May 10, 2011

Marin County Board of Supervisors
3501 Civic Center Drive
San Rafael, California, 94903

SUBJECT: Certification of the Final EIR for the Sir Francis Drake Boulevard Rehabilitation Project and Approval of the Mitigated Roadway Alternative (Preferred Alternative) as the Roadway Rehabilitation Project to be Constructed.

Dear Board Members:

RECOMMENDATION:

a). Adopt Resolution certifying the Sir Francis Drake Boulevard Rehabilitation Project Final Environmental Impact Report.
b). Adopt Resolution approving the Public Works Director's recommendation to Select the Mitigated Roadway Alternative (Preferred Alternative) as the project to be constructed.

PURPOSE OF THE PROJECT (Objective)

BACKGROUND:

Repair Existing Roadway

Sir Francis Drake Boulevard (SFDB) is a major arterial providing access to several communities in West Marin, Samuel P. Taylor State Park, Point Reyes National Seashore, and the Golden Gate National Recreation Area. A 5.2-mile segment of the roadway between Platform Bridge Road and Shafter Bridge displays evidence of distress including cracking and dislocation of the pavement. The roadway's width is highly variable. It is narrowest at Shafter Bridge and widest at Platform Bridge Road. West of Shafter Bridge, the pavement is generally between 22 and 30 feet wide with a lane width of 11 feet, but as narrow as 9-foot lanes in some areas. Approaching Platform Bridge Road, the pavement is 32 feet wide with a lane width of 12 feet. Prior maintenance of this segment of the roadway has included removal and replacement of damaged sections of roadway and overlays of asphalt concrete. However, these kinds of repairs are no longer effective as the pavement's structural section has failed.

A Project Study Report (PSR) for Improvements to SFDB between Platform Bridge Road and Shafter Bridge was prepared in August 2008 by BKF Engineers. The PSR confirmed that the 5.2-mile segment of the existing roadway exhibits areas of extensive structural failure. Modes of failure observed included alligator cracking, longitudinal and transverse cracking, lane/shoulder drop off, and a few locations with edge of pavement failure.

The existing road shows evidence of water penetration in the crack areas and at the edges that only increase deterioration. The road's existing geometry is not up to current design standards and contains restricted horizontal geometry due to original design and/or combined with existing physical constraints such as trees and excessively steep slopes at the edges.

Repair Roadway Drainage

The SFDB roadway is superelevated (entire road tipped on one direction instead of a crown at the center) in many areas and as a result runoff is generally directed to one side of the roadway or the other. When the roadway slopes away from the adjacent hillside, storm water sheet flows from the edge of pavement to Lagunitas Creek. When the roadway slopes towards the hillside, storm water flows to the edge of pavement at the toe of slope. Water collects in these areas until it reaches an elevation that allows it to flow to an existing culvert, which then conveys it under the roadway for discharge to Lagunitas Creek. As the profile of SFDB is generally flat and ditches are not well defined, storm water does not pass under the roadway and often inundates a portion of the travel lane during significant storm events. Sixty-eight (68) corrugated metal, reinforced concrete, or plastic pipe culverts and four large concrete box culverts carry storm water beneath SFDB. According to our maintenance staff and site observations, many of the metal culverts have corroded and require replacement.

Repair Landslide

There is an existing unstable slope condition west of Shafter Bridge. At this location, the existing roadway was constructed across a broad, east-facing colluvial drainage, which likely required the placement of fill along the outside edge of the roadway. Flow from one of the channels within the colluvial drainage is currently collected and conveyed within a culvert that discharges directly onto the downward slope supporting the roadway. As no energy dissipation structures are present at the outfall, the concentrated flows have resulted in localized erosion. The unstable slope is likely the result of placement of non-engineered fill when the roadway was constructed resulting in settlement and/or lateral movement over time. Additionally, as the slope erodes, it steepens, creating an unstable gradient. As the distress is located next to the edge of the roadway, the slope failure is likely shallow.

Minimize Roadway Effects on Lagunitas Creek

Fine sediments, metals and other pollutants contained in untreated runoff from the SFDB roadway and shoulder adversely affect Lagunitas Creek. Continued degradation of the existing asphalt roadbed results in the discharge of asphalt binder and associated metals that are potentially toxic to salmonids and other aquatic organisms. Damaged, and clogged culverts and shotgun culverts have a number of adverse impacts on the creek including limiting the amount of large sediment discharged into the creek and stream bank erosion. Unofficial unpaved pullouts along the roadway used for parking are a source of vehicle oils and toxins leaching into creek waters.

FINAL ENVIRONMENTAL IMPACT REPORT (EIR)

DRAFT EIR: In compliance with California Environmental Quality Act (CEQA) regulations, an Environmental Impact Report (EIR) was prepared for the rehabilitation of the roadway. A Notice of Preparation for the Sir Francis Drake Rehabilitation Project EIR was circulated on

October 27, 2009, to public agencies and all interested parties for a 30-day review period. In further compliance with CEQA a public scoping session was conducted on November 15, 2009, at the Woodacre Improvement Club to receive input from public agencies, community groups, and interested members of the public on environmental issues and concerns. A Notice of Completion (NOC) of the Draft EIR and a notice of public hearing on the Draft EIR were distributed on May 12, 2010, and the NOC and public hearing notice were published in a newspaper of general circulation (Marin IJ) to begin a 45-day public review and comment period on the adequacy of the Draft EIR. On June 15, 2010, your Board conducted a public hearing to receive testimony on the adequacy of the Draft EIR. Primary issues raised regarded impacts to endangered species and their habitat, water quality impacts, visual impacts, slope instability, erosion and silt, drainage issues, tree removal, traffic congestion and roadway safety, and construction related impacts. Following the close of the public hearing the Board directed that a Final EIR Response to Comments be prepared after the close of the comment period on June 25, 2010.

FINAL EIR: A Final EIR (consisting of the Revised Draft EIR text with tracked changes, Responses to Comments, Mitigation Monitoring and Reporting Program, and Appendix) was prepared and a Notice of Availability of the Final EIR for public review was distributed on January 21, 2011, for a 14-day review period that ended on February 7, 2011. Any changes to the text of the Draft EIR are noted in the specific response to comment and are shown with track changes in the Final EIR edited text.

FINAL EIR AMENDMENT: The Final EIR Amendment contains responses to comments from agencies and individuals who submitted comments on the Final EIR for the Sir Francis Drake Boulevard Rehabilitation project. It also includes an Errata page. The Errata modifies the Final Environmental Impact Report to include two changes needed to correct minor errors in the Final EIR and Responses to Comments.

Fifteen (15) comment letters on the Final EIR were received. They are included in the enclosed Amendment to the Final EIR along with responses to those comments. Each comment letter is assigned a number, from 1 through 15 and each comment is numbered in the margin of the comment letter. A complete list of comment letters is provided in the Amendment. Written responses to the comments can be found in the Amendment after the letters. Responses are referenced using a numeric system. For example the first comment from the first letter, from the National Marine Fisheries Services, is designated 1-1, as is the response to it.

None of the comments contained in the letters received on the Final EIR require changes to the text of the Final EIR, the Responses to Comments on the Draft EIR, or the Appendix.

The purpose of the Final EIR Amendment is to conclude the public review and comment process by responding to environmental issues raised in the written comments received on the Final EIR, consistent with the requirements of CEQA and the County's environmental review procedures, and to allow the Final EIR to be considered for certification. The Final EIR Amendment is to be considered together with the Final EIR for certification.

COUNTYWIDE PLAN CONSISTENCY

The Final EIR finds that the rehabilitation of the roadway, with the incorporation of mitigation measures specified in the EIR are consistent with all relevant policies of the Countywide Plan 2007 and the County Development Code requirements. The consistency with all relevant

policies is also achievable through adoption of the Mitigated Roadway Alternative (Preferred Alternative).

MITIGATION MONITORING AND REPORTING PROGRAM

The FEIR Mitigation Monitoring and Reporting Program (MMRP) would ensure that all required mitigation measures are completed in the course of roadway construction and maintenance. The program is designed in a table format for ease of use. The table identifies the individual impacts, corresponding mitigation measures, individual/agency responsible for implementation, time frame for implementation, and assigns a party responsible to implement, monitor, and confirm the implementation of the mitigation measure.

Generally, Marin County Department of Public Works (DPW) will be responsible for oversight, implementation and administration of the MMRP. A DPW Division designated by the DPW Director will manage the MMRP. Duties of the person responsible for the program coordination, whether a County staff member or independent contractor, would include the following:

- Conduct routine inspections, plan checking and reporting activities.
- Serve as liaison between the County and contractors regarding mitigation monitoring issues.
- Coordinate consultant activities when such expertise and qualifications are necessary to implement and monitor mitigation measures or submittals.
- Coordinate with agencies having mitigation monitoring responsibilities or plan approvals.
- Assure follow-up response to citizen complaints.
- Review forms, checklists, reports and other documentation provided to the County for reporting. Maintain reports and other records and documents generated by the monitoring program.
- Coordinate and assure corrective actions or enforcement measures are taken, if necessary.

Detailed mitigation measures and conditions of approval inspections and monitoring will be implemented on a routine basis during roadway construction. The activities will be monitored through periodic field inspections by County staff or independent consultants retained by the County, and through review of records and reporting requirements.

ENFORCEMENT

The mitigation measures and the MMRP will be incorporated as conditions of project approval. Therefore all mitigation measures and monitoring requirements must be complied with in order to fulfill the requirements of the approval.

SUMMARY OF MAJOR CONCLUSIONS IN THE FINAL EIR

- The EIR identified a total of 29 project impacts as significant or potentially significant. As identified in Table 2.11.A, feasible mitigation is available to reduce all of these impacts to a less than significant level.
- Project implementation could result in direct and indirect impacts to federal and/or state listed salmonid species – Central California Coastal coho salmon, Central California Coast steelhead, and California Coastal chinook salmon. Mitigation measures are recommended in Section 4.3 of the EIR to protect water quality in Lagunitas Creek and minimize loss of salmonid individuals and their habitat. Measures include preparation and implementation of a

Storm Water Pollution Protection Plan and Storm Water Management Plan, temporary construction fencing to protect riparian trees, and provision of suitable cuttings from the tree removal work for use as woody debris and in bio-engineered structures along Lagunitas Creek in order to enhance salmonid habitat. In addition mitigation measures note that the final project will need to incorporate all State and Federal permit requirements into project implementation. These mitigation measures would reduce potential impacts to salmonids to less-than-significant levels.

- Project implementation would result in the removal of 8 trees for slope repair at Station 270+25. Another roadway project that could provide for an additional shoulder called Option "A" was also studied. Option 'A' if implemented would result in the removal of 9 additional trees at various locations along the roadway. Mitigation measures are recommended in Section 4.3 of the EIR to minimize tree loss, and the planting of replacement trees for those that are removed if required by tree removal ordinance. Mitigation measures include replanting with native trees, financial contribution to the MMWD for support of habitat enhancement along Lagunitas Creek, and provision of suitable cuttings from tree removal work for use as woody debris and in bio-engineered structures along Lagunitas Creek. These mitigation measures would reduce the impact of tree loss to a less-than-significant level.
- Construction activities such as excavation and grading could affect a cultural resource, including an archaeological or paleontological resource, or human remains. Mitigation measures set forth in Section 4.4 would reduce potential impacts to a less-than-significant level.
- Implementation of the proposed project would alter some of the engineering features, physical design characteristics, and natural setting of SFDB, a historical resource. Mitigation measures are recommended in Section 4.4 of the EIR to reduce the impact of proposed roadway improvements on the historic features of the portion of SFDB in the project area to a less than significant level.
- Portions of the site are underlain by colluvium and residual soils that may be subject to heave and settlement in response to changing seasonal moisture conditions. The proposed project could be subject to significant impacts related to strong seismic ground shaking, seismic-related ground failure and/or seismically induced landslides. Mitigation measures identified in Section 4.5 would reduce potential impacts to a less-than-significant level.
- Construction activities, including placement of road material, grading, saw cutting, asphalt grinding, replacement of culverts, excavation, and tree removal, could result in discharge of sediment (and pollutants bound to sediment), asphalt materials, concrete, fuels, oils, paints, and solvents into Lagunitas Creek. Upon completion, the project would result in an increase in impervious area that would increase the surface area on which roadway pollutants could be deposited, come into contact with stormwater runoff, and discharge into Lagunitas Creek. Mitigation measures identified in Section 4.6 would reduce potential impacts to a less-than-significant level.
- Road construction activities would include the use of hazardous materials such as fuels, oils, lubricants, asphalt products, other petroleum products, and solvents. In addition, shallow soils disturbed during project construction could be affects by Aerially Deposited Lead (ADL), which could post a health risk to construction workers. Mitigation measures identified in Section 4.7 would reduce potential impacts to a less-than-significant level.
- Construction of the project would require temporary closure of one travel lane at a time, resulting in a temporary hazard to vehicles and bicycles, further pavement damage and

disrupt Marin Transit service during the construction period. Mitigation measures identified in Section 4.8 would reduce potential impacts to a less-than-significant level.

- Temporary, localized emissions of Particulate Matter$_{10}$ (PM_{10}) during construction have the potential to exceed ambient air quality standards and contribute to regional violations of the ambient air quality standards. This potential impact would be reduced to a less-than-significant level through mitigation.
- Construction-period noise could be perceived as a nuisance to adjacent land uses, including open space/wildlife habitat, one residential unit, and recreational uses. Mitigation identified in Section 4.10 would reduce potential impacts to a less-than-significant level.
- Heavy equipment used during project construction could generate significant greenhouse gas emissions. Mitigation identified in Section 4.12 would reduce potential impacts to a less-than-significant level.

PROJECT ALTERNATIVES EVALUATED

The EIR prepared on the Proposed Project analyzed three on-site alternatives to the proposed project, including a No-Project Alternative. The EIR also considered two other on-site alternatives, a 25-Foot Wide Roadway Alternative and a 32-Foot Wide Roadway Alternative, and these alternatives were rejected from further consideration because of the significant amount of grading and tree removal required to achieve the road widths associated therewith. The EIR did not consider any off-site alternatives since the proposed project is the rehabilitation of a portion of SFDB and there is no other existing roadway serving the project area.

PROJECT ALTERNATIVES: A number of alternatives to the proposed project were considered in the Final EIR including:

- The **No Project Alternative** assumes that the proposed roadway improvements would not be implemented. Existing traffic and roadway conditions would persist. The existing slide at Station 270+25 would continue to move and deposit silt and asphalt into the creek channel. The County would continue to maintain and repair the roadway on an as needed and ad hoc basis. The roadway design life would not be extended and safety would not be enhanced. Although some impacts associated with construction would be reduced or avoided by the smaller scale repairs of the roadway under the No Project Alternative, the environmental benefits of the project, such as slope stabilization measures to reduce erosion and slope failures and the drainage improvements to reduce the volume of sediments and pollutants entering Lagunitas Creek, would not be recognized. In general, the No Project Alternative would not achieve the project objectives.

- The **Resurface Roadway Alternative** assumes that the roadway would be restored using the same pavement rehabilitation techniques described for the proposed project. The existing base course would be crushed, replaced and overlaid with two layers of asphalt concrete. The roadway would not be expanded to accommodate wider lanes or shoulders. No new formal pullouts or retaining walls would be constructed, existing unpaved locations along the roadway used as informal pullouts would not be closed, culverts would not be replaced, and slide repair would not be conducted under this alternative. The Resurface Roadway Alternative would partly

achieve the project objectives. Under the Resurface Roadway Alternative, one of the environmental benefits of the Proposed Project – slope stabilization measures to reduce erosion and slope failures and the drainage improvements to reduce the volume of sediments and pollutants entering Lagunitas Creek – would not be achieved. The alternative would partially fulfill 'extend life of road' objective. It would extend the design life of the roadway to 20 years but would not provide a 30-year design life of the project.

- **The Option "A" Alternative** resurfaces existing roadway and looks into opportunities to provide additional paved shoulders in order to consider the needs of the multi-modes of transport on the roadway (vehicles, bicycles and pedestrians) throughout the length of the project. This resulted in removal of additional trees to accommodate the roadway widening.

- **The Mitigated Roadway Alternative** assumes that the roadway design would be modified to minimize impacts to site resources. The roadway would be rehabilitated and some sections of the roadway would be widened to accommodate wider vehicle lanes and/or shoulders. Under the Mitigated Roadway Alternative, no additional trees will be removed as proposed under Option "A". The Mitigated Roadway Alternative would achieve all objectives of the proposed project.

  In the Mitigated Roadway Alternative, nine fewer trees would be removed (when compared to Option "A"), thereby minimizing the tree impacts of the project and the need to replant mitigation trees in the watershed. As a result, **the Mitigated Roadway Alternative is considered the environmentally superior alternative**

OUTREACH AND ENGAGING THE COMMUNITY

We held two community meetings: one in West Marin at the Red Barn and the other in Woodacre to discuss the need to rehabilitate SFDB and various options for rehabilitating the roadway. In addition we conducted three bus tours of the project area with representatives from various public agencies including the State Park Service, Golden Gate National Recreation Area, the Regional Water Quality Control Board, California Department of Fish and Game, US Fish and Wildlife Service, the Marin Municipal Water District, Town of Fairfax, and Marin County Parks and Open Space; and representatives of special interest groups including: the Sierra Club, the San Geronimo Planning Group, Marin Conservation League, the California Native Plant Society, the Marin Horse Council, and Marin County Bicycle Coalition. The objective of the first bus tour was to point out the condition of the roadway and the environmental constraints in the project area. The second and third bus tours were conducted to present the proposed Resurface Roadway Alternative and Option 'A', focusing on tree removal, landslide repair and pullout closures.

In addition, we visited the project site on separate occasions with representatives of the California Department of Fish and Game, US Army Corps of Engineers, and the Regional Water Quality Control Board.

We have also kept the Transportation Authority of Marin (TAM), TAM's Technical Advisory Committee and TAM's Citizens Oversight Committee appraised of the processing of the EIR and the project. We most recently informed TAM's Technical Advisory Committee and TAM's Citizens Oversight Committee (COC) that the Final EIR has been completed, and will be submitted to the Board of Supervisors for certification. During these meetings a number of

questions about project construction were raised. For your information, I am including a list of some of the questions asked and our answers.

Technical Advisory Committee:

- When is construction going to start; ***Answer*** *- depends on when we can get permits from the Army Corps of Engineers and the Regional Water Quality Control Board and when work is allowed respecting the various environmental "windows".*
- How long will it take; ***Answer*** *- the entire project is estimated to take between 6 and 9 months...it may need to be split into two phases due to environmental restrictions.*
- What happens if you don't have enough money; ***Answer*** *- two options: seek additional funding sources or scale back the scope of the project to match available funding.*
- What kind of people are you going to have on site to monitor the environmental mitigation issues; ***Answer*** *- there will be appropriate experts on site as required by the EIR including biological, geotechnical, and cultural archeological.*
- When is the certification meeting going to take place; ***Answer*** *- County staff are working to set the date of the hearing before the Board.*

Citizens Oversight Committee:

- Will the road remain open during construction; ***Answer*** *- yes, the road will have one lane opened at all times and will be opened to two way traffic after hours.*
- Why can't you use the existing bike path thru Samuel P. Taylor Park? or the old railroad right of way; ***Answer*** *- either option is beyond the scope of this project, in addition, these locations are outside the road right of way and are not under the control of the County.*
- Can you cut down a few redwood trees at tight locations to improve safety; ***Answer*** *– the Public Works Director will make a recommendation to the Board for final project design.*
- Has the bicycle community weighed in on the point that the shoulder will be variable in width from 4' to 0'; ***Answer*** *– Marin County Bicycle Coalition has provided written support for the Mitigated Roadway Alternative.*
- Where is the contractor going to stage his equipment after the days work is done; ***Answer*** *- under the project specifications, the contractor has to provide his own staging areas that meet the required mitigation measures outlined in the EIR, this will be a part of the cost of the project incorporated in the contractors' bid.*

CONCLUSIONS

The Sir Francis Drake Boulevard Rehabilitation Project Final EIR underwent thorough preparation and processing in full compliance with CEQA State EIR Guidelines, and County Environmental Review Procedures. Substantial opportunity for public participation in the EIR process and review and comment on the EIR documents was provided which meet and exceed the requirements of CEQA and County Environmental Review Procedures. Staff recommends that the Board approve the attached Resolution Certifying the Final EIR for the Sir Francis Drake Boulevard Project.

The Final EIR identified the 'Mitigated Roadway Alternative' as the environmentally superior alternative compared to the other alternatives analyzed in the Final EIR.

It is therefore recommended that you authorize the final design and construction of the Mitigated Roadway Alternative. The attached Resolutions approve the Mitigated Roadway Alternative as the construction project and takes related CEQA actions including required CEQA findings and adoption of a Mitigation Monitoring and Reporting Program.

FISCAL IMPACT: The project is funded from Marin County's Transportation Sales Tax, Measure A Major Roads funds designated for West Marin, and there is no impact to the General Fund

REVIEWED BY:	[ ]	Department of Finance	[X]	N/A
	[X]	County Counsel	[ ]	N/A
	[ ]	Human Resources	[X]	N/A

Respectfully submitted,

Farhad Mansourian
Director

C: Dave Bernardi
Ernest Klock
John Roberto
Robert Stevens
Dianne Steinhauser

RESOLUTION NO. 2011_____
RESOLUTION OF THE MARIN COUNTY BOARD OF SUPERVISORS CERTIFYING THE SIR FRANCIS DRAKE BOULEVARD REHABILITATION PROJECT FINAL ENVIRONMENTAL IMPACT REPORT

SECTION 1: FINDINGS

I **WHEREAS**, Sir Francis Drake Boulevard is a major arterial providing access to several communities in West Marin, Samuel P. Taylor State Park, Point Reyes National Seashore, and the Golden Gate National Recreation Area, and a 5.2-mile segment of the roadway between Platform Bridge Road and Shafter Bridge displays evidence of distress including cracking and dislocation of the pavement, and

II. **WHEREAS,** prior maintenance of the 5.2-mile segment of the roadway by Marin County Department of Public Works has included removal and replacement of damaged sections of roadway and overlays of asphalt concrete. However, these kinds of repairs are no longer effective as the pavements structural section has failed, and

III **WHEREAS,** the Marin County Department of Public Works staff conducted a series of community meetings in October 2007, February 2008 and March 2008 to discuss the conditions of the roadway, different options for making improvements, and issues of local concern, and

IV. **WHEREAS,** in August 2008 a Project Study Report for Improvements to Sir Francis Drake Boulevard (SFDB) between Platform Bridge Road and Shafter Bridge was prepared by BKF Engineers. The Project Study Report confirmed that the 5.2-mile segment of the existing roadway exhibits areas of extensive structural failure. Modes of failure observed included alligator cracking, longitudinal and transverse cracking, land/shoulder drop off, and a few locations with corner breaks. The existing road shows evidence of water penetration in the crack areas and at the edges that only increase deterioration. The road's existing geometry is not up to current design standards and contains restricted horizontal geometry due to original design and/or combined with existing physical such as trees and excessively steep slopes at the edges, and

V. **WHEREAS**, after further study and consideration of concerns expressed by participants at the prior community meetings the Marin County Department of Public Works decided that the best option for improvements to the roadway was a Resurface, Restore and Rehabilitate Project with travel lanes that vary from 10' to 12' and shoulders that vary from 0' to 4'. Shoulders would be improved provided no trees are affected, with the exception of trees that may need to be removed to repair an existing failed creek-side slope, and

VI. **WHEREAS,** after further consideration of the needs of multiple modes of transport on the roadway (vehicles, bicycles, pedestrians) Marin Department of Public Works formulated an Option A that attempted to balance very limited tree removal beside the existing roadway for additional paved shoulder width, and

VII. **WHEREAS,** in conformance with CEQA regulations, the Marin County Department of Public Works ordered that an EIR be prepared for the proposed project. Per CEQA Guidelines Section 15060 (c)), an Initial Study was not prepared. A Notice of Preparation (NOP) for the Project EIR was circulated on October 27, 2009 to public agencies and all interested parties for a 30-day review and comment period on the scope of the EIR, and

VIII **WHEREAS,** in compliance with the CEQA Guidelines Section 15082(c)(1) and Marin County's Environmental Impact Report Guidelines a public scoping session was conducted on November 15, 2009 at the Woodacre Improvement Club, Woodacre, California to receive input from public agencies, community groups, and interested members of the public on the environmental issues and concerns for evaluation in the EIR, and

IX. **WHEREAS,** the Draft EIR and a Notice Of Completion (NOC) and notice of public hearing on the Draft EIR were distributed on May 12, 2010, to members of the Planning Commission, Board of Supervisors, State Clearinghouse, state and local agencies and special districts, surrounding property owners, and other interested groups and individuals. The Notice of Completion and notice of public hearing was published in a newspaper of general circulation to begin a 45-day public review and comment period on the adequacy of the Draft EIR. The public review and comment period ended on June 25, 2010, and

X **WHEREAS,** on June 15, 2010, the Marin County Board of Supervisors conducted a public hearing to receive testimony on the adequacy of the Draft EIR. Oral and written comments were presented at the hearing. Primary issues raised regarded concerns over impacts to endangered species and their habitat, water quality impacts, visual impacts, slope instability, erosion and silt, drainage issues, traffic congestion and roadway safety, and construction related impacts. Following the close of the public hearing, the Board of Supervisors directed that a Final EIR Response to Comments be prepared after the close of the comment period on the Draft EIR on June 25, 2010, and

XI **WHEREAS,** on June 25, 2010, the public review and comment period on the Draft EIR was closed, and written comments were received on the Draft EIR until 4:00 p.m. on that date.

XII **WHEREAS,** on January 21, 2011, the Final EIR, Response to Comments, and a Notice of Availability of the distribution of the Final EIR for review was distributed to members of the Planning Commission, Board of Supervisors, State Clearinghouse, state and local agencies and special districts, EIR commentors, and other interested groups and individuals. The Notice of Availability was published in a newspaper of general circulation to begin a 14-day public review and comment period on the Final EIR, which concluded on February 7, 2011.

XIII **WHEREAS,** on February 7, 2011, the review and comment period on the Final EIR Response to Comments was closed, and written comments were received on the Final EIR until 4:00 p.m. on that date. Similar to the Draft EIR, these comments primarily address concerns over biology, rare and endangered species, hydrology, traffic safety, and water quality. A response by the EIR consultant has been provided for each of the issues raised in the comments. The responses to comments on the Final EIR have been adopted as an Amendment to the Final EIR to complete the Final EIR as adequate for certification. Since the comments and responses result in only minor clarifications to the Final EIR, they do not trigger CEQA requirements for recirculation of the document for additional public review and do not prevent certification of the EIR as adequate and complete. On April 26, 2011, copies of the Final EIR Response to Comments Amendment and a notice of the Board of Supervisors meeting to consider recommendation for certification of the Final EIR were distributed to members of the Planning Commission, Board of Supervisors, other Public Agencies, EIR commentors and other interested parties. The Amendment to the Final EIR will be considered as part of the certified Final EIR in making an informed decision on the project.

XIV. **WHEREAS,** on April 26, 2011, notice of a public hearing before the Marin County Board of Supervisors to consider certification of the Final EIR was published in a news paper of general circulation and posted as required by law.

XV **WHEREAS,** on May 10, 2011, the Marin County Board of Supervisors conducted a public meeting to consider certifying the Final EIR. The Final EIR and a Response to Comments Amendment to the Final EIR, together with staff's report recommending certification of the Final EIR were provided to the Board of Supervisors

XVI. **WHEREAS,** the Marin County Board of Supervisors has reviewed and considered in light of public comments and testimony the information in the Final EIR, EIR administrative record, and staff reports for adequacy, completeness and compliance with CEQA, State CEQA Guidelines, and County Environmental Review Procedures.

SECTION 2: ACTION

NOW, THEREFORE, BE IT RESOLVED, that the Marin County Board of Supervisors hereby finds and certifies:

1. The recitals above are true and accurate and reflect the independent judgment of the Board of Supervisors.

2. Notice of the Board of Supervisors hearings on the Sir Francis Drake Boulevard Rehabilitation Project environmental review documents was given as required by law and the actions were conducted in accordance with CEQA, and the State CEQA Guidelines.

3. All individuals, groups and agencies desiring to comment were given adequate opportunity to submit oral and written comments on the environmental review documents. These opportunities for comment meet or exceed the requirements of CEQA and the County Environmental Review procedures.

4. All comments submitted during the public review and comment period on the DEIR, the public hearings on the adequacy of the DEIR conducted by the Board of Supervisors and the public review and comment period and hearing on the Final EIR were responded to adequately.

5. The Board of Supervisors was presented with all of the information described in the recitals and has considered this information in adopting this resolution.

6. The Final EIR (a) has been completed in compliance with the intent and requirements of CEQA and the State CEQA Guidelines, and the County EIR process, (b) reflects the independent judgment and analysis of the County of Marin, and (c) has been presented to and reviewed and considered by the Board of Supervisors.

SECTION 3: ACTION AND VOTE

PASSED AND ADOPTED at the regular meeting of the Board of Supervisors of the County of Marin held on this _____th of _____ 2011, by the following vote:

AYES: SUPERVISORS

NOES:

ABSENT:

_____
PRESIDENT, BOARD OF SUPERVISORS

ATTEST:

_____
CLERK

RESOLUTION NO. _____
RESOLUTION OF THE MARIN COUNTY BOARD OF SUPERVISORS APPROVING THE MITIGATED ROADWAY ALTERNATIVE AS THE PROJECT FOR REHABILITATION SIR FRANCIS DRAKE BOULEVARD FROM SHAFTER BRIDGE TO PLATFORM BRIDGE ROAD

SECTION 1: CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS

I. **WHEREAS,** a Environmental Impact Report (hereinafter, "EIR") was prepared for the Sir Francis Drake Boulevard Project pursuant to requirements of the California Environmental Quality Act ("CEQA," Public Resource Code Sections 21000-21177), State CEQA Guidelines, and County CEQA procedures; and

II. **WHEREAS,** on May 10, 2011, the Marin County Board of Supervisors adopted Resolution No. _____ which certified the Final EIR for the Sir Francis Drake Boulevard Rehabilitation Project as adequate for purposes of taking an action on the project; and

III. **WHEREAS,** the Marin County Board of Supervisors hereby makes findings of fact pursuant to CEQA and the State CEQA Guidelines as contained in "Exhibit 1" attached to this resolution and incorporated herein by reference; and

SECTION 2: SIR FRANCIS DRAKE BOULEVARD REHABILITATION PROJECT FINDINGS

V. **WHEREAS**, on April 26, 2011, prior notice of a public hearing was sent to property owners within 600 feet of the project site and also posted on the County web site; and

VI. **WHEREAS,** on May 10, 2011, the Marin County Board of Supervisors conducted a public hearing to consider the merits of the Sir Francis Drake Boulevard Rehabilitation Project, accepted public testimony, and

VII. **WHEREAS,** the Marin County Board of Supervisors concurred with the finding in the Final EIR that the Mitigated Roadway Alternative is the environmentally superior alternative and therefore is the Preferred Alternative; and

VIII. **WHEREAS,** prior to taking action, the Marin County Board of Supervisors has reviewed and considered, among other items: (1) the Final EIR documents and record (including the April 2011 Response to Comment Amendment); (2) information, data and technical reports provided by the Marin Department of Public Works; (3) the proposed CEQA findings of fact; (4) the proposed Mitigation Monitoring and Reporting Program; and (5) all oral and written public testimony received and the administrative record;

SECTION 3: RESOLUTION APPROVING THE MITIGATED PROJECT ALTERNATIVE (PREFERED ALTERNATIVE) AS THE CONSTUCTION PROJECT FOR THE REHABILITATION OF SIR FRANCIS DRAKE BOULEVARD

NOW, THEREFORE BE IT RESOLVED that the Marin County Board of Supervisors hereby adopts a resolution which approves the Mitigated Roadway Alternative as described in the Final EIR as the construction project for the rehabilitation of Sir Francis Drake Boulevard subject to the Mitigation Measure adopted in Exhibit 1, and adopts the Mitigation Monitoring and

Reporting Program (Exhibit 2) contained in the Final EIR Responses to Comments volume as modified by the findings in Exhibit 1.

SECTION 4: VOTE

PASSED AND ADOPTED at a regular meeting of the Board of Supervisors of the County of Marin held on this _____th day of _____, 2011, by the following vote:

AYES: SUPERVISORS

NOES:

ABSENT:

_____
PRESIDENT, BOARD OF SUPERVISORS

ATTEST:

_____
CLERK

"EXHIBIT 1"
FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND MITIGATION MONITORING REPORT
SIR FRANCIS DRAKE BOULEVARD REHABILITATION PROJECT

Purpose of the Findings

The purpose of these findings ("Findings") is to satisfy the requirements of section 21081 of the California Environmental Quality Act (CEQA), Public Resources Code Sections 15000 et seq., associated with the approval of the Sir Francis Drake Boulevard Rehabilitation Project. These Findings provide the written analysis and conclusions of the Board of Supervisors of the County of Marin, California regarding the Project. At times, they refer to materials in the record of proceedings, which materials are available for review at County offices.

The Findings are divided into 13 general sections:

Section I: Overview

Section II: Findings and Determinations

Section III: Concurrence with Potential Impacts Determined to be Less-Than-Significant

Section IV: CEQA Section 21081(a) Findings Regarding Significant Impacts

Section V: Significant Unavoidable, Growth Inducing and Significant Irreversible Impacts

Section VI: Potentially Significant Impacts Mitigated to a Less-Than-Significant Level

Section VII: Mitigation Monitoring and Reporting

Section VIII: Project Alternatives

Section IX: Recirculation Not Required; Subsequent/Supplemental EIR Not Required

Section X: Record of Proceedings

Section XI: Conclusion

Each of these sections is further divided into subsections that address a particular impact topic and/or requirement of law.

I Overview

A. CEQA Context

In accordance with CEQA, the CEQA Guidelines and the County's Environmental Impact Review Guidelines, the County prepared an Environmental Impact Report (EIR) to

identify and assess potential impacts associated with the Project. The County issued the Final EIR in January 2011 and a response to comments Amendment in April 2011. The FEIR and Amendment collectively are referred to herein as the "EIR." The Board certified the EIR for the Project on May 10, 2011. The EIR found that the Project did not result in unavoidable significant effects on the environment.

For the proposed Sir Francis Drake Boulevard Rehabilitation Project (SFDBRP), the County concludes that the Mitigated Roadway Alternative, which includes all of the mitigation measures identified in the EIR and the elimination of Option A, meets the basic objectives of the proposed SFDBRP and is the Environmentally Superior Alternative (Final EIR, page 353, section 5.5). The Board, through the Approval Resolutions, is adopting the Mitigated Roadway Alternative as the Preferred Alternative and the project to be constructed.

These Findings are made and adopted by the Board in satisfaction of State and local requirements relative to the environmental review, analysis, consideration, and approval of the Preferred Alternatives.

B. Project Proponent

The project proponent is the Marin County Department of Public Works.

C. Project Location

Sir Francis Drake Boulevard (SFDB) is an east-west arterial roadway connecting US Highway 101 in the eastern end of Marin County, California with State Highway 1 at the west end of the County. The portion of SFDB to be rehabilitated is along the western portion of the roadway between Shafter Bridge and Platform Bridge Road. This 5.2 mile portion of SFDB traverses Samuel P. Taylor State Park and a portion of the Golden Gate National Recreation Area (GGNRA). SFDB has a horizontal curvilinear alignment and generally parallels Lagunitas Creek that flows west to Tomales Bay.

D. Project Objectives

The primary objectives of the SFDB Rehabilitation Project are to:

- Restore the roadway pavement to provide an additional 30-year design life.
- Improve the roadway alignment, where possible, to enhance safety.
- Protect environmental resources to the greatest extent possible during and after construction.
- Enhance pedestrian and bicycle use of the roadway.

