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PACIFIC WEST REGIONAL OFFICE Memorandum

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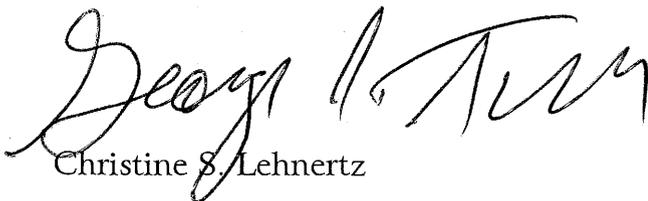
Memorandum

To: Superintendent, Golden Gate National Recreation Area

From: Regional Director, Pacific West Region

Subject: Environmental Compliance for Road Improvements at Alexander Avenue\Dan's Drive Intersection

The finalized *Finding of No Significant Impact* (FONSI) for this much anticipated road improvement and safety enhancement project is approved. To complete this particular compliance effort, at the time when the park announces the decision, copies of the *FONSI* should be made available to all individuals, organizations, and agencies that received the supporting environmental assessment.



Christine S. Lehnertz

Attachment

cc watch:
PWR-FLHP

FINDING OF NO SIGNIFICANT IMPACT

ALEXANDER AVENUE/DANES DRIVE INTERSECTION IMPROVEMENT PROJECT

National Park Service, U.S. Department of the Interior
Golden Gate National Recreation Area

May 2012

INTRODUCTION

This Finding of No Significant Impact (FONSI) has been prepared, in accordance with the National Environmental Protection Act (NEPA), for the Alexander Avenue/Danes Drive Intersection Improvement Project (proposed project), Marin County California. The project area is located south of the City of Sausalito in the Golden Gate National Recreation Area (GGNRA) Marin Headlands-Fort Baker area.

The National Park Service (NPS) and Golden Gate Bridge Highway and Transportation District (GGBHTD) partnered to plan and conduct the environmental analysis for the proposed project. A joint Environmental Assessment/Initial Study (EA/IS) was prepared in accordance with NEPA and the California Environmental Quality Act (CEQA). This FONSI approves federal actions on NPS property only. GGBHTD issued a separate Notice of Determination for project actions on their jurisdictional land.

This document describes the rationale used in selecting the alternative for implementation, and provides an explanation of why it will have no significant effects on the human environment. As stated in the EA/IS for the proposed project, the proposed project will widen and extend the northbound left-turn lane on Alexander Avenue; reconfigure the Alexander Avenue/Danes Drive intersection; add roadway shoulders to Alexander Avenue; and replace the existing guardrail with a steel-backed timber guardrail painted white to match the existing timber rail.

PURPOSE AND NEED

The purpose of the proposed project is to correct existing deficiencies and substandard roadway conditions at the Alexander Avenue left-turn lane to Danes Drive. The project would also help to reduce offsite transportation impacts associated with operation of Fort Baker by improving the Alexander Avenue/Danes Drive intersection functionality and enhancing multi-modal use opportunities along Alexander Avenue. The project identifies actions within the project area that address a number of deficient multi-modal transportation conditions including: inadequate roadside shoulder width to handle shared bicycle, pedestrian, and automobile use; and skewed intersection geometry. The proposed project is needed to enhance operational safety of the Alexander Avenue/Danes Drive intersection and minimize conflicts between the various user groups present.

SELECTED ALTERNATIVE

NPS and GGBHTD have selected Alternative D, the 8-Foot Rockfall Catchment Alternative, for implementation. A completed description of Alternative D can be found in the EA/IS (December 2011).

The selected alternative will make improvements to approximately 1,150 feet of Alexander Avenue north of the US 101 interchange and approximately 200 feet of Danes Drive between Alexander Avenue and East Bunker Road (see EA/IS Figure 2-4). The selected action will add roadside shoulders to both sides of Alexander Avenue within the project limits in order to accommodate bicyclists and pedestrians outside of the travel lanes. The Alexander Avenue/Danes Drive intersection will be reconfigured from a “Y” intersection to a “T” intersection to improve the limited sight distance and overall operation of the intersection. The existing left turn lane from northbound Alexander Avenue to westbound Danes Drive will be lengthened to allow for improved deceleration in the turn lane and to increase storage capacity in accordance with current AASHTO design guidelines. The project area and the construction staging area are depicted in EA/IS Figure 3-6.

Lengthening the left-turn lane and adding roadside shoulders along Alexander Avenue within the project limits will require widening the roadway. Widening Alexander Avenue will require two distinct construction components:

- Establishment of a new cut slope along the east side of Alexander Avenue between the US 101 interchange to the south and the intersection with Danes Drive to the north (described below); and
- Implementation of a retaining structure to support the placement of fill above the Bunker Road Arch Tunnel to allow widening of Alexander Avenue north of the Danes Drive intersection.

