Frequently Asked Questions Updated February 26, 2021

Alta Way Grading Permit

The Marin County Community Development Agency's Planning Division (CDA) is a regulatory agency responsible for implementing State and local land use laws through the entitlement process. While the CDA is not the permitting authority for a Grading Permit, we prepared this informational document to provide responses to questions that we have received about the Alta Way Grading Permit application.

1. Why is the project not considered a "Subdivision"?

Response: The Marin County Development Code defines a subdivision, in part, as follows: "The division, by any subdivider, of any unit or portion of land shown on the latest equalized Marin County Assessment Role as a unit or contiguous units…". The project applicant is not proposing to create additional, new lots. The proposal will provide access to a number of existing lots that were created by a prior subdivision map (Map of Garden Valley Park Subdivision 1, filed for record on October 9, 1919 in Volume 5 of Maps at page 4 in the Office of the Recorder, Marin County Records). The applicant proposes to "merge" or combine 8 of the existing lots into 4 lots. As a "merger" involves the combination of existing units of land rather than a division of a unit or units of land, a merger is not considered a subdivision under the County Code and the State Subdivision Map Act. Therefore, the provisions for subdivisions do not apply to the proposed project.

The applicant has applied to the CDA to merge the lots described above. The merger of these lots is currently under process and must comply with Chapter 22.92 of the County's Development Code.

2. How will the County ensure that the project complies with the California Environmental Quality Act (CEQA) ?

Response: The County's Environmental Planning Division is in the process of independently selecting and retaining an environmental consultant to prepare an environmental impact report (EIR) for the project at the applicant's expense and in conformance with CEQA. Should the applicant fund the preparation of the EIR, the consultant contract for preparation of the EIR will go before the Board of Supervisors (BOS) for consideration and approval. Initiation of work on the EIR will commence upon contract approval. The comprehensive EIR scope and background on the prior 2018 Initial Study prepared for an earlier version of the project are covered in detail in the attached consultant EIR proposal (Attachment 1).

CEQA requires that a public agency consider the "whole of an action" during the preparation of an environmental review document. This provision includes consideration of reasonably foreseeable future development. Therefore, the vacant properties that would potentially be affected by development of the paper street will be evaluated during preparation of the EIR.

The 2018 Initial Study included an analysis of cumulative and growth-inducing impacts. That analysis will be updated to consider the changes to the Project, new information provided by the applicants, and a revised list of current and potential future projects that could combine with

the Project in a cumulative manner. The EIR will reconsider the potential for growth-inducing impacts, particularly the potential for the Project to enable or facilitate future development of other paper streets in the neighborhood.

3. The project site is located in a Wildland Urban Interface Area (WUI) and a "Very High Fire Severity Zone". How will the project be evaluated to address fire and other safety concerns including egress and roadway width?

Response: As described above, the CEQA document prepared for the project will be required to evaluate potential "Wildfire" effects of the project. In addition, the project must meet all requirements of the Southern Marin Fire Protection District and Title 24 of the Marin County Code, in particular Section 24.04.I-Roads. Section 24.04.I of the Count Code has been provided as Attachment 2. Should the lots be developed in the future, the prospective development would be required to comply with all required permits and approvals that, among other items, would address fire protection and prevention.

Attachments:

Attachment 1-Proposal to prepare a focused EIR for the proposed Alta Way Road Extension Project, dated January 25, 2021
Attachment 2-Marin County Code Section 24.04.I-Roads

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January 25, 2021

Re: Proposal to prepare a Focused Environmental Impact Report for the proposed Alta Way Road Extension Project

Dear Rachel,

Thank you for inviting me to submit a proposal to the Marin County Community Development Agency to prepare a focused Environmental Impact Report (focused EIR) for the proposed extension of Alta Way and associated residential development ("the Project"), located in unincorporated Tamalpais Valley.

The Initial Study for the Project, which we completed in April 2018, indicated that the Project could have significant impacts on the environment. At that time, you determined that a focused Environmental Impact Report would be required. Since then, the applicants, Mitch Brown, Daniel Chador, Adam Cummings, and Greg O'Donnell, have revised the Project. The current version of the Project would reduce the reasonably foreseeable number of developable lots from ten to six. In addition, the applicants have provided new information on lot access, roadway geometry, an expanded geotechnical study, a hydrology and hydraulics study, and a stormwater control plan.

This proposal is to prepare a focused EIR to examine in greater depth the potentially significant impacts identified in the 2018 Initial Study, taking into account the applicants' proposed changes to the Project and new information that the applicants have provided, particularly regarding stormwater management and roadway design.

I have retained the same specialized subcontractors for this proposal, namely RCH Group, who will prepare the Air Quality section; Sutro Science, who will prepare the Geology and Hydrology sections; and JK Botany, who will conduct a new site reconnaissance and prepare the Biological Resources section. PaleoWest Archaeology, who prepared the Cultural Resources Assessment Report that formed the basis for the Initial Study's Cultural Resources section, and who assisted with Tribal consultation pursuant to AB 52, will assist the County with another round of Tribal consultation, and will incorporate the results of consultation into the focused EIR. I have also included Ellen Garber of Shute, Mihaly & Weinberger, LLP, to provide review of draft documents for legal adequacy and to advise on sensitive legal matters; and Mark Thomas Engineering, to conduct a peer review of the design for the extended roadway, including

roadway geometry and stormwater drainage features. Once again, Ron Teitel will prepare report graphics, and Eagle Eye editing will format documents. Our résumés are attached.

As with the 2018 Initial Study, my team and I will provide the County a complete, competent, objective, and CEQA-compliant document. We will thoroughly explore the impacts of the proposed Project and develop feasible mitigation measures to address significant impacts. The focused EIR will disclose to the public and County decision-makers the environmental consequences of Project approval, and will consider a range of alternatives to the Project.

I hope that the attached scope of work, budget, and schedule meet your expectations. If not, I would be more than happy to discuss any necessary revisions. I look forward to continuing to work with you on environmental review of this Project.

Sincerely,

Dan Sicular
Sicular Environmental Consulting and Natural Lands Management

Encl: Scope of Work, Schedule, Budget, Résumés

ALTA WAY ROAD EXTENSION FOCUSED EIR

Scope of Work

Background

In 2018, Marin County completed a CEQA Initial Study (the 2018 Initial Study) for an earlier version of the Project. As described in the 2018 Initial Study, that version of the Project would have allowed for the extension of Alta Way and would have enabled access to ten legal lots of record. The 2018 Initial Study assumed that all ten lots would be developed with single-family houses, per the site's zoning. The 2018 Initial Study identified significant or potentially significant impacts, in several environmental topic areas. While the 2018 Initial Study proposed mitigation measures to reduce many of the significant impacts to less than significant, two major issues remained unresolved: emergency access and egress from the future development, and stormwater management. Because these issues remained unresolved, the County concluded that the Project did not qualify for a Mitigated Negative Declaration, and that an EIR would be required.

Since completion of the 2018 Initial Study, the applicants have made changes to the proposed Project to address the issues identified in the 2018 Initial Study. The major changes include a proposal to merge several of the lots, which would reduce their number from ten to six. They have also provided revised plans for the roadway extension, including more detail on lot access, and adding stormwater management facilities to the roadway design, and they have provided additional information on site geology and hydrology, including more details on stormwater management.

Major differences between the previous version of the Project analyzed in the 2018 Initial Study, and the current version, include the following:

- The number of lots has been reduced from ten to six, through proposed lot mergers;
- The design for the roadway extension has been revised to address issues of adequacy for emergency vehicle access;
- Additional detail has been added to project plans on driveways and lot access;
- Additional stormwater management facilities have been added to the roadway design;
- A conceptual design for stormwater management has been added for lots downslope of the roadway, to manage runoff from future residential development.

General Approach

Sicular Environmental Consulting and Natural Lands Management (Sicular Environmental Consulting) will prepare a focused Environmental Impact Report (focused EIR, or EIR) for the proposed Alta Way Extension Project (Project), pursuant to the California Environmental Quality Act (CEQA) and the Marin County Environmental Impact Review Guidelines. The 2018 Initial Study found that the Project would not have a significant effect on several of the environmental topics covered by CEQA. Most of these topics will be "focused-out," leaving the EIR to focus on those topics for which the 2018 Initial Study found that mitigation measures would be required to reduce significant impacts to less-than-significant, and in addition those topics which were identified in the 2018 Initial Study as requiring further investigation.

Because the County has reinitiated Tribal consultation pursuant to AB 52, the focused EIR will also include a revised Tribal Cultural Resources Section. In addition, since completion of the 2018 Initial Study, Wildfire has been added as a CEQA topic, and the focused EIR will include this section as well. While greenhouse gas emissions were examined in the 2018 Initial Study and the Project was found not to have the potential for a significant impact, since its completion the County has adopted an updated Climate Action Plan with more ambitious goals for emissions reductions, consistent with current State goals. The focused EIR will therefore include a new GHG analysis that examines consistency of the Project with the goals and policies of the current County Climate Action Plan and State mandates.