E. Project Description

The roadway rehabilitation project consists of pavement rehabilitation, drainage improvements, pullout improvements, and slope repair. The proposed pavement rehabilitation is divided into two segments. Segment 1 (Shafter Bridge to Station 100+00) will be rehabilitated using the crack and seat technique that reuses the

existing concrete as a base for overlay of new asphalt concrete; Segment 2 (Station 100+00 to Platform Bridge Road) will be rehabilitated by milling the existing roadway surface and applying an overlay of rubberized concrete. All existing culverts comprised of corrugated metallic or plastic, within the right-of-way, will be removed and replaced. Those portions of existing culverts outside of the right-of way will not be removed and replaced. Regularly spaced pullouts will be provided along the roadway and paved with permeable asphalt. The proposal is to sign the formalized pullouts as no-parking zones. Other areas along the roadway currently used as informal pullouts will be landscaped to prohibit their use as vehicle pullouts. The existing unstable slope at Station 270+00 will be repaired. The slope repair will require the removal of 8 trees. In addition, the proposed project includes improvements to the alignment and width of SFDB. Small retaining walls, less than 3 feet in height, would be constructed to provide additional paved shoulder width. The proposed project as designed would not require the removal of any other trees.

Option 'A' would provide additional shoulder areas and a more uniform paved roadway width. Additional shoulder width and a more uniform roadway are proposed in areas where the existing topography will allow for the improvements without extensive grading. However, 9 existing trees adjacent to the roadway would need to be removed under Option 'A'.

F. Preferred Alternative

The Preferred Alternative would include all Mitigation Measures identified in the EIR for the proposed project, but would eliminate all improvements, environmental impacts and mitigation measure directly associated with Option A. and the majority of the retaining walls.

Project modifications associated with the Preferred Alternative were analyzed in the EIR and subsequently evaluated as part of the final approval. Based on these analyses, the modifications do not alter the conclusions of the EIR, do not trigger the thresholds for recirculation set forth in section 15088.5 of the CEQA Guidelines, and do not trigger the thresholds for a subsequent or supplemental EIR set forth in sections 15162 and 15163 of the CEQA Guidelines (See Section IX, below).

G. Public Review Process

Marin County determined on preliminary review that an EIR was required and proceeded directly with preparation of an EIR. On October 27, 2009, the County circulated a Notice of Preparation (NOP) of an EIR for SFDBRP pursuant to section 15082 of the CEQA Guidelines to seek comments from affected agencies and the public about the scope of the EIR. The County held a public scoping session regarding SFDBRP on November 15, 2009 to help identify potentially significant environmental effects to be analyzed in depth in the EIR. Several comment letters and oral comments were received from individuals and from interested governmental agencies in response to the NOP, and, during and following the meetings additional written comments were received. Comment letters on the NOP and from the public scoping meeting are contained in the Final EIR Appendices A and C.

The County prepared and circulated a Notice of Completion of the Draft EIR for the SFDBRP on May 12, 2010 in accordance with section 15087 of the CEQA Guidelines.

Comments were solicited from public agencies, organizations, and interested parties and individuals during the 45-day public review period, which ended on June 25, 2010, and at the Board of Supervisors public hearing on June 15, 2010. All written comments received during the public review period and comments received at the public hearing were addressed in the Responses to Comments volume of the Final EIR.

On January 21, 2011, Marin County prepared and distributed a Notice of Availability of the Final EIR to Responsible and Trustee Agencies that commented on the Draft EIR and all interested parties for a 14-day period to allow for review of the adequacy of the written responses to comments received on the Draft EIR. The 14-day review and comment period ended on February 7, 2011. In March 2011 the County issued an Amendment that responds to comments received on the Final EIR. Pursuant to this analysis the responses contained in the Amendment do not alter the conclusions of the Draft EIR, do not trigger the thresholds for recirculation set forth in CEQA Guidelines section 15088.5, and do not trigger the thresholds for a subsequent or supplemental EIR set forth in sections 15162 and 15163 of the CEQA Guidelines.

H. Defined Terms

To provide consistency in the use of terms and to increase readability, these findings often provide short parenthetical terms for certain longer, more encompassing terms or concepts. Unless the context requires a different meaning, any term or phrase used in these findings, which has its first letter capitalized shall have that meaning given to it by these findings. Certain such terms and phrases are referenced below, while others are defined where they appear in the text of these findings.

CEQA - The California Environmental Quality Act: Public Resources Code §21000 et seq.

CEQA Guidelines - The State regulations implementing CEQA; California Code of Regulations, Title 14, Chapter 3 section 15000 et seq.

County - The County of Marin.

EIR - The term "EIR" (environmental impact report) is a general reference to the Final Environmental Impact Report, and other documents incorporated by reference into the Final EIR, including the Amendment to the Final EIR, and other documents incorporated by reference into the Final EIR and the Amendment to the Final EIR.

Mitigation Measures -- CEQA requires that, where feasible, significant impacts of a project be avoided or mitigated. Measures to avoid or mitigate such impacts are referred to herein as Mitigation Measures.

MMRP - The term "MMRP" (Mitigation Monitoring and Reporting Program) refers to a mitigation monitoring program that is adopted if a project is approved with an EIR that identifies significant environmental impacts pursuant to Public Resources Code §21081.6. The MMRP, derived from Section II of the Responses to Comments volume of the EIR and contained in "Exhibit 2" of the approved resolutions and incorporated herein by reference, is designed to ensure project compliance with adopted Mitigation Measures during project implementation.

Proposed Project - The Sir Francis Drake Boulevard Rehabilitation Project as described in Section I.E. above. This is the "Project" pursuant to CEQA §21065 and State CEQA Guidelines §15378.

Preferred Alternative – The alternative that was defined during the Board of Supervisors hearing on March 29, 2011 entailing the construction techniques to be used in rehabilitating Sir Francis Drake Boulevard including culvert rehabilitation, the elimination of Option A, and the reduction in the number and length of retaining walls.

SFDBRP – Sir Francis Drake Boulevard Rehabilitation Project

I. Severability

If any term, provision, or portion of these findings or the application of same to a particular situation is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of these findings, or the application of the same to other situations, shall continue in full force and effect unless amended or modified by the County.

J. Project EIR

The EIR was prepared to examine the environmental impacts of a specific development project pursuant to the State CEQA Guidelines §15161. It is intended to serve as the environmental documentation for the Proposed Project, consisting of all the discretionary actions necessary for project implementation. The EIR provides a complete evaluation of not only the Proposed Project, but also the cumulative impacts of the Proposed Project along with other existing and proposed activities, and alternatives to the Proposed Project. The EIR is also intended to serve as the environmental documentation for all County and other public agency actions subsequent to the actions in the resolutions to which these findings are attached, including approvals, permits, or other entitlements granted or issued in connection with the planning, approval, construction, operation, and maintenance of the development contemplated by the Proposed Project.

The EIR was prepared to address all phases of project implementation, including planning, approval, construction operation and maintenance of the development contemplated by the Proposed Project, consistent with provisions of State CEQA Guidelines §15146 for degree of specificity required in the EIR. Therefore, the EIR is written to serve as a project- specific EIR consistent with the provisions of State CEQA Guidelines ' 15161.

II. FINDINGS ARE DETERMINATIONS

The Board recognizes that there may be differences in and among the different sources of information and opinions offered in the documents and testimony that make up the EIR and the record of proceedings; that experts can disagree; and that the Board must base its decisions and these Findings on the substantial evidence in the record that it finds most compelling. Therefore, by these Findings, the Board ratifies, clarifies, and/or makes insignificant modifications to the EIR and resolves that these Findings and the MMRP shall control and are determinative of the significant impacts of the Projects, as further mitigated by the Preferred Alternative and revised by the Board. In addition, the Board declares that except as otherwise provided herein, in the event of any discrepancy between the wording of a policy or program in these Findings and the wording in either of the Proposed Project/Alternatives or the MMRP, the wording in the Proposed Project/Alternatives or MMRP is in error and shall be replaced with the wording in these Findings.

III. CONCURRENCE WITH POTENTIAL IMPACTS DETERMINED TO BE LESS-THAN- SIGNIFICANT IMPACTS WITHOUT NEED FOR IMPOSITION OF MITIGATION

WHEREAS the Board of Supervisors has reviewed and considered the information in the EIR, including Chapters 4, 5, and 6, addressing environmental effects, mitigation measures, and alternatives, and said chapters identify certain conclusions that the Project would cause environmental impacts that are less-than-significant without imposition of mitigation. Therefore, the Board of Supervisors, relying on the facts and analysis in the EIR, which was presented to the Board and reviewed and considered, concurs with the conclusions of the EIR regarding the less-than-significant environmental impacts of the Proposed Project. The impacts identified as less than significant for the Proposed Project are also deemed to be less-than- significant for the Preferred Alternative, because the Preferred Alternative would reduce potential severity of impacts to the natural and visual resources on the site.

IV. CEQA §21081(a) FINDINGS REGARDING SIGNIFICANT IMPACTS

The Board has modified the Proposed Project as originally proposed, with the approval of the Preferred Alternative, to attempt to avoid or substantially reduce significant environmental impacts and to otherwise consider, address and resolve environmental concerns presented during public review of the EIR. The EIR identifies certain significant environmental impacts caused by the Proposed Project and recommends specific Mitigation Measures to reduce these impacts to a less-than-significant level. The Board has certified the EIR as being adequate according to CEQA and has reviewed and considered the information in the EIR and in the entire record. Therefore, the Board makes specific Findings, as set forth in the sections that follow, for each significant impact, pursuant to Public Resources Code section 21081(a), based not only on the EIR, but also on the evidence in the entire record of proceedings, including written and oral testimony to the Board.

According to Public Resources Code section 21081, no public agency shall approve or carry out a project for which an environmental impact report has been certified which identified one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

1. The public agency makes one or more of the following findings with respect to each significant effect:

   a. Changes or alternations have been required in, or incorporated into, the project, which mitigate or avoid the significant effects on the environment (referred to herein as: "Finding 1: The impact is mitigated to a less-than-significant level.")

   b. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency (referred to herein as "Finding 2: Another public agency can and should mitigate the impact.")

   c. Specific economic, legal, social, technological, or other considerations, including consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report (referred to herein as: "Finding 3: Specific consideration make mitigation measures or alternatives infeasible." or if the impact is partially mitigated, but not to a less-than-significant level; "Finding 3: The impact would be mitigated, but not to a less-than-significant level. Special considerations make further mitigation measures or alternatives infeasible.")

2. With respect to the significant effects, which were subject to Finding c described above, the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

The facts, findings, and substantial evidence supporting the findings related to significant effects of the Proposed Project in the sections that follow, do not repeat the full analysis of impacts and description of Mitigation Measures contained in documents making up the record of proceedings. Instead, the following discussion specifically references particular locations in documents containing such information (e.g., specific pages in the EIR). The referenced documents are either included or attached herein, or are readily available to the public for review at the Marin County Department of Public Works, 3501 Civic Center Drive, Room 404, San Rafael, California.

The discussion that follows under the caption "Facts" for each significant impact recites some of the background environmental impact information related to the Proposed Project. The finding made by the Board is set forth under the caption "CEQA §21081(a) Finding." The discussion under the caption "Evidence Supporting the Finding" contains substantiating information about what mitigation measures are provided and how they reduce the significant impact. The numerical assignments used in these facts, findings, and substantial supporting evidence sections correspond to the numbering system used in the EIR.

V. SIGNIFICANT UNAVOIDABLE, GROWTH INDUCING, AND SIGNIFICANT IRREVERSIBLE IMPACTS

Significant Unavoidable Impacts

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe those impacts that cannot be fully mitigated as part of a proposed project. In some cases, no feasible mitigation measures are available to reduce the significance of impacts; in other cases, mitigation measures may be available, but not reduce an impact to a level that is less-than-significant. In each such case, impacts are considered to be significant and unavoidable. The EIR identifies no significant unavoidable impact associated with the Proposed Project or the Alternatives.

Growth Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines requires an EIR to evaluate the growth-inducing impacts of a proposed project and defines the term for this purpose. The EIR considers growth-inducing impacts in the context of the Proposed Project with other approved or reasonably foreseeable projects. The EIR identifies no growth inducing impacts associated with approval of the Proposed Project or Alternatives.

Significant Irreversible Impacts

The EIR considers significant irreversible impacts in the context of the Proposed Project on page 355 of the EIR. The EIR identifies no significant irreversible impacts associated with approval of the Proposed Project or Alternatives.

VI. POTENTIALLY SIGNIFICANT IMPACTS MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

1. Aesthetic Impacts

IMPACT AES-1: Option A could increase the amount of light and glare visible to pedestrians, bicyclists and equestrians using the trail systems in the vicinity of the project area (Significant).

Facts

The EIR found that tree removal associated with Option A could open up views toward SFDB from nearby trails and campgrounds thereby potentially increasing vehicle light and glare impacts on trail users and campers. This impact is discussed on pages 149 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the EIR and the entire record, this aesthetic impact is mitigated to a less-than- significant level by the Board of Supervisors decision to eliminate Option A and the

tree removal associated with Option A in the final approved plan for rehabilitating the roadway. The elimination of Option A negates the need to implement Mitigation Measure AES-1 found on page 149 of the Final EIR

2. Biological Resource Impacts

IMPACT BIO-1: Implementation of the proposed project could impact special-status plant species present within the project area (Significant)

Facts

The EIR found that although no special-status plant species were observed within the project site during CDFG protocol-level plant surveys; special status plant species are known to occur in the project vicinity and new populations could possibly colonize the project site prior to the start of the project This impact is discussed on page 184 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the EIR and the entire record, this potential impact on special status plant species is mitigated to a less-than- significant level by the imposition of Mitigation Measures BIO-1 found in the MMRP and on pages 184-15 of the Final EIR. This potential impact would be mitigated to a less-than-significant level because Mitigation Measure BIO-1 would ensure that additional CDFG protocol level surveys be conducted within and adjacent to the project site prior to the start of construction, and includes measures to be implemented including avoidance, protective fencing, plant transplant, reseeding, or implementation of a long term management and enhancement plan for off-site populations of any effected special status plants.

Adopted Mitigation Measures

BIO-1: A qualified botanist shall conduct additional CDFG protocol-level surveys within and immediately adjacent to the zones that would be disturbed by construction work. The surveys shall be conducted in the year within which construction is to commence. To the extent allowed under the construction schedule, surveys shall be conducted during the flowering period of the special-status plants that have a high potential to occur within the project area (January through August). If any special-status plant species are observed within or adjacent to the disturbance zones, Marin DPW shall implement the following:

- A qualified botanist shall delineate the locations of any special-status plant populations adjacent to the disturbance zones and shall supervise the installation of temporary protective construction fencing between the disturbance zones and the plant population. The fencing shall remain in place until construction is completed and all construction equipment has been removed from the vicinity.

- If any special-status plant population is identified within the construction disturbance zones, the Marin DPW shall consult with CDFG and CNPS to determine appropriate avoidance and/or mitigation measures for impacts to the population. If the special status plant is federally listed as Threatened or Endangered, the Marin DPW shall also consult with the USFWS. At a minimum, avoidance and mitigation measures shall entail the following:
    a. Marin DPW shall adjust the boundaries of the disturbance zones, where feasible, to avoid impacts to the plant population.
    b. Where avoidance is not feasible, the Marin DPW shall implement one or more of the following measures, based on the prior consultation with CDFG and CNPS: 1) transplant affected plants to suitable habitat areas outside the disturbance zones; 2) collect and properly store seeds of affected plants; subsequently re-seed suitable habitat areas outside the disturbance zones; 3) prepare and implement a long-term management/enhancement plan for existing off-site populations of the affected plant species.

The Board adopts Mitigation Measure BIO-1 as proposed in the Final EIR.

IMPACT BIO-2: Implementation of the proposed project could impact special-status invertebrate species potentially present within the project area (Significant).

Facts

The EIR found that project could potentially impact invertebrate species in the project area including Marin elfin butterfly. Myrtle's silverspot butterfly and Marin Hesperian. This impact is discussed on page 185 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the EIR and the entire record, the potential on special-status invertebrate species is mitigated to a less-than-significant level by the imposition of Mitigation Measure BIO-2a found in the MMRP and on page 185 of the Final EIR. With Mitigation Measure BIO-2a, this impact would be reduced to a less-than-significant level because during the spring and summer period required preconstruction surveys would identify host plants for the special status invertebrate species that could potentially be present at the site and any identified populations will be avoided or transplanted.

Adopted Mitigation Measures

BIO-2a: During the spring and summer period prior to the start of construction, a qualified botanist shall conduct pre-construction surveys of the project site for the host plants of the Marin elfin butterfly and Myrtle's silverspot butterfly. Identified plant populations shall be marked for avoidance by project activities. If a plant population cannot be feasibly avoided, individual plants will be relocated by a qualified botanist to a

location adjacent to the project disturbance zone.

The Board adopts Mitigation Measure BIO-2a as proposed in the Final EIR.

BIO-2b: Implement re-vegetation and habitat restoration measures described in Mitigation Measures BIO-9a and BIO-9b.

The Board adopts Mitigation Measure BIO-2b as it pertains to retaining wall work at Station 270+25 in the Final EIR. Option A was rejected in the approved roadway habilitation project; therefore the impact of tree removal under Option A was avoided negating the need to adopt the portion of Mitigation Measure BIO-9b applicable to Option A.

IMPACT BIO-3: Implementation of the proposed project could impact bird species protected under the Federal and State Endangered Species Act (Significant).

Facts

The EIR found that Northern spotted owls had a high potential to occur in the project area and the tree removal associated with slope repair and Option A, and the noise from construction activity could have an impact on nesting owls. This impact is discussed on page 186 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the EIR and the entire record, impact on the Northern spotted owls is mitigated to a less-than- significant level by the imposition of Mitigation Measures BIO-3a and BIO-3b found in the MMRP and on 186 and 187 of the Final EIR. These mitigation measures require that: prior to construction activities the Point Reyes Bird Observatory will be contacted and a survey shall be conducted to determine if nesting Northern spotted owls are present. All suitable nesting trees within 165 feet of the construction disturbance zone will be surveyed. If nesting owls are identified 1) no project construction activities will be allowed within the 165 foot disturbance zone, 2) buffer zones shall be clearly delineated by fencing or other suitable barrier, 3) construction activities shall be limited to the daylight hours, 4) any required tree trimming shall be observed by an arborist to assure the tree is not permanently damaged and 5) a report documenting the results of the survey and protection measures and monitoring will be provided to the USFWS and CDFG. In addition, the decision by the Board of Supervisor to eliminate Option A from the final approved roadway rehabilitation project will avoid any impacts to potential nesting trees that would have been removed under Option A.

Adopted Mitigation Measures

BIO-3a: Prior to initiation of construction activities (in April or May of the construction year) the Point Reyes Bird Observatory (PRBO) shall be contacted to obtain the results of any new spotted owl surveys that were conducted in the project vicinity. If such

surveys indicate that spotted owls are nesting within 165 feet of the construction area, the USFWS and CDFG shall be consulted regarding additional avoidance and minimization measures.

The Board adopts Mitigation Measure BIO-3a as proposed in the Final EIR.

BIO-3b: If construction work is scheduled during the breeding season (March 1 through August 30), a qualified wildlife biologist shall conduct pre-construction surveys of all suitable nesting trees in the project disturbance zone and within 165 feet of the disturbance zone to determine if nesting birds of either species are present. (Preconstruction surveys will not be required for construction work carried out in the non-breeding season August 30 through February 28/29.) The pre-construction surveys shall be conducted within 15 days prior to the start of work from March 1 through May 31 (since there is higher potential for birds to initiate nesting during this period), and within 30 days prior to the start of work from June 1 through August 30. All suitable nesting trees within 165 feet of the construction disturbance zone will be surveyed.

If active nests of either species are found in the work area, the USFWS and CDFG will be consulted as to appropriate avoidance and minimization measures prior to the initiation of work. At a minimum, the following avoidance and minimization measures shall be implemented:

a. In order to avoid and minimize impacts on nesting northern spotted owls during project implementation, a 165-foot buffer shall be established around active nesting sites. No project construction activities shall be allowed to occur within this zone until a qualified biologist has determined that all juveniles have fledged from occupied nests.

b. Buffer zones shall be clearly delimited using construction fencing or other suitable barrier material to the extent feasible based on site conditions.

c. Construction activity, site access by equipment and vehicles, and operations at the staging areas shall be limited to daytime hours. No nighttime work shall be allowed on the project. Activities shall begin no earlier than one-half hour after sunrise and shall end no later than one-half hour before sunset.

d. Any required tree trimming of trees to be avoided shall be done according to arborist guidelines to minimize the effects to trees. Trimming of trees must not jeopardize the survival of trees.

e. A report documenting the results of preconstruction surveys and nest protection and monitoring shall be provided to USFWS and CDFG within 4 weeks of completion of work in the vicinity of active nests.

The Board adopts Mitigation Measure BIO-3b as proposed in the Final EIR.

IMPACT BIO-4: Implementation of the proposed project could impact special-status bird species protected under the MBTA potentially nesting in and adjacent to the project area. (Significant)

Facts

The EIR found that the proposed project could potentially impact special status bird species and also impact common nesting bird species due to tree removal associated with the proposed project and Option A. This impact is discussed on pages 187 and 188 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this impact on nesting special status bird species and common bird species is mitigated to a less-than-significant level by the imposition of Mitigation Measure BIO-4 found in the MMRP and on pages 188 and 189 the Final EIR. With the mitigation measure, this impact would be reduced to a less-than-significant level because: 1) during the breeding season preconstruction surveys for nesting birds would be required before roadway work can commence and 2) if active nests are found a biologist will determine an appropriate sized buffer zone based on the nesting species, and no construction work will be allowed within the buffer zone.

Adopted Mitigation Measures

BIO-4: If construction work is scheduled during the breeding season (March 1 through August 30), a qualified wildlife biologist shall conduct pre-construction surveys within and adjacent to the project disturbance zone to determine if nesting birds are present. (Preconstruction surveys shall not be required for construction work carried out in the non-breeding season August 30 through February 28/29.) The pre-construction surveys shall be conducted within 15 days prior to the start of work from March 1 through May 31 (since there is higher potential for birds to initiate nesting during this period), and within 30 days prior to the start of work from June 1 through August 30.

If active nests are found in the work area, the biologist shall determine an appropriately sized buffer around the nest in which no work shall be allowed until the young have successfully fledged. The size of the nest buffer shall be determined by the biologist in consultation with the CDFG, and shall be based on the nesting species, the context of the nest site in relation to existing human activity and its sensitivity to disturbance, and the expected types of disturbance. No project construction activities shall be allowed to occur within this zone until a qualified biologist has determined that all juveniles have fledged from occupied nests. At a minimum, the following buffer zones shall be implemented:

- *Yellow Warbler.* Yellow warblers typically nest and rear young from April through July. In order to avoid and minimize impacts on nesting yellow warblers during project implementation, a 25 to 50-foot buffer shall be established around active nesting sites when project activities shall occur during their breeding and nesting period. No project activities shall be allowed to occur within this zone. The buffer area can be removed prior to July if a qualified biologist determines that all juveniles have fledged from occupied nests.
- *Osprey.* Osprey typically nest and rear young from March through September. In order to avoid and minimize impacts on nesting osprey during project implementation, a 200-foot buffer shall be established around active nesting sites when project activities shall occur during their breeding and nesting period. No project activities shall be allowed to occur within this zone. The buffer area can be removed prior to September if a qualified biologist determines that all juveniles have fledged from occupied nests.
- *Other Raptor Species.* Other raptor species typically nests and rear young from early April through August. If these species are found to be nesting, impacts shall be avoided and minimized by establishing a 200-foot buffer around active nest sites. No project related activities should be allowed to occur within this buffer until young have fledged or the species are no longer attempting to nest. The buffer area can be removed prior to August if a qualified biologist determines that all juveniles have fledged from occupied nests.
- *Other Migratory Birds.* Migratory bird species typically nest and rear young from February through August. In order to avoid and minimize impacts on migratory bird species, a 25 to 200-foot buffer shall be established around active nesting sites when construction activities shall occur during their active nesting period. No project-related activities shall occur within this zone. The buffer area can be removed prior to August if a qualified biologist determines that all juveniles have fledged from occupied nests.

A report documenting the results of preconstruction surveys and nest protection and monitoring shall be provided to CDFG within 4 weeks of completion of work in the vicinity of active nests.

The Board adopts Mitigation Measure BIO-4 as proposed in the Final EIR.

IMPACT BIO-5: Implementation of the proposed project could impact federal and/or state listed salmonid species - Central California Coastal coho salmon, Central California Coast steelhead, and California Coastal chinook salmon. (Significant)

Facts

The EIR found that the proposed project would not directly impact salmonids in Lagunitas Creek but could potentially cause direct impacts to salmonids in tributaries to Lagunitas Creek where existing culverts beneath SFDB would be removed and replaced with upgraded culverts. The proposed project also has the potential to cause indirect impacts to salmonids due to construction-related activities (grading slope repair, tree removal and culvert replacement). Potential indirect impacts during construction include: 1) temporary changes in the volume and timing of stormwater runoff into Lagunitas Creek, 2) temporary water quality degradation in Lagunitas Creek, and 3) disturbance to

riparian vegetation. Potential post-construction impacts include: 1)hydromodification of Lagunitas Creek, 2) the quality of stormwater runoff into Lagunitas Creek, and 3) changes in riparian habitat along Lagunitas Creek These impacts are discussed on pages 189 through 200 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this impact is mitigated to a less-than-significant level by the imposition of Mitigation Measures BIO-5a through BIO-5d found in the MMRP and on pages 200 through 202 of the Final EIR. With these mitigation measures, this impact would be reduced to a less-than-significant level because: 1) a Storm Water Pollution Protection Plan (SWPPP) in accordance with the State Water Resources Control Board, National Pollution Discharge Elimination System Construction General Permit will be prepared and implemented. The SWPPP will include Best Management Practices for controlling sediment and turbidity during construction; 2) A long-term Storm Water Management Plan will be adopted to address on-going road maintenance and inspection of and maintenance of roadside bioswales; 3) All native trees with trunks adjacent to construction areas will be protected with temporary construction fencing; and 4) suitable cutting from tree removal work will be made available for use as woody debris in bio-engineered structures along Lagunitas Creek in order to enhance salmonid habitat.

Adopted Mitigation Measures

BIO-5a: In accordance with Mitigation Measure HYD1a, a Storm Water Pollution Protection Plan (SWPPP), in accordance with the State Water Resources Control Board, National Pollution Discharge Elimination System (NPDES) Construction General Permit, shall be prepared and implemented.[1] The SWPPP shall include a wide range of Best Management Practices (BMPs) for controlling sediment and turbidity during construction. These BMP should include the following measures to avoid impacts to salmonids:

- Work below the tops of the creek banks, including culvert replacement work in the tributaries and bank repair along Lagunitas Creek, shall be allowed only during the period from June 15 to October 15 during low flow conditions. Culvert replacement work in a tributary shall occur only when there is no flow in the tributary or when in the opinion of the project biologist, the flow is too low to allow salmonid passage through the culvert. Low tributary flows will be temporarily captured and diverted downstream from the work zone.
- No fill material, including asphalt or concrete, shall be allowed to enter the stream. Any concrete structures (such as culvert headwall construction) below the tops of banks shall be poured in tightly sealed forms and shall not be allowed contact with surface waters until the cement has fully cured. Poured concrete shall be excluded from the wetted channel for a period of 30 days after it is poured. During that time the poured concrete shall be kept moist, and runoff from the concrete shall not be allowed to enter the creek. Commercial sealants may be applied to the poured

concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry and fully cured according to the manufacturer's specifications.

- Water that contacts wet concrete and has a pH greater than 9.0 shall be pumped out and disposed of outside the creek channel.
- No substances toxic to aquatic life shall be discharged into Lagunitas Creek or its tributaries.
- There shall be neither material deposition nor other channel disturbance below the ordinary high water line of Lagunitas Creek.
- There shall be no coffer dams or dewatering of Lagunitas Creek.
- Hydroseed mixes used to stabilize disturbed areas shall not contain fertilizers.
- Equipment maintenance and fueling areas shall be located at least 100 feet away from the creek bank. Fueling must be behind a containment barrier that shall prevent any spilled or leaked fuel from running into the creek. All equipment servicing must occur within designated areas. All motorized equipment used during construction or demolition activities shall be checked for oil, fuel, and coolant leaks prior to initiating work. Any equipment found to be leaking fluids shall not be used in or around aquatic habitat features in order to minimize the chances of contaminating the habitat and potentially impacting sensitive species, particularly salmon and steelhead.
- The project's contractor shall prepare an emergency response and clean-up plan prior to beginning work at the site. The plan shall detail the methods to be used to contain and clean-up spills of petroleum products or other hazardous materials in the work area.
- All maintenance crew personnel shall receive environmental training about the sensitive nature of the special status species in the project vicinity. This training that shall include descriptions of the special status species and all project measures in place to protect the species during construction. Crews shall also be informed to stop all work and notify their supervisor or the project biologist if special-status species are observed within the project site.

The Board adopts Mitigation Measure BIO-5a as proposed in the Final EIR.

BIO-5b: Post-construction (ongoing) road maintenance, including inspection and maintenance of roadside bioswales, shall be conducted in accordance with a long-term Storm Water Management Plan (SWMP) prepared prior to the start of construction in accordance with RWQCB and Marin County Storm Water Pollution Prevention Program (MCSTOPPP) standards, and approved by the RWQCB and Marin County. The SWMP shall also incorporate county road maintenance BMPs contained in the Fish Net 4C BMPs Roads Manual.

The Board adopts Mitigation Measure BIO-5b as proposed in the Final EIR.

BIO-5c: In order to avoid damage to existing riparian trees in the vicinity of the construction site, all native trees with trunks adjacent to excavation areas, equipment staging and material storage areas, as well as other areas with concentrated activity by construction equipment, shall be protected with temporary construction fencing. The fencing shall be placed at the edge of the construction zone as close as feasible to the

edge of the tree drip lines. No construction work, storage of equipment or materials or other disturbance shall be allowed within the protected areas. Additionally, redwood trees in the vicinity of the construction site shall be protected in accordance with Mitigation Measures BIO-10a through BIO-10i.

The Board adopts Mitigation Measure BIO-5c as proposed in the Final EIR.

BIO-5d: Marin DPW shall make available suitable cuttings from the tree removal work for use as woody debris and in bio-engineered structures along Lagunitas Creek in order to enhance salmonid habitat. The Marin DPW shall notify the signatories to the February 7, 2007 *Memorandum of Understanding for Woody Debris Management in Riparian Areas of the Lagunitas Creek Watershed* (Marin Municipal Water District, Marin County Open Space District, California Department of Parks and Recreation, National Park Service, and the Marin County Resource Conservation District – see *Biological Assessment* – Appendix E) of the availability of the wood, and the signatories shall notify Marin DPW if they have use for the woody debris, and when they will collect the material. If the signatory agencies have not responded within 14 days Marin DPW shall dispose of the material in a legal manner.

The Board adopts Mitigation Measure BIO-5d as proposed in the Final EIR.

IMPACT BIO-6: Implementation of the proposed project could impact other special-status fish species. (Significant)

Facts

The EIR found that the proposed project could potentially impact Tomales roach and chum salmon in Lagunitas Creek. This impact is discussed on page 202 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this impact on other special-status fish species is mitigated to a less-than-significant level by the imposition of Mitigation Measures BIO-6 found in the MMRP and on page 202 of the Final EIR. With the mitigation measure, this impact would be reduced to a less-than-significant level because the same mitigation measures (BIO-5a through BIO-5b) adopted to protect salmonids in Lagunitas Creek will also protect special-status fish species.

Adopted Mitigation Measures

BIO-6: Implement measures to protect special-status salmonids described in Mitigation Measures BIO-5a through BIO-5d.

The Board adopts Mitigation Measure BIO-6 as proposed in the Final EIR.

IMPACT BIO-7: Implementation of the proposed project could impact special-status amphibian and reptile species potentially present within the project area. (Significant)

Facts

The EIR found that the proposed project could potentially impact individual northwest pond turtles, California red-legged frogs, and foothill yellow-legged frogs if they were present within stream channels during drainage improvements. This impact is discussed on pages 202 and 203 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this potential impact on special status amphibian and reptile species is mitigated to a less-than- significant level by the imposition of Mitigation Measures BIO-7a through BIO-7i found in the MMRP and on pages 203 and 204 of the Final EIR. With these mitigation measures, this impact would be reduced to a less-than-significant level because: 1) a authorized biologist will conduct a focused pre-construction survey for these special-status amphibian and reptile species within 48 hours of the commencement of work; 2) If the survey identifies any special-status amphibian or reptile species all work will be halted in the vicinity of the species and the CEFG and USFWS will be contacted as to actions that must be taken to protect the possible take of the species; 3) construction fencing will be erected to protect adjacent amphibian and reptile habitats from intrusion from construction equipment and materials, 4) work will cease if any special status amphibian or reptile species are found either within or outside of identified habitats adjacent to the work area until an authorized biologist relocates the individuals, 5) clearance surveys of the construction area will be conducted daily, 6) the authorized biologist and assistants are required to follow the 'Declining Amphibian Task Force' fieldwork code when conducting surveys or relocating individuals to protect against the transmission of disease, 7) all construction activities will be limited to the daylight hours except for emergency to protect against the take of the special status species, 8) traffic speed in the work zone will be limited to 15 mph, and 9) BMPs and erosion control plans in the projects SWPPP will prevent an increase in sediment from entering waterways.

Adopted Mitigation Measures

BIO-7a: Prior to work beginning in any habitats containing appropriate habitat for northwestern pond turtle, foothill yellow-legged frog, or California red-legged frog a qualified biologist shall conduct focused pre-construction surveys for these species. The Preconstruction surveys for California red-legged frog shall be completed within 48 hours prior to commencement of any earth-moving activity, construction, or vegetation removal, whichever comes first. The preconstruction survey shall include two nights of nocturnal surveys in areas of suitable habitat. The biologist performing the

preconstruction survey must hold a federal 10(a)(1)(A) permit for California red-legged frog or be considered by USFWS to be a "service approved" biologist.

If any of the above special-status amphibian and reptile species are encountered during the surveys, all work in the work area shall be placed on hold while the findings are reported to the CDFG and USFWS and it is determined what, if any, further actions must be followed to prevent possible take of this species.

The Board adopts Mitigation Measure BIO-7a as proposed in the Final EIR.

BIO-7b: Where construction would occur in habitat where California red-legged frogs, foothill yellow-legged frogs, and northwestern pond turtle are potentially present, work areas shall be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat areas. An authorized biologist shall assist in determining the boundaries of the area to be fenced in consultation with the USFWS, and CDFG. All workers shall be advised that equipment and vehicles must remain within the fenced work areas.

The authorized biologist shall direct the installation of the fence and shall conduct biological surveys to move any individuals of these species from within the fenced area to suitable habitat outside of the fence. Exclusion fencing shall be at least 24 inches in height. The type of fencing must be approved by the authorized biologist, the USFWS, and CDFG.

The Board adopts Mitigation Measure BIO-7b as proposed in the Final EIR.

BIO-7c: If, at any time, individuals of these species are found within an area that has been fenced to exclude these species, activities shall cease until the authorized biologist moves the individuals.

The Board adopts Mitigation Measure BIO-7c as proposed in the Final EIR.

BIO-7d: If any of these species are found in a construction area where fencing was deemed unnecessary, work shall cease until the authorized biologist moves the individuals. The authorized biologist in consultation with USFWS and CDFG shall then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.

The Board adopts Mitigation Measure BIO-7d as proposed in the Final EIR.

BIO-7e: Clearance surveys of the construction area shall occur on a daily basis in the work area. Any individuals of these species found during clearance surveys or otherwise removed from work areas shall be placed in nearby suitable, undisturbed habitat. The authorized biologist shall determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. The authorized biologist shall have the authority to stop all activities until appropriate corrective measures have been completed.

The Board adopts Mitigation Measure BIO-7e as proposed in the Final EIR.

BIO-7f: To ensure that diseases are not conveyed between work sites by the authorized

biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force[2] shall be followed at all times.

The Board adopts Mitigation Measure BIO-7f as proposed in the Final EIR.