Widening Alexander Avenue: The selected alternative (Alt. D) will allow for two 12-foot-wide vehicle lanes, a 12-foot-wide left turn lane, and a 5-foot-wide combined shoulder and bicycle lane on both sides of Alexander Avenue. Alternative D will install a temporary rockfall barrier between the catchment ditch and roadway. Any change to the temporary barrier (removal of the temporary barrier, possible installation of rockfall mesh, or installation of a permanent barrier) will be subject to a separate environmental evaluation (undertaken by NPS and the Federal Highway Administration Central Federal Lands Highway Division) prior to implementation. This alternative will result in a final east cut slope height of approximately 77 feet and the total width of excavation would average approximately 91 feet from where the existing slope toe meets the roadway. Similar to the other action alternatives, a 2-foot-wide paved ditch will be constructed along the west side of Alexander Avenue to facilitate drainage and provide minimal area for potential rockfall and landslide material. It is estimated that approximately 21,600 cubic yards (CY) of material will be excavated from the east slope. To reduce the hauling costs and the associated impacts to air quality, GGNRA anticipates being able to utilize on the order of 10,000 CY of the road cut material on projects within 10 miles driving distance from the proposed project. The remainder of the material is anticipated to require disposal outside of the park. Compliance will be handled separately for the projects that will receive earth materials from the Alexander Avenue/Danes Drive Intersection Improvement Project. Figure 2-3 of the EA/IS provides a cross-sectional view looking north along Alexander Avenue of the rock cut for the Selected Alternative (Alt. D), including slope angles, finished slope height, and width of excavation.

It is anticipated that excavation of the east slope rock cut would take approximately 1 month to complete and would primarily be accomplished through the use of typical excavator equipment. Hand-operated and self-propelled rock drills would be used for rock excavation. Blasting may be required for areas of harder rock in isolated areas. Blasting operations (if required) would be performed at night to limit traffic delays. During blasting operations, Alexander Avenue would be closed to through traffic within the project limits and traffic would be detoured during the blasting operations (refer to EA/IS Section 3.3, Transportation, for more information regarding potential detour routes). The potential nighttime road closures would occur from the northbound US 101 off-ramp intersection to the Danes Drive intersection along Alexander Avenue. Night blasting would require additional safety precautions to insure the safety of the public and project personnel.

Widening Alexander Avenue over the Bunker Road Arch Tunnel: Will require special design considerations because the tunnel structure is inadequate to support the additional load of conventional earthen fill. The Bunker Road Arch Tunnel is listed as a contributing structure to the Fort Baker, Barry, and Cronkhite Historic District; therefore, the design will minimize adverse effects to the Bunker Road Arch Tunnel. To allow for construction of the fill above the tunnel, a retaining structure supported on a micropile foundation will be constructed. The retaining structure and micropile foundation will be designed such that the integrity of the Bunker Road Arch Tunnel as a historic structure will not be compromised.

In summary, the major components of the selected alternative include:

- Construction of a retaining wall over the East Bunker Road tunnel
- Excavation of the existing cut slope on the east side of Alexander Avenue
- Reconstruction of the roadway to reduce superelevation and widen shoulders
- Lengthening of the southbound left-turn lane on Alexander Avenue
- Reconfiguration of the “Y” intersection to a “T” intersection
- Replacement of the existing timber-backed guardrails along the segment of Alexander Avenue within the project limits

RANGE OF ALTERNATIVES CONSIDERED

The NPS and GGBHTD analyzed four alternatives, Alternative A: No Action Alternative, Alternative B: 16-Foot Rockfall Catchment Alternative, Alternative C: 5-Foot Rockfall Catchment Alternative, and Alternative D: 8-Foot Rockfall Catchment Alternative. For Alternative A (the No Action Alternative) NPS and GGBHTD would not proceed with improvements to the Alexander Avenue/Danes Drive intersection. Use of the intersection would continue without the necessary design modifications, and the project area would remain in its current condition. For Alternative B, Alternative C, and Alternative D (the three action alternatives), the Alexander Avenue/Danes Drive intersection would be reconfigured and Alexander Avenue would be widened to provide an improved left-turn lane (onto Danes Drive) and multi-use shoulders along the Alexander Avenue within the project limits. Northeast of the US 101 interchange, Alexander Avenue passes through an engineered cut in the hillside, characterized by steep, exposed rock slopes on the west and east sides of the roadway. A new cut slope would be required to

provide adequate roadway width for constructing shoulders for bicyclists and pedestrians along this section of Alexander Avenue. Alternative B, Alternative C, and Alternative D provide three distinct options for the design of the rock cut that would be necessary to widen Alexander Avenue. In addition, all three action alternatives would require implementation of a retaining structure to support the placement of fill above the Bunker Road Arch Tunnel to allow widening of Alexander Avenue north of the Danes Drive intersection.