In sum, the environmental topics that will be included in the focused EIR will include the following:

- Air Quality
- Biological Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards
- Hydrology and Water Quality
- Land Use and Planning
- Transportation/Circulation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The County's Initial Study template was substantially revised since completion of the Alta Way document to incorporate amendments to Appendix G of the State CEQA Guidelines. The focused EIR will therefore include a brief section that reconciles the conclusions reached in the 2018 Initial Study with the current thresholds, for those topical areas that have been focused out.

The focused EIR will use questions from the current version of the County's Initial Study checklist template as a basis for significance thresholds. The focused EIR will describe the environmental and regulatory setting for each environmental topic. For each significant impact, mitigation measures will be identified, and a conclusion reached regarding the ability of the mitigation measures to reduce or avoid the impact. Impacts that the 2018 Initial Study found to be less than significant will not be further examined in the focused EIR, unless there is new information or changed circumstances calling into

question the previous significance conclusion. The 2018 Initial Study will be appended to the focused EIR.

The focused EIR will include an updated cumulative impact analysis and analysis of potential growth-inducing impacts. The alternatives analysis will examine a No Project Alternative, as well as up to three other alternatives, to be selected in consultation with County staff. One alternative is likely to be a "Mitigated Alternative," which incorporates mitigation measures and modifies or eliminates the most impactful features of the proposed Project. The focused EIR will also include other sections required by CEQA, including irreversible environmental impacts, an executive summary, and a list of document preparers.

As is customary for Marin County, this scope of work includes preparation of two administrative drafts and a pre-publication print check of the Draft and Final EIR; a Final EIR that includes responses to comments received on the Draft EIR as well as changes to the text of the Draft EIR; and an amendment that responds to comments on the Final EIR. The scope of work also includes preparation of the CEQA Findings, and attendance at all public hearings.

Tasks

Task 1: Review and Discussion of Interim Submissions

This task includes work already performed by Sutro Science and Sicular Environmental Consulting since completion of the 2018 Initial Study to review various submittals by the applicants, including Project changes and new information, and to advise the County on how these would affect previous significance conclusions from the 2018 Initial Study. The work already completed will be used directly in the focused EIR analysis. Documents that we have reviewed have included several iterations of the Project plan set, a Hydrology and Hydraulics study and its revision, a new geotechnical report, a new stormwater control plan, and technical memoranda from the applicant's engineering consultant. In September 2019, Sutro Science prepared a peer review memorandum, reviewing the Hydrology and Hydraulics study and Geotechnical report. As shown in the cost estimate (Attachment 2), we have expended considerable labor effort on this task, without compensation to date.

Task 2: Kickoff Meeting, Data Request, and Project Description

Following contract initiation, we will meet with County staff and the applicants' representatives to discuss the EIR process, communications protocols, and initial data needs. The cost estimate assumes that the kickoff meeting will be held by teleconference.

We will revise the Project Description to reflect the current version of the Project. The Project Description will describe in text, figures, maps, and photographs the location, extent, and details of the proposed project, including detailed description of the proposed extension of Alta Way and extension of utility lines, grading, construction period and intensity, and the applicant's proposed construction management plan. The Project Description will also outline the likely future development of the parcels that will be provided access by the roadway extension, including the scale, height, massing, setbacks, and other restrictions and requirements imposed by the existing zoning. The Project Description will include Project objectives – both those of the applicants and of the County. Upon receipt of comments from County staff on an administrative draft, we will revise the Project Description and provide a final version.

Following review and confirmation of the accuracy and completeness of the Project Description by the applicants, we will commence work on the environmental review. This scope of work, cost estimate, and schedule all assume that once approved by the County and confirmed by the applicants, the Project Description will not change.

During the course of preparation of the Project Description, we will determine whether additional information is needed from the applicants and from the County, in order to complete the Project Description and embark on the environmental analysis. We will prepare two data request memos, as necessary: one for the applicants, and one for the County. The cost estimate and schedule assume timely response to the data request.

Task 3: Peer Review of Applicant's Reports and Plans

Sutro Science will review new Project information relevant to the Geology and Hydrology sections of the focused EIR, as well as hydrologic data and design changes that have occurred since completion of the 2018 Initial Study. Sutro will prepare a technical memorandum that summarizes findings from their September 2019 peer review and that reviews new materials provided by the applicants since that date. These include an updated and revised Project plan set (June 2020); an updated Hydrology and Hydraulics Study (February 2020); and an updated Stormwater Control Plan (June 2020), which includes stormwater runoff analysis of the lots downgradient of the proposed Alta Way road extension. The peer review memo will provide conclusions regarding the adequacy of the supporting materials, and will list any additional data needs.

Mark Thomas Engineering will review the proposed Alta Way road design, including stormwater drainage facilities, as provided by the applicants' Civil Engineer in the June 2020 plan set. Plans will be reviewed for compliance with County and State standards for safety. Applicable County-required width and design speed standards will be selected in consultation with Department of Public Works staff. Mark Thomas will prepare a memo containing findings and an opinion of the adequacy of the road design.

Task 4: Tribal Consultation

We understand that the Federated Indians of Graton Rancheria have accepted the County's offer to reinitiate Tribal consultation for the Project, pursuant to AB 52. PaleoWest Archaeology and Sicular Environmental Consulting will be available, as requested, to participate in the consultation, including attending one or more phone or video conferences with the Tribe.

We assume that consultation will focus on any new information provided by the Tribe, and will not include potential impacts to resources outside of the Project footprint. PaleoWest will document the consultation efforts in a technical memorandum to be made available to the County and FIGR.

Optional Task 4a: Revisions to the Cultural Resources Assessment Report

Based on the results of the Tribal consultation, PaleoWest will update the 2017 CRAR, produced by PaleoWest for the 2018 Initial Study, to address any newly acquired information on previously unknown cultural or Tribal cultural resources within the Project footprint. The 2017 CRAR has not exceeded the five-year threshold requiring an updated record search or field study. Therefore, the data and conclusions

in the CRAR are still considered valid and adequate for supporting analysis and conclusions in the focused EIR, absent any additional information that emerges from Tribal consultation.

We assume that the cost of Optional Task 4a, if needed, will be drawn from the Contingency line item in the budget, as discussed in Task 12.

Task 5. Prepare Administrative Draft Focused EIR

The Administrative Draft EIR will include an introduction providing Project background and describing the EIR process; the Project Description; Environmental Setting, Impacts, and Mitigation Measures covering each of the topics identified in the General Approach section of this Scope of Work, the cumulative impact analysis and analysis of other required CEQA topics; the alternatives analysis; identification of references and persons consulted in preparation of the EIR, and identification of EIR preparers. Sicular Environmental Consulting will address County staff comments on the Administrative Draft EIR and prepare a revised Administrative Draft for County review.

Technical Scope of Work for Task 5

Air Quality

The 2018 Initial Study Air Quality analysis found that air quality and health risk impacts would be less than significant with mitigation. For the focused EIR, RCH Group will prepare a revised analysis of the air quality and health risk impacts. The air quality analysis will be prepared pursuant to the BAAQMD's *CEQA Air Quality Guidelines* for assessing the significance of air quality impacts. Air quality impacts will be evaluated against project-level thresholds of significance. Construction-related emissions will be based upon the anticipated construction phasing and duration, number/size of homes, and equipment needs for the revised Project, and will be modeled using the CalEEMod land use emission model and Sacramento Metropolitan Air Quality Management District Roadway Construction Emissions Model. Operational emissions will be estimated using CalEEMod based on the number and size of homes and lot size.

The Health Risk Assessment (HRA) will address project construction health impacts on nearby receptors. The HRA will be prepared based on the California EPA's *Air Toxics Hot Spots Program Risk Assessment Guidelines*. The Hotspots Analysis Reporting Program and the AERMOD dispersion model will be used to develop the exposure assessment and risk characterization. In addition, the health risk analysis will include a consideration of regional health impacts of Project emissions, to address the California Supreme Court's 2018 Friant Ranch decision.

RCH Group will prepare a Technical Report that details the methods used and results found in the air quality analysis. The Air Quality Technical Report will be included as an appendix to the focused EIR.

Biological Resources

The 2018 Initial Study found that the Project could cause significant impacts to biological resources, but that these impacts could be reduced to less-than-significant with implementation of specified mitigation measures. JK Botany will re-examine impacts to biological resources based on current information, including field observations from a new reconnaissance site survey, aerial photography, USGS maps, and a new California Natural Diversity Database (CNDDB) search. The EIR will examine the entire 2.81-acre

Project footprint, which includes the area of the proposed road extension, as well as the six lots that the road extension would enable access to.

The Biological Resources scope of work includes one site visit for a reconnaissance-level site survey, and preparation of a technical memo to document site conditions and list the plants and animals observed on site. The EIR section will characterize the biological environmental setting of the area in which the Project is located, and will include a table of species with the potential to occur on the Project site.

