visual, aesthetic, and cultural impacts to the bridge to a less than significant level under the California Environmental Quality Act (see Section 3.2.3 *Unavoidable Significant Environmental Effects*).

Caltrans consulted with the State Historic Preservation Officer and the Advisory Council on Historic Preservation in compliance with Section 106 of the National Historic Preservation Act. A Memorandum of Agreement to address the adverse effects of the project was signed by the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the California Department of Transportation in March 2009 (see Appendix E). Also refer to Response to comment

#3 to Mr. John Baker, County of Santa Barbara Executive Office (in the 2009 Final Environmental Impact Report).

Caltrans' Response to Mohr Comment #8a, relating to the project's inconsistency with the U.S. Secretary of the Interior Standards for Rehabilitation, Nos. 2 and 9:

The draft EIR/EA indicated that an adverse effect under Section 106 of the National Historic Preservation Act was expected. A Finding of Effect document was prepared which determined that the project would have an adverse effect on the bridge, an historic property. The State Historic Preservation Officer concurred with this determination on July 24, 2008.

The Finding of Effect addresses impacts under Section 106 and analyzes the extent to which the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings can be met. The Finding of Effect concluded that two of the Standards for Rehabilitation could not be met. Caltrans acknowledges that the significant impacts cannot be mitigated to a level of less than significant on the historic resource and that there is no feasible mitigation to fully comply with Standard 2 and Standard 9 of the Secretary of the Interior's Standards for Rehabilitation.

A Memorandum of Agreement (MOA) is executed once a Preferred Alternative is selected. By definition, this does not happen until the final environmental document is in preparation. The Preferred Alternative, the Grid/Mesh Alternative, has now been selected, and a Memorandum of Agreement has been signed (see Appendix E). The standard Section 106 evaluation process has been followed.