BIO-7g: Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when California red-legged frogs may be present.

The Board adopts Mitigation Measure BIO-7g as proposed in the Final EIR.

BIO-7h: Within the work zone, traffic speed shall be maintained as required by the Manual for Uniform Traffic Control Devices – California edition. The speed limit in the work zone shall be no more than 15 MPH.

The Board adopts Mitigation Measure BIO-7h as proposed in the Final EIR.

BIO-7i: BMPs and erosion control methods, as outlined in the project's SWPPP, shall be implemented. These BMPs include re-vegetation of all bare soil prior to the rainy season to prevent an increase in sediment entering waterways. The project's SWPPP shall be subject to the review and approval of the USFWS and CDFG.

The Board adopts Mitigation Measure BIO-7i as proposed in the Final EIR.

IMPACT BIO-8: Implementation of the proposed project could impact special-status mammal species potentially present within the project area (Significant).

Facts

The Final EIR found that project construction could result in impacts on roosting and maternity sites used by pallid, Townsend's big-eared, and western red bats. The impact is discussed on page 204 of the Final EIR. The project could also result in potential impacts on individual American Badgers or their dens if they are present in the project disturbance zone. The impact is discussed on page 206 of the Final EIR

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, the impact on roosting and maternity sites for pallid, Townsend's big-eared, and western red bats is mitigated to a less-than-significant level by the imposition of Mitigation Measures BIO-8a through BIO-8g found in the MMRP and on pages 204 through 206 of the Final EIR. With these mitigation measures, the potential impact on pallid, Townsend's big-eared, and western red bats would be reduced to a less-than-significant level because: 1) no more than 2 weeks before construction all trees within the project area will be surveyed for the presents of bat roosts by a qualified biologist; 2) if roosting habitat or maternity is present and occupied then a bat mitigation and exclusion plan shall be developed to compensate for

the lost roost site; 3) roosts will only be removed during seasons when bats are active and young can fly; 4) roost trees will be removed in two steps: first branches and limbs shall be removed as directed by the biologist, and then the remainder of the tree shall be removed, and 5) all construction activity in vicinity of roosts will be conducted in daylight hours and no diesel or gas-powered equipment shall be operated beneath a roost site.

Based upon the Final EIR and the entire record, the impact on individual American Badgers or their dens is mitigated to a less-than-significant level by the imposition of Mitigation Measures BIO-8h through BIO-8k found in the MMRP and on pages 206 and 207 of the Final EIR. With these mitigation measures potential impacts on American Badgers will be reduced to less-than-significant levels because: 1) no more than 7 days prior to construction a survey will be conducted to determine the presents of American Badger of their dens, 2) If American badger den is identified a survey will be conducted to determine if badgers are present, 3) No excavation of dens shall be allowed until monitoring results demonstrate the den is unoccupied for a least 3 nights, and 4) a report documenting the results of the preconstruction surveys and den monitoring shall be reported to CDFG.

Adopted Mitigation Measures

BIO-8a: All trees to be removed within the project area shall be surveyed for the presence of bat roosts by a qualified biologist. Surveys may entail direct inspection of the trees or nocturnal surveys. The survey shall occur no more than 2 weeks prior to the initiation of vegetation removal and ground disturbing activities. The survey shall be conducted prior to the commencement of the bat maternity season (approximately April 15-August 15). If no roosting habitat is present, then the tree must be removed within 1 week following the survey.

If roosting habitat is present and occupied, then a qualified biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost).

If it is determined that the bats are not a special-status species, and that the roost is not being used as a maternity roost, then the bats may be evicted from the roost using methods developed by a biologist experienced in developing and implementing bat mitigation and exclusion plans.

The Board adopts Mitigation Measure BIO-8a as proposed in the Final EIR.

BIO-8b: If special-status bat species are found to be present or if the roost is determined to be a maternity roost for any species of bat, then a qualified biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site.

Removal of the roost shall only occur when the mitigation plan has been approved by CDFG and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. One replacement roost shall be provided for each roost impacted. The mitigation plan shall be submitted to CDFG for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to

exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.

The Board adopts Mitigation Measure BIO-8b as proposed in the Final EIR.

BIO-8c: Roosts shall only be removed during seasons when bats are active and the young are able to fly (March 1 – April 15, and August 1 – October 15).

The Board adopts Mitigation Measure BIO-8c as proposed in the Final EIR.

BIO-8d: Removal of trees surrounding roost trees shall be conducted in a manner to prevent the tree being removed from falling on or otherwise damaging the roost tree.

The Board adopts Mitigation Measure BIO-8d as proposed in the Final EIR.

BIO-8e: No diesel or gas-powered equipment shall be stored or operated directly beneath a roost site.

The Board adopts Mitigation Measure BIO-8e as proposed in the Final EIR.

BIO-8f: Under supervision of a qualified bat expert, roost trees shall be removed in two steps, over two successive days:

- Branches and limbs identified by the bat expert should be removed on Day 1 (Disturbance).
- The remainder of the tree should be removed on Day 2 (Removal).

The Board adopts Mitigation Measure BIO-8f as proposed in the Final EIR.

BIO-8g: All construction activity in the vicinity of an active roost shall be limited to daylight hours.

The Board adopts Mitigation Measure BIO-8g as proposed in the Final EIR.

BIO-8h: A preconstruction survey of the project area and the area within 100 feet of the project areas shall be conducted for the presence of the badger dens and signs of badger occupancy. The survey shall be completed no more than 7 days prior to the initiation of vegetation removal and ground disturbing activities. If no dens are observed, a second survey shall be conducted within 24 hours of vegetation removal and ground disturbing activities to ensure that no badgers have entered the area since the first survey. Preconstruction surveys shall be repeated as necessary if vegetation removal and ground disturbing activities are delayed or postponed.

The Board adopts Mitigation Measure BIO-8h as proposed in the Final EIR.

BIO-8i: If potential dens are observed within the project area or 100 foot buffer area, then the project shall implement a monitoring program to determine if the dens are

active. Monitoring shall be performed using remote triggered cameras or tracking medium placed at the den entrance. Cameras or tracking medium shall be operated for a minimum of 3 nights. If no activity is observed at the den during the monitoring period, the den shall be excavated by hand on the morning following the third night of monitoring. The den shall be backfilled to prevent reuse. All den excavations shall be coordinated with the CDFG.

If a den is determined to be active, the den shall be monitored for an additional 3 nights to determine if the badgers are using the den continually. Special care shall be taken during the period of March through July when badger cubs may be present in the den. Excavation of natal dens shall not be allowed until it is determined by a qualified biologist that the young have left the den and are able to forage independently. The presence of a natal den within the project area or buffer area shall be reported to CDFG within 24 hours.

The Board adopts Mitigation Measure BIO-8i as proposed in the Final EIR.

BIO-8j: During all times of the year, no excavation of the dens shall be allowed until monitoring results demonstrate that the den has been unoccupied for at least 3 nights. Once the den has been determined to be unoccupied for a period of at least 3 nights, the den may be excavated by hand and backfilled.

The Board adopts Mitigation Measure BIO-8j as proposed in the Final EIR.

BIO-8k: Outside of the period when young may be present in the den (August through February), measures may be taken to discourage the use of continually occupied dens. This discouragement may include blocking the entrance to the den or other methods approved by CDFG. The den must be continually monitored during this period to ensure that badgers are not occupying the den. Excavation and backfilling may occur once the den is determined to be unoccupied for at least 3 nights. A report documenting the results of preconstruction surveys and den monitoring shall be reported to CDFG within 2 weeks of completion of the den excavations and initiation of vegetation removal and ground disturbance activities.

The Board adopts Mitigation Measure BIO-8k as proposed in the Final EIR.

IMPACT BIO-9: Implementation of the proposed project would impact native trees protected by the Marin County Tree Preservation Ordinance present within the project area (Significant)

Facts

The EIR found that the proposed stabilization work at Station 270+25 would require the removal of 8 native trees and Option A would result in the removal of 9 native trees. Tree removal associated with the proposed project and Option A would result in several potential biological impacts including: 1) bird nesting, roosting and foraging habitat; 2) reduced shading of the aquatic environment in Lagunitas Creek which could effect water temperature and related suitability for salmon and steelhead spawning, rearing and emergence; 3) loss of ground shading could open up stream bank areas to colonization by exotic plants; 4) and loss of potential large woody debris. These impacts are discussed on pages 207 and 208 of the FEIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, the impact of native tree loss on birds, stream aquatic habitat, woody debris, and riparian zone invasion by exotic plants is mitigated to a less- than-significant level by the imposition of Mitigation Measures BIO-9a and BIO-9b found in the MMRP and on pages 208 and 209 of the Final EIR, and the Board of Supervisors decision to eliminate Option A in its approval of the roadway rehabilitation project thereby avoiding the tree removal impacts associated with Option A. With these avoidance and mitigation measures, these impact would be reduced to a less-than-significant level because: 1) the planting of replacement trees within the Lagunitas Creek watershed would compensate for the trees removed by slope repair at Station 270+25; 2) financial contribution by Marin DPW to MMWD's habitat enhancement efforts along Lagunitas Creek would compensate for potential impacts to riparian habitat; and 3) Marin DPW will provide suitable cuttings from removed trees for use of woody debris and in other bio-engineered structures along Lagunitas Creek.

Adopted Mitigation Measures

BIO-9a: Marin DPW shall comply with the requirements of the Marin County Tree Protection Ordinance for any tree loss under the proposed project including retaining wall work at Station 270+25 and all tree removal under Option A. Consistent with the ordinance, trees of the same species as those impacted shall be replanted at a 3:1 replacement ratio. The replacement trees shall be 15-gallon specimens unless a certified arborist or a representative from the MMWD determines otherwise. Planted trees shall be maintained with browse protection and weed cloth around the root zones as needed, and regularly watered during the dry season until such time that a certified arborist has determined that they are sufficiently established to not require further maintenance or watering.

Replanted trees shall be planted within the Lagunitas Creek watershed if possible. One suitable location for tree replanting is the drilled-pier retaining wall structure located immediately downstream from the Peters Dam plunge pool (see Biological Assessment – Appendix E). MMWD constructed this wall to protect a pipeline that was endangered by a landslide along a 160-foot section of stream bank in 2005. MMWD would like to replant the stream bank below the retaining wall with native trees and shrubs, including redwood trees. The area to be planted would qualify as mitigation if Marin DPW paid for or did the planting.

Prior to the start of roadway construction, DPW shall identify the final planting location(s) and receive approval from MMWD if necessary. If suitable re-planting location(s) cannot be found and agreed to by the affected public agency property owners, then DPW may contribute the required monetary amount into the Marin County Tree Preservation Fund, as specified under the tree protection ordinance.

The Board adopts Mitigation Measure BIO-9a as it pertains to retaining wall work at Station 270+25 in the Final EIR. Option A was rejected in the approved roadway

habilitation project; therefore the impact of tree removal under Option A was avoided negating the need to adopt the portion of Mitigation Measure BIO-9a applicable to Option A.

BIO-9b: In order to compensate for the potential habitat impacts from tree removal along Lagunitas Creek, Marin DPW shall implement the following additional mitigation measures:

- Marin DPW shall provide a financial contribution to the MMWD for support of habitat enhancement along Lagunitas Creek under the MMWD *Mount Tamalpais Watershed Gateway Project.* The appropriate amount of the contribution shall be directly related to the degree of removed habitat and shall be determined by Marin DPW in consultation with MMWD and shall be specifically dedicated to either invasive exotic vegetation management and/or native plant revegetation efforts along the creek.
- Marin DPW shall make available suitable cuttings from the tree removal work for use as woody debris and in bio-engineered structures along Lagunitas Creek in order to enhance salmonid habitat. The Marin DPW shall notify the signatories to the February 7, 2007 *Memorandum of Understanding for Woody Debris Management in Riparian Areas of the Lagunitas Creek Watershed* (Marin Municipal Water District, Marin County Open Space District, California Department of Parks and Recreation, National Park Service, and the Marin County Resource Conservation District – see *Biological Assessment* - Appendix E) of the availability of the wood, and the signatories shall notify Marin DPW if they have use for the woody debris, and when they will collect the material. If the signatory agencies have not responded within 14 days Marin DPW shall dispose of the material in a legal manner.

The Board adopts Mitigation Measure BIO-9b as it pertains to retaining wall work at Station 270+25 in the Final EIR. Option A was rejected in the approved roadway habilitation project; therefore the impact of tree removal under Option A was avoided negating the need to adopt the portion of Mitigation Measure BIO-9b applicable to Option A.

IMPACT BIO-10: Implementation of the proposed project would impact root of redwoods and other native trees present within the project area. (Significant)

Facts

The Final EIR found that roadway construction could result in indirect impact to native trees that occur along the edge of SFDB within the work zone. The indirect impacts include root zone damage from soil compaction, soil excavation, root pruning, adding fill or concrete directly on the tree roots, altering drainage patterns. This impact is discussed on pages 209 through 211 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this impact on roots or redwoods and other native trees is mitigated to a less- than-significant level by the imposition of Mitigation Measures BIO-10a through BIO-10i found in the MMRP and on pages 211 and 212 of the Final EIR. With these mitigation measures, this impact would be reduced to a less-than-significant level because: 1) a certified arborist will be present during construction to evaluate potential impact on tree roots; 2) excavation work within a 50-foot radius of tree roots will be done with hand tools and light mechanized equipment; 3) contractor will use air space while excavating within tree roots; 4) the structural section of new pavement will consist of cement treated permeable base; 5) special construction methods will be used during culvert replacement and retaining wall construction; 6) no heavy construction equipment or materials will be staged or parked within drip line of mature trees in unpaved areas; and 7) bioswales and other drainage swale features will be located to avoid adversely altering drainage patterns.

Adopted Mitigation Measures

BIO-10a: An arborist certified by the International Society of Arboriculture (ISA) shall be present for any ground disturbing construction activities within a 50-foot radius of any redwood tree and within the drip line of other native trees to monitor compliance with Mitigation Measures BIO-10b through 10i.

The Board adopts Mitigation Measure BIO-10a as proposed in the Final EIR.

BIO-10b: All excavation work below the finish grade within a 50-foot radius of any redwood tree shall be done with hand tools or with light mechanized equipment such (e.g., mini or light excavator or backhoe) to minimize disturbance or damage to roots.

The Board adopts Mitigation Measure BIO-10b as proposed in the Final EIR.

BIO-10c: The contractor shall use an air spade while excavating the soil within the structural root zone of native trees to minimize physical injury to the tree roots. The contractor may propose alternative excavation methods that would minimize root damage, subject to the approval of the certified arborist and Marin DPW.

The Board adopts Mitigation Measure BIO-10c as proposed in the Final EIR.

BIO-10d: Smaller roots less than 2-inches in diameter requiring cutting shall be cut cleanly in order to promote healing.

The Board adopts Mitigation Measure BIO-10d as proposed in the Final EIR.

BIO-10e: The structural section for new pavement shall consist of Cement Treated Permeable Base (CTPB) or the equivalent to minimize the thickness of the structural section, minimize compaction of roots, and minimize thermal exposure to roots.

The Board adopts Mitigation Measure BIO-10e as proposed in the Final EIR.

BIO-10f: In areas where soil would be excavated through the roots of native trees for culvert replacement, retaining wall construction or other purposes, the following measures shall be used to protect roots and promote air circulation:

- The existing vegetation needing removal shall be cut flush with the ground and stumps left in place. Stumps shall not be treated with herbicides or other chemicals.
- Any duff layer shall be hand raked off the area within the clearing limits, stored, and replaced as erosion control.
- A 0.75-foot thick layer of Class 1, Type A porous material shall be placed and compacted as the first lift of the fill to increase water infiltration and air circulation. A layer of filter fabric shall then be applied prior to placing the remaining fill required for the embankment.
- In locations where fill would be placed next to the trunk of a redwood tree greater than three feet in diameter, a brow log shall be used to keep the soil from the tree trunk to increase air circulation.

The Board adopts Mitigation Measure BIO-10f as proposed in the Final EIR.

BIO-10g: Equipment staging areas/storage areas shall be on existing paved areas on existing areas of compacted, gravel surface not located within 50 feet of redwood trees.

The Board adopts Mitigation Measure BIO-10g as proposed in the Final EIR.

BIO-10h: No heavy equipment shall be staged or parked within the drip line of mature trees in unpaved areas. Fill, gravel or other construction materials shall not be stockpiled within 50-feet of redwood trees or beneath the drip lines of any other trees.

The Board adopts Mitigation Measure BIO-10h as proposed in the Final EIR.

BIO-10i : In order to avoid adversely altering surface drainage patterns over redwood root zones, bioswales and other drainage swale features shall be located on the upslope side of SFDB (opposite side from Lagunitas Creek) wherever feasible.

The Board adopts Mitigation Measure BIO-10i as proposed in the Final EIR.

IMPACT BIO-11: Implementation of the proposed project would impact seasonal wetlands and other waters present within the project area. (Significant)

Facts

The EIR found that the proposed project will result in direct, permanent impact to approximately 0.24 acres of roadside swale seasonal wetland culvert work would temporarily impact 2,308 linear feet of stream channels, and . This impact is discussed on page 212 and 213 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this wetland impact is mitigated to a less-than- significant level by the imposition of Mitigation Measure BIO-11a through BIO-11f found in the MMRP and on page 213 through 215 of the Final EIR. With these mitigation measures, this impact would be reduced to a less- than-significant level because 1) loss seasonal wetlands will be replaced at a 2:1 ratio within the Lagunitas Creek watershed in the vicinity of SFDB; 2) all temporarily disturbed stream banks will be restored and a native plant seed mix will be used to stabilize disturbed areas; 3) all areas temporarily disturbed in stream channels will be re-vegetated with appropriate riparian vegetation and re-vegetation activities will be approved by the CDFG, and 4) a qualified biologist will be present during any work occurring within wetlands and stream banks.

Adopted Mitigation Measures

BIO-11a: Prior to project implementation, Marin DPW shall obtain all required regulatory permits to conduct work activities in wetlands and streams. Permits required to conduct these activities include a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), a Section 404 permit from the USACE, and a Lake and Streambed Alteration Agreement from CDFG.

The Board adopts Mitigation Measure BIO-11a as proposed in the Final EIR.

BIO-11b: Marin DPW shall compensate for the loss of 0.24 acres of seasonal wetlands associated with the filling of roadside swales by establishing new seasonal wetlands at a 2:1 on-site replacement ratio within the Lagunitas Creek watershed in the vicinity of the SFDB project. One possible mechanism for accomplishing this may be for the DPW to fund the establishment of at least 0.48 acres of new floodplain wetland habitat along Lagunitas Creek in association with the MMWD *Lagunitas Creek Salmon Winter Habitat Enhancement Program*. This program seeks to address a possible limiting factor to the survival of juvenile coho salmon - a lack of suitable winter habitat along the creek, by establishing new side channels and backwater wetlands on selected reaches of the floodplain. The following is a brief summary of the proposed mitigation plan:

- **Mitigation Location.** Tocoloma Reach of Lagunitas Creek, just west of Platform Bridge Road, approximately 1,100 feet north of SFDB.
- **Mitigation Site.** An approximately 1.2-acre abandoned floodplain area adjacent to Lagunitas Creek. The site is characterized by disturbed grassland and ruderal (weedy) vegetation formerly used for cattle grazing, and contains abandoned grazing infrastructure (e.g., corrals, feeding troughs) as well as small areas of fill that would need to be removed. The site is generally flat with elevations ranging from approximately 62 – 63 feet NGVD. Soils are mapped as stratified depositions of sand, gravel, cobbles and stones with ephemeral depositions of silt and sandy loam, as is

typical of floodplains along the creek ("Fluvents, channelized" under Soil Conservation Service Soil Survey maps).

- The proposed mitigation site was selected by MMWD for the following reasons: (1) the site has floodplain topography and substrate conditions suitable for backwater channel creation; (2) the site is currently disturbed and does not support woody riparian habitat or wetlands; and (3) the site is publicly-owned (by the NPS) and is easily accessible to construction equipment due to it proximity to Platform Bridge Road.
- **Mitigation Approach.** The proposed plan is intended to be one element of the overall Winter Habitat Enhancement Program, which would include various winter habitat enhancement efforts along Lagunitas Creek from the Shafter Bridge downstream to Olema Creek. The overall goal of the plan is to establish an approximately 1,200-linear foot, 30-foot wide backwater channel that would establish approximately 0.8 acres of suitable over-wintering habitat for coho salmon juveniles and smolts. The channel would have upstream and downstream connections to Lagunitas Creek and would have a bottom elevation that intercepts baseflows during the winter and early spring based on historical flow records in Lagunitas Creek. Channel cross sections would be modeled after existing backwater channel habitat in Lagunitas Creek and in similar coastal streams elsewhere, and would include gentle side slopes suitable for the establishment of emergent marsh, seasonal wetland and woody riparian vegetation encompassing at least 0.5 acres. A key design element would be to ensure that salmonids are able to swim into and out of the backwater habitat and not become stranded during lower flows. The backwater habitat enhancement design would also include refuge and cover habitat features for salmonids (e.g., woody debris structures and undercut bank sections).
- **Funding Status.** The project has received funding only for detailed topographic surveys, site assessment work and construction plan preparation. The project does not have funding for regulatory approval, construction or follow-up monitoring and management. As mitigation for the SFDB project, the DPW proposes to provide the required funding and/or in-kind services for regulatory approval, construction and follow-up monitoring and management to allow the project to be implemented.
- **Schedule.** The MMWD would be selecting an engineering contractor to conduct hydrologic modeling analysis and to prepare the construction plans, as well as to conduct the related, site specific topographic survey and site assessments. Construction plans are scheduled to be completed by July 2011. The PWD would prepare and submit the Mitigation and Monitoring Plan in accordance with Corps of Engineers, Regional Water Quality Control Board and California Department of Fish and Game requirements as part of the wetland/streambed alteration permit applications for the SFDB Rehabilitation project. Implementation of the plan would occur prior to or simultaneous with the commencement of construction work for the SFDB Rehabilitation project.

Project construction, including filling of roadside swales shall not start until a suitable wetland mitigation site has been selected and a Wetland Mitigation and Monitoring Plan for the site has been prepared by Marin DPW and approved by the Corps, RWQCB and CDFG. Mitigation construction work under the plan shall be completed in accordance with a timetable agreed to by these three agencies.

The Board adopts Mitigation Measure BIO-11b as proposed in the Final EIR.

BIO-11c: Marin DPW shall minimize temporary disturbances to stream banks to the smallest amount feasible needed to accomplish culvert replacement, bank stabilization and slope repair work. Marin DPW shall restore disturbed areas to pre-disturbance conditions after temporary project activities are complete. Seed mixes for stabilization of disturbed areas shall consist of species native to Marin County. Fertilizers shall not be applied with any seeding or as part of hydroseed mixes.

The Board adopts Mitigation Measure BIO-11c as proposed in the Final EIR.

BIO-11d: Disturbance of stream channels in the project site shall be limited to the minimum necessary to complete proposed drainage improvement activities. Riparian vegetation shall be trimmed (and not removed) where feasible, and where removal is necessary, should be at the minimum necessary to complete work. Stream channels shall be re-vegetated with appropriate riparian vegetation after work activities are completed. All re-vegetation activities shall be approved by CDFG under the Streambed Alteration Agreement process prior to restoration activities being completed.

The Board adopts Mitigation Measure BIO-11d as proposed in the Final EIR.

BIO-11e: A qualified biologist shall be present during any work occurring within wetlands or streams.

The Board adopts Mitigation Measure BIO-11e as proposed in the Final EIR.

BIO-11f: DPW shall implement all water quality protection measures contained in the SWPPP to prevent the direct and indirect release of soil and other construction materials into wetlands and streams.

The Board adopts Mitigation Measure BIO-11f as proposed in the Final EIR.

IMPACT BIO-12: Implementation of the proposed project could induce the spread of panic veldt grass and other non-native invasive plants to previously un-infested areas within the project area. (Significant)

Facts

The EIR found that grading activities within the project disturbance zone could cause the spread of invasive plant populations beyond their current locations. This impact is discussed on page 215 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, the spread of invasive plants impact is mitigated to a less-than- significant level by the imposition of Mitigation Measures BIO-12a through BIO-12d found in the MMRP and on pages 215 and 216 of the Final EIR.

With these mitigation measure, this impact would be reduced to a less-than-significant level because: 1) prior to project construction Marin DPW will remove populations of existing invasive plants with a rating of A or B from area ground disturbance, 2) invasive plant removal will be conducted prior to seed set and overseen by a qualified botanist; 3) only certified weed-free hay bails will be used for erosion control; 4) construction truck wheels and tracks will be cleaned before entering project site; and 5) a native seed mix will be used in revegetation areas of disturbance.

Adopted Mitigation Measures

BIO-12a: Prior to project implementation, Marin DPW shall remove populations or individuals of invasive plants listed by the California Invasive Plant Council (CalIPC) with ratings of A or B for impacts and invasiveness from areas of the project site where the ground surface would be disturbed and vegetation removed. Removal activities shall be conducted under the supervision of a botanist qualified in the identification of invasive weed species. Invasive weed removal shall be conducted prior to seed set (as determined by monthly spring surveys by a qualified botanist) to minimize the spread of invasive weed seeds in the project site. If it is not possible to remove weeds prior to seed set, measures to minimize the release of invasive weed seeds during weed removal (e.g., manual weed removal into plastic bags) shall be used.

The Board adopts Mitigation Measure BIO-12a as proposed in the Final EIR.

BIO-12b: If hay bale installation is necessary for erosion-control in the project area, only certified weed-free hay bales shall be used.

The Board adopts Mitigation Measure BIO-12b as proposed in the Final EIR.

BIO-12c: Construction equipment, particularly wheels and tracks, shall be cleaned prior to entering the project site to prevent the spread of invasive weeds from areas outside of the project site. Cleaning shall be achieved by rinsing equipment with water or using high-pressure air.

The Board adopts Mitigation Measure BIO-12c as proposed in the Final EIR.

BIO-12d: When re-vegetation of bare soil surfaces is required, Marin DPW shall utilize a native seed mix pre-approved by CDFG and reviewed by CNPS.

The Board adopts Mitigation Measure BIO-12d as proposed in the Final EIR.

3. Cultural Resource Impacts

IMPACT CULT-1: Project implementation may cause an adverse change to a unique archaeological resource, including federally or State-listed resources, pursuant to CEQA. (Significant)

Facts

The Final EIR found that ground disturbance activities could affect prehistoric and historical archaeological sites. This impact is discussed on page 226 and 228 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this potential impact on prehistoric and historic sites is mitigated to a less-than-significant level by the imposition of Mitigation Measures CULT-1a through CULT-1d found in the MMRP and on pages 227 and 229 of the Final EIR. With these mitigation measure, this impact would be reduced to a less-than-significant level because 1) prior to project construction a professional archaeologist shall establish a barrier around recorded cultural resources subject to impact by project activities; 2) if project construction must occur within Environmentally Sensitive Areas (ESA) a professional archaeologist shall monitor the ground disturbance component of construction; and 3) if deposits of prehistoric or historical materials are encountered during project construction activities that are not archaeologically monitored, all work within 25 feet of the discovery will be redirected and a qualified archaeologist consulted to assess the situation.

Adopted Mitigation Measures

CULT-1a: Prior to project construction, a professional archaeologist shall establish a barrier around recorded cultural resources subject to impact by project activities so that these Environmentally Sensitive Areas (ESAs) can be avoided during construction. The professional archaeologist shall use high visibility temporary construction fencing or a similar durable material (i.e., not construction flagging) to establish the ESAs. For resources in the project area (i.e., the County right-of-way consisting of 30 feet on each side of the roadway centerline), the fencing shall delineate the entire boundary of the resource. For resources partially in or adjacent to the project area, the fencing shall delineate those portions of the resource that extend into, or are adjacent to, the project area.

To the greatest extent feasible, no project construction or access by construction crew shall occur in these areas. The project superintendent, crew foreman, environmental compliance officer, or other responsible project official shall review the condition of the fencing and check for unauthorized entry into these areas on a weekly basis. Any deficiencies in the fencing shall be repaired at the direction of the responsible project official.

The Board adopts Mitigation Measure CULT-1a as proposed in the Final EIR.

CULT-1b: If project construction must occur within a protected area (or if Option A requires tree root mass removal in an ESA, see below), a qualified professional archaeologist shall monitor the ground-disturbing component of such construction. The purpose of the monitoring is to identify intact archaeological deposits prior to substantial disturbance by project construction activity. If intact archaeological deposits are identified by archaeological monitoring, the monitor shall be empowered to temporarily halt construction to assess the find. Impacts to the find by project activities shall be avoided. If such avoidance is not feasible, the County shall conduct the necessary study, in consultation with the project archaeologist, to determine if the deposit qualifies as a

historical or unique archaeological resource under CEQA. If the deposit *does not* so qualify, project construction may resume with the continuation of archaeological monitoring. If the deposit *does* so qualify, then the County shall develop and implement, in consultation with the project archaeologist, a plan to mitigate the impact.

Mitigation may consist of, but is not limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. If data recovery excavation is the means selected to recover the scientifically consequential information contained in the deposit, a data recovery plan must be prepared, consistent with the requirements of *CEQA Guidelines* Section 15126.4(b)(3)(C). If the deposit is prehistoric in nature, the County shall seek and consider the input of the Federated Indians of Graton Rancheria regarding the proposed treatment prior to implementing the plan. Any reports generated from the evaluation or mitigation shall be submitted to the County and the Northwest Information Center.

The Board adopts Mitigation Measure CULT-1b as proposed in the Final EIR.

CULT-1c: If deposits of prehistoric or historical archaeological materials are encountered during project activities that are not archaeologically monitored, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The County shall also be notified. Project personnel shall not collect or move any archaeological materials. Adverse effects to the deposits shall be avoided by project activities or, if the deposits cannot be avoided, they shall be evaluated as described in Mitigation Measure CULT-1b to determine if the deposit qualifies as a historical or archaeological resource under CEQA and handled, documented and treated accordingly.

The County shall inform its contractor(s) of the archaeological sensitivity of the project area by including the following directive in contract documents:

If prehistoric or historical archaeological deposits are discovered during project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate and make recommendations regarding the treatment of the discovery. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt, or quartzite tool making debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Prehistoric sites often contain human remains. Historical materials can include wood, stone, concrete footings, walls, and other structural remains; and deposits of wood, glass, ceramics, metal, and other refuse. If the archaeological deposits are prehistoric in nature, the archaeologist shall consult with the Federated Indians of Graton Rancheria regarding the treatment of the find, and the feasible recommendations of the Tribe shall be incorporated in the approved plan.

The Board adopts Mitigation Measure CULT-1c as proposed in the Final EIR.

CULT-1d: If feasible, trees shall be removed by grinding each stump to grade and using a chemical application to kill stump growth. If this approach is taken, impacts to archaeological deposits due to Option A would be less than significant. If this approach is not feasible, and if the root mass must be removed, then Mitigation Measures CULT-1b or -1c shall be implemented, as appropriate, depending on whether or not the tree is located within an ESA.

The Board did not adopt Mitigation Measure CULT-1d because Option A was eliminated in the approved roadway rehabilitation project negating the need to adopt Mitigation Measure CULT-1d.

IMPACT CULT-2: Project implementation may cause an adverse change to a unique potential historical resource, including federally or State-listed resources and potential local landmarks (Sir Francis Drake Boulevard), pursuant to CEQA. (Significant)

Facts

The Final EIR found that the proposed pavement rehabilitation, alignment adjustments, retaining wall improvements, slope repair, vehicle pullouts, and drainage feature replacements could change the physical characteristics and form of SFDB that contribute to its historical status. This impact is discussed on pages 229-231 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this change to a potentially unique historical resource is mitigated to a less-than-significant level by the imposition of Mitigation Measures CULT-2a and CULT-2b found in the MMRP and on pages 231 and 232 of the Final EIR. With these mitigation measure, this impact would be reduced to a less-than-significant level because 1) the loss of historic headwalls will be mitigated by documentation that will preserve a record of their contribution to original roadway design; and 2) distribution of the document of SFDB and its associated features will provide the public with an record of the historic engineering and landscaping associated with Marin County roads including SFDB.

Adopted Mitigation Measures

CULT-2a: The loss of historic headwalls can be mitigated by the documentation that will preserve a record of their contribution to the original roadway design.

The Board adopts Mitigation Measure CULT-2a as proposed in the Final EIR.

CULT-2b: The Marin County DPW shall distribute the Pacific Legacy archaeological survey report to the Marin History Museum Library. Information concerning the location of prehistoric archaeological deposits (including maps and written descriptions) shall be removed from these distribution copies. The distribution of the documentation of SFDB

and its associated features will serve an interpretive function at the Museum Library by making publicly available information about the historical development of Marin County's historical roads, and the landscape features that once contributed to this history. The Marin County DPW shall retain a copy of the report to provide a record of historical engineering features for future planning efforts, and would reduce the impact on the historic roadway resource to less-than-significant.

The Board adopts Mitigation Measure CULT-2b as proposed in the Final EIR.

IMPACT CULT-3: Project implementation may destroy paleontological resources or sites. (Significant)

Facts

The Final EIR found that the proposed project includes the type of ground disturbing activities that may result in the destruction of paleontological sites, even though the geological formations that underlie the project site are not known to be fossiliferous. This impact is discussed on page 232 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based upon the Final EIR and the entire record, this potential impact on paleontological resources can be mitigated to a less-than-significant level by the imposition of Mitigation Measure CULT-3 found in the MMRP and on pages 232 and 233 of the Final EIR. With this mitigation measure, this impact would be reduced to a less-than-significant level because the County will inform its contractors of the paleontological sensitivity of the project area and will establish a procedure for halting work if resources are found and consulting with a qualified archaeologist on how to identify and protect the uncovered resource.

Adopted Mitigation Measures

CULT-3: The County shall inform its contractor(s) of the paleontological sensitivity of the project area by including the following directive in contract documents:

The subsurface of the construction site may be sensitive for paleontological resources. If paleontological resources are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Paleontological resources include fossil plants and animals, and evidence of past life such as trace fossils and tracks. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Vertebrate land mammals may include bones of mammoth, camel, saber tooth cat, horse, and bison. Paleontological resources also include plant imprints, petrified wood, and animal tracks.

Adverse effects to such paleontological resources shall be avoided. If avoidance is not possible, the discovery should be assessed to determine its paleontological significance. If the discovery is not significant, avoidance is not necessary. If the paleontological resources are significant, they will need to be avoided or adverse effects must be mitigated. Upon completion of the assessment, the paleontologist should prepare a report documenting the methods and results, and provide recommendations for the treatment of the paleontological resources discovered. The report should be submitted to the County and the University of California, Museum of Paleontology. The submittal of the report would reduce the potential impact on paleontological resources to less-than-significant.

The Board adopts Mitigation Measure CULT-3 as proposed in the Final EIR.

IMPACT CULT-4: The construction of the proposed project may disturb human remains. (Significant)

Facts

The Final EIR found that the proposed project includes ground disturbance activities that could result in disturbance to human remains. This impact is discussed on page 233 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this potential disturbance of human remains is mitigated to a less-than- significant level by the imposition of Mitigation Measures CULT-4 found in the MMRP and on pages 233 and 234 of the Final EIR. With this mitigation measures, this impact would be reduced to a less-than-significant level because if a human remains are encountered during construction activities these remains shall be treated in accordance with Health and Safety Code § 7050.5. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours. A report will be prepared documenting the methods and results and recommendations for treatment of the remains.

Adopted Mitigation Measures

CULT-4: If human remains are encountered during construction activities, these remains shall be treated in accordance with Health and Safety Code §7050.5. The County shall inform its contractor(s) of the sensitivity of the project area for human remains by including the following directive in contract documents:

If human remains are encountered during project activities, whether archaeologically monitored or not, work within 25 feet of the discovery shall be redirected and the Marin County Coroner notified immediately. At the same time, a professional archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. The County should also be notified. Project personnel shall not collect or move any human

remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the County and the Northwest Information Center.

The Board adopts Mitigation Measure CULT-4 as proposed in the Final EIR.