Geology and Soils

The 2018 Initial Study found that the Project could expose people to significant impacts due to the presence within the Project site of geologic hazards, specifically the potential for slope instability. The Project is in a region of high seismicity, where ground shaking on improperly engineered slopes could cause slope failure resulting in property loss, injury, or loss of life. Sutro Science staff will prepare the Geology and Soils section of the EIR relying primarily on the applicants' geotechnical engineering reports and geologic site assessment, which Sutro has peer reviewed. The Geology and Soils section will address stability of slopes under static forces (i.e., gravity) and dynamic forces (i.e., earthquake ground shaking). Specific tasks will include:

- Develop the regional and local geologic setting using available data and information including the U.S. Geological Survey (USGS), the California Geological Survey (CGS), Marin County, and site-specific information, including the updated geotechnical engineering reports, grading plans, and Project designs provided by the applicants. No additional geologic testing is included in this scope of work.

- Identify and plot the major earthquake fault systems and discrete faults in the region, their distance to the Project site, earthquake histories, potential to generate large earthquake magnitudes, and their general potential to affect the Project site.

- Assess static and seismic slope stability and the potential for erosion hazards on the Project site during and following construction, as appropriate. Sutro will describe and evaluate proposed Project grading including depth of fills and final topographic configurations.

- With the information and data gathered from the above tasks, Sutro will prepare an environmental setting for the focused EIR that addresses site geology, soils, seismicity, and the regulatory framework. Based on the setting information and the significance thresholds, Sutro will analyze the potential direct and cumulative impacts the Project may have on the local geology. Where necessary, Sutro will propose mitigation that could reduce impacts to less than significant.

Greenhouse Gas Emissions

The 2018 Initial Study found that greenhouse gas (GHG) emissions from construction and operation of the Project would have only less-than-significant effects on global climate change. Since then, Marin County has adopted an updated Community Climate Action Plan that contains goals and policies for greater reductions in emissions from unincorporated areas of the County. The focused EIR will include an

updated GHG analysis that includes an estimate of GHG emissions from Project construction and operation (i.e., residential uses), and that considers consistency of the Project with applicable goals and policies in the updated Climate Action Plan and the current version of the State's Climate Change Scoping Plan Update. In addition, because the Bay Area Air Quality Management District's current numeric significance threshold for GHG emissions may itself be insufficient to ensure projects contribute their fair share to achievement of the State's GHG reduction mandates, we will consult with County staff and legal counsel on whether an alternative significance threshold is required.

Hazards

The 2018 Initial Study identified a significant impact of the then-proposed version of the Project because it failed to provide secondary emergency egress for the future residential development. We understand that the Fire Marshall has determined that reducing the number of lots to six, as now proposed, renders secondary egress unnecessary. We will confirm this through direct consultation with the Fire Marshall and County Department of Public Works, Traffic Division staff. In addition, we will examine the consistency of the revised design of the proposed roadway with requirements for emergency vehicle access.

Hydrology and Water Quality

Stormwater runoff emerged as one of the major environmental issues in the 2018 Initial Study. Since then, the applicants have provided additional details on the proposed stormwater management system for the roadway extension and future lot development. Sutro Science will prepare the Hydrology and Water Quality section of the focused EIR, incorporating the most recent site-specific hydrologic and stormwater analyses prepared by CSW/ST2, the applicants' engineering consultant. The analysis will include consideration of construction and post-construction on- and off-site stormwater quality, surface drainage and runoff rates, erosion and hydromodification, and flooding. Specific tasks to complete the hydrology and water quality impact assessment will include:

- Develop a regional and site-specific hydrologic setting using information from flood risk maps, other background materials, information available from the City, site reconnaissance, and information from the applicants' most recent site-specific technical studies.

- Describe surface drainage and water features potentially affected by the Project.

- Summarize policies and regulations of the jurisdictional agencies that apply to the Project, constraints that these policies and regulations pose to the Project, and compliance activities or permits required by these agencies. This will include requirements of the Construction General Permit, the Marin Countywide Stormwater Pollution Prevention Program (MCSTOPPP), as well as objectives to protect the beneficial uses of the water bodies in the Project area with a focus on any new or updated the 303(d) listed impairments for downgradient surface waters.
- Assess potential direct and cumulative hydrology-related impacts of the proposed Project and assess the potential for the Project to impact stormwater quality, drainage, flooding, and erosion. The impact analysis will specifically consider proposed stormwater management measures for their effectiveness in reducing stormwater quality and runoff impacts and providing sufficient on-site retention to address potential downgradient hydromodification and flooding. Where necessary, Sutro will develop mitigation measures to address significant impacts.

Land Use and Planning

The 2018 Initial Study found that the version of the Project then being proposed would potentially be inconsistent with several Countywide Plan and Tamalpais Area Community Plan policies pertaining to stormwater management and emergency access. The focused EIR will reexamine policy consistency, based on the current version of the proposed Project, additional information provided by the applicants, and consultation with County Community Development Agency, Current Planning staff. The Land Use and Planning section will describe the regulatory and physical setting for land use and planning, including maps of current zoning and land use designations.

Tribal Cultural Resources

Based on the results of Tribal consultation (Task 4), PaleoWest will prepare an updated Tribal Cultural Resources section for the focused EIR. This section will include the results of consultation, and discuss whether any cultural or Tribal cultural resources are known by the Tribe to exist within or adjacent to the Project site, and if so, whether they could be adversely affected by the Project. If so, the section will discuss and incorporate the recommended mitigation measures identified by the Tribe and agreed to by the County.

Transportation/Circulation

Since completion of the 2018 Initial Study, a project's effect on intersection level of service is no longer considered an impact under CEQA. CEQA now requires a consideration of a project's effect on vehicle miles traveled (VMT). However, according to the traffic study prepared for the 2018 Initial Study, the Project, even with ten lots then anticipated to be developed, would not exceed the State's recommended screening threshold of 110 additional vehicle trips per day, above which a VMT analysis would be required. The current version of the Project, with six developable lots, would generate less traffic still, and so a VMT analysis will not be required.

To address potential traffic safety hazards at the Shoreline Highway/Sunnybrook Lane intersection, we will rely on the intersection sightline and turning capacity study conducted by Prism engineering for the 2018 Initial Study. We will rely on consultation with County Department of Public Works, Traffic Division staff, and also on Mark Thomas Engineering's peer review of the applicants' proposed roadway design, to determine whether roadway geometry and sightlines are consistency with State and County road standards. We will consult with the Fire Marshall regarding adequacy of the current version of the Project with regard to emergency access and egress.

Utilities and Service Systems

The 2018 Initial Study found that the applicants' stormwater management plan did not assess the potential for the net increase in stormwater runoff from the Project site to exceed the capacity of the existing conveyance culvert that discharges just downstream of the Alta Way Bridge. This culvert directs stormwater flow from Alta Way and Blue Jay Way into the Coyote Creek tributary that drains the Project site and surroundings. Exceedance of the capacity of this culvert could require replacement of the culvert, which the 2018 Initial Study found could have significant direct and indirect environmental effects related to construction activities that would be required to replace the culvert.

Based on Sutro Science's peer review of new hydrology and engineering materials provided by the applicants, we will consider whether there is now sufficient information to conclude that the existing culvert is adequately sized to accommodate runoff from the Project, which would lead to a conclusion that this issue has been resolved. If not, we will request additional information from the applicant on the condition and capacity of the existing culvert.

Wildfire

Since completion of the 2018 Initial Study, Wildfire has been added as a topic in CEQA reviews. The Project site is located within the designated Wildland-Urban Interface (WUI), and is mapped as an area of very high fire risk and very high fire hazard severity. New construction will be subject to requirements and restrictions of the WUI ordinance (California Building Code Section 7a, Materials and Construction Methods for Exterior Wildfire Exposure), which requires fire-resistant building materials and methods. New landscaping for each developed lot will also be required to comply with Marin County Fire Department Fire Protection Standard 220, Vegetation Management, which requires a Vegetation Management Plan and establishment of defensible space zones around structures.

As discussed under Hazards, above, we will consult directly with the Fire Marshall regarding the Project, and we will review compliance of the proposed road design with emergency vehicle access requirements. The Wildfire analysis will examine whether the Project would increase the risk of wildfire and expose people or structures to a significant risk of loss, injury, or death; or cause secondary effects, such as slope instability, flooding, or the need for additional infrastructure or facilities for fire protection.

Cumulative and Growth Inducing Impacts

The 2018 Initial Study included an analysis of cumulative and growth-inducing impacts. That analysis will be updated to consider the changes to the Project, new information provided by the applicants, and a revised list of current and potential future projects that could combine with the Project in a cumulative manner. The focused EIR will reconsider the potential for growth-inducing impacts, particularly the potential for the Project to enable or facilitate future development of other paper streets in the neighborhood.

Alternatives

The Alternatives chapter of the focused EIR will examine a reasonable range of feasible alternatives to the Project. This will include the required No Project alternative and will also likely include the Mitigated Alternative, which is customary in Marin County EIRs. Up to two additional alternatives will be selected in consultation with the County. The alternatives analysis will consider the impact potential for each selected alternative, compared with the Project, will evaluate the ability of each alternative to meet Project objectives, and will identify the environmentally superior alternative.

Task 6. Prepare Public Circulation Draft Focused EIR

Sicular Environmental Consulting will prepare a print check draft that addresses County comments on the second Administrative Draft EIR. This scope of work assumes that the second round of comments will only address issues already raised in the first round and requiring further revision. The print check draft will include an executive summary and draft Mitigation Monitoring and Reporting Program. After

County staff review of the print check draft, Sicular Environmental Consulting will make any final revisions and submit the public review Draft EIR.