Options Considered and Dismissed. The EA describes other alternatives that were considered and dismissed. These alternatives included widening Alexander Ave by excavating the west slope of the throughcut, and cutting both the east and west slope of the throughcut. Cutting the west slope of the throughcut would have unacceptable geologic resource impacts and increase complexity to the project due to the west slope's geology.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The Council on Environmental Quality (CEQ) Regulations implementing NEPA and the NPS NEPA guidelines require that "the alternative or alternatives which were considered to be environmentally preferable" be identified (CEQ Regulations, §1505.2). CEQ defines the environmentally preferred alternative as "the alternative that would promote the national environmental policy as expressed in NEPA §101." As stated in section 101(b) of NEPA, it is the continuing responsibility of federal agencies to:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The proposed project's purpose and need (as described in Chapter 1, Purpose of and Need for Action, of the EA/IS) closely mirrors these criteria. The purpose and need for this project emphasize natural and cultural resource protection, as well as enhancing visitor experience and improving safety of park users. Because the goals and objectives of the proposed project correlate with these criteria, analyzing which alternative best meets the project purpose and need would also determine which alternative is environmentally preferred. Using this analysis approach, it was determined that Alternative D is the environmentally preferred alternative. Provided below is a summary of how the action alternatives meet the stated purpose of the proposed project. Because Alternative A (No Action) does not meet the project purpose and need, it is not the environmentally preferred alternative.

Although the components of the three action alternatives are similar, there are several aspects of Alternative D that make it stand out as the environmentally preferred alternative. All three action alternatives would enhance the safety of the Alexander Avenue/Danes Drive intersection by providing additional turn lane storage capacity and improved geometric configuration. Further, all three action alternatives would enhance multi-modal access through the Alexander Avenue corridor and would contribute to the improvement of the GGNRA Marin Headlands transportation network as envisioned in the TIMP. However (consistent with NPS Director's Order-12), the proposed project should also minimize adverse effects to the natural, scenic, and historic resources associated with the Alexander Avenue corridor. Alternative C would partially fulfill this goal by minimizing adverse effects related to the emission of air pollutants and the loss of geologic resources during construction activities. However, because Alternative C would establish a 5-foot rockfall catchment as opposed to the 16-foot rockfall catchment proposed under Alternative B or the 8-foot rockfall catchment proposed under Alternative D, rockfall mesh would be required to cover the exposed rock cut along Alexander Avenue. As described in Chapter 3, Environmental Consequences of the EA/IS, the visual intrusion of the rockfall mesh would result in adverse effects on both the Forts Baker, Barry, and Cronkhite Historic District and Alexander Avenue as contributing features to the Historic District. Through these considerations, Alternative D was chosen as the environmentally preferred alternative. Alternative D would minimize adverse effects related to the emission of air pollutants and the loss of geologic resources during construction activities while also avoiding adverse effects to cultural resources.

PUBLIC INVOLVEMENT

The public scoping process for the proposed project was initiated at the GGNRA Quarterly Open House on April 26, 2011, at Fort Mason. Notification for this meeting was sent to agencies, organizations, and the public on the GGNRA mailing list. Comments were accepted at the public open house. Additionally, a scoping newsletter was mailed out to approximately 3,600 addresses on April 22, 2011 and emailed to 630 email addresses on April 29, 2011. Interested parties were encouraged to provide comment on the scope of the proposed project through May 27, 2011. Further, NPS and GGBHTD sent out consultation letters to State and federal agencies with regulatory or review authority over the potentially affected resources to specifically solicit their comments regarding the proposed project. A second open house was held on August 17, 2011 in Sausalito that approximately 60 individuals attended. All comments were recorded and considered. NPS received nine public scoping comments regarding the proposed project. The public scoping comments are primarily in support of the proposed project as it would enhance bicycle and pedestrian safety within the project area. Information gained in this effort assisted the lead agencies in determining the scope of this document, clarifying the description of the proposed project, and identifying potential environmental impacts.

The EA/IS was available for public review and comment from December 23, 2011 to January 27, 2012. Public notice of the availability of the EA/IS was provided to individuals, organizations, and agencies through notification on the park website (<http://parkplanning.nps.gov/goga> and www.nps.gov/goga), mailing of the EA/IS, and a postcard/email notice to approximately 3,600 people on the park mailing list. In addition 42 paper copies and 50 cd's of the EA were mailed to interested and affected public. The EA/IS was available for review and comment online at: http://parkplanning.nps.gov/Alex_Danes_Improvements. Paper copies were also made available at San Francisco Libraries (Main, Marina, Anza, Presidio and Sunset Branches), and Belvedere-Tiburon, Corte Madera County, Marin City, Mill Valley and Sausalito Public Libraries.

NPS received a total of 18 pieces of correspondence regarding the proposed project from individuals, agencies, and groups. There was a diversity of comments on the EA/IS. NPS responded to all commenters and these responses are included as part of the administrative record and available at the above named project website. Public comment did not provide any substantive comments that required changes to the EA, nor did they raise issues that were not already considered in the EA.