4. Geologic and Soils Impacts

IMPACT GEO-1: The proposed project may be subject to seismic shaking hazard impacts. (Significant)

Facts

The Final EIR found that the proposed project could be subject to significant impacts related to seismic shaking, seismic related ground failure (including liquefaction), and/or seismically induced landslides. These impacts are discussed on pages 247 and 248 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, these potential seismically induced impacts are mitigated to a less- than-significant level by the imposition of Mitigation Measures GEO-1 found in the MMRP and on page 248 of the Final EIR. With this mitigation measure, this impact would be reduced to a less-than-significant level because: a geotechnical investigation will be completed and a report submitted to Marin DPW. The report will recommend construction techniques appropriate to minimize seismic damage and the techniques will be integrated into the roadway design and construction plans.

Adopted Mitigation Measures

GEO-1: Prior to the commencement of the project, the Geotechnical Investigation and associated recommendations, as prepared by a licensed professional, shall be submitted to the County of Marin Public Works Engineering Division. The Geotechnical Investigation's determination of the project area's surface geotechnical conditions and potential seismic hazards such as liquefaction, lateral spreading, and landslides shall be considered in the project design. The Geotechnical Investigation's recommendations of construction techniques appropriate to minimize seismic damage shall be adopted as

part of the project design and implementation plan. Some of the recommended construction techniques from the project-specific Geotechnical Investigation include:

- Full depth replacement of soft subgrade materials, such as un-engineered fill or colluvium, with engineered fill. This would be accomplished by excavation of the subgrade and replacement with select imported fill materials.
- Excavations for the removal of culverts should be cleaned of loose materials and widened as necessary to permit compaction equipment access. The excavations should be subsequently backfilled with properly compacted fill.
- Imported select fill should be of low expansion potential and free of organic matter, and should conform, in general, to the following requirements:
  - Plasticity Index less than 15%
  - Liquid Limit less than 40%
  - Percent Soil Passing #200 Sieve between 15% and 60%
  - Maximum Aggregate Size 4 inches
- Consultation with a licensed geotechnical engineer to provide the appropriate engineering specifications input for design of any required structures to withstand seismic forces.
- Finished project grading and surfaces should avoid any ponding of water or concentrated seepage under structures or adjacent to the roadway.

In addition, the following shall be implemented:

- The County of Marin Public Works Engineering Division shall review the Geotechnical Investigation along with final project plans and confirm that the proposed improvements fully comply with the County of Marin Uniform Construction Standards and that the Geotechnical Investigation recommendations have been incorporated.
- All design criteria and specifications set forth in the Geotechnical Investigation shall be implemented as a condition of project approval.

The Board adopts Mitigation Measure GEO-1 as proposed in the Final EIR.

IMPACT GEO-2: Damage to proposed improvements related to expansive soils, corrosive soils, and/or settlements of non-engineered fill or disparate soils could occur. (Significant)

Facts

The Final EIR found that colluvium and residual soils in the project area may be subject to heave and settlement in response to changing seasonal moisture conditions and special construction techniques may be needed if this condition is encountered. This impact is discussed on page 249 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, potential heave and settlement conditions are mitigated to a less- than-significant level by the imposition of Mitigation Measure GEO-2 found in the MMRP and on page 249 250 of the Final EIR. With these mitigation measures, this impact would be reduced to a less-than-significant level because: 1) subsurface soil conditions will be monitored by a licensed geotechnical consultant and 2) if soils are found to be problematic the geotechnical consultant will recommend engineering solutions appropriate to the soil condition.

Adopted Mitigation Measures

GEO-2: The designers and engineers of proposed improvements (including roads, pullouts, parking areas, and utilities) shall consider the site's potential to be underlain by soils with moderate to high shrink-swell potential and, per the Geotechnical Investigation's recommendations, a qualified professional shall observe soil conditions in the field during the rehabilitation process. If locations along the alignment of SFDB are underlain by expansive soils and/or non-engineered fill, the geotechnical consultant to the project shall determine if the soils encountered are problematic, and shall make recommendations to ensure potential damage related to expansive soils and non-uniformly compacted fills are minimized. Mitigation options may range from removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements.

All design criteria and specifications set forth in the Geotechnical Investigation and as made by the geotechnical consultant while monitoring the project shall be implemented to reduce impacts associated with problematic soils.

The Geotechnical Investigation consultant shall include an evaluation of the potential for corrosive soils. If the results indicate corrosive soil conditions, appropriate measures to mitigate these conditions shall be incorporated into the design of project improvements, such as culverts, that may come into contact with site soils. Wherever corrosive soils are found in sufficient concentrations, recommendations shall be made to protect iron, steel, metal, and concrete from long-term deterioration caused by contact with corrosive onsite soils. In general, these recommendations are expected to include, but not be limited to, the following provisions:

- Protect buried iron, steel, cast iron, ductile iron, galvanized steel, and dielectric coated steel or iron (including all buried metallic piping) against corrosion from soil.
- Protect buried metal and cement structures in contact with earth surfaces from chloride ion concentrations.
- Use sulfate-resistant concrete mix for all concrete in contact with the ground.
- Consult a corrosion expert as needed during the project's detailed design phase to design the most effective corrosion protection.

The Board adopts Mitigation Measure GEO-2 as proposed in the Final EIR.

IMPACT GEO-3: Landslide hazards could result in roadway damage, vehicle damage, and/or injuries. (Significant)

Facts

The Final EIR found that slope and roadway instability at Station 270+25 due to the use of un-engineered fill in original roadway construction and inadequate roadway drainage. This impact is discussed on page 250 and 251 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, the existing unstable slope condition will be mitigated to a less-than-significant level by the imposition of Mitigation Measure GEO-3 found in the MMRP and on page 250 of the Final EIR. With this mitigation measures, the impact would be reduced to a less-than-significant level because a design level geotechnical report will be prepared specifying the design of the retaining wall proposed in the rehabilitation project.

Adopted Mitigation Measures

GEO-3: Prior to the commencement of the project, a site-specific design-level geotechnical investigation shall be conducted of the slope instability feature at Station 270+25. The geotechnical investigation shall be prepared by a licensed geotechnical engineer and the geotechnical report shall be submitted to the County of Marin Public Works Engineering Division. The geotechnical investigation shall include documentation of geologic mapping of the site and adjacent areas, exploratory borings, appropriate laboratory testing of soils samples, and recommendations for repair of the slope instability feature. All design criteria and specifications set forth in the design-level geotechnical investigation shall be implemented as a condition of project approval.

The Board adopts Mitigation Measure GEO-3 as proposed in the Final EIR.

5. Hydrology and Water Quality Impacts

IMPACT HYD-1: Construction period and operation period activities could generate stormwater runoff that could cause or contribute to a violation of water quality standards or waste discharge requirements, or otherwise substantially degrade the water quality of Lagunitas Creek and/or Tomales Bay. (Significant)

Facts

The EIR found that if not properly controlled construction activities could result in the discharge of sediment and pollution bound to sediment as metals, asphalt materials, concrete, fuels, oils, paints, solvents and other potentially hazardous materials into Lagunitas Creek. This impact is discussed on page 268 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this potential water quality impact is mitigated to a less-than- significant level by the imposition of Mitigation Measure HYD-1a and HYD-1b found in the MMRP and on pages 268-272 of the Final EIR. With this mitigation measures, the impact would be reduced to a less-than-significant level because: Mitigation Measure HYD-1a requires the County to implement BMPs for erosion control, sediment control, wind erosion control, tracking controls, and non-storm water controls. In addition Mitigation Measure HYD-1b requires that 1) road rehabilitation include a permeable top layer designed to promote sheet flow; 2) pull-outs include a top permeable layer; 3) where possible a vegetative zone will be established between the road surface and the creek; 4) a vegetative swale be installed were road runoff flows toward the hillside away from the creek; and 5) a flow duration control be implemented if pre- and post-project flow duration curves deviate by more than 10% over the length of the flow duration curve.

Adopted Mitigation Measures

HYD-1a: Prior to construction, consistent with the requirements of the Construction General Permit, the County shall prepare a SWPPP designed to reduce potential impacts to surface water quality through the project construction period. The SWPPP shall be prepared by a Qualified SWPPP Developer. The SWPPP shall include, as applicable, all Best Management Practices (BMPs) required in Attachment D for Risk Level 2 dischargers, or Attachment E for Risk Level 3 dischargers (as appropriate based on final determination of the project's Risk Level status). The SWPPP shall include a construction site Monitoring Program that includes requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate (depending on the Risk Level), sampling of the site effluent or receiving waters (receiving water quality monitoring is only required for some Risk Level 3 dischargers). The County shall also prepare a Rain Event Action Plan as part of the SWPPP. BMP implementation shall be consistent with the BMPs requirements in the California Storm Water Quality Association Storm Water Best Management Handbook-Construction.[3] Following are the types of BMPs that shall be implemented, subject to review and approval by the Water Board.

Erosion Control BMPs

- *Scheduling.* To reduce the potential for erosion and sediment discharge, construction shall be scheduled to minimize ground disturbance during the rainy season. The project applicant shall:
    - Sequence construction activities to minimize the amount of time that soils remain disturbed.
    - Stabilize all disturbed soils as soon as possible following the completion of ground disturbing work.

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[3] California Stormwater Quality Association, 2003a, Stormwater Best Management Handbook-Construction, with updates through 2006. Website: http://www.cabmphandbooks.com/Construction.asp, accessed November 2, 2009.

- Install erosion and sediment control BMPs prior to the start of any ground-disturbing activities.

- *Preservation of Existing Vegetation.* Where feasible, existing vegetation shall be preserved to provide erosion control.
- *Stabilize Soils.* Hydroseeding and geotextile fabrics shall be used, as appropriate, to reduce erosion.
- *Stabilize Streambanks.* When working along stream banks or within channels, BMPs shall be implemented to minimize channel erosion and sedimentation. Proper erosion and sediment controls, such as silt fences, mulch, geotextiles, and hydroseeding, shall be used. To the extent possible, existing vegetation that stabilizes the stream banks shall be preserved. While working within a stream channel, a barrier to isolate the work area shall be created, divert the stream around the work site, or employ practices to minimize sediment suspension.
- *Drainage Swales.* Construct drainage swales to divert runoff away from exposed soils and stabilized areas, and redirect the runoff to a desired location.
- *Outlet Protection and Velocity Dissipation Devices.* Install rock or concrete rubble at culvert and pipe outlets to prevent scour of the soil caused by concentrated high-velocity flows.

Sediment Control BMPs

- *Silt Fence/Fiber Roll.* Silt fences or fiber rolls shall be installed around the perimeter of the areas affected by construction, at the toe of slopes, around storm drain inlets, and at outfall areas, to prevent offsite sedimentation.
- *Slope Protection and Vacuuming.* When working adjacent to Lagunitas Creek on steep banks, a barrier shall be erected and equipment capable of vacuuming sediment shall be provided during pavement grinding and excavation operations.
- *Storm Drain Inlet Protection.* Storm drains shall be protected using a filter fabric fence, gravel bag barrier, or other methods, to allow sediments to be filtered or settle out before runoff enters drain inlets.
- *Sand Bag or Gravel Bag Berm.* Sand or gravel bags shall be installed as a linear erosion or sediment control measure to pond sheet flow runoff and reduce the discharge of sediment.

Wind Erosion Control BMPs

- *Dust Control.* Potable water shall be applied using water trucks to alleviate nuisance caused by dust. Water application rates shall be minimized to prevent erosion and runoff.
- *Stockpile Management.* Silt fences shall be used around the perimeter of stockpiles and stockpiles shall be covered with plastic to prevent wind dispersal of sediment.

Tracking Controls

- *Stabilized Construction Entrance/Exit.* Construction site entrances and exits, the equipment yard, the water filling area for water trucks, and the project office location, shall be graded and stabilized to prevent runoff from the site and erosion.

- *Tire Wash.* A tire washing facility shall be installed to allow for tire washing when vehicles exit the site to prevent tracking onto public and private streets.

Non-Stormwater Controls

- *Dewatering.* The SWPPP shall include a dewatering plan for non-contaminated groundwater specifying methods of water collection, transport, treatment, and discharge. The discharger shall consult with the Water Board regarding any required permit (other than the Construction General Permit) or Basin Plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies. Water produced by dewatering shall be impounded in holding tanks or other holding facilities to settle the solids and provide other treatment as necessary prior to discharge to receiving waters. Discharges of water produced by dewatering shall be controlled to prevent erosion.
- *Illicit Connection/Discharge Detection and Reporting.* Contractors shall regularly inspect the site for evidence of illicit connections, illegal dumping, or discharges. Such discharges shall immediately be reported to the stormwater illegal discharge contact for Marin County.
- *Vehicle and Equipment Cleaning.* Construction equipment shall be washed regularly in a designated enclosed area. Except for concrete washout, vehicle cleaning shall not be performed on site. Concrete washout waste will be contained and managed properly.
- *Vehicle and Equipment Fueling and Maintenance.* Self-propelled vehicles shall be fueled off-site or at the temporary fueling area. Fuel trucks equipped with absorbent spill clean-up materials shall be used for all on-site fueling; the fuel truck shall be parked on the paved fueling area for overnight storage. Drip pans shall be used for all mobile fueling. Drip pans or absorbent pads shall be used for all vehicle and equipment maintenance activities. Vehicle maintenance and mobile fueling operations shall be conducted on a level graded area, at least 50 feet away from operational inlets and drainage facilities.
- *Paving and Grinding Operations.* Proper practices shall be implemented to prevent run-on and run-off, and to properly dispose of waste. Paving and grinding activities shall be avoided during the rainy season, when feasible.
- *Structure Demolition.* Potable water shall be sprayed during road demolition to control dust.

Waste Management and Materials Pollution Control BMPs

- *Material Delivery, Storage and Use.* The general material storage area shall be located in the contractor's yard. Two watertight shipping containers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents and grease. Very large items, such as light standards, framing materials, and stockpiled lumber, shall be stored in the open in the general storage area. Such materials shall be elevated with wood blocks to minimize contact with run-on. Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers shall be maintained at the site.
- *Spill Prevention and Control.* Proper procedures shall be implemented to contain and clean-up spills and prevent material discharges into the storm drain system.

- *Solid Waste Management.* Solid wastes shall be loaded directly into trucks for off-site disposal. When on-site storage is necessary, solid wastes shall be stored in watertight dumpsters in the general storage area of the contractor's yard. Asphalt concrete and Portland cement concrete rubble shall be removed immediately to an approved disposal site.
- *Sanitary/Septic Waste Management.* Portable toilets shall be located and maintained 50 feet away from drain inlets and away from paved areas.
- *Stockpile Management.* Stockpiles shall be surrounded by sediment controls and shall be covered. Alternatively, soil binders may be used to minimize erosion. If contaminated soils are encountered, such as soils containing aerially-deposited lead, stockpiles shall be covered and bermed and located away from storm drain inlets and watercourses, and on-site storage shall be minimized. Hazardous materials shall be transported and disposed in accordance with applicable regulations (refer to Mitigation Measure HAZ-1c).
- *Concrete Waste Management.* Cement-based fill material shall be used for the project and waste management shall be consistent with requirements in the CA BMP Handbook (BMP WM-8). Concrete washout waste will be contained and managed properly.
- *Training.* Construction site personnel shall receive training on implementing all BMPs included in the SWPPP. All personnel that inspect BMPs and perform other monitoring activities, such as visual observations and collecting water quality samples, shall be trained.
- *Post-Construction BMPs.* Outlet protection/energy dissipating devices, vegetative buffer strips, or sand filters shall be installed at culverts and along the roadway. Exposed slopes shall be seeded with a mix native to Marin County that is appropriate for erosion control.

The Board adopts Mitigation Measure HYD-1a as proposed in the Final EIR.

HYD-1b: As part of project implementation, the County shall implement the following three water quality improvement measures:

1. The County shall install a permeable layer, as the top surface layer above impervious rubberized asphalt concrete on all paved road sections. Runoff exiting the permeable friction course shall be designed to sheetflow on the underlying impervious asphalt concrete and discharge into the nearest storm drain inlet, culvert, or directly over the outboard edge of the road.
2. Pullout areas shall be designed with permeable asphalt for the to allow stormwater to percolate through the asphalt and be collected in an udnerdrain that will be routed to discharge at the nearest existing roadway culvert.
3. In locations where the road slopes toward Lagunitas Creek and there is adequate space, a vegetative buffer strip shall be established adjacent to the road. The buffer strip vegetation shall be indigenous to Marin County and shall also be suitable for erosion control. The buffer shall be protected from vehicle traffic and illicit parking by placement of a barrier (e.g., guardrail, boulders) between the road and the buffer.
4. In locations where the road slopes toward the hillside and away from Lagunitas Creek, a vegetated swale with permeable backfill underneath that would function like

a sand filter shall be installed where feasible. A perforated pipe shall be installed within the permeable backfill to direct infiltrating runoff to the nearest culvert; the underdrain shall reduce the ponding of water that inundates the road during significant storm events. The bioswale vegetation shall be indigenous to Marin County and shall also be suitable for erosion control. Swales/sand filters shall not be installed in locations of freshwater emergent wetlands (to preserve the wetlands).

5. The need for the water quality improvement measures to be designed for flow duration control shall be evaluated in the project design phase. Pre- and post-project flow duration curves shall be generated using a hydrologic model that analyzes a long-term time series of precipitation data to generate the cumulative frequency of in-stream flows of a certain magnitude for the full distribution of flows up to the pre-project 10-year peak flow rate. Flow duration control shall be implemented if pre- and post-project flow duration curves deviate by more than 10% over the length of the flow duration curve; subsurface storage shall be provided within the water quality treatment measures, and the outlet shall be designed to discharge the increase in runoff volume resulting from the project at a rate that does not increase in-stream erosion.

The Board adopts Mitigation Measure HYD-1b as proposed in the Final EIR.

6. Hazardous Materials

IMPACT HAZ-1: Project construction activities would entail the use of hazardous materials and could also encounter hazardous materials in shallow soils, which would require transportation off site and disposal. In addition, hazardous materials used or encountered during construction could create a significant hazard through release into the environment. (Significant)

Facts

The EIR found that road construction activities would include the use of hazardous materials such as fuels, oils, lubricants, asphalt products, other petroleum products and solvents. In addition shallow soils that may be disturbed during construction could contain aerial deposited lead (ADL), the ADL could pose a potential health risk to workers, nearby receptors and the environment. These impacts are discussed on page 280 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, the potential health risk associated with the use and disturbance of hazardous materials is mitigated to a less-than-significant level by the imposition of Mitigation Measure HAZ-1a through HAZ-1d found in the MMRP and on pages 280-281 of the Final EIR. With these mitigation measures, the impact would be reduced to a less-than-significant level because: 1) prior to project construction a soil investigation will be performed by a licensed professional to determine if ADL and/or other potentially hazardous constituents are present in shallow

soil, and recommendations as to how contaminated soils shall be managed; 2) prior to initiation of construction a HASP will be prepared and it will include measures to protect workers and general public if contaminants are identified during soil sampling; and 3) and if warranted by soil study results Marin DPW will implement a Risk Management Plan (RMP) that will identify special soil management and disposal procedures as well as construction worker health and safety procedures.

Adopted Mitigation Measures

HAZ-1a: Prior to the initiation of project construction, a soil investigation shall be performed by a licensed professional to evaluate if ADL and other potentially hazardous constituents are present in shallow soils that would be disturbed. Chemical analyses for soil shall be performed by an analytical laboratory certified by the California Department of Public Health Environmental Laboratory Accreditation Program. A licensed professional shall review the results of the soil investigation and provide recommendations on additional investigation activities, if any, and soil management requirements during project construction, if applicable (see Mitigation Measure HAZ-1c). The analytical results of the soil investigation shall be compared to hazardous waste criteria and health and safety thresholds for construction workers. The soil investigation shall be conducted with oversight from a local or state regulatory agency.

The Board adopts Mitigation Measure HAZ-1a as proposed in the Final EIR.

HAZ-1b: Prior to the initiation of project construction, a project-specific HASP shall be prepared by a certified industrial hygienist that shall include measures to protect construction workers and the general public, if contaminants are identified during the soil sampling recommended in Mitigation Measure HAZ-1a. Such measures shall include monitoring, engineering controls, administrative controls, and security measures to prevent unauthorized entry into the construction area. If prescribed exposure levels for contaminants (see Mitigation Measure HAZ-1a) are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations. The HASP shall address the possibility of encountering unknown contamination or subsurface hazards, in addition to emergency response procedures in the event of a hazardous materials release. The project sponsor shall verify that the HASP is incorporated into the construction worker's health and safety programs.

The Board adopts Mitigation Measure HAZ-1b as proposed in the Final EIR.

HAZ-1c: If warranted, based on the results of the pre-construction soil characterization (Mitigation Measure HAZ-1a), the County shall implement a Risk Management Plan (RMP) that will identify special soil management and disposal procedures and/or construction worker health and safety procedures (in addition to the HASP) to be implemented during project construction to reduce exposure to hazardous materials. The RMP shall include all necessary procedures to ensure that excavated soils are stored, tested, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. The County shall ensure that the RMP includes available data from any pre-project construction soil sampling activities (Mitigation Measure HAZ-1a). The County shall provide the RMP to construction contractors and ensure that contractors are following the RMP. The RMP shall consider the following requirements:

- Excavation, transportation, and placement operations shall result in no visible dust.
- A construction "Exclusion Zone" shall be identified where hazardous materials may be stored. A temporary security fence shall be installed to surround and secure the exclusion zone.
- Air quality shall be monitored during excavation of soils contaminated with hazardous constituents.
- Storage of hazardous materials shall comply with the requirements in Title 22, CCR, Sections 6626.250 to 66265.260.
- If temporary stockpiling of hazardous materials is necessary, the construction contractor shall:
  - Cover the stockpile with plastic sheeting or tarps.
  - Install a berm around the stockpile to prevent runoff from leaving the area.
  - Locate the stockpile away from storm drain inlets and Lagunitas Creek.
- Hazardous materials shall be excavated, transported, and disposed in accordance with the rules and regulations of the following agencies:
  - United States Department of Transportation (DOT).
  - United States Environmental Protection Agency (EPA).
  - California Environmental Protection Agency (Cal/EPA).
  - California Division of Occupational Safety and Health (DOSH).
  - Local regulatory agencies.

The Board adopts Mitigation Measure HAZ-1c as proposed in the Final EIR.

HAZ-1d: The Storm Water Pollution Prevention Plan required as Mitigation Measure HYD-1a shall include Best Management Practices (BMPs) for containing hazardous materials and minimizing the contact of hazardous materials (e.g., fuels, lubricants, paints, solvents, and adhesives) with rain and stormwater runoff, including BMPs for stockpile management.

The Board adopts Mitigation Measure HAZ-1d as proposed in the Final EIR.

7. Traffic Impacts

IMPACT TR-1: Project construction activities could increase roadway hazards during the construction period due to the temporary closure of one travel lane, the presence of construction vehicles, and pavement damage created by construction traffic. (Significant)

Facts

The Final EIR found that traffic delays, safety concerns, and pavement damage created by construction traffic would represent a potential traffic safety impact. This impact is discussed on page 292 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this traffic safety impact is mitigated to a less-than-significant level by the imposition of Mitigation Measure TR-1 found in the MMRP and on pages 293 of the Final EIR. With these mitigation measures, the impact would be reduced to a less-than-significant level because: 1) prior to construction a Traffic Management Plan (TMP) will be prepared by the contractor and approved by Marin DPW, and 2) the TMP will include route identification for movement of heavy equipment and truck traffic, heavy equipment and materials transport, and will coordinate construction activities with State Parks, the GGNRA, and affected cites and communities along travel routes.

Adopted Mitigation Measures

TR-1: For the proposed project or Option A, prior to construction, the project contractor shall submit a Traffic Management Plan (TMP) to Marin County DPW for review and approval. During construction activities, the Marin County DPW and the project contractors working on the project shall adhere to all requirements of the TMP. Implementation of a TMP would reduce potential impacts to a level of less than significant. The TMP shall include the following:

- The route selection for movement of heavy equipment and truck traffic in the project vicinity shall be coordinated with the Marin County DPW, Marin County Sheriff's Department, and Police Department for applicable cities and unincorporated communities (Lagunitas, Forest Knolls, Woodacre, Olema, Point Reyes Station, Nicasio, San Anselmo, San Rafael, and Fairfax), State Parks, and Golden Gate National Recreation Area to minimize traffic and physical road impacts. Truck drivers shall be notified of and required to use the most direct route between the project site and US 101.
- Heavy equipment transport, material transportation, or exportation to and from the project site shall not occur during weekday commute peak traffic periods and shall be coordinated by the contractor with the Marin County DPW, Marin County Sheriff's Department, and relevant city police departments.
- Construction activities shall be coordinated with State Parks, Golden Gate National Recreation, affected cities and communities, and affected property owners to minimize disruption to local traffic.
- Construction worker parking, material storage, and construction staging areas to the extent possible shall be specified and located within the boundaries of the project site in coordination with State Parks personnel.
- Warning signs indicating frequent truck entry and exit shall be posted at the main construction points. Flaggers shall monitor and control ingress and egress of large construction vehicles to and from the site as well as lane closures.
- Debris and mud on nearby streets caused by trucks shall be monitored daily, and a roadway cleaning program shall be instituted as necessary.

- Westbound construction truck trips shall be prohibited on weekdays between the hours of 7:00 a.m. and 9:00 a.m. Eastbound construction truck trips shall be prohibited on weekdays between 4:00 p.m. and 6:00 p.m.

The Board adopts Mitigation Measure TR-1 as proposed in the Final EIR.

IMPACT TR-2: Construction of the project could result in inadequate emergency access. (Significant)

Facts

The Final EIR found that lane closures along SFDB associated with project construction could result in inadequate emergency access. This impact is discussed on page 293 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, emergency access impact is mitigated to a less-than-significant level by the imposition of Mitigation Measure TR-2 found in the MMRP and on pages 293 of the Final EIR. With this mitigation measures the impact would be reduced to a less-than-significant level because the schedule of construction activities contained in the TMP will be provided to local emergency service providers so that they can respond accordingly to an incident.

Adopted Mitigation Measures

TR-2: A schedule of construction activities and the Traffic Management Plan (TMP) prepared per Mitigation Measure TR-1 shall be provided to any pertinent local emergency service providers, including the Marin County Fire Department, Marin County Sheriff's Department, City of Fairfax Fire and Police Departments, Town of San Anselmo and City of San Rafael Fire and Police Departments, and paramedics.

The Board adopts Mitigation Measure TR-2 as proposed in the Final EIR.

IMPACT TR-3: Construction of the project could affect transit service through the project area during the construction period. (Significant)

Facts

The Final EIR found that construction of the project could impact transit service through the project area.. This impact is discussed on page 293 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this transit service impact is mitigated to a less-than- significant level by the imposition of Mitigation Measures TR-3 found in the MMRP and on page 293 of the Final EIR. With this mitigation measure, this impact would be reduced to a less-than-significant level because the contractor will provide Marin Transit with detailed information regarding construction delays so transit can be rerouted and passengers notified.

Adopted Mitigation Measures

TR-3: Prior to the start of the construction activities, Marin Transit shall be provided with detailed information regarding construction delays to plan a route deviation and/or notify passengers.

The Board adopts Mitigation Measure TR-3 as proposed in the Final EIR.

8. Air Quality Impacts

IMPACT AIR-1: Demolition and construction period activities could generate significant dust, exhaust and organic emissions. (Significant)

Facts

The Final EIR found that during construction of the proposed project construction equipment would generate toxic emissions through the use of diesel fuel. In addition during the construction period there will be a short-term degradation of air quality due to the release of particulate emissions generated by excavation, grading, hauling and other activities. This impact is discussed on pages 307-309 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this air quality impact is mitigated to a less-than- significant level by the imposition of Mitigation Measure AIR-1 on pages 309 and 310. With this mitigation measure, this impact would be reduced to a less-than-significant level because the BAAQMD guidelines for reducing particulate emissions will be followed during demolition and roadway construction.

Adopted Mitigation Measures

AIR-1: Consistent with guidance from the BAAQMD, the following actions shall be required of construction contracts and specifications for the project.

Demolition. The following controls shall be implemented during demolition:

- Water during demolition of structures and break-up of pavement to control dust generation;

- Cover all trucks hauling demolition debris from the site; and
- Use dust-proof chutes to load debris into trucks whenever feasible.

Construction. The following controls shall be implemented at all construction sites:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered as necessary to minimize the generation of dust.
- 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 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Replant vegetation in disturbed areas as quickly as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacture'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 County of Marin regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the BAAQMD shall also be visible to ensure complaints with applicable regulations.

The Board adopts Mitigation Measure AIR-1as proposed in the Final EIR.

9. Noise Impacts

IMPACT NOI-1: Construction period activities could create significant short-term noise impacts on noise sensitive receptors in the project area. (Significant)

Facts

The Final EIR found that construction period activities such as worker and equipment transport,; and the use of bulldozers, scrapers, loaders and graders and pavement breakers and pile drivers could create noise impacts on sensitive noise receptors in the project vicinity including residences and people hiking, walking and camping in the parks. This impact is discussed on pages 317 and 318 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this construction noise impact is mitigated to a less-than- significant level by the imposition of Mitigation Measures NOI-1a through NOI-1f found in the MMRP and on page 319 of the Final EIR. With these mitigation measures, this impact would be reduced to a less-than-significant level because: 1) contractor will equipped with properly operating mufflers and the County will monitor noise levels at the project site, 2) equipment and materials will be staged at location the greatest possible distance from sensitive noise receptor, 3) construction activities will be limited to 7:00Am to 6:00Pm weekdays, 4) signs will be posted informing the public of who to contact should construction noise be deemed to intrusive, and 5) the project manager will be required to respond to all noise complaints.

Adopted Mitigation Measures

NOI-1a: During all construction, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. During construction, the County shall monitor noise levels to ensure they remain below 95 dBA measured 50 feet from the noise source.

The Board adopts Mitigation Measure NOI-1a as proposed in the Final EIR.

NOI-1b: The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.

The Board adopts Mitigation Measure NOI-1b as proposed in the Final EIR.

NOI-1c: The construction contractor shall locate equipment staging in areas that will create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.

The Board adopts Mitigation Measure NOI-1c as proposed in the Final EIR.

NOI-1d: The construction contractor shall ensure that all general construction related activities are restricted to Monday through Friday between the hours of 7:00 a.m. and 6:00 p.m. Construction activities shall not be conducted on Saturdays, Sundays and holidays.

The Board adopts Mitigation Measure NOI-1d as proposed in the Final EIR.

NOI-1e: The Marin County DPW shall post an information sign at entrances to the construction zones easily visible to the public. The signs shall identify the permitted construction hours and the name, telephone number, and other pertinent contact information and list of responsibilities for the entity responsible for overall construction and noise management. The information signs shall also provide a means for members of the public to receive information about project construction. The County DPW shall

record all noise complaints received and actions taken in response. Informational signs shall be posted for the duration of project construction.

The Board adopts Mitigation Measure NOI-1e as proposed in the Final EIR.

NOI-1f: The project manager shall be responsible for responding to any local complaints about construction noise. The project manager will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will determine and implement reasonable measures warranted to correct the problem.

The Board adopts Mitigation Measure NOI-1f as proposed in the Final EIR.

10. Public Service and Utility Impacts

IMPACT PS-1: Construction of the proposed project would generate wastewater and human waste that if not disposed of at the proper facilities, could pose a public health impact. (Significant)

Facts

The Final EIR found that construction personnel will produce wastewater and there are no restrooms and washroom facilities in the project area, and any leakage from portable sanitation facilities could potentially spill into waterways. This impact is discussed on page 330 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this potential wastewater impact is mitigated to a less-than- significant level by the imposition of Mitigation Measures PS-1 a through PS-1c found in the MMRP and on page 330 of the Final EIR. With these mitigation measures, this impact would be reduced to a less- than-significant level because: 1) portable restrooms must be provided by the contractor and located as directed by a qualified biologist, 2) portable restrooms and wash facilities will be provided with secondary containment areas, and 3) and portable restroom and wash facilities will be monitored and maintained.

Adopted Mitigation Measures

PS-1a: In accordance with Mitigation Measure HYD-1, portable restroom and washroom facilities shall be located 50 feet away from drain inlets to prevent accidental release of wastewater materials into these areas. A qualified biologist shall be consulted on location of such facilities prior to their placement.

The Board adopts Mitigation Measure PS-1a as proposed in the Final EIR.

PS-1b: Portable restroom and washroom facilities shall have secondary containment placed around them in order to contain wastewater materials in the event that a leak or

accidental release should occur.

The Board adopts Mitigation Measure PS-1b as proposed in the Final EIR.

PS-1c: Portable restroom and wastewater facilities shall be monitored, maintained, and emptied on a regular basis to ensure that the facilities continue to function properly.

The Board adopts Mitigation Measure PS-1c as proposed in the Final EIR.

11. Global Climate Change

IMPACT GCC-1: Construction of the proposed project could generate substantial GHG emissions. (Significant)

Facts

The Final EIR found that the Project Description in the Final EIR lists several Best Management Practices that would be used during construction, but those practices did not include BAAQMD for reducing GHG emissions This impact is discussed on page 342 and 343 of the Final EIR.

CEQA §21081(a) Finding

Finding 1: This impact is mitigated to a less-than-significant level.

Evidence Supporting the Finding

Based on the Final EIR and the entire record, this Green House Gas emission impact is mitigated to a less- than-significant level by the imposition of Mitigation Measure GCC-1 found in the MMRP and on page 343 of the Final EIR. With this mitigation measure, this impact would be reduced to a less- than-significant level because the project's BMPs will be required to include the BAAQMD for the use of alternative fuels, local building materials, and recycling of construction and demolition waste.

Adopted Mitigation Measures

GCC-1: Consistent with draft guidance from the BAAQMD, the following best management practices shall be required of construction contracts and specifications for the project.

- Alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet, as feasible;
- Local building materials (within 100 miles) of at least 10 percent; and
- Recycle at least 50 percent of construction waste or demolition materials.

The Board adopts Mitigation Measure GCC-1 as proposed in the Final EIR.

VII: MITIGATION MONITORING PROGRAM

Finding

As required by Public Resources Code section 21081.6 and sections 15091(d) and 15097 of the CEQA Guidelines, the County, in adopting these Findings, also adopts an MMRP.

Evidence Supporting the Finding

A. The Board adopts an MMRP for the Project. The MMRP lists each Mitigation Measure and action to be performed, specifies the responsible party and timing. The MMRP is designed to ensure, during all phases of the Project, that the County and any other responsible parties implement the adopted Mitigation Measures.

B. The Board finds that the Mitigation Measures incorporated into and imposed upon the Project, including Mitigation Measures that were added or revised in the FEIR and FEIR Amendment, will not have new significant environmental impacts that have not already been analyzed

VIII. PROJECT ALTERNATIVES

A. Environmentally Superior Alternative

An EIR must identify the "environmentally superior alternative" among all of the alternatives considered that feasibly implements the objectives of the proposed project. (CEQA Guidelines sections 15126.6(a) and (e)(2)). For the proposed SFDB Rehabilitation Project, the EIR analyzed which alternative is environmentally superior based on the analysis of the proposed Project and alternatives to proposed Project.

As discussed in the Final EIR on pages 353 and 354, the Final EIR concluded that the Mitigated Roadway Alternative was environmentally superior. The Mitigated Roadway Alternative would achieve all the basic objectives of the proposed project, would avoid the short-term visual impact of the proposed project and reduces the number of trees to be removed by eliminating Option A. This is the Preferred Alternative adopted by the Board for the proposed rehabilitation of SFDB.

B. CEQA Alternatives Analysis

CEQA Guidelines section 15126.6(f) requires that an EIR analyze a reasonable range of alternatives to the proposed project that is sufficient to allow informed decision-making and public participation. The analysis should focus on alternatives that eliminate or reduce significant environmental impacts of the proposed project. Based on the analysis in the Final EIR, the proposed project was expected to result in a significant short-term visual impacts associated with retaining wall construction, and the removal of 8 large redwood trees and one oak tree under Option A. The retaining wall construction and tree removal under Option A were also expected to result local hydrologic and natural resource impacts. Alternatives to the Project were designed to avoid or reduce the potential significant impacts of the proposed project and to further reduce impacts that were found to be less-than-significant.