Task 7. Respond to Comments, Prepare Final EIR

After close of comments on the Draft EIR, Sicular Environmental Consulting will review all written and oral comments received and will prepare a list of "master responses" to be developed for the Final EIR. The cost estimate (Attachment 2) anticipates a high volume of comments, including comments of a technical nature and the likelihood of comments from an attorney representing Project opponents. Following initial review, Sicular Environmental Consulting will estimate the level of effort required to respond to comments, and will inform the County whether the hours included in the budget for this task are sufficient for the response effort. If not, Sicular Environmental Consulting will request a contract modification or release of contingency funds (Task 12) to cover the additional effort required.

Sicular Environmental Consulting will respond to all substantive comments on the environmental analysis and on the adequacy of the Draft EIR and prepare an administrative draft Response to Comments (RTC) document. We will address County staff comments on the administrative draft RTC and prepare a revised administrative draft. Following a second round of comments, we will prepare a print check draft. This scope of work assumes that the second round of comments will only address issues already raised in the first round, but requiring further revision. The print check draft will include a separate volume of the full text of the Draft EIR, revised in response to comments and to correct any errata, and incorporating any relevant new information. The print check will also include the final Mitigation Monitoring and Reporting Program. After County staff review of the print check draft, we will prepare the Final EIR for release to the public and County decision-makers.

Task 8. Respond to Comments, Prepare Final EIR Amendment

Following close of the public review period for the Final EIR, Sicular Environmental Consulting will review all comments received and will prepare a list of "master responses" to be developed for the Response to Comments Amendment to the Final EIR. After an initial review of comments received, we will estimate the level of effort required to respond to comments, and will inform the County whether the hours included in the budget for this task are sufficient for the response effort. If not, we will request a contract modification or release of contingency funds (Task 12) to cover the additional effort required.

We will respond to all new substantive comments on the environmental analysis, and cross-reference to responses to comments previously addressed. We will prepare an Administrative Draft RTC Amendment document. We will address County staff comments on the Administrative Draft RTC Amendment and prepare a revised Administrative Draft. Following a second round of comments, we will prepare a print check draft. This scope of work assumes that the second round of comments will only address issues already raised in the first round but requiring further revision. After County staff review of the print check draft, we will prepare the Amendment to the Final EIR for release to the public and County decision-makers.

Task 9. Findings and Statement of Overriding Considerations

Prior to consideration of EIR certification and Project approval, we will prepare draft CEQA Findings, a draft Findings Resolution, and a Statement of Overriding Considerations, if necessary. Draft documents

will be reviewed by Ellen Garber, our legal counsel (Task 11). In addition, we will convert mitigation measures to a list of conditions for approval.

Task 10. Project Management, Meetings, and Communications

This task covers management and oversight of subcontractors, communications with County staff, attendance at meetings, and maintenance of the Administrative Record. It is assumed that Dan Sicular, Project Manager, will communicate with Community Development Agency and Public Works staff frequently and as needed during preparation of the focused EIR, and that these communications will be by email, telephone, and video conference. Sicular Environmental Consulting and our subcontractors will not communicate directly with the Project applicants or their consultants, without prior approval by County staff.

Due to pandemic restrictions, the budget for this task assumes only telephone and video conferences, and no in-person meetings with County staff. Also included are attendance and brief presentations of the focused EIR analysis and conclusions at up to three (3) public hearings. Up to four (4) conference calls, which may include relevant team members, are also assumed in the budget. It is assumed that there will be no scoping meeting.

The Administrative Record will be maintained electronically throughout the preparation of the focused EIR. It will include all written sources relied upon to prepare the focused EIR, as well as records of consultations with outside agencies and any individuals used in preparation of the focused EIR. At the conclusion of the EIR process, the Administrative Record will be provided to the County on CD.

Task 11. Legal Review

Ellen Garber of Shute, Mihaly & Weinberger will review all administrative draft documents for legal adequacy. Ellen will assist with drafting of the CEQA Findings document. She will also be available for consultation on CEQA approach and resolution of technical legal issues as they arise. The budget for this line item is for on-call, time and materials services, and assumes 75 hours of Ellen's time.

Task 12. Contingency

The accompanying budget includes a Contingency line item equal to ten percent of the anticipated cost of completing the EIR process. The purpose of the contingency budget is to cover currently unforeseen costs of completing the focused EIR. This contingency budget will not be drawn upon without express written authorization from the Marin County Community Development Agency.

Schedule

The attached schedule (Attachment 1) shows the projected timeline for preparation, circulation, and certification of the EIR, based on Sicular Environmental Consulting's best estimate of the time necessary to conduct the analysis and to prepare and revise documents, the mandatory and customary comment periods, and typical County staff review time at each stage. The schedule shows that the EIR process will be completed in about 13 months.

Document Format and Printing

The cost estimate assumes delivery of the following:

- Administrative draft and final Project Description: PDF + editable Word electronic version
- Peer Review and Tribal Consultation Memoranda: PDF version
- Two administrative drafts of the Draft EIR: PDF + editable Word electronic version
- Printcheck Draft EIR: PDF + editable Word electronic version
- Draft EIR 20 hard copies + 1 web-ready PDF version
- Two administrative drafts of the Final EIR: PDF + editable Word electronic versions
- Printcheck Final EIR: PDF + editable Word electronic version
- Final EIR: 20 hard copies + 1 web-ready PDF version
- Final EIR Amendment: 20 hard copies + PDF + editable Word electronic version
- Findings and Override: PDF + editable Word electronic version

The web-ready PDFs of the Draft and Final EIR and Final EIR Amendment will meet accessibility requirements of the Americans with Disabilities Act.

Assumptions Upon Which This Proposal is Based

The scope of work, schedule, and cost estimate show Sicular Environmental Consulting's best estimate of the labor effort, elapsed time, and cost necessary to complete the focused EIR, plus a contingency fee to cover unforeseen expenses. The budget represents a firm bid good for 90 days. It is based on the following assumptions:

- Once approved by the County and the Project applicants, there will be no changes to the Project Description.
- There will be no work stoppages or lengthy delays in the fulfillment of data requests or completion of County staff review of administrative drafts.
- The labor effort to respond to comments on public review documents will not exceed the hours shown in the budget for those tasks.
- The contingency fee, as described in Task 12 in the Scope of Work and shown in the cost estimate, will be drawn upon only for work beyond that described in the Scope of Work and budgeted for in the cost estimate, and only with prior written authorization of the Environmental Planning Manager. Any out-of-scope labor effort beyond the limits of the contingency fee may be performed on a time and materials basis, upon agreement to a contract budget augment.

Should any of these assumptions not bear out, Sicular Environmental Consulting will request a budget augment or release of contingency funds to cover additional labor effort and costs incurred.

Sicular Environmental Consulting confirms that we have obtained, understand, and will comply with Marin County's EIR Guidelines, specifically including but not limited to the County EIR Guidelines Appendix A, "Administrative Procedures for selecting and utilizing consultants to prepare EIRs for the County."

Sicular Environmental Consulting will accomplish the proposed work program expeditiously and economically, within the County's overall project schedule and contracted budget. Out-of-scope work will not be performed without prior, express authorization by the County. Quality control of document preparation and necessary oversight will be provided. Should the County encounter a problem related to such, Dan Sicular will intervene in the process to keep work successfully on track per the contract terms.

Attachment 1
Schedule

Alta Way Road Extension Focused EIR
Schedule
Prepared January 19, 2021

Task/Milestone	Weeks to Complete	Elapsed Time (weeks)
Authorization to Proceed	0	0
Peer review, Tribal consultation	3	3
Project Description, data request	4	7
Prepare Administrative Draft	10	17
County review of ADEIR	3	20
Prepare revised ADEIR	3	23
County review of revised ADEIR	3	26
Prepare Screencheck DEIR	2	28
County review of Screencheck DEIR	1	29
Prepare public review DEIR	1	30
45-Day Circulation Period, Public Hearing	7	37
Prepare Administrative Draft RTC	4	41
County review of ADRTC	3	44
Prepare second Administrative DRAFT RTC and FEIR	2	46
County review of complete Administrative Draft FEIR	2	48
Prepare Screencheck FEIR	1	49
County review of Screencheck FEIR	1	50
Prepare final FEIR	1	51
14-Day review period	2	53
Prepare Administrative Draft FEIR Amendment and Findings	3	56
County review of FEIR Amendment and Findings	2	58
Prepare Final FEIR Amendment	1	59

Attachment 2
Cost Estimate

Sicular Environmental Consulting

Alta Way Road Extension
Focused Environmental Impact Report
Cost Estimate
Prepared January 25, 2021