Although there were no substantive comments, and no additional issues raised which were not already considered in the EA, a number of comments received during the public review period suggested that this project address other various safety issues along Alexander Avenue. Alexander Avenue corridor safety issues from the north end of the Golden Gate Bridge to the Sausalito city limits have been studied by the Federal Highway Administration (FHWA), Central Federal Lands Highway Division (CFLHD), in cooperation with the NPS, and other key stakeholder agencies: City of Sausalito; California Department of Transportation (Caltrans); Golden Gate Bridge Highway, and Transportation District (GGBHTD); and County of Marin. The Study (¹Alexander Avenue Planning Study) identified corridor deficiencies and developed multi-modal improvement strategies for the Alexander Avenue corridor. In summary, the study identified the following issues/concerns:

- Conflicts may arise among bicycle, pedestrian, transit, and vehicle access and movements
- Variable demands between weekday and weekend peaks for commuter, daily, and recreational users
- Significant grade, limited sight distances, and narrow roadways to accommodate all users
- Traffic volumes and patterns have changed in the corridor, possibly due to the Fort Baker redevelopment, increased park visitation, and increased bicycle use (including commuter and less experienced recreational riders)

Cooperating agencies will assist corridor land managers to seek funding opportunities to implement safety improvements identified in the Study, and will actively cooperate to plan and design safety improvements. When considered for implementation, these safety improvements will be publicly noticed for review and comment as part of NEPA and CEQA environmental review requirements.

REGULATORY COMPLIANCE

National Environmental Policy Act (Public Law [PL] 91-190, 83 Stat. 852, 42 United States Code [USC] §4341 et seq.). The EA/IS provides disclosure of the planning and potential environmental consequences of the two action alternatives and the No Action Alternative, as required by NEPA. The EA/IS was made available for public review and comment for 30 days. Agency and public comments were considered and a determination was made to prepare a Finding of No Significant Impact which will respond individually or through summaries to all substantive comments.

Clean Air Act of 1972, as amended (42 USC §7401 et seq.). Section 176(c) of the Clean Air Act prohibits federal action or support of activities that do not conform to a State Implementation Plan. The

¹ The Alexander Avenue Planning Study is still in Draft. It will be finalized and released to the public in 2012.

proposed project is not expected to violate any standard, increase violations in the project area, exceed the U.S. EPA's general conformity de minimis threshold, or hinder the attainment of air quality objectives in the local air basin.

Clean Water Act of 1972, as amended (33 USC §1251 et seq.). The proposed project is in compliance with Section 401 of the Clean Water Act. The proposed project would not result in placement of fill material into waters of the United States, including wetlands.

Endangered Species Act of 1973, as amended (16 USC §1531 et seq.). NPS has determined that the proposed project is not likely to adversely affect any listed terrestrial species. NPS is requesting concurrence from the U.S. Fish and Wildlife Service (USFWS). Potential effects on the aquatic environment are being addressed through consultation with the U.S. Army Corps of Engineers (Corps).

Fish and Wildlife Coordination Act of 1958, as amended (16 USC §661 et seq.). Coordination with the USFWS under this act has been integrated throughout the preparation of the EA/IS.

National Historic Preservation Act, Section 106. Section 106 of the NHPA of 1966 requires federal agencies to consider the effects of their undertakings on properties listed or potentially eligible for listing on the National Register of Historic Places. All actions affecting the parks' cultural resources must comply with this legislation. National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470). It has been determined that the proposed project would have no adverse effect on historic properties under Section 106 of the NHPA. The NPS cultural resources staff reviewed this project for purposes of Section 106 under the park's 1992 Programmatic Agreement by the State Historic Preservation Office (SHPO) and Advisory Council on Historic Preservation (ACHP).

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA), which was first enacted in 1918, implements domestically a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former USSR, which provide for international migratory bird protection and authorize the Secretary of the Interior to regulate the taking of migratory birds. The act makes it unlawful, except as permitted by regulations, "at any time, by any means, or in any manner, to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird, included in the terms of conventions" with certain other countries (16 USC 703). This includes direct and indirect acts, although harassment and habitat modification are not included unless they result in the direct loss of birds, nests, or eggs.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE QUALITY OF THE HUMAN ENVIRONMENT

The NPS used the following NEPA criteria and factors defined in 40 CFR §1508.27 to evaluate whether the Selected Alternative would have a significant impact on the environment.

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.

Whether taken individually or as a whole, the impacts of the proposed project do not reach the level of significance warranting an EIS. Most of the adverse impacts would be temporary and occur during construction. Mitigations and Best Management Practices are incorporated into the proposed project to

ensure any adverse impacts would be less than significant. Adverse impacts to water quality during construction would be negligible and short term. Impacts related to temporary increase of hazardous materials onsite or increased fuel load would be negligible and short term. Impacts to the soundscape would be short term, moderate, and adverse and air quality impacts would be minor to moderate and short term during construction. The proposed project would have short term, negligible impacts to sensitive plant and wildlife habitat.

The Selected Alternative would also have long-term, minor, adverse effects on visual resources; long term, moderate, beneficial effects on visitor experience; long term, minor, adverse effects to cultural resources; long term, moderate, and adverse effects on geologic resources; long term, minor, and beneficial effects to soils and seismicity; and long term, minor to moderate, and beneficial effects to invasive species and transportation.