The EIR's alternatives analysis also should be limited to alternatives that could attain the proposed project's basic objectives and be potentially feasible. "Feasible" is defined in Public Resources Code section 21061.1 as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." CEQA Guidelines section 15364 adds the term "legal" to the list of factors to take into account. In evaluating the alternatives, the Board considered each alternative's ability to attain most of the basic project objectives and feasibility.

The EIR analyzed three on-site alternatives to the proposed project, including a No-Project Alternative. The EIR also considered two other on-site alternatives, a 25-Foot Wide Roadway Alternative and a 32-Foot Wide Roadway Alternative, and these alternatives were rejected from further consideration because of the significant amount of grading and tree removal required to achieve the road widths associated therewith. The reasons these two on-site alternatives were rejected from further consideration is discussed on page 353 of the Final EIR. The EIR did not consider any off-site alternatives since the proposed project is the rehabilitation of a portion of SFDB and there is no other existing roadway serving the project area.

No Project Alternative – Continued Existing Condition

Description of the Alternative

The **No Project Alternative** is discussed starting on page 346 of the Final EIR. This alternative assumes that the proposed roadway improvements would not be implemented. Existing traffic and roadway conditions would persist. The County would continue to maintain and repair the roadway on an as needed and ad hoc basis. The roadway design life would not be extended and safety would not be enhanced. Although some impacts associated with construction would be reduced or avoided by the smaller scale repairs of the roadway under the No Project Alternative, the environmental benefits of the project, such as slope stabilization measures to reduce erosion and slope failures and the drainage improvements to reduce the volume of sediments and pollutants entering Lagunitas Creek, would not be recognized.

Reasons for Rejecting the Alternative

In general, the No Project Alternative would not achieve the project objectives and would continue to adversely effect water quality in Lagunitas Creek through continued erosion and silting. Furthermore, failure to repair the failing slope could result in material being deposited in Lagunitas Creek in the future and the possible need for emergency roadway repair and stabilization work at some unforeseen time in the future. Therefore the Board rejects this alternative

Resurface Roadway Alternative

Description of the Alternative

The **Resurface Roadway Alternative** is discussed starting on page 349 of the Final EIR. The alternative assumes that the roadway would be restored using the same pavement rehabilitation techniques described in Section 3.4.1 for the proposed project.

The existing base course would be crushed, replaced and overlaid with two layers of asphalt concrete. The roadway would not be expanded to accommodate wider lanes or shoulders. No new formal pullouts or retaining walls would be constructed, existing locations along the roadway used as informal pullouts would not be closed, culverts would not be replaced, and slide repair would not be conducted under this alternative.

Reasons for Rejecting the Alternative

The Resurface Roadway Alternative would partly achieve the project objectives. Under the Resurface Roadway Alternative, one of the environmental benefits of the Proposed Project – slope stabilization measures to reduce erosion and slope failures and the drainage improvements to reduce the volume of sediments and pollutants entering Lagunitas Creek – would not be achieved. The alternative would partially fulfill 'extend life of road' objective. It would extend the design life of the roadway to 20 years but would not provide the additional 30-year design life of the project. Therefore the Board rejects this alternative.

Mitigated Roadway Alternative

The **Mitigated Roadway Alternative** is discussed starting on page 351 of the Final EIR. This alternative assumes that the roadway design would be modified to minimize impacts to site resources. The roadway would be rehabilitated and some sections of the alignment would be widened to accommodate wider vehicle lanes and/or shoulders. Under the Mitigated Roadway Alternative, Option A would be eliminated to minimize the number of trees to be removed. Most of the proposed retaining walls would be removed from the project to avoid short-term significant visual impacts. The Mitigated Roadway Alternative would achieve all objectives of the proposed project.

Reasons for Accepting the Alternative

The Mitigated Roadway Alternative was deemed to be the 'Preferred Alternative, by the Board because it eliminates Option 'A' thereby avoiding the need to remove 9 large trees to achieve a small increase in the amount of paved shoulder width, and avoiding the local impacts of tree removal on underlying riparian and nearby aquatic habitats and the need to replant mitigation trees in the watershed. The Mitigated Roadway Alternative also avoids the short-term visual impacts of the proposed retaining walls by removing most of the retaining walls from the project.

The Mitigated Roadway Alternative would achieve all of the basic objectives of the proposed project but would result in less paved road width in areas constrained by topography. Even though the proposed project does not result in any significant environmental impacts that cannot be mitigated, the Mitigated Roadway Alternative avoids the short-term visual impact of retaining wall construction and reduces the number of trees to be removed and associated mitigation by eliminating Option A. As a result, the Mitigated Roadway Alternative is considered the environmentally superior alternative and the Preferred Alternative for project construction.

IX. RECIRCULATION NOT REQUIRED; SUBSEQUENT/SUPPLEMENTAL EIR NOT REQUIRED

In the course of responding to comments received during the public review and comment period on the EIR, certain portions of the EIR were modified and some new information amplifying and clarifying information in the EIR was added. No significant new information, as defined in section 15088.5(a) of the CEQA Guidelines, was added to the EIR after the Draft EIR was issued for public review and before certification. "Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." CEQA Guidelines § 15088.5(b).

Evidence

A. The Draft EIR for the Project was circulated on May 12, 2010. The Final EIR was issued on January 21, 2011 and the FEIR Amendment was issued in March 2011.

B. No substantial changes to the Draft EIR or the Project were proposed after release of the Draft EIR and before certification of the EIR. In the course of responding to comments received during the public review and comment period on the EIR and the Project, certain portions of the EIR were modified and some new information amplifying and clarifying information was added. The changes, clarifications, and additions to the Draft EIR and the Project made in the Final EIR and Final FEIR Amendment do not identify or result in any new significant impacts or substantial increase in the severity of any environmental impacts. The Board finds that none of the information contained in the Final EIR, the Final EIR Amendment or comments received prior to certification of the EIR necessitated recirculation pursuant to Public Resources Code section 21092.1 and section 15088.5 of the CEQA Guidelines.

X RECORD OF PROCEEDINGS

The documents and other materials that constitute the record of proceedings (i.e., those items identified in Public Resources Code section 21167.6(e)) on which these Findings are based are located at the County of Marin Department of Public Works, 3501 Civic Center Drive, Room 404, San Rafael, California. The custodians for these documents are the County of Marin Community Department of Public Works and the Clerk to the Board. This information is provided in compliance with Public Resources Code section 21081.6(a)(2) and section 15091(e) of the CEQA Guidelines.

Evidence

A. County of Marin Department of Public Works files, staff reports to the Board, minutes and records of the Board proceedings, and other documents and materials constitute the record of proceedings upon which the Board bases its actions contained herein.

B. The documents and other material that constitute the record of proceedings are located at County Department of Public Works, 3501 Civic Center Drive, Room 308, San Rafael, CA 94903.

XI. CONCLUSION

In accordance with Public Resources Code section 21081 and section 15091 of the CEQA Guidelines, the Board of Supervisors of the County of Marin, California, finds as follows: The Final EIR and Final EIR Amendment (EIR) for the Sir Francis Drake Rehabilitation Project was prepared pursuant to CEQA, the CEQA Guidelines and the County's Environmental Impact Review Guidelines. The Board has exercised its independent judgment and determined that the EIR fully and adequately addresses the impacts of the proposed Project.

The range of project alternatives identified and considered in the EIR meets the test of "reasonable" analysis and provides the Board with important information from which to make an informed decision on the Project.

Public hearings were held before the Board. Substantial evidence in the record from those hearings and other sources demonstrates various economic, legal, social, environmental and other benefits that the County would achieve from the implementation of the Project.

The Board has balanced the Project's benefits and other considerations against the Project's significant environmental impacts identified in the EIR and has concluded that such impacts are outweighed by the Projects' benefits.

In accordance with Public Resources Code section 21081 and CEQA Guidelines section 15091, the Board finds as follows:

A. Based on the foregoing Findings and information contained in the record of proceedings, the Board hereby makes one or more of the following findings with respect to the significant environmental effects of the Preferred Alternative:

    1. Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

B. Based on the foregoing Findings and information contained in the record of proceedings, the Board finds that:

    1. All significant effects on the environment due to the approval of the Project, as approved, will be eliminated or substantially lessened where feasible through the incorporation and implementation of Mitigation Measures.

C. These Findings are based on the Draft EIR, Final EIR and Final EIR Amendment, the MMRP, comments from responsible agencies and the public, testimony before the Board during public hearings, staff analysis and commentary, and the record of proceedings as a whole.

The Board therefore concludes that the Preferred Alternative be adopted with applicable mitigation measures as the rehabilitation project for Sir Francis Drake Boulevard and should be implemented under the provisions of the mitigation measures in the MMRP as modified herein.

EXHIBIT 2

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based on the findings of the Environmental Impact Report (EIR) prepared for the Sir Francis Drake Boulevard Rehabilitation Project. The purpose of the MMRP is to ensure the implementation of mitigation measures identified as part of the environmental review for the project.

The MMRP (Table 1) lists mitigation measures recommended in the EIR and identifies mitigation monitoring requirements. Each mitigation measure is numbered according to the topical section to which it pertains in the EIR. As an example, Mitigation Measure AES-1 is the first mitigation measure identified in Chapter 4.2, Aesthetics, of the EIR. The column entitled "Mitigation Responsibility" identifies the party responsible for carrying out the required actions. The columns entitled "Monitoring/Reporting Agency and "Monitoring Schedule" identify the party ultimately responsible for ensuring that the mitigation measure is implemented and the approximate timeframe for the oversight agency to ensure implementation of the mitigation measure. The column entitled "Verification of Compliance" will be used by the County of Marin to document the person who verified the implementation of the mitigation measure and the date on which this verification occurred.

The County of Marin must adopt a MMRP or an equally effective program, if it approves the proposed project with the mitigation measures included in the EIR. Public Resources Code, Section 21081.6(a) requires an agency to adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval.

Table 1: Mitigation Monitoring and Reporting Program

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
4.1 LAND USE					
There are no significant Land Use impacts.					
4.2 AESTHETICS					
AES-1: Option A could increase the amount of light and glare visible to pedestrians, bicyclists and equestrians using the trail systems in the vicinity of the project area.	**AES-1:** The County shall identify those trees proposed for removal in Option A that currently shield campgrounds or trails from the light and glare of vehicles passing on SFDB. Prior to construction, the County shall include in its construction plans or designs, plantings, or other methods to reduce the potential impacts of vehicle glare and light impacts that would result from removal of these trees.	Marin County DPW	Approval of construction documents	Marin County DPW	*Verified by:* *Date:*
4.3 BIOLOGICAL RESOURCES					
BIO-1: Implementation of the proposed project could impact special-status plant species present within the project area.	**BIO-1:** A qualified botanist shall conduct additional CDFG protocol-level surveys within and immediately adjacent to the zones that would be disturbed by construction work. The surveys shall be conducted in the year within which construction is to commence. To the extent allowed under the construction schedule, surveys shall be conducted during the flowering period of the special-status plants that have a high potential to occur within the project area (January through August). If any special-status plant species are observed within or adjacent to the disturbance zones, Marin DPW shall implement the following: • A qualified botanist shall delineate the locations of any special-status plant populations adjacent to the disturbance zones and shall supervise the installation of temporary protective construction fencing between the disturbance zones and the plant population. The fencing shall remain in place until construction is completed and all construction equipment has been removed from the vicinity. • If any special-status plant population is identified within the construction disturbance zones, the Marin DPW shall consult with CDFG and CNPS to determine appropriate avoidance and/or	Marin County DPW/Project Botanist	Prior to construction	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	mitigation measures for impacts to the population. If the special status plant is federally listed as Threatened or Endangered, the Marin DPW shall also consult with the USFWS. At a minimum, avoidance and mitigation measures shall entail the following: a. Marin DPW shall adjust the boundaries of the disturbance zones, where feasible, to avoid impacts to the plant population. b. Where avoidance is not feasible, the Marin DPW shall implement one or more of the following measures, based on the prior consultation with CDFG and CNPS: 1) transplant affected plants to suitable habitat areas outside the disturbance zones; 2) collect and properly store seeds of affected plants; subsequently re-seed suitable habitat areas outside the disturbance zones; 3) prepare and implement a long-term management/enhancement plan for existing off-site populations of the affected plant species.				
BIO-2: Implementation of the proposed project could impact special-status invertebrate species potentially present within the project area.	BIO-2a: During the spring and summer period prior to the start of construction, a qualified botanist shall conduct pre-construction surveys of the project site for the host plants of the Marin elfin butterfly and Myrtle's silverspot butterfly. Identified plant populations shall be marked for avoidance by project activities. If a plant population cannot be feasibly avoided, individual plants will be relocated by a qualified botanist to a location adjacent to the project disturbance zone.	Marin County DPW/Project Botanist	Prior to construction	Marin County DPW	*Verified by:* *Date:*
	BIO-2b: Implement re-vegetation and habitat restoration measures described in Mitigation Measures BIO-9a and BIO-9b.	See the cited mitigation measure			*Verified by:* *Date:*
BIO-3: Implementation of the proposed project could impact bird species protected under the Federal and State Endangered Species Act.	BIO-3a: Prior to initiation of construction activities (in April or May of the construction year) the Point Reyes Bird Observatory (PRBO) shall be contacted to obtain the results of any new spotted owl surveys that were conducted in the project vicinity. If such surveys	Marin County DPW	Prior to construction	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	indicate that spotted owls are nesting within 165 feet of the construction area, the USFWS and CDFG shall be consulted regarding additional avoidance and minimization measures.				
	BIO-3b: If construction work is scheduled during the breeding season (March 1 through August 30), a qualified wildlife biologist shall conduct pre-construction surveys of all suitable nesting trees in the project disturbance zone and within 165 feet of the disturbance zone to determine if nesting birds of either species are present. (Preconstruction surveys will not be required for construction work carried out in the non-breeding season August 30 through February 28/29.) The pre-construction surveys shall be conducted within 15 days prior to the start of work from March 1 through May 31 (since there is higher potential for birds to initiate nesting during this period), and within 30 days prior to the start of work from June 1 through August 30. All suitable nesting trees within 165 feet of the construction disturbance zone will be surveyed. If active nests of either species are found in the work area, the USFWS and CDFG will be consulted as to appropriate avoidance and minimization measures prior to the initiation of work. At a minimum, the following avoidance and minimization measures shall be implemented: a. In order to avoid and minimize impacts on nesting northern spotted owls during project implementation, a 165-foot buffer shall be established around active nesting sites. No project construction activities shall be allowed to occur within this zone until a qualified biologist has determined that all juveniles have fledged from occupied nests. b. Buffer zones shall be clearly delimited using construction fencing or other suitable barrier material to the extent feasible based on site	Marin County DPW/Project Biologist	Prior to construction	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	conditions. c. Construction activity, site access by equipment and vehicles, and operations at the staging areas shall be limited to daytime hours. No nighttime work shall be allowed on the project. Activities shall begin no earlier than one-half hour after sunrise and shall end no later than one-half hour before sunset. d. Any required tree trimming of trees to be avoided shall be done according to arborist guidelines to minimize the effects to trees. Trimming of trees must not jeopardize the survival of trees. e. A report documenting the results of preconstruction surveys and nest protection and monitoring shall be provided to USFWS and CDFG within 4 weeks of completion of work in the vicinity of active nests.				
BIO-4: Implementation of the proposed project could impact special-status bird species protected under the MBTA potentially nesting in and adjacent to the project area.	BIO-4: If construction work is scheduled during the breeding season (March 1 through August 30), a qualified wildlife biologist shall conduct pre-construction surveys within and adjacent to the project disturbance zone to determine if nesting birds are present. (Preconstruction surveys shall not be required for construction work carried out in the non-breeding season August 30 through February 28/29.) The pre-construction surveys shall be conducted within 15 days prior to the start of work from March 1 through May 31 (since there is higher potential for birds to initiate nesting during this period), and within 30 days prior to the start of work from June 1 through August 30. If active nests are found in the work area, the biologist shall determine an appropriately sized buffer around the nest in which no work shall be allowed until the young have successfully fledged. The size of the nest buffer shall be determined by the biologist in consultation with the CDFG, and shall be based on the	Marin County DPW/Project Biologist	Prior to construction/ Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	nesting species, the context of the nest site in relation to existing human activity and its sensitivity to disturbance, and the expected types of disturbance. No project construction activities shall be allowed to occur within this zone until a qualified biologist has determined that all juveniles have fledged from occupied nests. At a minimum, the following buffer zones shall be implemented: • *Yellow Warbler.* Yellow warblers typically nest and rear young from April through July. In order to avoid and minimize impacts on nesting yellow warblers during project implementation, a 25 to 50-foot buffer shall be established around active nesting sites when project activities shall occur during their breeding and nesting period. No project activities shall be allowed to occur within this zone. The buffer area can be removed prior to July if a qualified biologist determines that all juveniles have fledged from occupied nests. • *Osprey.* Osprey typically nest and rear young from March through September. In order to avoid and minimize impacts on nesting osprey during project implementation, a 200-foot buffer shall be established around active nesting sites when project activities shall occur during their breeding and nesting period. No project activities shall be allowed to occur within this zone. The buffer area can be removed prior to September if a qualified biologist determines that all juveniles have fledged from occupied nests. • *Other Raptor Species.* Other raptor species typically nests and rear young from early April through August. If these species are found to be nesting, impacts shall be avoided and minimized by establishing a 200-foot buffer around active nest sites. No project related activities should be allowed to occur within this buffer until young have fledged or the species are no longer				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	attempting to nest. The buffer area can be removed prior to August if a qualified biologist determines that all juveniles have fledged from occupied nests. • *Other Migratory Birds.* Migratory bird species typically nest and rear young from February through August. In order to avoid and minimize impacts on migratory bird species, a 25 to 200-foot buffer shall be established around active nesting sites when construction activities shall occur during their active nesting period. No project-related activities shall occur within this zone. The buffer area can be removed prior to August if a qualified biologist determines that all juveniles have fledged from occupied nests. A report documenting the results of preconstruction surveys and nest protection and monitoring shall be provided to CDFG within 4 weeks of completion of work in the vicinity of active nests.				
BIO-5: Implementation of the proposed project could impact federal and/or state listed salmonid species - Central California Coastal coho salmon, Central California Coast steelhead, and California Coastal chinook salmon.	BIO-5a: In accordance with Mitigation Measure HYD1a, a Storm Water Pollution Protection Plan (SWPPP), in accordance with the State Water Resources Control Board, National Pollution Discharge Elimination System (NPDES) Construction General Permit, shall be prepared and implemented.[1] The SWPPP shall include a wide range of Best Management Practices (BMPs) for controlling sediment and turbidity during construction. These BMP should include the following measures to avoid impacts to salmonids: • Work below the tops of the creek banks, including culvert replacement work in the tributaries and bank repair along Lagunitas Creek, shall be allowed only during the period from June 15 to October 15 during low flow conditions. Culvert replacement work in a	Marin County DPW/ Construction Contractor	Prior to issuance of a grading permit/ Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

[1] See Section 4.6.2 and Mitigation Measure HYD-1 under *Hydrology and Water Quality* for further details on SWPPP requirements as they relate to the proposed project.

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	tributary shall occur only when there is no flow in the tributary or when in the opinion of the project biologist, the flow is too low to allow salmonid passage through the culvert. Low tributary flows will be temporarily captured and diverted downstream from the work zone. • No fill material, including asphalt or concrete, shall be allowed to enter the stream. Any concrete structures (such as culvert headwall construction) below the tops of banks shall be poured in tightly sealed forms and shall not be allowed contact with surface waters until the cement has fully cured. Poured concrete shall be excluded from the wetted channel for a period of 30 days after it is poured. During that time the poured concrete shall be kept moist, and runoff from the concrete shall not be allowed to enter the creek. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry and fully cured according to the manufacturer's specifications. • Water that contacts wet concrete and has a pH greater than 9.0 shall be pumped out and disposed of outside the creek channel. • No substances toxic to aquatic life shall be discharged into Lagunitas Creek or its tributaries. • There shall be no material deposition nor other channel disturbance below the ordinary high water line of Lagunitas Creek. • There shall be no coffer dams or dewatering of Lagunitas Creek. • Hydroseed mixes used to stabilize disturbed areas shall not contain fertilizers.				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	• Equipment maintenance and fueling areas shall be located at least 100 feet away from the creek bank. Fueling must be behind a containment barrier that shall prevent any spilled or leaked fuel from running into the creek. All equipment servicing must occur within designated areas. All motorized equipment used during construction or demolition activities shall be checked for oil, fuel, and coolant leaks prior to initiating work. Any equipment found to be leaking fluids shall not be used in or around aquatic habitat features in order to minimize the chances of contaminating the habitat and potentially impacting sensitive species, particularly salmon and steelhead. • The project's contractor shall prepare an emergency response and clean-up plan prior to beginning work at the site. The plan shall detail the methods to be used to contain and clean-up spills of petroleum products or other hazardous materials in the work area. • All maintenance crew personnel shall receive environmental training about the sensitive nature of the special status species in the project vicinity. This training that shall include descriptions of the special status species and all project measures in place to protect the species during construction. Crews shall also be informed to stop all work and notify their supervisor or the project biologist if special-status species are observed within the project site.				
	BIO-5b: Post-construction (ongoing) road maintenance, including inspection and maintenance of roadside bioswales, shall be conducted in accordance with a long-term Storm Water Management Plan (SWMP) prepared prior to the start of construction in accordance with RWQCB and Marin County	Marin County DPW	For the life of the project	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	Stormwater Pollution Prevention Program (MCSTOPPP) standards, and approved by the RWQCB and Marin County. The SWMP shall also incorporate county road maintenance BMPs contained in the Fish Net 4C BMPs Roads Manual.[2]				
	BIO-5c: In order to avoid damage to existing riparian trees in the vicinity of the construction site, all native trees with trunks adjacent to excavation areas, equipment staging and material storage areas, as well as other areas with concentrated activity by construction equipment, shall be protected with temporary construction fencing. The fencing shall be placed at the edge of the construction zone as close as feasible to the edge of the tree driplines. No construction work, storage of equipment or materials or other disturbance shall be allowed within the protected areas. Additionally, redwood trees in the vicinity of the construction site shall be protected in accordance with Mitigation Measures BIO-10a through BIO-10i.	Marin County DPW/ Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-5d: Marin DPW shall make available suitable cuttings from the tree removal work for use as woody debris and in bio-engineered structures along Lagunitas Creek in order to enhance salmonid habitat. The Marin DPW shall notify the signatories to the February 7, 2007 *Memorandum of Understanding for Woody Debris Management in Riparian Areas of the Lagunitas Creek Watershed* (Marin Municipal Water District, Marin County Open Space District, California Department of Parks and Recreation, National Park Service, and the Marin County Resource Conservation District – see *Biological Assessment* – Appendix E) of the availability of the wood, and the signatories shall notify Marin DPW if they have use for the woody debris, and when they will collect the material. If the signatory agencies have not responded within 14 days Marin DPW shall dispose of the material in a legal manner.	Marin County DPW	During construction	Marin County DPW	*Verified by:* *Date:*

[2] See Section 4.6.2 under *Hydrology and Water Quality* for further details on the MCSTOPPP requirements for compliance with RWQCB NPDES General Permit.

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
BIO-6: Implementation of the proposed project could impact other special-status fish species.	BIO-6: Implement measures to protect special-status salmonids described in Mitigation Measures BIO-5a through BIO-5d.	See cited mitigation measures			*Verified by:* *Date:*
BIO-7: Implementation of the proposed project could impact special-status amphibian and reptile species potentially present within the project area.	BIO-7a: Prior to work beginning in any habitats containing appropriate habitat for northwestern pond turtle, foothill yellow-legged frog, or California red-legged frog a qualified biologist shall conduct focused pre-construction surveys for these species. The Preconstruction surveys for California red-legged frog shall be completed within 48 hours prior to commencement of any earth-moving activity, construction, or vegetation removal, whichever comes first. The preconstruction survey shall include two nights of nocturnal surveys in areas of suitable habitat. The biologist performing the preconstruction survey must hold a federal 10(a)(1)(A) permit for California red-legged frog or be considered by USFWS to be a "service approved" biologist. If any of the above special-status amphibian and reptile species are encountered during the surveys, all work in the work area shall be placed on hold while the findings are reported to the CDFG and USFWS and it is determined what, if any, further actions must be followed to prevent possible take of this species.	Marin County DPW/Project Biologist	Prior to construction	Marin County DPW	*Verified by:* *Date:*
	BIO-7b: Where construction would occur in habitat where California red-legged frogs, foothill yellow-legged frogs, and northwestern pond turtle are potentially present, work areas shall be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat areas. An authorized biologist shall assist in determining the boundaries of the area to be fenced in consultation with the USFWS, and CDFG. All workers shall be advised that equipment and vehicles must remain within the fenced work areas. The authorized biologist shall direct the installation of the fence and shall conduct biological surveys to move any individuals of these species from within the	Construction Contractor/ Project Biologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	fenced area to suitable habitat outside of the fence. Exclusion fencing shall be at least 24 inches in height. The type of fencing must be approved by the authorized biologist, the USFWS, and CDFG.				
	BIO-7c: If, at any time, individuals of these species are found within an area that has been fenced to exclude these species, activities shall cease until the authorized biologist moves the individuals.	Construction Contractor/ Project Biologist	Throughout the construction period	Marin County DPW/Project Biologist	*Verified by:* *Date:*
	BIO-7d: If any of these species are found in a construction area where fencing was deemed unnecessary, work shall cease until the authorized biologist moves the individuals. The authorized biologist in consultation with USFWS and CDFG shall then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.	Construction Contractor/ Project Biologist	Throughout the construction period	Marin County DPW/Project Biologist	*Verified by:* *Date:*
	BIO-7e: Clearance surveys of the construction area shall occur on a daily basis in the work area. Any individuals of these species found during clearance surveys or otherwise removed from work areas shall be placed in nearby suitable, undisturbed habitat. The authorized biologist shall determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. The authorized biologist shall have the authority to stop all activities until appropriate corrective measures have been completed.	Construction Contractor/ Project Biologist	Throughout the construction period	Marin County DPW/Project Biologist	*Verified by:* *Date:*
	BIO-7f: To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force[3] shall be followed at all times.	Project Biologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-7g: Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when California red-legged frogs may be present.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