	Sicular Environmental Consulting	RCH Group			Sutro Sciences		JK Botany	Mark Thomas Engineering			PaleoWest Archaeology			Shute Mihaly & Weinberger	Graphics	Word Pro-cessing						
	Dan Sicular, Ph.D., Project Manager	Paul Miller, Principal	Dan Jones,Technical Associate II	Mike Ratte, Senior Air Quality Specialist, Health Risk Assessor	Peter Hudson, Geologist	Justin Taplin, Hydrologist	Julia King	Sasha Dansky, P.E., Principal	Mike Cooper, P.E., Project Manager	Design Engineer	Vanessa Miro, Prncipal	Allan Estes, Ph.D., Prinicipal Investigator	Brenna Wheelis, Project Manager	Ellen Garber, Esq.	Ron Teitel, Graphic Artist, GIS	Eagle Eye Editing	Total Hours	Total Labor Cost	Travel & communications	Printing & materials	Other direct cost	Mark-up on Sub-contractor and Direct Costs	TOTAL COST
Billing Rate ($/hour)	**$190**	**$170**	**$120**	**$160**	**$150**	**$150**	**$100**	**$415**	**$250**	**$121**	**$180**	**$135**	**$115**	**$375**	**$80**	**$75**						**5%**	
TASKS:	Labor Hours																						
1. Review and Discussion of Interim Submittals	26				10	13											49	$8,390				$173	$8,563
2. Data Request, Project Description, Kick-off Meeting	32	1		2	2	2	2								8	4	53	$8,310				$112	$8,422
3. Peer Review of Applicant's Stormwater and Roadway Plans	4				2	8		1	20	17							52	$9,732				$449	$10,181
4. Tribal Consultation	4										1	2	12				19	$2,590				$92	$2,682
5. Prepare Administrative Draft EIR																							
Air Quality, HRA	8	1	24	14													47	$6,810				$265	$7,075
Biological Resources	12						52										64	$7,480	$100			$265	$7,845
Geology and Soils	4				16	2											22	$3,460				$135	$3,595
Greenhouse Gas Emissions	32																32	$6,080				$0	$6,080
Hazards	24																24	$4,560				$0	$4,560
Hydrology and Water Quality	8				4	40											52	$8,120				$330	$8,450
Land Use and Planning	30																30	$5,700				$0	$5,700
Transportation/Circulation	32																32	$6,080				$0	$6,080
Tribal Cultural Resources	12										2	3	17				34	$5,000				$136	$5,136
Utilities and Service Systems	20																20	$3,800				$0	$3,800
Wildfire	32																32	$6,080				$0	$6,080
Cumulative and Growth Inducing Impacts	20		2	2	2	2	2						2				32	$5,390				$80	$5,470
Alternatives	40	2		2	2	2	2										50	$9,060				$73	$9,133
Document Preparation	40														20	12	72	$10,100				$125	$10,225
6. Prepare Public Circulation Draft EIR	60	1	2	2	1	1	2								4	20	93	$14,450		$2,500		$278	$17,228
7. Respond to Comments, Prepare Final EIR	125	2		4	12	24	8					1	4		4	16	200	$33,045		$3,500		$640	$37,185
8. Respond to Comments, Prepare Amendment	65	1		2	6	12	4								2	8	100	$16,700		$1,000		$268	$17,968
9. Findings and Override	40															2	42	$7,750				$8	$7,758
10. Project Management, Meetings, and Communications	120				2	2							2				126	$23,630	$500		$500	$92	$24,722
11. Legal Review and Advice														75			75	$28,125				$1,406	$29,531
SUBTOTAL																							**$253,464**
12. Contingency (10%)																							$25,346
TOTAL EFFORT (Hours)	790	8	28	28	59	108	72	1	20	17	3	6	37	75	38	62	562						
TOTAL COSTS ($)	$150,100	$1,360	$3,360	$4,480	$8,850	$16,200	$7,200	$415	$5,000	$2,057	$540	$810	$4,255	$28,125	$3,040	$4,650		$240,442	$600	$7,000	$500	**$4,922**	**$278,811**

ALTA WAY ROAD EXTENSION FOCUSED EIR

Résumés

Sicular Environmental Consulting and Natural Lands Management
Dan Sicular

RCH Group
Paul Miller
Dan Jones
Mike Ratte

Sutro Science
Peter Hudson
Justin Taplin

JK Botany
Julia King

Mark Thomas Engineering
Mike Cooper
Sasha Dansky

PaleoWest
Vanessa Miro
Allen Estes
Brenna Wheelis

Shute, Mihaly & Weinberger
Ellen Garber

RT Design
Ron Teitel

Eagle Eye Editing
Loralie Froman
Brian Vahey

DANIEL T. SICULAR, Ph.D.

Principal, Sicular Environmental Consulting and Natural Lands Management

Dan Sicular is the Principal of Sicular Environmental Consulting and Natural Lands Management, a Bay Area-based firm specializing in CEQA environmental review, sustainable forest management, and habitat restoration. Dan is an experienced CEQA practitioner, having written and managed numerous Environmental Impact Reports and Initial Studies for projects ranging from State permitting programs, to solid waste landfills and mining operations, to urban development projects. In late 2017 and early 2018, Dan served as the Consulting Environmental Planning Manager for the Marin County Community Development Agency, filling in for the regular Environmental Planning Manager while she was on maternity leave. In this position, Dan worked closely with staff from the Marin County Community Development Agency, Public Works Department, and County Counsel's Office, providing oversight and guidance for several CEQA and NEPA environmental reviews. This experience, in addition to completion of several EIRs and Initial Studies for the County, has given Dan an intimate knowledge of Marin County environmental review standards, practices, and procedures.

Positions Held

Current
Principal, Sicular Environmental Consulting and Natural Lands Management (2016-present)

Past
Consulting Environmental Planning Manager, Marin County Community Development Agency (Sept. 2017- March 2018)
Forest Manager, Pacific Forest Trust, San Francisco, CA (2015-2016)
Senior Project Manager, Environmental Science Associates, San Francisco, CA (1994-2015)
Instructor, University of California, Berkeley Extension Environmental Management Program (1991-1994)
Instructor, San Francisco State University Environmental Resources Program (1990-1993)

Education

Ph.D., Geography, University of California, Berkeley (1989)
M.A., Geography, University of California, Berkeley (1984)
B.A., Southeast Asian Studies, University of California, Berkeley (1982)

Relevant Experience

San Rafael Rock Quarry Supplemental Environmental Review (Project Manager). Dan is assisting Marin County with preparation of a CEQA Supplemental Environmental Review for the proposed extension of the reclamation timeline for the San Rafael Rock Quarry. The extension would allow for continued mining through at least 2044. Dan previously managed the completion of an EIR for the Quarry (see below). The Supplemental Environmental Review covers the full range of environmental topics.

Dipsea Ranch Land Division Initial Study (*Project Manager*). Under contract to the Marin County Community Development Agency, Dan prepared a CEQA Initial Study for the Dipsea Ranch Land Division Project. The Project consisted of subdivision of an existing 8-acre parcel located on Panoramic Highway on the southern slope of Mount Tamalpais, to create three lots. A Mitigated Negative Declaration for the Project was adopted by the Planning Commission in April, 2020, and, after appeal, upheld by the Board of Supervisors in October, 2020. The Project garnered intense opposition from neighbors. Dan and his team prepared written responses to the extensive comments submitted during the public review period, and responded, on a very short timeline, to additional comments received during the appeal.

Marin County Department of Public Works/Flood Control and Water Conservation District, Environmental Planning and Coordination Services (*Project Manager*). Dan is assisting the District with

coordination and review of environmental review documents for the Ross Valley Watershed Program. These have included the San Anselmo Flood Risk Reduction Final EIR and the Corte Madera Creek Flood Risk Management Project Draft EIS/EIR. Dan is currently assisting with review of the upcoming Corte Madera Creek Flood Risk Management Project Phase 1 EIR.

Gallinas Levee Upgrade Initial Study, Marin County Department of Public Works/Flood Control and Water Conservation District (*Project Manager*). Dan prepared a CEQA Initial Study for the planned raising of the timber reinforced berm atop the Gallinas Levee, which protects the Santa Venetia neighborhood from tidal and riverine flooding of Las Gallinas Creek. The Initial Study was completed in June, 2019 and a Mitigated Negative Declaration was adopted for the project in October, 2019.

Alta Way Extension Initial Study, Marin County. *Project Manager*. Dan prepared a CEQA Initial Study for a proposed grading permit to extend an existing residential street in the Tamalpais Valley to access ten legal lots of record. Working closely with Community Development Agency and Department of Public Works staff, Dan navigated complex technical and planning issues as well as public controversy over the project. The Initial Study concludes that the project would have the potential for significant effects on the environment, and that an EIR should be prepared. The Initial Study was completed in April, 2018.

Marin County Federal Housing Grants Program NEPA Assistance, Marin County Community Development Agency (*Project Manager*) Since 2018, Dan has assisted the Community Development Agency with completion of NEPA reviews for the Federal Housing Grants Program. Grants, which originate with funding from the Department of Housing and Urban Development, are given for new construction and rehabilitation low-income housing. Each grant requires compliance with NEPA through preparation of an environmental review document.