Degree of effect on Public Health or Safety.

Adverse impacts on Public Health and Safety would be negligible and related to the short term use of hazardous materials such as fuels, oils, or other fluids as well as the potential to expose construction workers and the public to hazardous materials during ground-disturbing activities. Current public safety hazards are primarily associated with the skewed geometry of the Alexander Avenue/Danes Drive intersection which limits visibility, narrow roadside shoulders, and insufficient deceleration space for vehicles turning left onto Dane Drive from Alexander Avenue. The project would benefit public safety by improving the Alexander Avenue/Danes Drive intersection as described in the purpose and need, above.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The project area does not contain prime farmland, farmland of local or statewide importance or wild and scenic rivers. The project area is in the Fort Baker, Barry, and Cronkhite Historic District. However, through implementation of mitigation measures, the proposed project would result in long term, minor, adverse effects to cultural resources. Implementation of the Selected Alternative would not compromise the Historic District's eligibility. In Addition, the project vicinity contains mission blue butterfly habitat. Through implementation of mitigation measures, construction of the proposed project would result in short term, negligible impacts to mission blue butterfly habitat.

Degree to which effects on the quality of the human environment are likely to be highly controversial.

The project actions have not generated public controversy and are not likely to be controversial. Comments received were generally favorable.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The potential impacts are well defined and analyzed in the EA/IS and regulatory agencies have concurred with the impact assessment for topics under their jurisdiction through consultation. The degree or possibility that the effects on the human environment will be highly uncertain or will involve unique or unknown risks is remote.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Selected Alternative will not predetermine or establish a precedent for future actions with significant effects at the site or along the Alexander Avenue corridor and does not represent a decision in principle about a future consideration. Future actions, such as additional improvements along the Alexander Avenue corridor will proceed independently of this project and will receive a separate environmental analysis.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The EA/IS considered the cumulative impacts of the Selected Alternative with several past, present and ongoing future projects and the analysis for all impact topics indicated that the Selected Alternative could result in minimal and not collectively significant cumulative adverse effects. As described in the EA/IS, NPS is in the process of implementing multiple roadway projects throughout the GGNRA Marin Headland area. These cumulative projects, including the proposed project, are evaluated in the Marin Headlands and Fort Baker Transportation Infrastructure and Management Plan which did not determine cumulative impacts to be significant. Further, these cumulative roadway projects will not occur at the same time as the selected action. This selected action, when examined cumulatively with other actions in the project vicinity, will not result in cumulatively significant adverse impacts.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The EA/IS found that the project will not significantly and adversely affect any cultural resource. The proposed project will be designed and implemented so that the integrity of the Historic District that the project site is a contributing feature to will maintained.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.

A survey of the project area for mission blue butterfly habitat was conducted on March 10, 2011 and March 11, 2011 by an NPS biological technician. No mission blue butterflies were observed during the survey. Additionally, no mission blue butterfly habitat was observed within the survey area boundaries. Further, the proposed project would adhere to mitigation measures in order to prevent adverse effects to mission blue butterfly habitat outside of the project boundaries.

Whether the action threatens a violation of federal, State, or local environmental protection law

Implementing the Selected Alternative would violate no federal, state or local environmental protection laws. Assessment of the proposed action has been performed pursuant to NEPA, which requires consideration of environmental protection laws and regulations.

MITIGATION MEASURES

The following table summarizes the mitigation measures that will be implemented as part of the Selected Alternative. The NPS Project Manager will ensure the mitigation measures get incorporated into the contract for the contractor selected to conduct the work. The NPS Project Manager will monitor construction activities to ensure the mitigation measures described below are being implemented.

MITIGATION MEASURES

Mitigation	Description
AQ-1	<p><i>Construction Dust and Emissions Control Strategies.</i> To reduce particulate matter emissions during project excavation and construction phases, the project contractor(s) shall comply with the dust control strategies developed by the Bay Area Air Quality Management District (BAAQMD). The Project Sponsor shall include in [all construction contracts] the following requirements or measures:</p> <ul style="list-style-type: none"> • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. <p>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 30 seconds (as required GGNRA Vehicle Idling Standard Operating Procedures adopted by GGNRA in compliance with State of California regulations for In-Use Off-Road Diesel Vehicles [Title 13 CCR, Section 2449(d)(3)]). Clear signage shall be provided for construction workers at all access points.</p> <ul style="list-style-type: none"> • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.²
AQ-2	<p><i>Limitations on Excavated Material and Debris Removal.</i> The construction documents shall ensure that the hauling of excavated material and construction debris shall be conducted in such a manner that the modeled air pollutant emissions (using the Roadway Construction Emissions Model) would not exceed the thresholds of significance for criteria air pollutants established by BAAQMD. Methods to achieve this standard could include use of larger haul trucks, minimization of truck trips per day, and identification of a nearby disposal site for placement of the excavated material (to reduce haul distance).</p>
BIO-1	<p><i>Avoid Dust Accumulation on Mission Blue Butterfly Habitat.</i> NPS or its contractor shall ensure that dust is controlled during construction by periodically watering down construction areas within 100 feet of mission blue butterfly habitat as necessary. Watering down the construction area would prevent dirt from becoming air borne and accumulating on larval host plants and adult food source plants for the mission blue butterfly.</p>

² Bay Area Air Quality Management District, CEQA Air Quality Guidelines, Updated May 2011, p. 9-17.