[3] http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/DAFTA.pdf

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	BIO-7h: Within the work zone, traffic speed shall be maintained as required by the Manual for Uniform Traffic Control Devices – California edition. The speed limit in the work zone shall be no more than 15 MPH.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-7i: BMPs and erosion control methods, as outlined in the project's SWPPP, shall be implemented. These BMPs include re-vegetation of all bare soil prior to the rainy season to prevent an increase in sediment entering waterways. The project's SWPPP shall be subject to the review and approval of the USFWS and CDFG.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
BIO-8: Implementation of the proposed project could impact special-status mammal species potentially present within the project area.	BIO-8a: All trees to be removed within the project area shall be surveyed for the presence of bat roosts by a qualified biologist. Surveys may entail direct inspection of the trees or nocturnal surveys. The survey shall occur no more than 2 weeks prior to the initiation of vegetation removal and ground disturbing activities. The survey shall be conducted prior to the commencement of the bat maternity season (approximately April 15-August 15). If no roosting habitat is present, then the tree must be removed within 1 week following the survey. If roosting habitat is present and occupied, then a qualified biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If it is determined that the bats are not a special-status species, and that the roost is not being used as a maternity roost, then the bats may be evicted from the roost using methods developed by a biologist experienced in developing and implementing bat mitigation and exclusion plans.	Marin County DPW/Project Biologist	Prior to construction	Marin County CDA	*Verified by:* *Date:*
	BIO-8b: If special-status bat species are found to be present or if the roost is determined to be a maternity roost for any species of bat, then a qualified biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site.	Marin County DPW/Project Biologist	Prior to construction	Marin County CDA/Project Biologist	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	Removal of the roost shall only occur when the mitigation plan has been approved by CDFG and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. One replacement roost shall be provided for each roost impacted. The mitigation plan shall be submitted to CDFG for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.				
	BIO-8c: Roosts shall only be removed during seasons when bats are active and the young are able to fly (March 1 – April 15, and August 1 – October 15).	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-8d: Removal of trees surrounding roost trees shall be conducted in a manner to prevent the tree being removed from falling on or otherwise damaging the roost tree.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-8e: No diesel or gas-powered equipment shall be stored or operated directly beneath a roost site.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-8f: Under supervision of a qualified bat expert, roost trees shall be removed in two steps, over two successive days: • Branches and limbs identified by the bat expert should be removed on Day 1 (Disturbance). • The remainder of the tree should be removed on	Construction Contractor/ Project Biologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	Day 2 (Removal				
	BIO-8g: All construction activity in the vicinity of an active roost shall be limited to daylight hours.	Construction Contractor	Throughout the construction period	Marin County DPW/Project Biologist	*Verified by:* *Date:*
	BIO-8h: A preconstruction survey of the project area and the area within 100 feet of the project areas shall be conducted for the presence of the badger dens and signs of badger occupancy. The survey shall be completed no more than 7 days prior to the initiation of vegetation removal and ground disturbing activities. If no dens are observed, a second survey shall be conducted within 24 hours of vegetation removal and ground disturbing activities to ensure that no badgers have entered the area since the first survey. Preconstruction surveys shall be repeated as necessary if vegetation removal and ground disturbing activities are delayed or postponed.	Marin County DPW/ Project Biologist	Prior to construction	Marin County DPW	*Verified by:* *Date:*
	BIO-8i: If potential dens are observed within the project area or 100 foot buffer area, then the project shall implement a monitoring program to determine if the dens are active. Monitoring shall be performed using remote triggered cameras or tracking medium placed at the den entrance. Cameras or tracking medium shall be operated for a minimum of 3 nights. If no activity is observed at the den during the monitoring period, the den shall be excavated by hand on the morning following the third night of monitoring. The den shall be backfilled to prevent reuse. All den excavations shall be coordinated with the CDFG. If a den is determined to be active, the den shall be monitored for an additional 3 nights to determine if the badgers are using the den continually. Special care shall be taken during the period of March through July when badger cubs may be present in the den. Excavation of natal dens shall not be allowed until it is determined by a qualified biologist that the young have left the den and are able to forage independently. The presence of a natal den within the project area or	Marin County DPW/ Project Biologist	Throughout the construction period	Marin County DPW/Project Biologist	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	buffer area shall be reported to CDFG within 24 hours.				
	BIO-8j: During all times of the year, no excavation of the dens shall be allowed until monitoring results demonstrate that the den has been unoccupied for at least 3 nights. Once the den has been determined to be unoccupied for a period of at least 3 nights, the den may be excavated by hand and backfilled.	Marin County DPW/ Project Biologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-8k: Outside of the period when young may be present in the den (August through February), measures may be taken to discourage the use of continually occupied dens. This discouragement may include blocking the entrance to the den or other methods approved by CDFG. The den must be continually monitored during this period to ensure that badgers are not occupying the den. Excavation and backfilling may occur once the den is determined to be unoccupied for at least 3 nights. A report documenting the results of preconstruction surveys and den monitoring shall be reported to CDFG within 2 weeks of completion of the den excavations and initiation of vegetation removal and ground disturbance activities.	Marin County DPW/ Project Biologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
BIO-9: Implementation of the proposed project would impact native trees protected by the Marin County Tree Preservation Ordinance present within the project area.	BIO-9a: Marin DPW shall comply with the requirements of the Marin County Tree Protection Ordinance for any tree loss under the proposed project including retaining wall work at Station 270+25 and all tree removal under Option A. Consistent with the ordinance, trees of the same species as those impacted shall be replanted at a 3:1 replacement ratio. The replacement trees shall be 15-gallon specimens unless a certified arborist or a representative from the MMWD determines otherwise. Planted trees shall be maintained with browse protection and weed cloth around the root zones as needed, and regularly watered during the dry season until such time that a certified arborist has determined that they are sufficiently established to not require further maintenance or watering.	Marin County DPW	Approval of construction documents	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	Replanted trees shall be planted within the Lagunitas Creek watershed if possible. One suitable location for tree replanting is the drilled-pier retaining wall structure located immediately downstream from the Peters Dam plunge pool (see Biological Assessment – Appendix E). MMWD constructed this wall to protect a pipeline that was endangered by a landslide along a 160-foot section of stream bank in 2005. MMWD would like to replant the stream bank below the retaining wall with native trees and shrubs, including redwood trees. The area to be planted would qualify as mitigation if Marin DPW paid for or did the planting. Prior to the start of roadway construction, DPW shall identify the final planting location(s) and receive approval from MMWD if necessary. If suitable re-planting location(s) cannot be found and agreed to by the affected public agency property owners, then DPW may contribute the required monetary amount into the Marin County Tree Preservation Fund, as specified under the tree protection ordinance.				
	BIO-9b: In order to compensate for the potential habitat impacts from tree removal along Lagunitas Creek, Marin DPW shall implement the following additional mitigation measures: • Marin DPW shall provide a financial contribution to the MMWD for support of habitat enhancement along Lagunitas Creek under the MMWD *Mount Tamalpais Watershed Gateway Project.* The appropriate amount of the contribution shall be directly related to the degree of removed habitat and shall be determined by Marin DPW in consultation with MMWD and shall be specifically dedicated to either invasive exotic vegetation management and/or native plant revegetation efforts along the creek. • Marin DPW shall make available suitable	Marin County DPW	Approval of construction documents	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	cuttings from the tree removal work for use as woody debris and in bio-engineered structures along Lagunitas Creek in order to enhance salmonid habitat. The Marin DPW shall notify the signatories to the February 7, 2007 *Memorandum of Understanding for Woody Debris Management in Riparian Areas of the Lagunitas Creek Watershed* (Marin Municipal Water District, Marin County Open Space District, California Department of Parks and Recreation, National Park Service, and the Marin County Resource Conservation District – see *Biological Assessment* - Appendix E) of the availability of the wood, and the signatories shall notify Marin DPW if they have use for the woody debris, and when they will collect the material. If the signatory agencies have not responded within 14 days Marin DPW shall dispose of the material in a legal manner.				
BIO-10: Implementation of the proposed project would impact root of redwoods and other native trees present within the project area.	BIO-10a: An arborist certified by the International Society of Arboriculture (ISA) shall be present for any ground disturbing construction activities within a 50-foot radius of any redwood tree and within the dripline of other native trees to monitor compliance with Mitigation Measures BIO-10b through 10i.	Marin County DPW/ Certified Arborist	Throughout the construction period	Marin County CDA/Certified Arborist	*Verified by:* *Date:*
	BIO-10b: All excavation work below the finish grade within a 50-foot radius of any redwood tree shall be done with hand tools or with light mechanized equipment such (e.g., mini or light excavator or backhoe) to minimize disturbance or damage to roots.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-10c: The contractor shall use an air spade while excavating the soil within the structural root zone of native trees to minimize physical injury to the tree roots. The contractor may propose alternative excavation methods that would minimize root damage, subject to the approval of the certified arborist and Marin DPW.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-10d: Smaller roots less than 2-inches in diameter requiring cutting shall be cut cleanly in order to promote healing.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	BIO-10e: The structural section for new pavement shall consist of Cement Treated Permeable Base (CTPB) or the equivalent to minimize the thickness of the structural section, minimize compaction of roots, and minimize thermal exposure to roots.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-10f: In areas where soil would be excavated through the roots of native trees for culvert replacement, retaining wall construction or other purposes, the following measures shall be used to protect roots and promote air circulation: • The existing vegetation needing removal shall be cut flush with the ground and stumps left in place. Stumps shall not be treated with herbicides or other chemicals. • Any duff layer shall be hand raked off the area within the clearing limits, stored, and replaced as erosion control. • A 0.75 foot thick layer of Class 1, Type A porous material shall be placed and compacted as the first lift of the fill to increase water infiltration and air circulation. A layer of filter fabric shall then be applied prior to placing the remaining fill required for the embankment. • In locations where fill would be placed next to the trunk of a redwood tree greater than three feet in diameter, a brow log shall be used to keep the soil from the tree trunk to increase air circulation.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-10g: Equipment staging areas/storage areas shall be on existing paved areas on existing areas of compacted, gravel surface not located within 50 feet of redwood trees.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-10h: No heavy equipment shall be staged or parked within the drip line of mature trees in unpaved areas. Fill, gravel or other construction materials shall not be stockpiled within 50-feet of redwood trees or beneath the driplines of any other trees.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	BIO-10i : In order to avoid adversely altering surface drainage patterns over redwood root zones, bioswales and other drainage swale features shall be located on the upslope side of SFDB (opposite side from Lagunitas Creek) wherever feasible.	Marin County DPW	Approval of construction documents	Marin County DPW	*Verified by:* *Date:*
BIO-11: Implementation of the proposed project would impact seasonal wetlands and other waters present within the project area.	BIO-11a: Prior to project implementation, Marin DPW shall obtain all required regulatory permits to conduct work activities in wetlands and streams. Permits required to conduct these activities include a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), a Section 404 permit from the USACE, and a Lake and Steambed Alteration Agreement from CDFG.	Marin County DPW	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*
	BIO-11b: Marin DPW shall compensate for the loss of 0.24 acres of seasonal wetlands associated with the filling of roadside swales by establishing new seasonal wetlands at a 2:1 on-site replacement ratio within the Lagunitas Creek watershed in the vicinity of the SFDB project. One possible mechanism for accomplishing this may be for the DPW to fund the establishment of at least 0.48 acres of new floodplain wetland habitat along Lagunitas Creek in association with the MMWD *Lagunitas Creek Salmon Winter Habitat Enhancement Program*. This program seeks to address a possible limiting factor to the survival of juvenile coho salmon - a lack of suitable winter habitat along the creek, by establishing new side channels and backwater wetlands on selected reaches of the floodplain. The following is a brief summary of the proposed mitigation plan: • **Mitigation Location.** Tocoloma Reach of Lagunitas Creek, just west of Platform Bridge Road, approximately 1,100 feet north of SFDB. • **Mitigation Site.** An approximately 1.2-acre abandoned floodplain area adjacent to Lagunitas Creek. The site is characterized by disturbed grassland and ruderal (weedy) vegetation formerly used for cattle grazing, and contains abandoned grazing infrastructure (e.g., corrals, feeding	Marin County DPW	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	troughs) as well as small areas of fill that would need to be removed. The site is generally flat with elevations ranging from approximately 62 – 63 feet NGVD. Soils are mapped as stratified depositions of sand; gravel, cobbles and stones with ephemeral depositions of silt and sandy loam, as is typical of floodplains along the creek ("Fluvents, channelized" under Soil Conservation Service Soil Survey maps). The proposed mitigation site was selected by MMWD for the following reasons: (1) the site has floodplain topography and substrate conditions suitable for backwater channel creation; (2) the site is currently disturbed and does not support woody riparian habitat or wetlands; and (3) the site is publicly-owned (by the NPS) and is easily accessible to construction equipment due to it proximity to Platform Bridge Road. • **Mitigation Approach.** The proposed plan is intended to be one element of the overall Winter Habitat Enhancement Program, which would include various winter habitat enhancement efforts along Lagunitas Creek from the Shafter Bridge downstream to Olema Creek. The overall goal of the plan is to establish an approximately 1,200-linear foot, 30-foot wide backwater channel that would establish approximately 0.8 acres of suitable over-wintering habitat for coho salmon juveniles and smolts. The channel would have upstream and downstream connections to Lagunitas Creek and would have a bottom elevation that intercepts baseflows during the winter and early spring based on historical flow records in Lagunitas Creek. Channel cross sections would be modeled after existing backwater channel habitat in Lagunitas Creek and in similar coastal streams elsewhere, and would include gentle sideslopes suitable for the establishment of emergent marsh, seasonal wetland and woody riparian vegetation				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	encompassing at least 0.5 acres. A key design element would be to ensure that salmonids are able to swim into and out of the backwater habitat and not become stranded during lower flows. The backwater habitat enhancement design would also include refuge and cover habitat features for salmonids (e.g., woody debris structures and undercut bank sections). • **Funding Status.** The project has received funding only for detailed topographic surveys, site assessment work and construction plan preparation. The project does not have funding for regulatory approval, construction or follow-up monitoring and management. As mitigation for the SFDB project, the DPW proposes to provide the required funding and/or in-kind services for regulatory approval, construction and follow-up monitoring and management to allow the project to be implemented. • **Schedule.** The MMWD would be selecting an engineering contractor to conduct hydrologic modeling analysis and to prepare the construction plans, as well as to conduct the related, site specific topographic survey and site assessments. Construction plans are scheduled to be completed by July 2011. The PWD would prepare and submit the Mitigation and Monitoring Plan in accordance with Corps of Engineers, Regional Water Quality Control Board and California Department of Fish and Game requirements as part of the wetland/streambed alteration permit applications for the SFDB Rehabilitation project. Implementation of the plan would occur prior to or simultaneous with the commencement of construction work for the SFDB Rehabilitation project. Project construction, including filling of roadside swales shall not start until a suitable wetland				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	mitigation site has been selected and a Wetland Mitigation and Monitoring Plan for the site has been prepared by Marin DPW and approved by the Corps, RWQCB and CDFG. Mitigation construction work under the plan shall be completed in accordance with a timetable agreed to by these three agencies.				
	BIO-11c: Marin DPW shall minimize temporary disturbances to streambanks to the smallest amount feasible needed to accomplish culvert replacement, bank stabilization and slope repair work. Marin DPW shall restore disturbed areas to pre-disturbance conditions after temporary project activities are complete. Seed mixes for stabilization of disturbed areas shall consist of species native to Marin County. Fertilizers shall not be applied with any seeding or as part of hydroseed mixes.	Marin County DPW	During construction/ Following construction.	Marin County DPW	*Verified by:* *Date:*
	BIO-11d: Disturbance of stream channels in the project site shall be limited to the minimum necessary to complete proposed drainage improvement activities. Riparian vegetation shall be trimmed (and not removed) where feasible, and where removal is necessary, should be at the minimum necessary to complete work. Stream channels shall be re-vegetated with appropriate riparian vegetation after work activities are completed. All re-vegetation activities shall be approved by CDFG under the Streambed Alteration Agreement process prior to restoration activities being completed.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-11e: A qualified biologist shall be present during any work occurring within wetlands or streams.	Project Biologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-11f: DPW shall implement all water quality protection measures contained in the SWPPP to prevent the direct and indirect release of soil and other construction materials into wetlands and streams	Marin County DPW/ Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
BIO-12: Implementation of the proposed project could induce the spread of panic veldt grass and other non-native invasive plants to previously un-infested areas within the project area.	BIO-12a: Prior to project implementation, Marin DPW shall remove populations or individuals of invasive plants listed by the California Invasive Plant Council (CalIPC) with ratings of A or B for impacts and invasiveness from areas of the project site where	Marin County DPW/Consulting Botanist	Prior to construction	Marin County DPW/Consulting Botanist	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	the ground surface would be disturbed and vegetation removed. Removal activities shall be conducted under the supervision of a botanist qualified in the identification of invasive weed species. Invasive weed removal shall be conducted prior to seed set (as determined by monthly spring surveys by a qualified botanist) to minimize the spread of invasive weed seeds in the project site. If it is not possible to remove weeds prior to seed set, measures to minimize the release of invasive weed seeds during weed removal (e.g., manual weed removal into plastic bags) shall be used.				
	BIO-12b: If hay bale installation is necessary for erosion-control in the project area, only certified weed-free hay bales shall be used.	Construction Contractor	During construction	Marin County DPW	*Verified by:* *Date:*
	BIO-12c: Construction equipment, particularly wheels and tracks, shall be cleaned prior to entering the project site to prevent the spread of invasive weeds from areas outside of the project site. Cleaning shall be achieved by rinsing equipment with water or using high-pressure air.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	BIO-12d: When re-vegetation of bare soil surfaces is required, Marin DPW shall utilize a native seed mix pre-approved by CDFG and reviewed by CNPS.	Construction Contractor	During construction	Marin County DPW	*Verified by:* *Date:*
4.4 CULTURAL RESOURCES					
CULT-1: Project implementation may cause an adverse change to a unique archaeological resource, including federally or State-listed resources, pursuant to CEQA.	CULT-1a: Prior to project construction, a professional archaeologist shall establish a barrier around recorded cultural resources subject to impact by project activities so that these Environmentally Sensitive Areas (ESAs) can be avoided during construction. The professional archaeologist shall use high visibility temporary construction fencing or a similar durable material (i.e., not construction flagging) to establish the ESAs. For resources in the project area (i.e., the County right-of-way consisting of 30 feet on each side of the roadway centerline), the fencing shall delineate the entire boundary of the resource. For resources partially in or adjacent to the project area, the fencing shall delineate those portions of the resource that	Marin County DPW/Professional Archaeologist	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	extend into, or are adjacent to, the project area. To the greatest extent feasible, no project construction or access by construction crew shall occur in these areas. The project superintendent, crew foreman, environmental compliance officer, or other responsible project official shall review the condition of the fencing and check for unauthorized entry into these areas on a weekly basis. Any deficiencies in the fencing shall be repaired at the direction of the responsible project official.				
	CULT-1b: If project construction must occur within a protected area (or if Option A requires tree root mass removal in an ESA, see below), a qualified professional archaeologist shall monitor the ground-disturbing component of such construction. The purpose of the monitoring is to identify intact archaeological deposits prior to substantial disturbance by project construction activity. If intact archaeological deposits are identified by archaeological monitoring, the monitor shall be empowered to temporarily halt construction to assess the find. Impacts to the find by project activities shall be avoided. If such avoidance is not feasible, the County shall conduct the necessary study, in consultation with the project archaeologist, to determine if the deposit qualifies as a historical or unique archaeological resource under CEQA. If the deposit *does not* so qualify, project construction may resume with the continuation of archaeological monitoring. If the deposit *does* so qualify, then the County shall develop and implement, in consultation with the project archaeologist, a plan to mitigate the impact. Mitigation may consist of, but is not limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be	Marin County DPW	During construction within protected areas	Marin County DPW/ Professional Archaeologist	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	appropriate. If data recovery excavation is the means selected to recover the scientifically consequential information contained in the deposit, a data recovery plan must be prepared, consistent with the requirements of *CEQA Guidelines* Section 15126.4(b)(3)(C). If the deposit is prehistoric in nature, the County shall seek and consider the input of the Federated Indians of Graton Rancheria regarding the proposed treatment prior to implementing the plan. Any reports generated from the evaluation or mitigation shall be submitted to the County and the Northwest Information Center.				
	CULT-1c: If deposits of prehistoric or historical archaeological materials are encountered during project activities that are not archaeologically monitored, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The County shall also be notified. Project personnel shall not collect or move any archaeological materials. Adverse effects to the deposits shall be avoided by project activities or, if the deposits cannot be avoided, they shall be evaluated as described in Mitigation Measure CULT-1b to determine if the deposit qualifies as a historical or archaeological resource under CEQA and handled, documented and treated accordingly. The County shall inform its contractor(s) of the archaeological sensitivity of the project area by including the following directive in contract documents: *If prehistoric or historical archaeological deposits are discovered during project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate and make recommendations regarding the treatment of the discovery. Project personnel shall not collect or move*	Construction Contractor/ Marin County DPW	Throughout the construction period/ Approval of construction documents	Marin County DPW/ Professional Archaeologist	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	any archaeological materials or human remains and associated materials. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt, or quartzite toolmaking debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Prehistoric sites often contain human remains. Historical materials can include wood, stone, concrete footings, walls, and other structural remains; and deposits of wood, glass, ceramics, metal, and other refuse. If the archaeological deposits are prehistoric in nature, the archaeologist shall consult with the Federated Indians of Graton Rancheria regarding the treatment of the find, and the feasible recommendations of the Tribe shall be incorporated in the approved plan.				
	CULT-1d: If feasible, trees shall be removed by grinding each stump to grade and using a chemical application to kill stump growth. If this approach is taken, impacts to archaeological deposits due to Option A would be less than significant. If this approach is not feasible, and if the root mass must be removed, then Mitigation Measures CULT-1b or -1c shall be implemented, as appropriate, depending on whether or not the tree is located within an ESA.	Construction Contractor	During construction	Marin County DPW	*Verified by:* *Date:*
CULT-2: Project implementation may cause an adverse change to a unique potential historical resource, including federally or State-listed resources and potential local landmarks (Sir Francis Drake Boulevard), pursuant to CEQA..	CULT-2a: The loss of historic headwalls can be mitigated by the documentation that will preserve a record of their contribution to the original roadway design.	Marin County DPW	Prior to construction	Marin County DPW	*Verified by:* *Date:*
	CULT-2b: The Marin County DPW shall distribute the Pacific Legacy archaeological survey report to the Marin History Museum Library. Information concerning the location of prehistoric archaeological deposits (including maps and written descriptions) shall be removed from these distribution copies. The distribution of the documentation of SFDB and its	Marin County DPW	Prior to construction	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	associated features will serve an interpretive function at the Museum Library by making publicly available information about the historical development of Marin County's historical roads, and the landscape features that once contributed to this history. The Marin County DPW shall retain a copy of the report to provide a record of historical engineering features for future planning efforts, and would reduce the impact on the historic roadway resource to less-than-significant.				
CULT-3: Project implementation may destroy paleontological resources or sites.	CULT-3: The County shall inform its contractor(s) of the paleontological sensitivity of the project area by including the following directive in contract documents: *The subsurface of the construction site may be sensitive for paleontological resources. If paleontological resources are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Paleontological resources include fossil plants and animals, and evidence of past life such as trace fossils and tracks. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Vertebrate land mammals may include bones of mammoth, camel, saber tooth cat, horse, and bison. Paleontological resources also include plant imprints, petrified wood, and animal tracks.* Adverse effects to such paleontological resources shall be avoided. If avoidance is not possible, the discovery should be assessed to determine its paleontological significance. If the discovery is not significant, avoidance is not necessary. If the	Marin County DPW/ Construction Contractor	Approval of construction documents/ Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	paleontological resources are significant, they will need to be avoided or adverse effects must be mitigated. Upon completion of the assessment, the paleontologist should prepare a report documenting the methods and results, and provide recommendations for the treatment of the paleontological resources discovered. The report should be submitted to the County and the University of California, Museum of Paleontology. The submittal of the report would reduce the potential impact on paleontological resources to less-than-significant.				
CULT-4: The construction of the proposed project may disturb human remains.	CULT-4: If human remains are encountered during construction activities, these remains shall be treated in accordance with Health and Safety Code §7050.5. The County shall inform its contractor(s) of the sensitivity of the project area for human remains by including the following directive in contract documents: *If human remains are encountered during project activities, whether archaeologically monitored or not, work within 25 feet of the discovery shall be redirected and the Marin County Coroner notified immediately. At the same time, a professional archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. The County should also be notified. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.* Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated	Marin County DPW/ Construction Contractor	Approval of construction documents/ Throughout the construction period	Marin County DPW/ Professional Archaeologist/ FIGR	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the County and the Northwest Information Center.				
4.5 GEOLOGY, SOILS AND SEISMICITY					
GEO-1: The proposed project may be subject to seismic shaking hazard impacts.	GEO-1: Prior to the commencement of the project, the Geotechnical Investigation and associated recommendations, as prepared by a licensed professional, shall be submitted to the County of Marin Public Works Engineering Division. The Geotechnical Investigation's determination of the project area's surface geotechnical conditions and potential seismic hazards such as liquefaction, lateral spreading, and landslides shall be considered in the project design. The Geotechnical Investigation's recommendations of construction techniques appropriate to minimize seismic damage shall be adopted as part of the project design and implementation plan. Some of the recommended construction techniques from the project-specific Geotechnical Investigation include: • Full depth replacement of soft subgrade materials, such as un-engineered fill or colluvium, with engineered fill. This would be accomplished by excavation of the subgrade and replacement with select imported fill materials. • Excavations for the removal of culverts should be cleaned of loose materials and widened as necessary to permit compaction equipment access. The excavations should be subsequently backfilled with properly compacted fill. • Imported select fill should be of low expansion potential and free of organic matter, and should conform, in general, to the following requirements: – Plasticity Index less than 15%	Marin County DPW/Project Geotechnical Engineer	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	– Liquid Limit less than 40% – Percent Soil Passing #200 Sieve between 15% and 60% – Maximum Aggregate Size 4 inches • Consultation with a licensed geotechnical engineer to provide the appropriate engineering specifications input for design of any required structures to withstand seismic forces. • Finished project grading and surfaces should avoid any ponding of water or concentrated seepage under structures or adjacent to the roadway. In addition, the following shall be implemented: • The County of Marin Public Works Engineering Division shall review the Geotechnical Investigation along with final project plans and confirm that the proposed improvements fully comply with the County of Marin Uniform Construction Standards and that the Geotechnical Investigation recommendations have been incorporated. • All design criteria and specifications set forth in the Geotechnical Investigation shall be implemented as a condition of project approval.				
GEO-2: Damage to proposed improvements related to expansive soils, corrosive soils, and/or settlements of non-engineered fill or disparate soils could occur.	GEO-2: The designers and engineers of proposed improvements (including roads, pullouts, parking areas, and utilities) shall consider the site's potential to be underlain by soils with moderate to high shrink-swell potential and, per the Geotechnical Investigation's recommendations, a qualified professional shall observe soil conditions in the field during the rehabilitation process. If locations along the alignment of SFDB are underlain by expansive soils and/or non-engineered fill, the geotechnical consultant to the project shall determine if the soils encountered	Marin County DPW/ Project Geotechnical Engineer	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	are problematic, and shall make recommendations to ensure potential damage related to expansive soils and non-uniformly compacted fills are minimized. Mitigation options may range from removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements. All design criteria and specifications set forth in the Geotechnical Investigation and as made by the geotechnical consultant while monitoring the project shall be implemented to reduce impacts associated with problematic soils. The Geotechnical Investigation consultant shall include an evaluation of the potential for corrosive soils. If the results indicate corrosive soil conditions, appropriate measures to mitigate these conditions shall be incorporated into the design of project improvements, such as culverts, that may come into contact with site soils. Wherever corrosive soils are found in sufficient concentrations, recommendations shall be made to protect iron, steel, metal, and concrete from long-term deterioration caused by contact with corrosive onsite soils. In general, these recommendations are expected to include, but not be limited to, the following provisions: • Protect buried iron, steel, cast iron, ductile iron, galvanized steel, and dielectric coated steel or iron (including all buried metallic piping) against corrosion from soil. • Protect buried metal and cement structures in contact with earth surfaces from chloride ion concentrations. • Use sulfate-resistant concrete mix for all concrete in contact with the ground.				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	• Consult a corrosion expert as needed during the project's detailed design phase to design the most effective corrosion protection.				
GEO-3: Landslide hazards could result in roadway damage, vehicle damage, and/or injuries.	GEO-3: Prior to the commencement of the project, a site-specific design-level geotechnical investigation shall be conducted of the slope instability feature at Station 270+25. The geotechnical investigation shall be prepared by a licensed geotechnical engineer and the geotechnical report shall be submitted to the County of Marin Public Works Engineering Division. The geotechnical investigation shall include documentation of geologic mapping of the site and adjacent areas, exploratory borings, appropriate laboratory testing of soils samples, and recommendations for repair of the slope instability feature. All design criteria and specifications set forth in the design-level geotechnical investigation shall be implemented as a condition of project approval.	Marin County DPW/ Project Geotechnical Engineer	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*
4.6 HYDROLOGY AND WATER QUALITY					
HYD-1: Construction period and operation period activities could generate stormwater runoff that could cause or contribute to a violation of water quality standards or waste discharge requirements, or otherwise substantially degrade the water quality of Lagunitas Creek and/or Tomales Bay.	HYD-1a: Prior to construction, consistent with the requirements of the Construction General Permit, the County shall prepare a SWPPP designed to reduce potential impacts to surface water quality through the project construction period. The SWPPP shall be prepared by a Qualified SWPPP Developer. The SWPPP shall include, as applicable, all Best Management Practices (BMPs) required in Attachment D for Risk Level 2 dischargers, or Attachment E for Risk Level 3 dischargers (as appropriate based on final determination of the project's Risk Level status). The SWPPP shall include a construction site Monitoring Program that includes requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate (depending on the Risk Level), sampling of the site effluent or receiving waters (receiving water quality monitoring is only required for some Risk Level 3 dischargers). The County shall also	Marin County DPW/ Construction Contractor	Prior to issuance of a grading permit/ Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	prepare a Rain Event Action Plan as part of the SWPPP. BMP implementation shall be consistent with the BMPs requirements in the California Stormwater Quality Association Stormwater Best Management Handbook-Construction.[4] Following are the types of BMPs that shall be implemented, subject to review and approval by the Water Board. **Erosion Control BMPs** • *Scheduling*. To reduce the potential for erosion and sediment discharge, construction shall be scheduled to minimize ground disturbance during the rainy season. The project applicant shall: o Sequence construction activities to minimize the amount of time that soils remain disturbed. o Stabilize all disturbed soils as soon as possible following the completion of ground disturbing work. o Install erosion and sediment control BMPs prior to the start of any ground-disturbing activities. • *Preservation of Existing Vegetation*. Where feasible, existing vegetation shall be preserved to provide erosion control. • *Stabilize Soils*. Hydroseeding and geotextile fabrics shall be used, as appropriate, to reduce erosion. • *Stabilize Streambanks*. When working along stream banks or within channels, BMPs shall be implemented to minimize channel erosion and sedimentation. Proper erosion and sediment				

[4] California Stormwater Quality Association, 2003a, Stormwater Best Management Handbook-Construction, with updates through 2006. Website: http://www.cabmphandbooks.com/Construction.asp, accessed November 2, 2009.

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	controls, such as silt fences, mulch, geotextiles, and hydroseeding, shall be used. To the extent possible, existing vegetation that stabilizes the stream banks shall be preserved. While working within a stream channel, a barrier to isolate the work area shall be created, divert the stream around the work site, or employ practices to minimize sediment suspension. • *Drainage Swales*. Construct drainage swales to divert runoff away from exposed soils and stabilized areas, and redirect the runoff to a desired location. • *Outlet Protection and Velocity Dissipation Devices*. Install rock or concrete rubble at culvert and pipe outlets to prevent scour of the soil caused by concentrated high-velocity flows. **Sediment Control BMPs** • *Silt Fence/Fiber Roll*. Silt fences or fiber rolls shall be installed around the perimeter of the areas affected by construction, at the toe of slopes, around storm drain inlets, and at outfall areas, to prevent offsite sedimentation. • *Slope Protection and Vacuuming*. When working adjacent to Lagunitas Creek on steep banks, a barrier shall be erected and equipment capable of vacuuming sediment shall be provided during pavement grinding and excavation operations. • *Storm Drain Inlet Protection*. Storm drains shall be protected using a filter fabric fence, gravel bag barrier, or other methods, to allow sediments to be filtered or settle out before runoff enters drain inlets. • *Sand Bag or Gravel Bag Berm*. Sand or gravel bags shall be installed as a linear erosion or sediment control measure to pond sheet flow				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	runoff and reduce the discharge of sediment. **Wind Erosion Control BMPs** • *Dust Control.* Potable water shall be applied using water trucks to alleviate nuisance caused by dust. Water application rates shall be minimized to prevent erosion and runoff. • *Stockpile Management.* Silt fences shall be used around the perimeter of stockpiles and stockpiles shall be covered with plastic to prevent wind dispersal of sediment. **Tracking Controls** • *Stabilized Construction Entrance/Exit.* Construction site entrances and exits, the equipment yard, the water filling area for water trucks, and the project office location, shall be graded and stabilized to prevent runoff from the site and erosion. • *Tire Wash.* A tire washing facility shall be installed to allow for tire washing when vehicles exit the site to prevent tracking onto public and private streets. **Non-Stormwater Controls** • *Dewatering.* The SWPPP shall include a dewatering plan for non-contaminated groundwater specifying methods of water collection, transport, treatment, and discharge. The discharger shall consult with the Water Board regarding any required permit (other than the Construction General Permit) or Basin Plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies. Water				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	produced by dewatering shall be impounded in holding tanks or other holding facilities to settle the solids and provide other treatment as necessary prior to discharge to receiving waters. Discharges of water produced by dewatering shall be controlled to prevent erosion. • *Illicit Connection/Discharge Detection and Reporting.* Contractors shall regularly inspect the site for evidence of illicit connections, illegal dumping, or discharges. Such discharges shall immediately be reported to the stormwater illegal discharge contact for Marin County. • *Vehicle and Equipment Cleaning.* Construction equipment shall be washed regularly in a designated enclosed area. Except for concrete washout, vehicle cleaning shall not be performed on site. Concrete washout waste will be contained and managed properly. • *Vehicle and Equipment Fueling and Maintenance.* Self-propelled vehicles shall be fueled off-site or at the temporary fueling area. Fuel trucks equipped with absorbent spill clean-up materials shall be used for all on-site fueling; the fuel truck shall be parked on the paved fueling area for overnight storage. Drip pans shall be used for all mobile fueling. Drip pans or absorbent pads shall be used for all vehicle and equipment maintenance activities. Vehicle maintenance and mobile fueling operations shall be conducted on a level graded area, at least 50 feet away from operational inlets and drainage facilities. • *Paving and Grinding Operations.* Proper practices shall be implemented to prevent run-on and run-off, and to properly dispose of waste. Paving and grinding activities shall be avoided during the rainy season, when feasible. • *Structure Demolition.* Potable water shall be				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	sprayed during road demolition to control dust. **Waste Management and Materials Pollution Control BMPs** • *Material Delivery, Storage and Use.* The general material storage area shall be located in the contractor's yard. Two watertight shipping containers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents and grease. Very large items, such as light standards, framing materials, and stockpiled lumber, shall be stored in the open in the general storage area. Such materials shall be elevated with wood blocks to minimize contact with run-on. Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers shall be maintained at the site. • *Spill Prevention and Control.* Proper procedures shall be implemented to contain and clean-up spills and prevent material discharges into the storm drain system. • *Solid Waste Management.* Solid wastes shall be loaded directly into trucks for off-site disposal. When on-site storage is necessary, solid wastes shall be stored in watertight dumpsters in the general storage area of the contractor's yard. Asphalt concrete and Portland cement concrete rubble shall be removed immediately to an approved disposal site. • *Sanitary/Septic Waste Management.* Portable toilets shall be located and maintained 50 feet away from drain inlets and away from paved areas. • *Stockpile Management.* Stockpiles shall be surrounded by sediment controls and shall be				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	covered. Alternatively, soil binders may be used to minimize erosion. If contaminated soils are encountered, such as soils containing aerially-deposited lead, stockpiles shall be covered and bermed and located away from storm drain inlets and watercourses, and on-site storage shall be minimized. Hazardous materials shall be transported and disposed in accordance with applicable regulations (refer to Mitigation Measure HAZ-1c). • *Concrete Waste Management.* Cement-based fill material shall be used for the project and waste management shall be consistent with requirements in the CA BMP Handbook (BMP WM-8). Concrete washout waste will be contained and managed properly. • *Training.* Construction site personnel shall receive training on implementing all BMPs included in the SWPPP. All personnel that inspect BMPs and perform other monitoring activities, such as visual observations and collecting water quality samples, shall be trained. • *Post-Construction BMPs.* Outlet protection/energy dissipating devices, vegetative buffer strips, or sand filters shall be installed at culverts and along the roadway. Exposed slopes shall be seeded with a mix native to Marin County that is appropriate for erosion control.				
	HYD-1b: As part of project implementation, the County shall implement the following five water quality improvement measures: 1. The County shall install a permeable layer, as the top surface layer above impervious rubberized asphalt concrete on all paved road sections. Runoff exiting the permeable friction course shall be designed to sheetflow on the underlying impervious asphalt concrete and discharge into the nearest storm drain inlet, culvert, or directly over	Marin County DPW	Approval of construction documents	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	the outboard edge of the road. 2. Pullout areas shall be designed with permeable asphalt for the to allow stormwater to percolate through the asphalt and be collected in an udnerdrain that will be routed to discharge at the nearest existing roadway culvert. 3. In locations where the road slopes toward Lagunitas Creek and there is adequate space, a vegetative buffer strip shall be established adjacent to the road. The buffer strip vegetation shall be indigenous to Marin County and shall also be suitable for erosion control. The buffer shall be protected from vehicle traffic and illicit parking by placement of a barrier (e.g., guardrail, boulders) between the road and the buffer. 4. In locations where the road slopes toward the hillside and away from Lagunitas Creek, a vegetated swale with permeable backfill underneath that would function like a sand filter shall be installed where feasible. A perforated pipe shall be installed within the permeable backfill to direct infiltrating runoff to the nearest culvert; the underdrain shall reduce the ponding of water that inundates the road during significant storm events. The bioswale vegetation shall be indigenous to Marin County and shall also be suitable for erosion control. Swales/sand filters shall not be installed in locations of freshwater emergent wetlands (to preserve the wetlands). 5. The need for the water quality improvement measures to be designed for flow duration control shall be evaluated in the project design phase. Pre- and post-project flow duration curves shall be generated using a hydrologic model that analyzes a long-term time series of precipitation data to generate the cumulative frequency of in-stream flows of a certain magnitude for the full distribution of flows up to the pre-project 10-year				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	peak flow rate. Flow duration control shall be implemented if pre- and post-project flow duration curves deviate by more than 10% over the length of the flow duration curve; subsurface storage shall be provided within the water quality treatment measures, and the outlet shall be designed to discharge the increase in runoff volume resulting from the project at a rate that does not increase in-stream erosion.				
4.7 HAZARDS AND HAZARDOUS MATERIALS					
HAZ-1: Project construction activities would entail the use of hazardous materials and could also encounter hazardous materials in shallow soils, which would require transportation off site and disposal. In addition, hazardous materials used or encountered during construction could create a significant hazard through release into the environment.	HAZ-1a: Prior to the initiation of project construction, a soil investigation shall be performed by a licensed professional to evaluate if ADL and other potentially hazardous constituents are present in shallow soils that would be disturbed. Chemical analyses for soil shall be performed by an analytical laboratory certified by the California Department of Public Health Environmental Laboratory Accreditation Program. A licensed professional shall review the results of the soil investigation and provide recommendations on additional investigation activities, if any, and soil management requirements during project construction, if applicable (see Mitigation Measure HAZ-1c). The analytical results of the soil investigation shall be compared to hazardous waste criteria and health and safety thresholds for construction workers. The soil investigation shall be conducted with oversight from a local or state regulatory agency.	Marin County DPW/Licensed Environmental Professional	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	HAZ-1b: Prior to the initiation of project construction, a project-specific HASP shall be prepared by a certified industrial hygienist that shall include measures to protect construction workers and the general public, if contaminants are identified during the soil sampling recommended in Mitigation Measure HAZ-1a. Such measures shall include monitoring, engineering controls, administrative controls, and security measures to prevent unauthorized entry into the construction area. If prescribed exposure levels for contaminants (see Mitigation Measure HAZ-1a) are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations. The HASP shall address the possibility of encountering unknown contamination or subsurface hazards, in addition to emergency response procedures in the event of a hazardous materials release. The project sponsor shall verify that the HASP is incorporated into the construction worker's health and safety programs.	Marin County DPW/ Certified Industrial Hygienist	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*
	HAZ-1c: If warranted, based on the results of the pre-construction soil characterization (Mitigation Measure HAZ-1a), the County shall implement a Risk Management Plan (RMP) that will identify special soil management and disposal procedures and/or construction worker health and safety procedures (in addition to the HASP) to be implemented during project construction to reduce exposure to hazardous materials. The RMP shall include all necessary procedures to ensure that excavated soils are stored, tested, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. The County shall ensure that the RMP includes available data from any pre-project construction soil sampling activities (Mitigation Measure HAZ-1a). The County shall provide the RMP to construction contractors and ensure that contractors are following the RMP. The RMP shall consider the following requirements:	Marin County DPW/ Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	• Excavation, transportation, and placement operations shall result in no visible dust. • A construction "Exclusion Zone" shall be identified where hazardous materials may be stored. A temporary security fence shall be installed to surround and secure the exclusion zone. • Air quality shall be monitored during excavation of soils contaminated with hazardous constituents. • Storage of hazardous materials shall comply with the requirements in Title 22, CCR, Sections 6626.250 to 66265.260. • If temporary stockpiling of hazardous materials is necessary, the construction contractor shall: – Cover the stockpile with plastic sheeting or tarps. – Install a berm around the stockpile to prevent runoff from leaving the area. – Locate the stockpile away from storm drain inlets and Lagunitas Creek. • Hazardous materials shall be excavated, transported, and disposed in accordance with the rules and regulations of the following agencies: – United States Department of Transportation (DOT). – United States Environmental Protection Agency (EPA). – California Environmental Protection Agency (Cal/EPA). – California Division of Occupational Safety and Health (DOSH).				