Marin County Emergency Operations Facility EIR, *Project Manager. (ESA)* Dan was ESA's project manager for preparation of an EIR for Marin County's proposed Emergency Operations Facility, which was being considered for location on the County Civic Center campus. Working with staff from the County Administrator's Office and Community Development Agency, Dan and his team examined in detail six potential locations for the facility, including four sites on the Civic Center campus as well as two off-site locations. Of paramount importance in the EIR was a consideration of the compatibility of the Emergency Operations Facility with the 2005 *Marin County Civic Center Master Design Guidelines*, which are intended to ensure that all future development on the Campus is consistent with Frank Lloyd Wright's original Master Plan. The EIR was unusual in conducting an economic analysis and architectural study of the alternative locations. Work was stopped on the EIR just before the Draft was due to be published in April 2011, as the Board of Supervisors began focusing attention on the Marin Commons office complex site, one of the alternatives being examined in the EIR; because this site was an existing office complex, purchasing and repurposing it for the Emergency Operations Facility were exempt from CEQA review.

San Rafael Rock Quarry EIR, **Marin County. *Project Manager (ESA).*** Working with the Marin County Department of Public Works and Community Development Agency, Dan and his team at ESA managed the preparation an EIR for the San Rafael Rock Quarry's Reclamation Plan and Surface Mining and Quarrying Permit. The quarry, located at Point San Pedro near the City of San Rafael, extracts and processes rock for use as aggregate, road base, rip-rap, and other products. Operation of the quarry had become a matter of considerable controversy, due to impacts on the residential neighborhood that adjoins the quarry property. Of particular concern to the site's neighbors were blasting, truck traffic, and a degraded view shed. The project included an analysis of potential impacts of planned post-reclamation use of the site, which included cutting a channel between the 400-foot deep main quarry bowl and San Pablo Bay in order to create a lagoon and ship channel. A mixed commercial, residential, and marina development was planned for the site. The Final EIR was certified, and the project approved by the Marin County Board of Supervisors, in 2009.

Redwood Landfill Expansion EIR, Marin County. ***Project Manager (ESA).*** While at ESA, Dan managed the completion of a Subsequent EIR for the proposed expansion of the Redwood Landfill, located near Novato in Marin County. Dan worked closely with County Environmental Health Services and Community Development Agency staff to develop an alternative to the project that refocuses the facility on materials and energy recovery, rather than landfill disposal, and that limits the size of the expansion and daily waste intake to levels commensurate with the County's needs. Ultimately, the County approved the alternative, after certifying the EIR in 2008. Subsequently, Dan worked with the County on preparation of an Addendum to the EIR to examine more closely two key elements of the facility's transition: development of a materials recovery facility, and expansion of the existing composting operation.

Other EIRs

While at ESA, Dan managed through to certification the following Environmental Impact Reports (lead agency and date of certification provided; asterisk (*) indicates that the EIR withstood legal challenge):

Cold Creek Compost Facility EIR, Mendocino County (1998)*

Blue Line Transfer Station/Materials Recovery Facility EIR, South San Francisco (1999)

Ostrom Road Landfill Expansion, Yuba County (1999)*

Yolo County Central Landfill EIR, Yolo County (2005)

Redwood Landfill EIR, Marin County (2008)*

Shasta and Scott River Watershed-wide Permitting Programs EIRs, CA Depart. of Fish and Wildlife (2009)

San Rafael Rock Quarry Expansion and Reclamation Plan EIR, Marin County (2009)

San Francisco Bay and Delta Sand Mining EIR, California State Lands Commission (2012)*

Pilarcitos Quarry Expansion and Reclamation Plan EIR, San Mateo County (2012)

Sonoma County Compost Facility EIR, Sonoma County Waste Management Authority (2013)

Landbank Central and Wolfe Campus EIR, City of Sunnyvale (2014)

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Paul Miller

Managing Principal, Senior Noise Scientist, Environmental Services

Paul is an environmental professional with more than 35 years of experience in providing services and products to government agencies and private sector corporations. His technical areas of expertise include CEQA project management and technical analyses in the areas of air quality, greenhouse gas emissions, noise, integrated waste management, energy, and hazardous materials. With a broad range of environmental skills, he has applied his background since 1986 to CEQA and NEPA and has been integral in the preparation of over 500 CEQA/NEPA environmental documents, including project manager for more than 18 major EIRs. He has been the project manager or a key team leader for five state agencies (California Public Utilities Commission (CPUC), California Energy Commission (CEC), CalRecycle, the former California Integrated Waste Management Board, and the State Water Resources Board, Central Valley Region) on projects of statewide importance.

CEQA/NEPA Project Experience:

- **Residential/Commercial Development:** Marin County Alta Way Extension Initial Study Noise Technical Report (2017); San Marin High School Expansion IS/MND; Novato High School Expansion IS/MND; San Marin High School Turf Field Categorical Exemption; Novato High School Turf Field Categorical Exemption; Dutton Meadows CEQA Addendum; Colfax Corporation Yard and RV/Boat Storage IS/MND; Colfax Hotel IS/MND; Rocklin Sunset & Pacific IS/MND; Granite Bay Joe Rodgers Subdivision AQ/GHG/Noise Analysis; Double S Ranch Subdivision AQ/GHG Analysis; Whitehawk I & Whitehawk II AQ/GHG Analysis; William Jenkins Health Center CEQA Exemption; Clarksburg Sugar Mill Specific Plan EIR; Elverta Specific Plan EIS; Redding Oasis Center Master EIR; NUMI Modernization EIR Addendum
- **Senior Noise Analyst and Reviewer**: Mr. Miller has been collecting high-quality noise measurements since 1988. He specializes in collecting baseline environmental noise data and analyzing the potential noise impacts of proposed projects in CEQA and NEPA documents. RCH uses a noise data collection and processing system that he has been continually modifying and enhancing the processes for data accuracy and cost efficiency. The combined hardware/software system uses higher-capacity batteries, portable computers to download data, and customized software to automatically plot daily noise data showing relevant standards and noise monitoring locations.
- **Air Quality/Greenhouse Gas**: Salton Sea Particulate Matter Review; Honda Port of Entry EIR (Port of Richmond); Union Pacific Railroad Modernization EIR (Lathrop, CA); Eagle Mountain Pumped Storage Hydroelectric EIR and EIS (Mohave Desert); Oasis Shopping Center Master EIR (Redding, CA); San Rafael Rock Quarry EIRs; La Vista Quarry EIR (Alameda County); Stockton Delta Water Supply Project Feasibility Study EIR; Novato Sanitary District Master Plan EIR; SAFCA Mayhew Levee Replacement Project Peer Review
- **Restoration/Recreational**: Aramburu Island Restoration in Marin County; Salt River Restoration in Humboldt County; Sonoma Creek in Sonoma County; Napa Ponds in Napa County; Parsons Slough Restoration near Monterey Bay

- **Energy/Transmission:** Pacific Gas and Electric Co. (PG&E) Divestiture EIR for Hydroelectric System Divestiture EIR; PG&E Divestiture EIRs to sell Morrow Bay, Moss Landing, Oakland, Potrero, Pittsburg, and Contra Costa Power Plants; San Diego Gas and Electric Company's (SDG&E's) Power Plant Divestiture MND; MND to divest Southern California Edison Company's power plants
- **Anaerobic Digestion:** San Luis Obispo County HZI Anaerobic Digester; CalRecycle Statewide Program EIR for Anaerobic Digestion Facilities; Central Valley Regional Water Quality Control Board - Dairy Manure Digester and Manure Co-digester Program EIR; Blue Line Materials Recovery Facility and Transfer Station Anaerobic Digester with Compressed Natural Gas Production MND
- **Waste Management:** Plasco Conversion System for the Salinas Valley Solid Waste Management Authority (SVSWA); South San Francisco Scavenger Company Materials Recovery Facility EIR; West Contra Costa County Integrated Resource Recovery Facility EIR; Sanitary Fill Solid Waste Transfer Station and Household Hazardous Waste Facility EIR; Yuba-Sutter Disposal Inc. Transfer Station and Compost MND; Stockton Scavenger Transfer Station Focused EIR; City of Fremont Transfer Station/MRF/Composting Facility EIR; Austin Road Landfill Expansion EIR; Altamont Landfill and Resource Recovery Facility Expansion EIR; Time Extension of Importation of Contra Costa County Waste to the Altamont Landfill EIR; Altamont Landfill Reclassification (Class II) EIR; West Contra Costa Landfill Closure CEQA Technical Assistance; Ostrom Road Landfill Permit Modifications (Class II) EIR; Eureka County Nevada Solid Waste Management NEPA EAs; Bakersfield City Sanitary Landfill; Closure/Post-Closure Maintenance Plans EIR; San Leandro Landfill Gas Collection and Flaring System Mitigated Negative Declaration; New Jamestown Landfill EIR; Sutter County Ash Disposal Site EIR; Ukiah Landfill Permit Revision Supplemental EIR; Marsh Canyon Landfill EIR; Sonoma County Compost Site Selection, Conceptual Design and EIR; Cold Creek Compost Facility EIR

Education

1977 MS Zoology and Entomology, Colorado State University – Fort Collins, Colorado
1974 BA Zoology, Miami University – Oxford, Ohio

Professional Affiliations/Accreditations

- Member, Association of Environmental Professionals
- Board Member, Air and Waste Management Association, Mother Lode Chapter of Golden West Section
- CARB-Accredited Lead GHG Verifier of Emissions Data Reports for Mandatory Reporting
- Acoustical Society of America, Associate Member
- Institute of Noise Control Engineering (INCE), Associate Member

35 Years Consulting Experience

- Environmental Science Associates (ESA)
- North State Resources
- Aspen Environmental Group
- EarthMetrics, Inc.
- Environmental Measurements, Inc.
- Ecology Consultants, Inc.
- Miller Environmental Consultants

RCHGROUP
planning & environmental consulting

Dan Jones

Air Quality/Noise Technical Associate, Environmental Services

Dan Jones is an environmental professional with six years of experience in providing environmental services and products to government agencies and private sector corporations. Dan's technical areas of expertise include CEQA project management and document preparation and technical analyses in the areas of air quality, greenhouse gases/climate change, health risk assessment, and noise. Dan has been integral in the preparation of over 150 CEQA documents and technical studies supporting such documents. Dan's technical noise experience includes short-term and long-term noise monitoring and noise modeling with the Federal Highway Administration's Roadway Construction Noise Model and Highway Traffic Noise Prediction Model. Dan is proficient in a variety of air emissions models including California Air Pollution Control Officers Association's CalEEMod, California Air Resource Board's EMFAC and OFFROAD, and Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model.