MITIGATION MEASURES

Mitigation	Description
BIO-2	<i>Fence/Flag and Monitor Mission Blue Butterfly Habitat.</i> A qualified biologist shall supervise the installation of flagging or fencing around stands of known mission blue butterfly host/food plants and species that can be avoided within the limits of work. Fencing/flagging shall be installed prior to any ground disturbing or vegetation removal activities. The fencing/flagging shall be placed the maximum distance from the plants possible (up to 100 feet), while still allowing work to occur in the adjacent area. The location of the flagging/fencing shall be field adjusted by the biological monitor as necessary. The temporary fencing/flagging shall be furnished, constructed, maintained, and later removed as shown on the construction plans, as specified in the special provisions, and as directed by NPS. Temporary fencing/flagging shall be at least 4-foot-high and constructed of high visibility material (e.g., orange, commercial-quality woven polypropylene, or similar material). No construction activities shall be permitted within the fenced/flagged area. Warning signs indicating the sensitivity of the area shall be attached to the fencing/flagging.
BIO-3	<i>Biological Resources Education Program for Construction Crews and Biological Monitoring.</i> Before any ground disturbing work (including vegetation clearing or grading) occurs in the construction area, an NPS-approved biologist will conduct a mandatory biological resources awareness training for all construction personnel on federally listed species that could potentially occur on site (i.e., mission blue butterfly). The training program will be approved by an NPS-qualified staff member prior to implementation, if prepared by a consulting biologist. The environmental education program will include a description, representative photographs, and legal status of each of the federally listed species; terms and conditions of the biological opinion; and the penalties for not complying with biological mitigation requirements. This information will be supplied to non-English speaking personnel in their native language as needed.
BIO-4	<i>Minimize Light Pollution.</i> Nighttime construction lighting shall include downward cast/shielded lighting and the use of minimal lighting techniques to reduce light pollution and potential impacts to biological resources.
BIO-5	<i>Minimize the Introduction and Spread of Invasive Plants.</i> To avoid or minimize the introduction or spread of invasive plants during construction activities, the following measures shall be implemented: <ol style="list-style-type: none"> 1. NPS-approved weed-free, erosion-control materials (or rice straw in upland areas) shall be used exclusively. 2. The biological monitor shall educate the construction supervisors and managers about problems created by noxious weeds and the importance of controlling and preventing their spread. The biological monitor shall conduct a tailgate meeting before construction begins and shall distribute handouts identifying noxious weeds and describe the techniques used to prevent their spread. Noxious weed education could be conducted at the same time the biological resources education program (Conservation Measure 1) is conducted. 3. To reduce the spread of invasive plants into uninfested areas, the contractor shall stockpile and cover topsoil removed during excavation. 4. Equipment shall be cleaned to minimize spread of invasive species when moving from offsite to the watershed. <p>To reduce the likelihood of the introduction or spread of invasive plants during operations and routine maintenance activities, NPS shall implement the following operations and maintenance protocol:</p> <ol style="list-style-type: none"> 1. Crews shall receive training regarding problems created by invasive plants and the importance of controlling and preventing their spread. 2. Activities shall be limited to as small a footprint as possible. 3. Vehicles shall stay on designated access roads. Off-road vehicle traffic shall be prohibited unless required in an emergency.
CR-1	<i>Discovery Provisions.</i> In the event that previously unknown cultural resources are encountered during project construction by anyone, they shall be treated in accordance with 36 CFR §800.13 (Protection of Historic Properties: Post-review discoveries). The archeological resource shall be assessed for its