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	– Local regulatory agencies.				
	HAZ-1d: The Storm Water Pollution Prevention Plan required as Mitigation Measure HYD-1a shall include Best Management Practices (BMPs) for containing hazardous materials and minimizing the contact of hazardous materials (e.g., fuels, lubricants, paints, solvents, and adhesives) with rain and stormwater runoff, including BMPs for stockpile management.	Marin County DPW/ Construction Contractor	Prior to issuance of a grading permit/ Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
4.8 TRANSPORTATION AND CIRCULATION					
TR-1: Project construction activities could increase roadway hazards during the construction period due to the temporary closure of one travel lane, the presence of construction vehicles, and pavement damage created by construction traffic.	TR-1: For the proposed project or Option A, prior to construction, the project contractor shall submit a Traffic Management Plan (TMP) to Marin County DPW for review and approval. During construction activities, the Marin County DPW and the project contractors working on the project shall adhere to all requirements of the TMP. Implementation of a TMP would reduce potential impacts to a level of less than significant. The TMP shall include the following: • The route selection for movement of heavy equipment and truck traffic in the project vicinity shall be coordinated with the Marin County DPW, Marin County Sheriff's Department, and Police Department for applicable cities and unincorporated communities (Lagunitas, Forest Knolls, Woodacre, Olema, Point Reyes Station, Nicasio, San Anselmo, San Rafael, and Fairfax), State Parks, and Golden Gate National Recreation Area to minimize traffic and physical road impacts. Truck drivers shall be notified of and required to use the most direct route between the project site and US 101. • Heavy equipment transport, material transportation, or exportation to and from the project site shall not occur during weekday commute peak traffic periods and shall be coordinated by the contractor with the Marin County DPW, Marin County Sheriff's	Construction Contractor	Throughout the construction period	Marin County DPW/Constructi on contractor	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	Department, and relevant city police departments. • Construction activities shall be coordinated with State Parks, Golden Gate National Recreation, affected cities and communities, and affected property owners to minimize disruption to local traffic. • Construction worker parking, material storage, and construction staging areas to the extent possible shall be specified and located within the boundaries of the project site in coordination with State Parks personnel. • Warning signs indicating frequent truck entry and exit shall be posted at the main construction points. Flaggers shall monitor and control ingress and egress of large construction vehicles to and from the site as well as lane closures. • Debris and mud on nearby streets caused by trucks shall be monitored daily, and a roadway cleaning program shall be instituted as necessary. • Westbound construction truck trips shall be prohibited on weekdays between the hours of 7:00 a.m. and 9:00 a.m. Eastbound construction truck trips shall be prohibited on weekdays between 4:00 p.m. and 6:00 p.m. • A public information program shall be developed and coordinated with local agencies affected by construction activities and/or road closures. The public information program should include measures to inform the public of planned construction activities using means such as print media, radio, and/or web-based messages and information.				
TR-2: Construction of the project could result in inadequate emergency access.	TR-2: A schedule of construction activities and the Traffic Management Plan (TMP) prepared per Mitigation Measure TR-1 shall be provided to any	Marin County DPW	Prior to construction	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	pertinent local emergency service providers, including the Marin County Fire Department, Marin County Sheriff's Department, City of Fairfax Fire and Police Departments, Town of San Anselmo and City of San Rafael Fire and Police Departments, and paramedics.				
TR-3: Construction of the project could affect transit service through the project area during the construction period.	TR-3: Prior to the start of the construction activities, Marin Transit shall be provided with detailed information regarding construction delays to plan a route deviation and/or notify passengers.	Marin County DPW	Prior to construction	Marin County DPW	*Verified by:* *Date:*
4.9 AIR QUALITY					
AIR-1: Demolition and construction period activities could generate significant dust, exhaust and organic emissions.	AIR-1: Consistent with guidance from the BAAQMD, the following actions shall be required of construction contracts and specifications for the project. *Demolition.* The following controls shall be implemented during demolition: • Water during demolition of structures and break-up of pavement to control dust generation; • Cover all trucks hauling demolition debris from the site; and • Use dust-proof chutes to load debris into trucks whenever feasible. *Construction.* The following controls shall be implemented at all construction sites: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered as necessary to minimize the generation of dust. • 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.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	• All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. • Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.) • Replant vegetation in disturbed areas as quickly as possible. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacture'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 County of Marin regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the BAAQMD shall also be visible to ensure complaints with applicable regulations.				
4.10 NOISE					
NOI-1: Construction period activities could create significant short-term noise impacts on noise sensitive receptors in the project area.	NOI-1a: During all construction, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. During construction, the County shall	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
	monitor noise levels to ensure they remain below 95 dBA measured 50 feet from the noise source.				
	NOI-1b: The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	NOI-1c: The construction contractor shall locate equipment staging in areas that will create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	NOI-1d: The construction contractor shall ensure that all general construction related activities are restricted to Monday through Friday between the hours of 7:00 a.m. and 6:00 p.m. Construction activities shall not be conducted on Saturdays, Sundays and holidays.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	NOI-1e: The Marin County DPW shall post an information sign at entrances to the construction zones easily visible to the public. The signs shall identify the permitted construction hours and the name, telephone number, and other pertinent contact information and list of responsibilities for the entity responsible for overall construction and noise management. The information signs shall also provide a means for members of the public to receive information about project construction. The County DPW shall record all noise complaints received and actions taken in response. Informational signs shall be posted for the duration of project construction.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	NOI-1f: The project manager shall be responsible for responding to any local complaints about construction noise. The project manager will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will determine and implement reasonable measures warranted to correct the problem.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
4.11 PUBLIC SERVICES AND UTILITIES					
PS-1: Construction of the proposed project would generate waste water and human waste that if not disposed of at the proper	PS-1a: In accordance with Mitigation Measure HYD-1, portable restroom and washroom facilities shall be located 50 feet away from drain inlets to prevent	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*

Table 1 *Continued*

Impacts	Mitigation Measures	Implemented By	When Implemented	Monitored By	Verified By and Date
facilities, could pose a public health impact.	accidental release of wastewater materials into these areas. A qualified biologist shall be consulted on location of such facilities prior to their placement.				
	PS-1b: Portable restroom and washroom facilities shall have secondary containment placed around them in order to contain wastewater materials in the event that a leak or accidental release should occur.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
	PS-1c: Portable restroom and wastewater facilities shall be monitored, maintained, and emptied on a regular basis to ensure that the facilities continue to function properly.	Construction Contractor	Throughout the construction period	Marin County DPW	*Verified by:* *Date:*
4.12 GLOBAL CLIMATE CHANGE					
GCC-1: Construction of the proposed project could generate substantial GHG emissions.	GCC-1: Consistent with draft guidance from the BAAQMD, the following best management practices shall be required of construction contracts and specifications for the project. • Alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet, as feasible; • Local building materials (within 100 miles) of at least 10 percent; and • Recycle at least 50 percent of construction waste or demolition materials.	Marin County DPW	Prior to issuance of a grading permit	Marin County DPW	*Verified by:* *Date:*

Source: LSA Associates, Inc., 2009.

SIR FRANCIS DRAKE BOULEVARD REHABILITATION PROJECT
AMENDMENT TO
FINAL ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NUMBER: 2008112004

prepared for:
Marin County
Department of Public Works

April 2011

prepared by:
John Roberto Associates
P.O. Box 31330
San Francisco, CA 94131

TABLE OF CONTENTS

1 INTRODUCTION

The following Final EIR Amendment contains responses to comments from agencies and individuals who submitted comments on the Final EIR for the Sir Francis Drake Boulevard Rehabilitation Project. It also includes an Errata page. It modifies the Final Environmental Impact Report to include the Errata.

Fifteen (15) comment letters from commentors on the Final EIR were received by the County Department of Public Works. They are included below along with responses to those comments. Each comment letter is assigned a number, from 1 through 15, and each comment is numbered in the margin of the comment letter. A complete list of comment letters is provided in Table 3-1 in Chapter 3 of this Amendment. Responses to the comments follow the letters, and responses are referenced using the same numeric system. For example the first comment from the first letter, from the National Marin Fisheries Service, is designated 1-1, as is the response to it.

2 ERRATUM

The following erratum identifies changes that have been made to the Final EIR. In each of two cases, exact text from the FEIR is shown and modified as necessary. Omitted text is shown in strikethrough mode and new text is shown in dark bold text.

Final EIR, Section 1.4 Public Review and Comment, 3rd Line

Change ~~October 27, 2008~~ to **October 27, 2009.**

Response A3-2 is edited as follows:

The tasks recommended by the commenter have been completed. Pacific Legacy prepared a technical report describing the methods, results, and recommendations of their cultural resources study. This report was submitted to the proper county planning authorities, and sensitive site information was treated as confidential. **Pacific Legacy, pursuant to an agreement to access the regional information center archives, submitted a copy of their cultural resources technical report to the Northwest Information Center in Rohnert Park. The report was submitted in 2009 and received an internal filing number of S-36630.** ~~The Pacific Legacy report will also be submitted to the Northwest Information Center.~~ The documentation for these tasks is included in *Archaeological Survey Report for the Sir Francis Drake Boulevard Improvement Project, Marin County, California* (Pacific Legacy 2009).

3 COMMENTS AND RESPONSES

A. *Introduction to Comments and Responses*

Comments on the FEIR were received from 15 parties, including agencies, local organizations and individuals. These parties are listed in Table 3-1. Comment letters received and responses to comments are included in this chapter. Multiple commenters submitted a form letter that contained the same comments. These commenters and the approach taken to these comments are identified in the response to Letter Number 11 below. The great majority of the comments address the merits of the Proposed Project and not the content of the Final EIR. Project merit comments are noted in the response to the comment.

Table 3-1 LIST OF COMMENTORS

Letter #	Agency/Name	Date Received	First Name	Last Name	Title
Government Agencies					
1	National Marine Fisheries Service	2/11/11	Dick	Butler	North Coast Supervisor
2	Marin Municipal Water District	2/07/11	Dain	Anderson	Environmental Coordinator
3	Town of Fairfax	2/07/11	Larry	Bergman	Mayor
Local Groups and Residents					
4	Marin Audubon Society	2/08/11	Barbara	Salzman	Co-chair
5	San Geronimo Planning Group	2/04/11	Jean	Berensmeier	Group Chair
6	Marin Conservation League	2/09/11	Nona	Dennis	President
7	Marin County Bicycle Coalition	2/07/11	Andy	Peri	Outreach Coordinator
8	Watershed Protection Network	2/07/11	Louis	Nuyens	President
9	Fairfax Resident	2/03/11	Jo	Carson RN	NA
10	Inverness Resident	2/09/11	Pamela Charles	Ross Gay	NA
Form Letters					
11	La Crescenta, CA Resident	3/03/11	Susan	Campana	NA
12	Norwalk, CA Resident	2/03/11	Lee	Baldwin	NA
13	Berkeley, CA Resident	2/02/11	Ruby	Wara-Goss	NA
14	Mountain View, CA Resident	2/02/11	Teresa	Gibson	NA
15	San Francisco, CA Resident	2/02/11	Heather	Christy	NA

COMMENT LETTERS

Letter #1

RECEIVED
FEB 11 2011
MARIN COUNTY
DEPARTMENT OF PUBLIC WORKS

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
777 Sonoma Ave., Room 325
Santa Rosa, California 95404-4731

February 9, 2011

In response, refer to:
2011/00337

Ernest Klock
Principal Civil Engineer
Marin County Department of Public Works
3501 Civic Center Drive, Room 404
San Rafael, California 94903

Dear Mr. Klock:

Thank you for your Notice of Availability of the Final Environmental Impact Report for the Sir Francis Drake Boulevard Rehabilitation Project. The Marin County Department of Public Works proposes to rehabilitate Sir Francis Drake Boulevard along the 5.2 mile section of roadway between Shafter Bridge and Platform Bridge Road in Marin County, California. The roadway rehabilitation project consists of pavement rehabilitation, drainage improvements, pullout improvements, and slope repair. The notice was received by NOAA's National Marine Fisheries Service (NMFS) on January 25, 2011. NMFS was not notified of a request for comments regarding the Draft Environmental Impact Report. Therefore, this letter is the first opportunity NMFS has had to comment on the project and is a response to the request for agency comments regarding the Final Environmental Impact Report. **1-1**

The following Federally listed species and designated critical habitat are present in Lagunitas Creek within the proposed project area: endangered Central California Coast (CCC) coho salmon (*Oncorhynchus kisutch*) and threatened CCC steelhead (*Oncorhynchus mykiss*). Activities associated with the proposed project that could affect listed salmonids and critical habitat include the removal of eight to17 trees, changes in roadway width and alignment, drainage modification and culvert replacement, and slope repair. Therefore, NMFS recommends the Marin County Department of Public Works implement measures that avoid or minimize impacts to listed salmonids into the final project description. These measures should include the utilization of best management practices that maintain water quality, limiting the extent of tree and riparian vegetation removal, and avoidance of in-water construction. If it is determined that the proposed project may affect listed species or critical habitat, consultation with NMFS will be necessary. **1-2**

Please contact Mr. Joseph Heublein at (707) 575-1251, or via e-mail at joe.heublein@noaa.gov should you have any questions.

Sincerely,

Dick Butler
North Central Coast Office Supervisor
Protected Resources Division

cc: Chris Yates, NMFS, Long Beach

Letter #2

MARIN MUNICIPAL WATER DISTRICT

220 Nellen Avenue Corte Madera CA 94925-1169
www.marinwater.org

February 7, 2011

Mr. Ernest Klock, Principal Civil engineer
Marin County Department of Public Works
3501 Civic Center Drive, Room 404
San Rafael, CA 94903

RE: Comments on the Final Environmental Impact Report for the proposed Sir Francis Drake Boulevard Rehabilitation Project (SCH 2008112004)

Dear Mr. Klock:

Marin Municipal Water District (MMWD) staff has reviewed the Final Environmental Impact Report (FEIR) for the County's proposed Sir Francis Drake Boulevard Rehabilitation Project. We are submitting the following comments for inclusion in the County's FEIR Administrative Record as well as for consideration by the Board of Supervisors as they proceed with review and potential certification of the document and evaluation of the project's merits.

Mitigation Measure Bio-9a: Measure Bio-9a identifies a site on MMWD land (referred to in the FEIR as the area below a drilled pier retaining wall near the Peters Dam plunge pool) as one possible location to partially or wholly satisfy mitigation to offset project impacts to native trees protected by the Marin County Tree Preservation Ordinance. MMWD has identified the location near the plunge pool as a priority to reestablish a thriving riparian habitat, and MMWD would not object to the planting of some trees as outlined in Measure Bio-9a. However, it is unlikely that there is enough land area at that location to accommodate all of the trees impacted by the project at a 3:1 replacement, especially projecting forward to those trees when they reach maturity. Further, the species of trees suitable for the area near the plunge pool may not be the same as those that would be impacted by the SFDB Rehabilitation Project. Also, MMWD cannot commit at this time to the care and maintenance of those trees for the 5-year period identified in Measure Bio-9a. MMWD reserves the right as property owner and steward of the Lagunitas Creek Watershed within MMWD's land holdings to accept or reject any offer by the County for the planting of trees on MMWD lands as identified in Measure Bio-9a. **2-1**

Mitigation Measure Bio-11b: Measure Bio-11b describes a site for the construction of a floodplain wetland habitat on land owned by the National Park Service. Measure Bio-11b could be interpreted by some that that floodplain wetland habitat project is a MMWD project. It is not. **2-2**

MMWD is one of many agencies and non-governmental organizations responsible for and participating in the stewardship of the entire Lagunitas Creek Watershed from the

system's headwaters to Tomales Bay. MMWD is one of several who have identified the construction of an approximately 0.75-acre floodplain wetland habitat as one possible project that could benefit the populations of coho salmon and steehead in Lagunitas Creek.

2-2 cont'd

MMWD did secure grant funding from the U.S. Fish and Wildlife Service for the preparation of topographic surveys, hydrologic analyses, and construction plans and specifications for the habitat project. MMWD's current involvement with that project will conclude in July 2011 with the preparation of site specific plans that could be used to implement habitat enhancement at that location.

Local National Park Service staff, representing the landowner, has indicated some interest in the project. However, there are no memorandums of understanding or other formal agreements for the construction of such a project between the National Park Service and a future un-named lead agency. There is no identified funding for construction of the project, although it is noted in Measure Bio-11b that the County proposes to provide the required funding and/or in-kind services for regulatory approval, construction, and follow-up monitoring and management to allow the project to be implemented. Another factor that the County should consider as it moves forward with potential certification of the FEIR is that there has been no evaluation of the floodplain wetland habitat project within the context of the California Environmental Quality Act or the National Environmental Policy Act to assess that project's potential impacts, and if required, mitigation.

We appreciate Marin County providing MMWD the opportunity to review and comment on the FEIR for the proposed Sir Francis Drake Boulevard Rehabilitation Project, and our staff is available to respond to any questions or requests for clarifications of the comments included in this letter.

Sincerely,

Dain Anderson
Environmental Services Coordinator

Cc: Paul Helliker, General Manager
Greg Andrew, Fishery Program Manager

Letter #3

TOWN OF FAIRFAX

142 BOLINAS ROAD, FAIRFAX, CALIFORNIA 94930
(415) 453 - 1584 / FAX (415) 453 – 1618

February 7, 2011

Ernest Klock,
Principal Civil Engineer
3501 Civic Center Drive,
Room 404
San Rafael, CA 94903

Re: The Final Environmental Impact Report (FEIR) on the proposed repaving of Sir Francis Drake Boulevard through Samuel Taylor Park (Camp Taylor) and portions of Golden Gate National Recreation Area

Dear Mr. Klock and others to whom it may concern:

The Town of Fairfax has concerns regarding aspects of the proposed project. Widening the roadway will result in increased speeds of traffic, potentially increasing the frequency and severity of accidents. Further, since the route is a regional arterial, widening the roadway and increasing average vehicular speeds could well result in increased growth in the area. Since the Town of Fairfax is the gateway to this stretch of road, we are concerned about any increase in traffic volumes, speeds or delays. **3-1** **3-2**

Additionally, the project area serves a recreational purpose for the residents of Fairfax, who use various informal pullouts along the route as parking to access the creek and numerous hiking trails. In the EIR it is stated: "Regularly spaced pullouts will be provided along the road and paved with permeable asphalt. The proposal is to sign the formalized pullouts as no-parking zones. Other areas along the roadway currently used as informal pullouts will be landscaped to prohibit their use as vehicle pullouts." In the full EIR, "placement of large boulders" is substituted for "landscaped". In effect this would result in no parking for the entire route, except for at Devils Gulch or the fee area at Camp Taylor. Currently, residents enjoy access to the inkwells, dozens of other creek-side spots, and numerous hiking trails along the route. On a hot summer's day, this is especially evident. **3-3**

The Fairfax Town Council, on behalf of its citizens, respectfully requests that you limit the proposed repaving project to just that, repaving the existing roadway within its current confines, after preparing the existing roadway in the proposed manner. We urge you not to pursue the second and third alternatives which would result in the additional removal of a significant number of heritage redwoods. The travel lanes should not be widened, in some cases narrowed, and efforts should be made to keep an area of repaved surface outside the "fog line" as much as possible, to both reduce travel speeds of cars, and provide some refuge for cyclists. 3-4

We further request that you refrain from including in this repaving project any plan to prevent public access to the "unofficial" pullouts which currently exist, or to the proposed "official" pullouts. 3-5

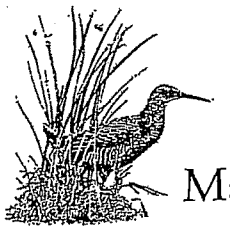
On behalf of the Fairfax Town Council,

John Reed
Fairfax Council Member

Larry Bragman
Fairfax Mayor

cc: Marin County Board of Supervisors

Letter #4



RECEIVED
FEB 08 2011
MARIN COUNTY
DEPARTMENT OF PUBLIC WORKS

Marin Audubon Society
P.O. Box 599 | Mill Valley, CA 94942-0599 | marinaudubon.org

February 4, 2011

Ernest Klock, Principal Civil Engineer
Marin County Department of Public work
3501 Civic Center Drive
San Rafael, CA 94903

RE: Sir Francis Drake Blvd. Rehabilitation Project Final EIR

Dear Mr. Klock:

The Marin Audubon Society appreciates your consideration of our comments on the final EIR for the Sir Francis Drake Rehabilitation Project. The Final EIR fails to provide adequate information, minimizes impacts, and does not adequately analyze the broader impacts. As has been expressed by numerous commentors, many of the environmental impacts would and/or could be significant and many of the mitigations are speculative or inadequate to reduce the impacts to a less than significant level. **4-1**

B4-1, 5, 6,11, and 33 - These responses indicate that CEQA does not require that the need for the project be addressed. Regardless of whether CEQA requires the "need" for a project to be addressed in an EIR, this is a public works project that is being paid for with public funds. Good public policy dictates that public agencies to justify expenditure of public funds particularly for large public works projects such as this. **4-2**

This response describes the project as "a pavement resurfacing and minor roadway alignment (that) would enhance public safety, as well as pedestrian and bicycle use while protecting the environment." A separate trail that parallels the entire length of the proposed roadway widening project can be used by pedestrians and bicyclist to get safely off the road. **4-3**

The significance of the roadway widening must be viewed in the larger context of the and ecosystem. In that context, the removal of 9 to 17 ancient native trees is indeed a significant potential adverse impact to endangered species and the creek. Resurfacing the road appears to be a legitimate need but could be accomplished without removal of ancient trees that would adversely impact habitat and risk erosion and other damage the creekbank. **4-4**

B4-2, 3 CEQA recommends a mitigation sequence that begins with avoidance. There is no evidence that avoidance has been considered at all. The impact/mitigation discussions all go immediately to minimization and compensation. **4-5**

B4-4 Texts, tables, and graphs and linking to mitigation measures do not provide any certainty Many of the impacts can be avoided and many of the proposed mitigation measures are speculative. **4-6**

B4-7 This response states "The project is a roadway rehabilitation project that incorporates drainage improvements....". The "drainage improvements" may result in adverse impacts to the creek from construction, placement of riprap and/or other stabilization methods. Impacts resulting from any part of the project should be identified and mitigation provided. Our recommendation, to avoid impacts, is that only those culverts that are experiencing failure be replaced. **4-7**

B4-8 Our comment was misinterpreted. We apologize for the unclear wording. We understand that the purpose of the pullouts would be for cars to pull out. Reducing sediment discharge was mentioned in the Draft EIR as a benefit which does not appear to be needed. Also, we question the need for pullouts. They would only serve to allow traffic to move faster. **4-8**

B4-9 Thank you for explaining the circumstances of the slope instability. We appreciate that the county would work with contractors to minimize tree damage, but that does not answer our question. We asked that a slope repair method to be developed that does not require the removal of eight native trees. We do not agree that this is not feasible. **4-9**

B4-10, 11, 29 We are surprised that the county and consultants do not agree that proposed roadway improvements - straightening, widening, smoothing the surface and constructing pullouts - would result in increased vehicle speed and reduce safety. Anyone (almost) who drives is aware that when roads are straight and smooth, people tend to drive faster. Faster speed would increase the potential for vehicle accidents and increase adverse impacts to wildlife trying to cross the road. This should be identified as an adverse impact of the project. Posting of speed limits is fine, but not fully effective in keeping speeds within the speed limit. A wide smooth road with good visibility is inviting for some people to travel fast under certain circumstances. **4-10**

The meaning of the response "The proposed project was never intended to provide separate improvements for all modes of transportation along the roadway alignment, b ut to make enhancements compared to the existing condition." The project would in fact encourage uses that duplicate the existing path that parallels with entire length of the proposed road widening project and that accommodates pedestrians and bicyclers. **4-11**

B4-12 The information is convincing that the roadway surface is deteriorating and that it would benefit the creek and roadway users to resurface. But the need for other components of the project, including pullouts, culverts, etc, is not clear. An Alternative that consists of resurfacing, replacing only damaged culverts and no tree removal should be developed. **4-12**

B4-14, 20 We are referred to Master Response 6 regarding tree removal. This discussion states that the significance of environmental effects is at the discretion of the lead agency and is based on evidence in the record and "reflects the independent judgment and conclusions" of the lead agency. In other words, the proponents/applicants of this project are determining the significance of the environmental effects. This can hardly be defined as independent judgment. The fact that the authors of the EIR agree, is not a surprise as they are hired by the county. **4-13**

The EIR fails to consider the potential localized impact of the loss of nine to 17 ancient trees on endangered spotted owl and coho salmon and on the unique ecosystem of the redwood forest and Lagunitas Creek, which would be significant. **4-14**

Mitigation proposed would allow payment into the County Tree Preservation fund, which would allow trees to be replaced outside of the project area. This would not provide adequate mitigation because the species that currently depend on these trees, would lose habitat, and the other ecological benefits provided by the trees would be lost. **4-15**

B4-15 Faster moving vehicles on a wider paved road (although minor in the consultants view) would increase the impacts to wildlife trying to cross the road. The risk to wildlife would increase. A four foot widening plus pull outs in some sections, although considered minor by the consultants, is significant on a two lane road. We question how rapidly the vegetation that would be removed would reestablish. Unvegetated sections of the road edge would increase the impact for wildlife because they would not have a place to hide. Also removing vegetation would open pathway for invasion of exotics. Retaining walls would present another obstacle, which would contribute to the cumulative significance of this impact. **4-16**

B4-16 It is unclear to us how the bioswales would be located. Would they be on the creek side of the road or hillside? **4-17**

B4-18 The risk of the project to salmonids that depend on the creek depend as stated on the project and any mitigation measures being." The project adjacent to and in this salmonid stream habitat is not worth the risk of damaging this endangered species Creek, one of the few remaining coho salmon streams in the state. **4-18**

B4-19, 22 The very process of working on the creek bank has the potential to cause erosion and generate new sediment and bank problems. While redwood roots may live longer than other tree roots they will not provide the ecosystem services that a live tree would. It is also unclear whether the tree stump would be covered with road surface material so that it could not resprout. **4-19**

B4- 23 The EIR may have been prepared by a "team of environmental professionals and technical experts" but these "experts" are employed by the proponents of the project. It is not unheard of that the position of the employer influences of the position taken by the consultant. In fact, statements throughout the responses emphasize that the consultants and the county are in agreement on all aspects of the plan. **4-20**

B4-26 The discussion here and Master Response conveys the impression that the project can or will implement the project at Tocoloma taken from the *Lagunitas Creek Salmon Winter Habitat Enhancement Program.* While DPW may desire to use the project described in Master Response 10 as mitigation, MMWD has not approved this rehabilitation Project as mitigation. Actually, there has been no environmental review for that restoration project nor has a plan even been prepared, so currently it is a non-project. **4-21**

Regarding the need for a monitoring program for invasive species, the project will remove existing vegetation, opening up areas that are currently vegetated. These are precisely the kind of areas that exotic plants invade. A monitoring program that lasts until native vegetation colonizes the denuded areas is imperative. Because invasive species already exist along the roadway does not alleviate the need for this mitigation. To the contrary, it increases the need. A monitoring and removal program for invasive plants is imperative. **4-22**

B4-27 This response list activities for which adverse impacts could result, and then goes on to indicate that potential impacts have been identified based on a threshold of significance in the CEQA Guidelines, and the Marin County Environmental Review Guidelines. This indicates that some impacts were not, in fact, identified and addressed. This is an inadequate response to our our question. In particular, the potential impacts of placement of the culvert, particularly placement of bank stabilization, and retaining walls are not adequately addressed, and we request that they be described and analyzed. **4-23**

B4-30 This response claims that marginal seasonal wetlands would be replaced with higher quality wetlands. There is no explanation provided that the existing wetlands are marginal, nor is there even an explanation of what marginal means. Further, as no specific mitigation project is even provided, there is no way to judge whether or not the replacement wetlands would provide the same ecological services as the current wetlands nor is there any certainty that they would be of higher quality. **4-24**

The existing wetlands may provide water quality benefits for example. Those benefits would be lost if the mitigation wetlands are not constructed in the same area.

Many studies have demonstrated the overall lack of success of most wetland mitigation projects. It is always safer to keep the wetlands that are existing instead of risk the "promise" of something better.

Thank you for considering our comments. We look forward to the merits hearing on the project.

Sincerely;

Barbara Salzman, Co-chair
Conservation Committee

Phil Peterson, Co-chair
Conservation Committee

Letter #5

Feb. 4, 2011
Marin County Development Agency
Ernest Klock, Principal Civil Engineer
3501 Civic Center Drive, Room 404
Re: Final EIR SF Drake Blvd. Rehab Project

Dear Mr. Klock
Thank you for the opportunity to comment. This Final EIR has arrived along with two other projects that require short turnarounds. This has stretched our volunteer availability very thin. With that said, here are our comments that are brief, to the point and will meet your deadline.

Sincerely,
Jean Berensmeier
SGV Planning Group Chair

BACKGROUND
I was invited to attend the March 2007 tour along with consultants, Department heads, Supervisor Kinsey and regional and organization representatives. Farhad Mansourian noted that this is the #1 "complained about" section of road in the county and welcomes the challenges of preserving this environmentally sensitive area while making it safe for drivers and cyclists. Supervisor Kinsey referred to this area as "our Yosemite" and stated he was seeking to "calm" traffic and was not supportive of road widening.

Heartened by this, I attended the tours and subsequent meetings as a "community activist". In 2009, I became chair of the SGV Planning Group and continue in that capacity. Our group has informed our growing membership of the nature of the project and kept them informed of the progress of the project through our monthly Newsletter.

First, and foremost, Samuel P. Taylor State Park was purchased to preserve and protect the redwoods, salmonid habitat, plants and wildlife unique to this area. With that bias as the foundation to guide us in our review of the document we added our concerns about the condition of the road that threatens the health and safety of occupants of autos and trucks, cyclists and pedestrians.

COMMENTS
Option A: Should be deleted from any further consideration. We do not support the removal of any redwoods along the road with the exception of some in the proposed slope repair near Shafter Bridge for reasons specified later. Originally 23 redwoods and 1 oak were recommended to be removed in order to widen the entire road to 11' and provide a 3' consistent shoulder. (In this document the redwood tree removal proposal dropped to 9.) Tree removal would not only destroy a precious resource and negatively impact the creek, it would speed up traffic increasing the danger to both motorists and cyclists. The 3' shoulder does not help road bicyclists who travel too fast to be limited to

5-1

P. O Box 57, Forest Knolls, CA 94933

or expected to ride within a 3' shoulder. Cyclists are vehicles and have the legal right to use the road width and the responsibility to be respectful of vehicles faster than themselves. Cyclists will use the shoulder occasionally to accommodate a driver or for safety. A 3' wide consistent shoulder will also infringe on tree roots and riparian habitat. Removal of some redwoods would remove the shield they provide from impacts of light and glare on campgrounds and trails by vehicles. It is worthy to note that removal of this option from consideration will prevent a huge public outcry. 5-1 Cont'd

Alternatives:
No Project Alternative: Unacceptable. The road is exceedingly dangerous for all users.

Resurface Roadway Alternative: Unacceptable. The knowledge we have today compared to the knowledge used when this road was put in is significant. "Same old, same old" exacerbates the safety and environmental problems. 5-2

Mitigated Roadway Alternative: This alternative will meet the goals of the project by protecting the environment while addressing the safety needs of drivers and cyclists. It is similar to the Proposed Project below except for the inclusion of cement walls.

Proposed Project: This proposal extends the rural experience through the Valley into the redwoods experience through Taylor Park. The mitigations proposed would result in a favorable project as described beginning on pg. 73. It would have the following features we support – not in order of priority:

1. There would be no redwood tree removal with the exception of the unique slope repair problem noted elsewhere. This is the appropriate action to protect this resource. Sprouts at the base of redwoods next to the road/shoulder must be monitored and removed annually to assist in safety. Any tree or large shrub removal should be considered for replacement elsewhere or used as woody debris rather than removed from site.
2. A meandering shoulder. This will help to protect the trees that are adjacent to the road and still allow opportunities for use by cyclists when extra safety security is needed. The shoulder base must be adequate to support use and the edges reinforced to prevent deterioration.
3. An 11' wide roadway. . We are pleased that this improvement does not include widening or straightening that results in increased speeds.
4. Pavement rehabilitation - We are appreciative of the creative idea to crush the existing concrete and use it in place as a base rather than suffer the expense and polluting aspects of trucking it off site. And our fish residents will welcome creating a permeable layer that improves water quality. Reducing the potential for hydroplaning is important for vehicle safety and reducing vehicle noise will be welcomed by park visitors whose camp sites are near the road.
5. Pullouts – One pullout in each direction would be appropriate in this five mile stretch for horse trailers, large trucks, recreational vehicles or extremely slow drivers. The pullout must be long enough and located where it does not impact the stream bank, has the proper surfacing and slope and has minimal impact on 2

adjacent vegetation. Unless signage is a regulation problem signage s
used to prevent using this space for parking, social pullouts and subse
trails that impact the stream bank and creek. All detrimental pullouts
eliminated (along with social trails) and revegetated,

6. Drainage improvements. Replacing the existing culverts is critical an
include repair and planting of banks disturbed by the replacement pro
reducing the erosion process. The timing of planting and efforts to as
survival must be scheduled and monitored.
7. Slope repair. Regretfully, after reviewing all the options to solve the problem in this area near Strafter Bridge we find that all will significantly impact the environment. Reluctantly, we believe that the 8 trees designated for removal is the best option for the creek, the fish, the stream bank and user safety. We would request a revisit, if possible, to see if the redwoods involved could be saved as slope repair progresses. If redwoods cannot be saved is there a possibility to preserve them with root ball intact for placement elsewhere?

5-2 Cont'd

Note:

A. 3' cement walls – We note that 3' cement walls are included in the Proposed Project description but eliminated in the Mitigated Roadway Alternative. We ran out of time trying to understand the reason for the difference. While we are not in favor of any cement walls we might consider supporting low walls in order to prevent more cuts that might require higher walls or have other impacts.
B. Areas of Controversy – We will monitor these five potential areas of controversy as this project moves forward.

UNFINISHED BUSINESS

Some mitigation details related to the following that we were unable to explore more thoroughly include:

1. Using permeable surfacing for ditches appear beneficial. Toxins and safety may be issues.
2. Swales and buffers. They will require on going monitoring and maintenance.
3. Certainty of protection of bird nesting and rearing of young by resident and migratory birds, salmonid eggs, fry and smolts as well as mammal dens during work/construction.
4. Adequate environmental training of work crews to implement #3 above.
5. Cement treated permeable base – to assure that no toxins escape to riparian habitat and creek.
6. Adequacy of wetland/floodplain proposed to mitigate for loss of swales.
7. Construction schedule. Public information program to be coordinated with the SGV Planning Group.

5-3

We recognize that some of these issues may be resolved during the implementation process through the county's stormwater management program regardless of mitigation measures.

P. O Box 57, Forest Knolls, CA 94933

Letter #6

MARIN CONSERVATION LEAGUE

February 7, 2011

Ernest Klock, Principal Civil Engineer
Marin County Dept. of Public Works
3501 Civic Center Drive, Rm. 404
San Rafael, CA 94903

Re: Sir Francis Drake Boulevard (SFDB) Rehabilitation Project Final Environmental Impact Report

Dear Mr. Klock:

Marin Conservation League has reviewed the subject FEIR and wishes to comment on its adequacy for certification. In general, the FEIR provides sufficient information to enable the County to make an informed decision in selecting the least environmentally damaging alternative ("Environmentally Superior Alternative") and rejecting Option A. **6-1**

The added information in the FEIR Master Responses adequately covers construction related impacts and offers more information on post-construction impacts and mitigations. The latter analysis was one of the deficiencies in the DEIR. Our three lingering concerns are 1) that mitigation measures be feasible and sufficient to ensure that pollutants will not reach Lagunitas Creek throughout the roadway's 30-year design life; 2) that monitoring of all mitigation measures be carried out objectively and, where warranted, for the long term; and 3) that the loss of mature redwood trees under Option A cannot be mitigated to levels of insignificance. **6-2**

1. Maintaining the long-term health of the Lagunitas Creek habitat is of paramount importance. The DEIR devoted most of its analysis to construction-related impacts but also admitted that "in the absence of a proper long-term maintenance program . . . the proposed project could cause a significant adverse impact to salmonids in Lagunitas Creek due to a gradual decline in runoff water quality under post project conditions." The FEIR Master Responses #9 and #11 claim that, with implementation of mitigation measure HYD-1b, the project would likely improve runoff water quality compared to the existing conditions. HYD-1b lists design features intended to address water quality and habitat concerns in Lagunitas Creek: lay a permeable friction course, use permeable asphalt for pull-out areas, install vegetated buffer strips and vegetated swales/sand filters. The FEIR gives the impression that the bioswales will be adequate to prevent ponding on the roadway. Equally important is their purpose in ensuring that no sediment or toxic runoff from the roadway enters the creek. It may be necessary, as noted in the added mitigation measure HYD-1 b(5), to provide subsurface storage ("sumps"?) to control discharge of increased runoff volume and thereby prevent pollutants from direct discharge to the Creek. Mitigation measure BIO-5b responds to the need for post-construction, long-term inspection and maintenance of roadside bioswales in accordance with a long-term SWMP to be prepared. We wish to echo the concern of the San Francisco Region RWQCB (Comment A-31) that the bioswales, to function properly, must act as unclogged, porous sand filters. These conditions could be compromised by frequent sloughing of unstable slopes. To keep bioswales performing properly will require an extra measure of maintenance that should be reflected in the SWMP.

PHONE: 415.485.6257
FAX: 415.485.6259
EMAIL: mcl@marinconservationleague.org
URL: www.marinconservationleague.org
ADDRESS: 1623-A Fifth Avenue
San Rafael, CA 94901

An additional point: Gravel transport is mentioned as only a secondary consideration in the design of the culverts for this project. In the case of the Cross Marin Trail rehabilitation along Lagunitas Creeek, gravel transport is a key design element, in order to help restore the gravel beds of the creek during major storm events. Should this not also be an objective in the design of culverts and their outfalls for this project? **6-4**

2. With the exception of a professional archaeologist and consulting botanist for a few selected mitigation measures, the Mitigation Reporting and Monitoring Program is wholly reliant on the Marin County Department of Public Works for implementation. The DPW is also the "applicant/sponsor" of the project. Despite best intentions and qualified staff, this dual role sets up inherent conflicts of interest in the execution of the project to meet construction timelines and to complete the project within budget. Proper mitigation monitoring should involve some independent entity or contractor whose responsibility is to ensure that the project meets its *quality* control standards, i.e., completes all the mitigations to the highest environmental standards. For example, while RWQCB and MCSTOPP are cited as entities that must pass on the mitigation plans and mitigation implementation, they do not appear to be involved in monitoring the results of the work. In our opinion, the organization of this project should include an objective third party to oversee the effective conduct of the MMRP. **6-5**

3. We continue to question the necessity of removing eight sizeable redwoods (nine trees in all) under Option A and the facile dismissal of significant impact of their removal by means of off-site compensatory mitigation. The proposed approach, while a worthy enhancement of riparian habitat with its own benefits, does not replace the stature, maturity, or habitat value of the trees removed. Avoidance, where it is feasible as in this case, is always the preferred form of mitigation. Since wetland impacts are scattered in the project area, we support the proposed compensatory mitigation approach in that instance. **6-6**

Thank you for this opportunity to comment.