CEQA/NEPA Project Experience:

- **Residential/Commercial Development:** Marin County Alta Way Extension Marin County Alta Way Extension Initial Study Air Quality, Greenhouse Gas and Health Risk Assessment Technical Report (2017), San Marin High School Expansion IS/MND, Novato High School Expansion IS/MND, San Marin High School Turf Field Categorical Exemption, Novato High School Turf Field Categorical Exemption, Shasta 10 Noise/AQ/CAP Consistency Analysis, Morgan Knolls Subdivision IS/MND, Rocklin Meadows Subdivision AQ/GHG Analysis, Wildcat Subdivision AQ/GHG Analysis, Winding Creek Subdivision Noise Analysis, Rancho Vista Subdivision AQ Analysis, Riolo Vineyards Specific Plan IS/MND, Nevin Avenue Apartments IS/MND, Calistoga Subdivision Noise/AQ/CAP Consistency Analysis, Residences at Railway AQ/GHG Analysis, Centennial Towers North Tower AQ/GHG/HRA Analysis, 488 Linden Avenue AQ/HRA Analysis, 255 Cypress Avenue AQ/HRA Analysis, Centennial Towers R&D Project AQ/GHG/HRA Analysis, Whitehawk I & Whitehawk II AQ/GHG Analysis, Viri Estates Skilled Nursing Facility IS/MND, Alviso Village AQ/GHG/HRA Analysis, Lakeside Fire Protection District IS/MND, Green Island Road Wine Warehouse AQ/GHG/HRA Analysis, Pruneyard Shopping Center AQ/GHG/HRA Analysis, Richmond Terminal 3 Timber Export Facility IS/MND, 901 Larch Avenue IS/MND, 52 Franklin Avenue IS/MND, UCSF Research Building and Parking Garage Expansion EIR, 150 Airport Blvd IS/MND, Oak Knoll Mixed Use Community Plan EIR, Lincoln Northeast Quad Specific Plan HRA, Oakland T12 Office Tower, Sonora Food Service Building IS/MND, Osgood Heights IS/MND, 550 Gateway Blvd Hotel IS/MND, Justin Vineyards & Winery Permit Application, Sunnyvale Atria on El Camino Real AQ/GHG/HRA Analysis, Quarry Place Mixed Use Development AQ/GHG/Noise Analysis, First and Campbell AQ Analysis, Roseville Junction Crossing Noise Analysis, William Jenkins Health Center Noise Analysis, John Henry High School AQ/Noise Peer Review, Sierra Oaks Estates and Village Oaks IS/MND, The Parkway Apartments IS/MND, Cal Expo Rock & Brews CEQA Categorical Exemption, Solana Beach Skyline Elementary School Reconstruction Peer Review, Folsom Bidwell Pointe CEQA Infill Exemption, Granite Bay Joe Rodgers Subdivision AQ/GHG/Noise Analysis, Monarch Vista Apartments IS/MND, Double S Ranch Subdivision AQ/GHG Analysis, Vista Self Storage IS/ND, Colfax Sierra Oaks Estates and Village Oaks CEQA Addendum, Bayview Health Risk Assessment, The Oaks Assisted Living CEQA Addendum, Colfax

Corporation Yard and RV/Boat Storage IS/MND, Colfax Hotel IS/MND, Dutton Meadows CEQA Addendum, Rocklin Tractor Supply Company AQ/GHG Analysis, and Colfax Maidu Village Development Project

- **Restoration/Recreational:** Rockville Trails IS/MND, High Plains Shooting Sports Center Noise Analysis, Alameda Creek Levee Improvement IS/MND, Putah Creek Restoration Projects Program EIR, Lower Putah Creek Restoration Project IS/MND, Lake Chabot Campus Modernization IS/MND, Phillips 66 Company Line 200 Release Remediation Project IS/MND, Bay Point Restoration and Public Access IS/MND, University of California Santa Barbara Sea Wall IS/MND, Black Diamond Mines Preserve EIR
- **Mining/Quarrying:** Olive Pit Mine and Reclamation Project EIR, R&J Aggregate Mines EIR, Olive Pit Mine and Reclamation Project EIR Addendum, Irwindale Kincaid Pit Remediation and Reclamation Project
- **Energy Projects:** Castor Solar Noise Study, California Public Utilities Commission Fulton-Fitch Mountain Reconductoring Project, California Public Utilities Commission Central Valley Power Connect 230 kV Project, California Public Utilities Commission Riverside Transmission Reliability Project, San Diego Gas & Electric TL 695, TL 6971 Reconductoring Project and Santa Paula Battery Energy Storage System IS/MND, PG&E Wheeler Ridge Junction Project, Gemini Solar EIS.
- **Water Conveyance:** Buena Outfall Force Main Phase III IS/MND, Oasis Irrigation System Expansion Project EIR, The People's Moss Landing Water Desalination Project EIR, Central Amador Water Project Pioneer Water Rehabilitation Project IS/MND, Cuesta Heights Water Storage and Distribution Improvements Project IS/MND, Christian Valley Park Community Service District Water Storage Tank Project IS/MND
- **Miscellaneous Public Works:** Sea Ranch Fiber Optic Cable Project IS/MND, Jackson Creek Bridge Replacement Project IS/MND
- **Waste Management:** Blue Line Biogenic CNG Facility CEQA Addendum, Recology Vallejo Permit Revisions IS/MND, Valley Springs Recycling Center IS/MND, Irwindale Materials Recovery Facility/Transfer Station EIR, Sierra Waste Transfer Station Permitting, Forward Landfill SEIR, Glenn County Solid Waste Conversion Facility EIR, North Richmond Chip & Grind GHG Analysis, San Luis Obispo Anaerobic Digester IS/MND, Fair Deal Recycling Facility IS/MND & Transfer Processing Report, Ukiah Landfill Closure EIR, San Luis Obispo Anaerobic Digester Odor Impact Minimization Plan, Irwindale Materials Recovery Facility/Transfer Station EIR Addendum, San Luis Obispo Anaerobic Digester Authority to Construct Permit
- **NEPA:** Tule Lake Segregation Center Historic Jail Restoration EA, Chicago O'Hare Intl Re-evaluation EIS, Christian Valley Park Community Service District Water Storage Tank Project Environmental Report, Chicago O'Hare Terminal Air Plan, Chicago O'Hare Interim Fly Quiet

Education

2013 BS Environmental Policy Analysis and Planning, University of California: Davis – Davis, California

Professional Affiliations/Accreditations

- Member, Association of Environmental Professionals
- CARB-Accredited GHG Verifier of Emissions Data Reports for Mandatory Reporting

RCH GROUP
planning & environmental consulting

Michael Ratte

Senior Air Quality Scientist, Environmental Services

Michael Ratte is a Senior Air Quality Scientist at RCH Group. Mike has been a practicing meteorologist and air quality specialist within the consulting business for over 30 years. Mike's technical areas of expertise include CEQA/NEPA environmental planning, air emissions inventories, ambient air monitoring, atmospheric dispersion modeling, General Conformity determinations, CO/PM roadway intersection hot-spot analysis, air quality permitting, health risk assessments, and climate change analyses.

Mike has worked extensively for local, state, and federal agencies, as well as a wide array of commercial businesses and industries. His recent projects involved transportation facilities (airports, roadways, and marine ports), land development (residential/commercial/institutional), landfills, and quarry operations. He has conducted air quality analysis for over 30 airport CEQA/NEPA documents.

Mike is well versed in a wide array of air emission models including, EMFAC, OFFROAD, NONROAD, MOVES, CALEEMod, and AP-42; dispersion models such as AERMOD, CAL2QHC, EDMS/AEDT, and HARP; with strong data management and ACCESS programming skills.