MITIGATION MEASURES

Mitigation	Description
	eligibility for listing on the National Register of Historic Places (NRHP) in consultation with the State Historic Preservation Office (SHPO) and the Federated Indians of Graton Rancheria (if it is an indigenous archaeological site) and a determination of the project effects on the property shall be made. If the site shall be adversely affected, a treatment plan shall also be prepared, as needed, during the assessment of the site's significance. Assessment of inadvertent discoveries may require archaeological excavations or archival research to determine resource significance. Treatment plans shall fully evaluate avoidance, project redesign, and data recovery alternatives before outlining actions proposed to resolve adverse effects.
CR-2	<i>Discovery Provision.</i> In the event that human remains are discovered, work shall cease immediately in the area of the find and the project manager/site supervisor shall notify the appropriate NPS personnel. Protocols under federal law shall apply for discoveries on federal land. The find shall be secured and protected in place. The Marin County coroner shall be notified in accordance with Section 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (NAHC) shall be notified within 24 hours of the discovery if the coroner determines that the remains are Native American. If a determination finds that the remains are Native American and that no further coroner investigation of the cause of death is required, they shall be treated in accordance with the Native American Graves Protection and Repatriation Regulations at 43 CFR §10.4 (Inadvertent Discoveries).
CR-3	<i>Design Requirements.</i> If rockfall mesh is installed it shall be designed to be as visually unobtrusive as possible. Further, NPS cultural resources staff shall review and approve: 1) the design of the rockfall mesh (if installed); 2) the design of the temporary rockfall barrier (providing input, in particular, on wall type/style and color); and 3) the design of the retaining wall proposed to be built above the Bunker Road arch tunnel.
CR-4	<i>Avoid Adverse Effects to Cultural Resources.</i> Implementation of Alternative C would result in an adverse effect on both the Historic District's eligibility and the eligibility of Alexander Avenue as contributing features to the Historic District under Section 106. Therefore, Alternative C shall not be selected or implemented as the agency preferred alternative.
HAZ-1	<i>Underground Storage Tank Management.</i> If construction is likely to occur before hazardous substance cleanup by the U.S. Army Corps of Engineers in areas where there are known or suspected underground storage tanks, soil contamination, or hazardous materials, then the NPS shall take steps to address the portions of these sites that shall be disturbed before construction began. Such steps shall include further exploration to confirm the existence of underground storage tanks, soil contamination, or hazardous materials. If such substances are confirmed, cleanup options shall be determined before construction.
HAZ-2	<i>Prepare Hazardous Materials Management Plan.</i> A materials management plan that addresses handling of potentially contaminated soils or materials shall be prepared by the contractor prior to excavation operations. Project construction documents shall include plan recommendations.
HAZ-3	<i>Contamination Surveys.</i> In areas where deeper excavation work is proposed, and where there are indications that the military's past use of an area may have resulted in some potential for contamination, additional survey work shall be undertaken during the design phase of each project. Surveys using electromagnetic subsurface diagnostic tools, ground-penetrating radar, seismic refraction, or resistivity tools shall be conducted in the areas to be excavated to determine potential for buried objects (such as storage tanks, vaults, pipelines, and buried drums). If any such objects are found, steps shall be taken to appropriately confirm and, if necessary, remove the objects and any contamination.
HAZ-4	<i>Spill Prevention and Control Plan.</i> A spill prevention and control plan shall be prepared and include the following elements: <ul style="list-style-type: none"> • Proper storage, use, and disposal of chemicals, fuels, and other toxic materials shall be required.

MITIGATION MEASURES

Mitigation	Description
	<ul style="list-style-type: none"> • Construction equipment shall be required to be refueled only in upland areas and in conformance with the avoidance zones to prevent fuel spills near sensitive habitats. Equipment shall be inspected for hydraulic and oil leaks regularly, as well as before to use in the park. • All heavy equipment in the park shall be required to carry emergency spill-containment materials. For example, pans shall be placed under equipment that is stored onsite to reduce the potential for leaks of oil and other substances onto park lands. Absorbent materials shall be on hand at all times to absorb any minor leaks and spills. • An emergency response plan shall be prepared by the contractor(s), approved by NPS, and implemented during project implementation.
NOI-1	<i>Noise Restrictions.</i> Mitigation measures providing hourly restrictions for noise-generating construction activities shall be developed by NPS staff in consultation with Marin County representatives and Cavallo Point Lodge personnel.
NOI-2	<i>Employ Noise Reducing Construction Practices.</i> To reduce daytime noise and potential disturbance due to construction, contractors shall muffle or control noise from construction equipment by using the following measures: <ul style="list-style-type: none"> • Construction equipment and trucks shall use noise control techniques (such as improved mufflers, intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds, and sound blankets around the project site, wherever feasible). All vehicles shall meet federal standards for the year they were built. Construction vehicles shall be properly maintained and equipped with exhaust mufflers that meet State standards. To reduce noise and emissions, construction equipment shall not be permitted to idle for long periods of time; • Impact tools (e.g., jackhammers and pavement breakers) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter procedures shall be used, such as drilling rather than impact or blasting equipment whenever feasible.

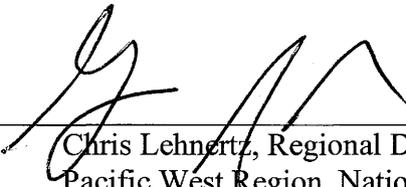
FINDING

The NPS have considered the information and analyses in the EA and supporting environmental documentation, the comments of agencies and the public, and the project's administrative record. Based on NPS guidance, policies, monitoring, and experience, and the capability of mitigation measures to avoid, minimize, or eliminate impacts; it is the determination that the selected alternative is not a major federal action having the potential to substantially affect the quality of the human environment.