Nona Dennis

Nona Dennis, President

ADV_POS_SFDBREhabFEIR_02.07.2011

Letter # 7

MCBC
MARIN COUNTY BICYCLE COALITION

www.marinbike.org

V 415 456 3469
F 415 456 9344
733 Center Blvd.
Fairfax, CA 94930

February 7, 2011

Mr. Dave Bernardi
Marin County Department of Public Works
3501 Civic Center Drive- Room 404
San Rafael, CA 94903

Re: Sir Francis Drake Boulevard Rehabilitation Final EIR Comments

Dear Mr. Bernardi:

The Marin County Bicycle Coalition is pleased to submit comments for the Sir Francis Drake Boulevard Rehabilitation Project's Final Environmental Impact Report. As indicated in previous comments, the Marin County Bicycle Coalition wishes to maximize safety throughout this corridor for bicyclists and all other users, while maintaining its beauty and minimizing adverse impacts to the ecological environment. **7-1**

The Marin County Bicycle Coalition supports the Proposed Project as described in the Final EIR but *without* Option A. The Proposed Project will provide a dramatically improved roadway surface with smooth and consistent asphalt and increased shoulder width where possible. Option A would provide some increases of shoulder width by removing several large redwood trees without substantial safety benefit for bicyclists.

In general, MCBC requests that the Project provide maximum possible shoulder widths throughout the project area within the constraints allowed in the Proposed Project. We understand that automobile lane widths will be 11 feet, which will yield shoulder widths varying from 0-4 feet throughout the 5.2-mile project length as shown in Table 3.4.B in the Final EIR. **7-2**

As specified in our June 18, 2010 DEIR comments, the Marin County Bicycle Coalition requests that the County ensure that the interface between the rehabilitated asphalt roadway and permeable asphalt turnouts be smooth and consistent. A ridge or lip between the roadway surface and the turnouts would create a

7-2
Cont'd

hazard for bicyclists. It is critical that these interfaces be maintained over time so that such hazards do not arise in the future.

We appreciate the opportunity to comment on this Final EIR and look forward to working with the County during construction to protect the safety of all users in this corridor while ensuring minimum negative impacts to the ecological environment.

Sincerely,

Andy Peri, Advocacy & Outreach Coordinator
Marin County Bicycle Coalition

Letter # 8

Gmail by Google

David Bernardi <dbernardi61@gmail.com>

FW: WPN Comments on SFD Rehab FEIR -- 07 February 2011

1 message

Taylor, Tammy <TTaylor@co.marin.ca.us> Mor
To: John Roberto <jraplan@sbcglobal.net>, Dave Bernardi <dbernardi61@gmail.com>

FYI:

From: Louis Nuyens [mailto:Lou@wpn.org]
Sent: Monday, February 07, 2011 4:00 PM
To: Klock, Ernest
Cc: Taylor, Tammy; Elena Belsky
Subject: WPN Comments on SFD Rehab FEIR -- 07 February 2011

Dear Mr. Klock,

Watershed Preservation Network (WPN)-a Marin-based 501c3 nonprofit organization focusing on educ environmental issues from watershed-based perspectives-appreciates the opportunity to comment on th Boulevard Rehabilitation Project Final Environmental Impact Report, State Clearing House Number 2C 2011."

It is WPN's belief that the January 2011 Final EIR for the "SIR FRANCIS DRAKE ROADWAY REH **8-1**
PROJECT" is inadequate because it fails to adequately examine alternatives in which bicycle traffic ne multi-purpose trail that runs adjacent to the proposed roadway project and that has served bicycle and p decades.

The multi-purpose trail adjacent to the proposed roadway project is considered part of the "Cross Marir from Shafter Bridge at its East end, connecting safely via an established overpass to paved portions of t at its West end.

The unpaved multi-purpose trail is currently adequate for simultaneously serving pedestrian and bicycl both mountain bicycles and road bicycles. If necessary, we believe that the trail could be improved whi permeable surface and without significant environmental detriment.

Use of the adjacent multipurpose trail to meet the needs of bicycle traffic has several significant advant **8-1 Cont'd**

* Substantial safety advantages for bicyclists and motor-vehicles, relative to sharing the Sir Fran roadway;

* Reducing environmental impacts by eliminating the need to widen the paved roadway to includ on either side of the motor vehicle lanes;

* Reducing the need for maintenance activities that would be required for roadway safety by rem vegetative debris from a bicycle path on Sir Francis Drake Blvd., particularly on the "inboard" (u the roadway, where vegetative debris current accumulates in the existing bicycle lane and, more drainage ditch to where the bicycle lane might be relocated.

WPN believes that bicycle traffic along the road segment of the proposed project should be diverted aw of Sir Francis Drake Blvd. between Shafter Bridge and Platform Bridge Road, and onto the Cross Mari this to be a significantly superior choice, relative to the EIR Alternatives, in terms of improving safety environmental impacts. Until this EIR contains analysis of one or more Alternatives based on this scen is deficient.

WPN requests that this EIR be amended with analysis of one or more Alternatives in which the needs c **8-2** along the route of the proposed roadway project are met by diverting bicycle traffic onto the Cross Mar

Thank you.

Louis Nuyens

President

Watershed Preservation Network

Letter # 9

February 1, 2011

Jo Carson RN
36 Scenic Road
Fairfax, CA 94930

Ernest Klock,
Principal Civil Engineer
3501 Civic Center Drive,
Room 404
San Rafael, CA 94903

Dear Mr. Klock and others to whom it may concern;

Regarding the Final Environmental Impact Report (FEIR) on the proposed repaving of Sir Francis Drake Boulevard through Samuel Taylor Park and portions of Golden Gate National Recreation Area:

I object to the following statement, p. 282, bottom paragraph of FEIR:

"No official or designated parking areas are located within the project area due to the extremely narrow shoulders along a majority of the roadway route. There are numerous unpaved areas along SFDB that are used by vehicles to pull off of the roadway. Many of the existing pullouts are too small to safely accommodate a vehicle. The proposed project would remove these "unofficial" pullouts and provide paved pullouts to increase safety along SFDB." 9-1

and to the following, from the Notice of Availability of FEIR, dated 1/21/2011;

"Regularly spaced pullouts will be provided along the road and paved with permeable asphalt. The proposal is to sign the formalized pullouts as no-parking zones. Other areas along the roadway currently used as informal pullouts will be landscaped to prohibit their use as vehicle pullouts."

Since the time Europeans have lived in the San Rafael/Ross Valley corridor, we have traveled at times to the Olema/Bear Valley/Coast area. We have often taken some time on the way for a break to sit on a rock or creekside, enjoying a time of reflection or perhaps a picnic. The above-described removal of unofficial pullouts along Sir Francis Drake, plus the planned landscaping to prevent parking in the "official" pullouts, constitutes a "taking away" from the public of this valuable and delightful historical activity.

The EIR describes this as being done to "increase safety". However, since members of the public have historically had the right to choose for themselves whether or not to park in these places, we, the public, have also had the right to choose for ourselves whether to take whatever chances might be involved.

9-1
Cont'd

While some of the pullouts are narrow, some are not; while there may be a government body that has, in its goal of avoiding lawsuits, defined what is and what is not "safe", there are certainly pullouts along Sir Francis Drake in this area that have been used for decades with no adverse effect.

It is not appropriate for the government to take away from the public a right that we have historically exercised, and which is clearly popular.

I request that you refrain from including in this repaving project any plan to prevent public access to the "unofficial" pullouts which currently exist, or to the proposed "official" pullouts.

Yours truly,

Jo Carson, RN

Letter # 10

60 Drake Summit Rd
Inverness, CA 94937
Feb. 1, 2011

Ernest Klock
3501 Civic Center Dr, Room 404
San Rafael, CA 94903

Re: FEIR for Sir Francis Drake Blvd Rehabilitation Project

Dear Mr. Klock,

We write to comment on this FEIR as homeowners in Inverness who regularly drive Sir Francis Drake Blvd in the rehabilitation area.

We are happy to learn that the badly deteriorated roadway will finally be resurfaced, and that runoff into Lagunitas Creek will be lessened.

In general, the FEIR looks very good. We support the repair of the unstable slope at Station 270+00, even at the cost of the removal of two small redwoods. But we are opposed to Option A because it involves the removal of 8 redwoods. We urge you to save these trees and instead to sign the places where trees are very close to the road. **10-1**

In addition, we suggest that the existing bike path (the Cross-Marin Trail) be paved for its entire length where it parallels the rehabilitation area, and that bicycles be banned from Sir Francis Drake Blvd entirely on this stretch. As long as there is a good alternative, we see no reason why bicycles should be allowed to use the roadway. They are the main hazard to driving this stretch. Signs could be posted at Tocaloma and at Shafter Bridge, saying "All bicycles must exit here." **10-2**

Thank you for your consideration,

Pamela M. Ross
Charles W. Gay

Letter # 11

From: David Bernardi <dbernardi61@gmail.com>
Subject: **Fwd: Protect Samuel P. Taylor State Park**
Date: March 3, 2011 9:22:40 PM PST
To: John Roberto <jraplan@sbcglobal.net>

John,

another State PArk Foundation letter although very late

Dave

-------- Forwarded message --------
From: **Klock, Ernest** <EKlock@co.marin.ca.us>
Date: Thu, Mar 3, 2011 at 6:12 PM
Subject: Fwd: Protect Samuel P. Taylor State Park
To: Dave Bernardi <dbernardi61@gmail.com>

FYI

Ernest Klock
Principal Civil Engineer
Marin County Public Works
3501 Civic Center Dr., San Rafael, CA 94913
Ph: (415) 499-6552 Fax: (415) 499-3724

Begin forwarded message:

From: Susan Campana <campanaclan@sbcglobal.net>
Date: March 3, 2011 5:55:04 PM PST
To: eklock@co.marin.ca.us
Subject: Protect Samuel P. Taylor State Park
Reply-To: Susan Campana <campanaclan@sbcglobal.net>

Mar 3, 2011

Ernest Klock
CA

Dear Klock,

I'm writing today to express my concern over the Sir Francis Drake Boulevard Rehabilitation Project, SCH #2008112004. The proposed project has the potential for significant impacts that threaten protection of Samuel P. Taylor State Park and water quality in Lagunitas Creek.

Samuel P. Taylor State Park is a priceless and irreplaceable state park treasure, featuring countless hiking trails and numerous plant and wildlife. In fiscal year 2008-09, Samuel P. Taylor hosted over 200,000 visitors.

11-1

Dear Marin County,

I'm writing today to express my concern over the Sir Francis Drake Boulevard Rehabilitation Project, SCH #2008112004. The proposed project has the potential for significant impacts that threaten protection of Samuel P. Taylor State Park and water quality in Lagunitas Creek.

Samuel P. Taylor State Park is a priceless and irreplaceable state park treasure, featuring countless hiking trails and numerous plant and

wildlife. In fiscal year 2008-09, Samuel P. Taylor hosted over 200,000 visitors.

Safety is an important concern, but should not override sound environmental policy. I urge you to consider the short and long term environmental consequences and impacts to Samuel P. Taylor State Park and develop a balance between the needs of road improvements and strong protection of California's natural resources.

Sincerely,

Mrs. Susan Campana
4708 Briggs Ave
La Crescenta, CA 91214-3109
(818) 248-8255

11-1 Cont'd

Letter # 12

Feb 3, 2011

Ernest Klock
CA

Dear Klock,

I'm writing today to express my concern over the Sir Francis Drake Boulevard Rehabilitation Project, SCH #2008112004. The proposed project has the potential for significant impacts that threaten protection of Samuel P. Taylor State Park and water quality in Lagunitas Creek. **12-1**

Samuel P. Taylor State Park is a priceless and irreplaceable state park treasure, featuring countless hiking trails and numerous plant and wildlife. In fiscal year 2008-09, Samuel P. Taylor hosted over 200,000 visitors.

Please protect the State Park while doing road repairs or upgrades. That means NO NOISY LARGE TRACTORS rumbling.

Safety is an important concern, but should not override sound environmental policy. I urge you to consider the short and long term environmental consequences and impacts to Samuel P. Taylor State Park and develop a balance between the needs of road improvements and strong protection of California's natural resources.

Sincerely,

Mr. Lee Baldwin
11532 Liggett St
Norwalk, CA 90650-4715

Letter # 13

Ernest Klock
CA

Dear Klock,

I'm writing today to express my concern over the Sir Francis Drake Boulevard Rehabilitation Project, SCH #2008112004. The proposed project has the potential for significant impacts that threaten protection of Samuel P. Taylor State Park and water quality in Lagunitas Creek.

Samuel P. Taylor State Park is a priceless and irreplaceable state park treasure, featuring countless hiking trails and numerous plant and wildlife. In fiscal year 2008-09, Samuel P. Taylor hosted over 200,000 visitors. **13-1**

Please strike another balance than what has been put forth. Proper environmental policy is essential to formulating the impact of the area.

Safety is an important concern, but should not override sound environmental policy. I urge you to consider the short and long term environmental consequences and impacts to Samuel P. Taylor State Park and develop a balance between the needs of road improvements and strong protection of California's natural resources.

Sincerely,

Ms. Ruby Wara-Goss
1620 Harmon St
Apt C
Berkeley, CA 94703-2635

Letter # 14

Ernest Klock
CA

Dear Klock,

I'm writing today to express my concern over the Sir Francis Drake Boulevard Rehabilitation Project, SCH #2008112004. The proposed project has the potential for significant impacts that threaten protection of Samuel P. Taylor State Park and water quality in Lagunitas Creek. **14-1**

Samuel P. Taylor State Park is a priceless and irreplaceable state park treasure, featuring countless hiking trails and numerous plant and wildlife. In fiscal year 2008-09, Samuel P. Taylor hosted over 200,000 visitors.

Our forests and watersheds are crucial to the health and beauty of California. Please respect the wild lands and understand the great value they give to our well-being.

Safety is an important concern, but should not override sound environmental policy. I urge you to consider the short and long term environmental consequences and impacts to Samuel P. Taylor State Park and develop a balance between the needs of road improvements and strong protection of California's natural resources.

Sincerely,

Ms. Teresa Gibson
325 W Dana St
Mountain View, CA 94041-1335

Letter # 15

Feb 2, 2011

Ernest Klock
CA

Dear Klock,

I'm writing today to express my concern over the Sir Francis Drake Boulevard Rehabilitation Project, SCH #2008112004. The proposed project has the potential for significant impacts that threaten protection of Samuel P. Taylor State Park and water quality in Lagunitas Creek.

Samuel P. Taylor State Park is a priceless and irreplaceable state park treasure, featuring countless hiking trails and numerous plant and wildlife. In fiscal year 2008-09, Samuel P. Taylor hosted over 200,000 visitors. **15-1**

Please protect Samuel P. Taylor Park. If we allow these changes to occur, there is no going back.

Safety is an important concern, but should not override sound environmental policy. I urge you to consider the short and long term environmental consequences and impacts to Samuel P. Taylor State Park and develop a balance between the needs of road improvements and strong protection of California's natural resources.

Sincerely,

Ms. Heather Christy
39 Hartford St
San Francisco, CA 94114-2013

RESPONSES TO COMMENT LETTERS

LETTER 1
National Marine Fisheries Service
February 9, 2011

1-1 The National Marin Fisheries Service (NMFS) was mailed a Notice of Completion (NOC) of the Draft EIR and the NMFS was also mailed a Memorandum containing a CD of the Draft EIR and Appendix. The NOC and Memorandum were addressed to Regional Supervisor, 777 Sonoma Avenue, Santa Rosa, CA 95404. A copy of the Memorandum and the mailing list including the address are on file at the Marin CDA office Room 308. The documents mailed to the NMFS were not returned to the County, and the County did not receive any comments from the NMFS on the Draft EIR.

1-2 Should the Marin County Board of Supervisors approve a roadway rehabilitation project. All mitigation measures recommended in the Final EIR and the Mitigation Monitoring and Reporting Program will be incorporated into any decision to approve a project rehabilitating the roadway. The mitigation measures recommended in the Final EIR include the utilization of best management practices that maintain water quality and avoidance of in-water construction. Mitigation measures require the County Department of Public Works(DPW) to consult with the USF&WS and CDF&G concerning any potential impacts on listed species or critical habitat. If there is a potential impact on listed species or critical habitat the County DPW will consult with NMFS.

LETTER 2
Marin Municipal Water District
February 7, 2011

2-1 MMWD's comment that they cannot commit to care and maintenance of any trees planted as mitigation is noted. The Mitigation Monitoring and Reporting Program included in the Final EIR requires the County of Marin to implement BIO-9a and not MMWD. The statement that MMWD reserves the right as property owner to accept or reject any offer by the County to plant trees on MMWD land is already recognized in Mitigation Measure BIO-9a. The last paragraph of the mitigation measure reads: "*Prior to the start of roadway construction, DPW shall identify the final planting location(s) and receive approval from MMWD if necessary. If suitable re-planting location(s) cannot be found and agreed to by the affected public agency property owners, then DPW may contribute the required monetary amount into the Marin County Tree Preservation Fund, as specified under the tree protection ordinance*". Therefore if MMWD does not accept the proposed tree planting plan the County's Tree Protection Ordinance provides for a monetary contribution to the Tree Preservation Fund if new tree planting is not feasible. Furthermore, some public agency projects are exempted from the tree removal and replanting requirements of the ordinance. Section 22.27.040(k) of the Tree

Preservation Ordinance may exempt the proposed project from the provisions of the ordinance.

2-2 BIO-11b was formulated in consultation with MMWD staff (Greg Andrews). MMWD's comment that construction drawings will be completed in July, and the District's involvement in this segment of the Winter Habitat Enhancement Program is consistent with the mitigation measure. BIO-11b also recognizes that the potential project is a work in progress. The Funding Status subsection of the mitigation measure reads: "The project has received funding only for detailed topographic surveys, site assessment work and construction plan preparation. The project does not have funding for regulatory approval, construction or follow-up monitoring and management. As mitigation for the SFDB project, the Marin DPW proposes to provide the required funding and/or in-kind services for regulatory approval, construction and follow-up monitoring and management to allow the project to be implemented."

The County is aware that there bas been no evaluation of the floodplain wetland habitat project within the context of CEQA or NEPA. The potential affects on existing wetlands within the mitigation area (if any) and proposed mitigation measure must be reviewed and authorized by the US Army Corps of Engineers (USCOE). The Corps in compliance with NEPA will complete a Environmental Assessment to determine if the creation of the proposed mitigation will result in any impacts on the environment, and the Corps will have to satisfy NEPA before the County can receive authorization to proceed with the mitigation. Furthermore, the Regional Water Quality Control Board and California Department of Fish and Game, in their evaluation of the proposed project and wetland mitigation under Section 401 and Section 1600, must ensure that the project complies with CEQA before granting the permit.

LETTER 3
Town of Fairfax
February 7, 2011

3-1 This issue was addressed in the Responses to Comments (Response B4-29 on page 92) The response reads: "*The EIR authors and the County do not agree with the commenter's assumption that rehabilitation of the roadway under the proposed project would result in increased speeds along the project alignment. The traffic impact analysis (pages 285 through 291) in the Draft EIR concluded that the proposed project would not result in an increase in traffic through the project area and that proposed roadway improvements would make vehicular traffic movement easier and safer. The resulting improvements in traffic flow and the provision of properly designed formalized pullouts are expected to reduce the urge for faster moving traffic to pass slower moving traffic, thereby reducing the need for vehicles to accelerate at higher speeds to pass the vehicle in front of them. Safe roadway speed limits are posted along the roadway and all licensed drivers are required by law to comply with the posted speed limit. Some drivers*

may feel that an improved roadway provides an opportunity to travel at a higher speed than posted. However, this is not an impact of the proposed project, but a matter of perception by the driver of the vehicle. Furthermore, no substantial evidence was presented in the comment to support the opinion that the proposed roadway rehabilitation will result in higher vehicle speeds (CEQA Guidelines Section 15384)".

3-2 The Final EIR concluded on page 355 that the proposed project would not result in increased growth in the area or nearby communities. No evidence is presented in this comment to warrant a change to the findings of the Final EIR.

3-3 The comment speaks to the fact that informal areas adjacent to the roadway that are used by motorists for parking and pull outs will be eliminated, and that new formal pull-outs proposed in the project will be signed 'No-Parking". The comment argues that the proposed project will result in a loss of existing recreation parking. This issue is addressed in Response A5-30 which reads: "*The proposed project would construct formalized pullouts along the roadway within the project area, and would prohibit vehicle parking at these locations with posted "No Parking" signs. Formalizing pullouts and prohibiting parking is expected to improve the flow of traffic along the roadway and to significantly reduce the risk of accidents when slower moving vehicles pull over to allow the normal flow of traffic to pass. Locations along the roadway currently used by some motorists for parking were never intended or planned as parking spaces. Therefore, the design measures that would be taken to eliminate the use of these areas for parking would not increase the need for new visitor parking spaces in the State Park. Visitor parking is already provided in the park at locations that provide safe ingress and egress with easy access to hiking and bicycle trails. Individuals that have used existing informal areas to park their vehicles in the past may find the proposal to eliminate the use of these areas for vehicle parking as inconvenient, but the proposed project would not create the need to provide additional parking spaces within the park*".

3-4 This is a project merits comment. The Town of Fairfax requests that the County limit the proposed repaving project to just that, repaving the existing roadway.

3-5 This is a project merits comment. The Town of Fairfax requests that the County refrain from preventing public access to the un-official and proposed official pull-outs.

LETTER 4
Marin Audubon Sociey
February 4, 2011

4-1 The preparers of the Final EIR disagree with this comment. The EIR fully discloses all the environmental impacts of the proposed project, recommends feasible mitigation measures, and evaluates feasible alternatives. Comments

received on the Draft EIR concerning the severity of impact and the feasibility of mitigation measures have all been responded to in writing and edits were made in the text of the Final EIR for clarification.

4-2 This is a project merits comment. The issue of whether the proposed project is warranted and should be funded is not a CEQA impact issue, but a project merits issue.

4-3 The comment is accurate, there is an existing multipurpose trail that parallels the length of the proposed project. An improved roadway surface and the formalization of roadway pullouts is expected to benefit bicyclists and pedestrians as well as motorists. However, the objective of the project is to rehabilitate the roadway.

4-4 The impact of tree removal under the Proposed Project and Option A is addressed on pages 209 through 212 of the EIR. The EIR found that all tree removal impacts will be mitigated to a less-than-significant level.

4-5 The project as proposed would only require tree removal in the area of the proposed slide repair. Option A would involve the removal of 9 additional large trees for increase paved shoulder width. The Department of Public Works has made great effort to avoid and thereby limit the number of trees to be moved in the Proposed Project. Furthermore, the EIR on page 353 notes that two other alternatives for rehabilitating the roadway were rejected due to the large number of trees that would need to be removed and associated negative impacts of tree removal on other environmental resources in the project area. Accordingly, avoidance of potential environmental impacts was considered in designing the Proposed Project.

4-6 The Mitigation Monitoring and Reporting Program (MMRP) contained in the Responses to Comments documents the entity responsible for implementing each mitigation measure recommended in the EIR and provides for verification of implementation. Compliance with EIR mitigation measures will be documented in the MMRP, and if a project is approved the MMRP will be available for public review at the County Department of Public Works office.

4-7 This is a merits comment. Marin Audubon requests that the County only replace those culverts that are experiencing failure in order to avoid possible impacts to the creek from project construction.

4-8 The second part of this comment is a merits issue. The comment questions the need for new formal pull-outs in the roadway rehabilitation project.

4-9 The proposed retaining wall repair is designed to limit tree removal and impacts on the stream bank. The EIR makes a worst case assumption as to tree removal

due to the needed slope repair. It is possible that fewer trees may actually require removal when the slope repair is undertaken.

4-10 This is a restatement of a previous comment made on the Draft EIR. Response B4-29 on page 92 addresses the question as to whether the Proposed Project when completed will result in increased vehicle speeds on the roadway. The author of the EIR did not agree with the original comment and no evidence is presented in this comment to change the EIR author's opinion.

4-11 The proposed project does not include a bike path or pedestrian path. The Proposed Project is strictly a roadway rehabilitation project. Therefore, the project has no design features that will encourage users of the multipurpose path to abandon the path and use the road.

4-12 The comment is a merits comment. The comment requests that the County approve a resurfacing project that only replaces damaged culverts and no tree removal.

4-13 The County under the provisions of the California Environmental Quality Act (CEQA)must consider the potential environmental impacts of any project the County proposes to undertake. Furthermore, the County is the public agency responsible for proposing and approving its own projects and therefore is the lead public agency as defined by CEQA. The Lead Agency under CEQA has the responsibility to determine the severity of an impact based on scientific and factual evidence, and other opinions expressed during the public review process. In the end the determination of the severity of impact under CEQA regulations is based on the Significance Criteria contained in each section of environmental analysis in the EIR.

4-14 The EIR considered the environmental impacts associated with tree removal and found that the impacts were not environmentally significant based on the relevant Significance Criteria. There are localized impacts of tree removal, but the loss of 17 trees given the thousand and thousands of trees in the project area was not found to result in significant adverse environmental impacts. The impacts of tree removal are discussed on pages 209-212 in the Final EIR, and are further discussed in Master Response 6 on page 9 of the Responses to Comments. The author of the EIR does not agree with the comment. that tree removal results in a significant adverse environmental impact.

4-15 As discussed in the previous response (4-14) tree removal did not result in a significant impact on the environment and therefore mitigation for tree removal is not required under CEQA. The County of Marin has a tree preservation ordinance that requires the planting of 3 new trees for every protected tree removed by a project. The ordinance allows for payment into the County Tree Preservation Fund if planting of new trees in the project area is not possible. It is

noted that Section 22.27.040(k) of the Tree Preservation Ordinance may exempt the project from the provisions of the ordinance.

4-16 Responses B4-15 in the Responses to Comments already addresses the issue of replanting the response reads "*Where vegetation removal is required (other than the tree removal for slope stabilization at Station 270+25 and under Option A), the removal would be largely limited to herbaceous roadside cover that should rapidly re-establish itself following applications of a native erosion control seed mix to all areas disturbed by construction.*" Furthermore, BIO-12a requires the removal of invasive species prior to project construction under the supervision of a qualified botanist to avoid the spread on any invasive plant seed. BIO-12d requires the replanting of all disturbed areas using a native seed mix approved by the CDF&G and NPS.

4-17 The proposed bioswales will be located on the hillside of the roadway. See Figure 3.4-1 in the EIR for a cross section of a typical bioswale.

4-18 This comment is a statement of opinion about the impacts of the project on Salmonid habitat. Since the comment is not supported by any new facts no change to the Final EIR is necessary.

4-19 The DEIR recognizes that tree removal work has the potential to cause erosion and generate sediment and bank problems. Mitigation Measure HYD-1a requires a range of erosion control and bank stabilization measures during and following construction, including tree removal work. The specific tree removal work at Station 270+25 is required to stabilize an actively eroding stream bank. In this location, the project will result in improved bank stability following tree removal and will reduce the potential for the bank to be a source of sediments into the creek. With regard to tree stumps, Mitigation Measure BIO-10f states that stumps shall be left in place and shall not be treated with herbicides or other chemicals.

4-20 This is not a statement on the adequacy of the Final EIR. The County Department of Public Works(DPW) did higher the environmental consultant that prepared the EIR.

4-21 Please see preceding Response #2-2.

4-22 See Response B4-26 in the Responses to Comments. The last paragraph in the response already addresses this comment.

4-23 Culvert replacement and retaining wall construction are part of the Project Description. Accordingly, the impacts of these two improvements are discussed in various sections of the EIR. For example the impacts of culvert replacement are discussed in Impact BIO-5 starting on page 189 of the Final EIR, another example is the effects of culvert replacement on salmonids starting on page 197 of the Final EIR. An example of the analysis of retaining wall impacts is in the

Aesthetic section of the EIR on page 147. The EIR analyzes the impacts of the entire project in the various areas of environmental analysis. Therefore, one must read the various sections of the EIR and not just a single section (Biology) to understand the impacts of any portion of the project description on the environment. Culvert and retaining wall impacts are discussed throughout the Biology, Hydrology, Geology and Aesthetic sections of the EIR.

4-24 Section 4.3.1 of the DEIR describes the seasonal wetlands found within the project site. The seasonal wetlands that would be affected by the project occur within narrow ditches and swales running along the roadside, and contain ruderal (weedy) non-native and native sedges, grasses and forbs adapted to seasonally saturated soils and periods of surface inundation. These roadside ditches and swales can reasonably be considered marginal with respect to their potential habitat functions. Section 4.3.1 states: "...the narrowness of the swales, the very close proximity of the SFDB roadway, and the disturbances associated with relatively constant daytime traffic probably limit the utility of the habitat for feeding and foraging."

Mitigation Measure BIO-11 states that the Marin DPW shall compensate for the loss of seasonal wetlands associated with the filling of roadside swales by establishing new seasonal wetlands at a 2:1 on-site replacement ratio within the Lagunitas Creek watershed in the vicinity of the SFDB project. It further states that one possible mitigation site is the MMWD *Lagunitas Creek Salmon Winter Habitat Enhancement Program* which would establish a floodplain seasonal wetland and backwater channel complex along Lagunitas Creek that would expand not only floodplain wetland area but also meet a critical habitat need for coho salmon – over-wintering habitat for salmonid juveniles.

The mitigation measure further states that project construction shall not start until a suitable wetland mitigation site has been selected and approved by the federal and state wetland regulatory agencies (i.e. the Corps, RWQCB and CDFG). These agencies require that there not only be no net loss of wetland area but also require that mitigation wetlands replace the functions and values of the impacted wetlands.

LETTER 5
San Geronimo Valley Planning Group
February 4, 2011

5-1 This is a merits comment requesting that Option A be deleted in the final roadway rehabilitation project approved by the County. No response required under CEQA.

5-2 This is a project merits comment addressing the Alternatives discussed in the EIR and various aspects of the Proposed Project. No response required under CEQA.

5-3 Potential toxic impacts of the Proposed Project are discussed in the Hazardous and Hazardous Materials section starting on page 273 of the Final EIR.

5-4 This is a project merits issue. As noted in Response B8-11 the County currently provides road shoulder maintenance on an as need basis.

5-5 The EIR contains a number of Mitigation Measures designed to protect nesting and migratory birds, salmonid eggs, fry and smolts as well as mammal dens during construction. See mitigation measures in the Biology sections of the Final EIR. These mitigation measures requrie pre-construction surveys for nesting birds, mammal dens, and measures to protect salmonid habitat. Also see Master Response 9 on page 12 of the Responses to Comments.

5-6 The MMRP requires that the County and the road contractor instruct workers on construction protocols in this rich environmental resource area. The MMRP must document compliance by construction contractors with these mitigation measures. The mitigation measures also require that qualified biologists and botanists monitor construction activities.

5-7 The Biology, Hydrology and Hazards &Hazardous Materials section of the EIR discusses the impacts of cement treated permeable base on water quality and riparian habitat. Also see Master Response #2 on page 6 of the Responses to Comments.

5-8 The proposed project must first obtain USACOE authorization for filling or taking wetlands. The Corps will determine the feasibility and adequacy of the proposed wetland mitigation as part of its review.

5-9 This is a project merits issue. Construction scheduling must be coordinated with nearby communities and service providers.

LETTR 6
Marin Conservation League
February 7, 2011

6-1 This is a project merits comment requesting that the County approve the Environmentally Superior Alternative and reject Option A. No response required under CEQA.

6-2 This comment is a statement of concern about the project and its implementation and a statement of opinion that loss of mature trees under Option A cannot be mitigated. The issue of tree removal impacts, mitigation for removal and severity of tree removal impact is addressed in Master Response 6 starting on page 9 of the Responses to Comments. This comment does not result in any change to the findings of the EIR on impacts of tree removal.

6-3 This is a project merits comment and address the importance of implementing mitigation measures related to water quality and the need for long-term inspection and maintenance of roadside bioswales in accordance with a long-term SWMP. The merits comment is noted.

6-4 This is a project merits comment related to the size of new culverts to be installed as part of the roadway rehabilitation project. The comment requests that culverts be designed to transport gravel in order to help restore the the gravel beds of the creek. The merits comment is noted.

6-5 This is a project merits comment. The comment requests that the County retain an independent entity or contractor whose sole responsibility is mitigation monitoring to ensure that the project meets its quality control standards. The merits comment is noted.

6-6 This is a project merits comment. MCL questions the necessity to remove trees under Option A and prefers that tree removal under Option A be avoided. MCL supports the proposed compensatory mitigation approach to wetland loss. The merits comments are noted.

LETTER 7
Marin County Bicycle Coalition
February 7, 2011

7-1 This is a merits comment supporting the Proposed Project without Option A. The Bicycle Coalition states that even though Option A would provide some increased shoulder width, the limited increase in shoulder width does not warrant the loss of several large redwood trees. The merits comment is noted.

7-2 This is a project merits comment. MCBC requests that the rehabilitation roadway design ensure that the interface between the rehabilitated asphalt roadway and permeable asphalt turnouts be smooth and consistent. A ridge or lip between the roadway surface and the turnouts would create a hazard to bicyclists. The merits comment is noted.

LETTER 8
Watershed Preservation Network
February 7, 2011

8-1 The comment states that the EIR is inadequate because it fails to examine alternatives in which bicycle traffic uses the multipurpose trail that parallels SFDB trough the project area. As mentioned in previous responses the Proposed Project is a roadway rehabilitation project and does not include a bicycle lane, nor is the project proposed with a uniform paved shoulder width. Furthermore, the County cannot restrict bicyclists from using SFDB through the project area.

Therefore an alternative that forces bicycle traffic to divert to the multipurpose pathway is not feasible.

8-2 The remaining comments relate to project merits. The comment requests that bicycle traffic on the roadway be diverted to the multipurpose path.

LETTER 9
Jo Carson
February 1, 2011

9-1 This is a project merits comment. The comment requests that the County not close the existing unofficial pull-outs and allow the pull-outs to continue to be used for parking.

LETTER 10
Pamela Ross & Charles Gay
February 1, 2011

10-1 This is a project merits comment. The comment supports the removal of trees to stabilize the slope at Station 270+00 and is opposed to Option A because of the tree removal associated with the option.

10-2 This is not project related. It requests that the County pave the length of the Cross -Marin Trail. The Cross Marin Trail is not part of the project. The comment also requests that the County ban bicycles from SFDB through the project area and require bicyclists to use the Cross-Marin Trail. See previous Response 8-1.

LETTER 11
Susan Campana
March 3, 2011

11-1 This is a project merits comment requesting that the County consider the short and long term impacts on natural resources in the project area and the impacts to Samuel P. Taylor State Parking in making its decision on the proposed project. The merit's comment is noted.

LETTER 12
Lee Baldwin
February 3, 2011

12-1 This is a project merits comment requesting that the County consider the short and long term impacts on natural resources in the project area and the impacts to Samuel P. Taylor State Parking in making its decision on the proposed project. The merit's comment is noted.

LETTER 13
Rudy Wara-Goss
February 2, 2011

13-1 This is a project merits comment requesting that the County consider the short and long term impacts on natural resources in the project area and the impacts to Samuel P. Taylor State Parking in making its decision on the proposed project. The merit's comment is noted.

LETTER 14
Teresa Gibson
February 2, 2011

14-1 This is a project merits comment requesting that the County consider the short and long term impacts on natural resources in the project area and the impacts to Samuel P. Taylor State Parking in making its decision on the proposed project. The merit's comment is noted.

LETTER 15
Heather Christy
February 2, 2011

15-1 This is a project merits comment requesting that the County consider the short and long term impacts on natural resources in the project area and the impacts to Samuel P. Taylor State Parking in making its decision on the proposed project. The merit's comment is noted.