The NPS has determined there are no significant direct, indirect or cumulative effects on public health or safety, sites listed on the National Register of Historic Places, or other unique characteristics of the region. The selected alternative is neither scientifically nor publicly controversial. Implementation of the selected alternative will not involve unique or unknown risks, cause loss or destruction of noteworthy park resources, or violate any federal, state, or local law. Implementation of the selected alternative is not precedent-setting nor will it automatically trigger other actions which may require environmental impact statements. Therefore, in accordance with the National Environmental Policy

Act of 1969 and regulations of the Council on Environmental Quality, an environmental impact statement will not be prepared.

Recommended:  5/18/12
Frank Dean, General Superintendent Date
Golden Gate National Recreation Area

Approved:  5/27/12
Chris Lehnertz, Regional Director Date
Pacific West Region, National Park Service

ATTACHMENT 1

NO IMPAIRMENT DETERMINATION

Alexander Avenue/Danes Drive Intersection Improvement Project *Selected Alternative D: 8-Foot Rockfall Catchment*

NPS Management Policies 2006 (§1.4) requires analysis of potential effects to determine whether or not proposed actions will impair a park's resources and values. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, mandates that NPS conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give NPS management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park, although that discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values. Non-resource topics are generally not subject to impairment assessment. Whether an impact could lead to impairment depends on the particular resources that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact will be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact may be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. Impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park. The following consideration of impairment only applies to resource impacts of the selected alternative.

Special-Status Species

Implementation of the selected alternative would result in short term, negligible, adverse effects to special status species within and surrounding the project site. A survey of the project area for mission blue butterfly habitat was conducted on March 10, 2011 and March 11, 2011 by an NPS biological technician. The survey area covered the entire project area plus a 150 buffer around the project site. Accessible areas of the site were surveyed on foot, and areas of steep inaccessible slopes the site were surveyed with binoculars. No mission blue butterflies were observed during the survey. Additionally, no mission blue butterfly habitat was observed within the survey area boundaries. However, a previously unmapped population of silver lupine was observed just outside the survey area boundary near the aforementioned populations on the west side of the Alexander Avenue road cut. In order to reduce the potential for adverse construction-related impacts to mission blue butterfly habitat within the project vicinity, mitigation measures would be employed to minimize dust, avoid disturbance of existing habitat, and educate construction workers. As such, there would be no impairment to special-status species as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Water Resources

The selected alternative would have no adverse impacts on surface water flow, groundwater conditions, or water quality in the project area. Although there would be short term, construction-related impacts to water quality associated with surface runoff, construction best management practices would be implemented to maintain appropriate erosion and siltation controls during and following construction. Further, the proposed project would adhere to the conditions stipulated in the State Water Resources Control Board's General Permit for Discharges of Stormwater Associated with Construction Activity. There are no water bodies or wetlands within or surrounding the project site. Therefore, there would be no impairment to water resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Visual Resources

The selected alternative would result in excavation of the existing east cut slope along Alexander Avenue, reconfiguration of the existing Alexander Avenue/Danes Drive intersection, and widening of Alexander Avenue within the project limits. These project features would have a minor, long-term adverse effect on visual resources in the project area. In general, views of the project area from the surrounding vicinity are obstructed by vegetation and steep topography. There are no prominent visual resources in the project area, and implementation of the selected alternative would not create visual obstructions or substantially change the existing visual character and continuity of the project area. Therefore, there would be no impairment to water resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Cultural Resources

Alexander Avenue is a contributing structure to the Forts Baker, Barry and Cronkhite Historic District (Historic District). There are a total of eight character-defining features for Alexander Avenue. Implementation of the selected alternative would modify some, but not all of these character-defining features and, therefore, would result in minor, long term, adverse effects. The changes associated with

the selected alternative would be detectable, but would not compromise the significance of Alexander Avenue as a contributing structure and would not affect the Historic District's eligibility to the National Register of Historic Places. Further, Mitigation measures have been included to reduce possible adverse effects to the existing cut or to the Bunker Road East/Alexander Avenue Overpass from the widening of Alexander Avenue. With the implementation of Alternative D, the proposed undertaking would have no adverse effect under Section 106. In addition, there are no archaeological resources or recorded instances of human remains occurring on or in the vicinity of the project site. However while highly unlikely, it is possible that earth-disturbing construction activities could encounter and damage these types of cultural resources. Mitigation would be employed to reduce potential impacts to unknown archaeological resources to a negligible level. Therefore, there would be no impairment to cultural resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Geologic Resources

The selected alternative would result in the excavation of approximately 21,600 CY of rock material, expected to be comprised mainly of "greenstone" basalt and chert. In order to reduce the loss of park geologic resources, GGNRA anticipates being able to utilize on the order of 10,000 CY of the roadcut material on projects within 10 miles driving distance of the project site. The remainder of the material is anticipated to require disposal outside of GGNRA boundaries. Therefore, the selected alternative would have a long term, moderate, and adverse effect on geologic resources within the project area. As such, there would be no impairment to geologic resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Conclusion

As guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected alternative.