CEQA/NEPA Project Experience:

- **Residential/Commercial Development:** Marin County Alta Way Extension Initial Study Air Quality, Greenhouse Gas and Health Risk Assessment Technical Report (2017), San Marin High School Expansion IS/MND, Novato High School Expansion IS/MND, 127 West Harris Ave Hotel IS/MND, 150 Airport Blvd IS/MND, 1525 Alviso Street IS/MND, 2117 Carlmont Drive IS/MND, 255 Cypress Avenue IS/MND, 418 Linden Ave IS/MND, 488 Linden Avenue IS/MND, 550 Gateway Blvd hotel IS/MND, 699 Ralston Avenue IS/MND, 830 Marina Way South (Bay Walk) IS/MND, American Canyon Green Road Wine Warehouse IS/MND, American Canyon Middle School EIR, Bayview Residential EIR, Brisbane Baylands EIR, Broadway Plaza EIR, Centennial Towers IS/MND, Centennial Hotel IS/MND, Central Amador Water Pioneer Water Rehabilitation IS/MND, Crystal Springs Upland School IS/MND, Colfax Sierra Oaks Estates and Village Oaks Apartments IS/MND, East Bay Regional Park District Public Safety Modernization IS/MND, First and Campbell Retail IS/MND, Folsom Bidwell Pointe CEQA Exemption, Folsom Parkway Parcel A Apartment Complex IS/MND, Gimbals Candies Expansion IS/MND, Lafayette Town Center IS/MND, Lakeside Fire Station IS/MND, Life Sciences Campus IS/MND, Lincoln Northeast Quad Specific Plan, Linden Commuter Bus Facility IS/MND, Masonic Homes Union City EIR, Morgan Knolls IS/MND, Nevin Avenue Apartments IS/MND, Park SFO IS/MND, Oak Knoll Mixed Use Community Plan EIR, Oakland T12 Office Tower, Port of Richmond Honda Port of Entry EIR, Port of Richmond Terminal 3 Log Export Facility IS/MND, Osgood Heights IS/MND, Residences at Railway IS/MND, Pruneyard Shopping Center, Richmond Quarry Residential IS/MND, Richmond John Henry High School Peer Review, Richmond South Shoreline Specific Plan HRA, Rocklin Sunset & Pacific IS/MND, Sea Ranch Fiber Optic Cable Project IS/MND, Sunnyvale Atria on El Camino Real IS/MND, The Oaks Assisted Living EIR Addendum, Treasure Island EIR, UCSF Long Term Development Plan EIR, UCSF Research Building and Parking Garage Expansion EIR, Ukiah Walmart EIR, Westborough Shopping Center Redevelopment IS/MND, William Jenkins Health Center CEQA Exemption

- **Restoration/Recreational:** Marin Municipal Water District Biodiversity Fire and Fuels Integrated Plan EIR, Alameda Creek North Levee Improvements IS/MND, Bay Point Restoration and Public Access IS/MND, Lower Berryessa Creek EIR, Lower Yolo Restoration EIR, Black Diamond Mines Regional Preserve Land Use Plan Amendment EIR, Moss Landing Desalination Plant EIR, Oasis Area Irrigation System Expansion EIR, Phillips 66 Oil Spill Remediation IS/MND, Putah Creek Restoration Project IS/MND, Rockville Trails Preserve IS/MND
- **Mining/Quarrying:** Olive Pit Mine EIR, Permanente Quarry Reclamation Plan Amendment EIR, Pilarcitos Quarry Expansion EIR, R&J Aggregate Mine EIR, Roblar Road Quarry EIR, San Rafael Rock Quarry EIR, Vernalis Quarry EIR
- **Energy/Transmission:** Eagle Mountain Pumped Storage Hydroelectric EIR/EIS, California Public Utilities Commission Bakersfield Power Connect 230 kV Project, California Public Utilities Commission Fulton-Fitch Mountain Reconductoring Project, California Public Utilities Commission Riverside Transmission Reliability Project, SDG&E TL 695, TL 6971 Reconductoring Project, Santa Paula Battery Energy Storage System IS/MND
- **Waste Management:** Fair Deal Waste Recycling and Transfer Station IS/MND, Forward Landfill Expansion EIR, Glenn County Landfill EIR, Irwindale Athens Services Materials Recovery Facility/Transfer Station EIR, Keller Canyon Landfill EIR, Milpitas Odor Assessment, San Luis Obispo Anaerobic Digester IS/MND, San Luis Obispo Anaerobic Digester Authority to Construct Permit, Sonoma Compost EIR, Ukiah Landfill Closure EIR
- **Airport:** Baltimore Intl Improvement Program EA, Baltimore Intl Proposed Hotel EA, Burbank Terminal Relocation EIR, Chicago O'Hare Intl Modernization Program EIS, Chicago O'Hare Intl Re-Evaluation EIS, Coronado Naval Air Station North Island Land Use Plan, East Hampton Control Tower EA, Fresno Yosemite Intl Runway Safety Area EA, Gooding (Idaho) Municipal EA, Houston Hobby Intl Service EA, Kaiser Air Oakland North Field EIR, LaGuardia Intl Runway Safety Area EA, Louis Armstrong New Orleans Intl Terminal Relocation EA, Manchester-Boston Regional Emission Inventory, March Inland Port General Aviation Development EA/EIR, Minneapolis-St. Paul Intl 2020 Improvements EA, Nut Tree Master Plan EIR, Oakland Intl Runway Safety Area EA, Palm Springs Intl Master Plan Update EA, Philadelphia Intl Capacity Enhancement Program General Conformity Determination, Philadelphia Intl Capacity Enhancement Program EIS, Portland Intl Runway Extension EA, Providence Runway Extension EIS, Riverside Master Plan EA, Sacramento Intl Terminal Expansion EIR, San Diego Intl Master Plan EIR, San Francisco Intl Runway Safety Area EA, Santa Maria Master Plan Update EA, Southern Nevada Supplemental EIS

Education

1989 BS Meteorology, Lyndon State College – Lyndonville, Vermont

Professional Affiliations/Accreditations

- Member, Association of Environmental Professionals
- Member, Air and Waste Management Association

30 Years Consulting Experience

- TRC
- Radian/URS
- Environmental Science Associates
- KB Environmental Sciences

PETER HUDSON PG, CEG

Principal/Senior Geologist

Pete Hudson has more than 30 years of broad-based experience in engineering geology, hydrogeology, environmental, geotechnical and surface water. He is a professional geologist and certified engineering geologist in the state of California and a registered geologist/engineering geologist in the state of Washington. His general responsibilities include providing geological, geotechnical, geophysical and hydrogeological technical support in water quality assessments, water resource and geological studies for planning, permit assistance, environmental impact assessments with emphasis on hydrological and geologic issues, soils investigations and erosion/geomorphic investigations, planning/policy assessments, and mitigation planning and monitoring. Pete has authored numerous geoscience and hydrology-related technical sections under CEQA and NEPA and provides technical input and senior review for completion of work products including EIRs and EISs, and EAs. Pete contributes his technical expertise to resource management plans, reclamation/restoration plans, erosion control plans, draft permits (e.g., NPDES), land development environmental feasibility analyses, and site selection/constraints studies. Pete is a Qualified SWPPP Practitioner (QSP) as required under California's Construction General Permit.

Education and Certifications

BA, Geology, San Francisco State University 1987
Pre-Engineering Coursework. University of San Francisco 1985
Professional Geologist, California (Registration No. 6730)
Certified Engineering Geologist, California (Registration No. 2368)
Qualified SWPPP Practitioner QSP (Certificate No. 21673)

RELEVANT PROJECT EXPERIENCE

Redwood Landfill Solid Waste Facilities Permit Revision EIR. ***Senior Geologist.*** Pete was involved in this project for 8 years as an analysts and geoscience technical advisor for issues with landfill cover, slope analysis, the Leachate Collection and Recovery System (LCRS) operations analysis and levee stability. This project is located on the Bay mud along the banks of the Petaluma River and thus presents challenging issues for geotechnical stability, groundwater/leachate management, and groundwater quality. As Technical Services Group manager, Pete supported staff hydrologists and geologists during the impact analysis, attended County/Applicant CEQA meetings, and provided senior technical review of EIR sections on geology and hydrology.

San Rafael Rock Quarry Amended Reclamation Plan and Amended Quarry Permit EIR. ***Geologic and Hydrogeologic Analyst –Reviewer*****.** Pete provided senior technical input and oversight for the preparation of the geology/seismicity and hydrology chapters of the EIR. He coordinated and led the technical aspects of the sampling program developed for fugitive dust emissions and crystalline silica. Main technical issues involved erosion and storm water and post-reclamation conversion to a marina. Pete provided senior review of the DEIR sections and assisted with the response to public and agency comments.

Dipsea Ranch Land Division Initial Study. ***Geologist*****.** Sutro assisted Sicular Environmental Consultants with the completion of a CEQA Initial Study for the lot subdivision project in Mill Valley. Pete conducted a peer review of applicant geotechnical studies and prepared the geology/seismicity section for the initial study. Analysis also involved review of the onsite sewage disposal analysis prepared for the applicant by an outside

consultant. Impact analysis included past action involving the unpermitted grading of a fire road, placement of fill, and installation of a culvert.

Alta Way Extension Initial Study. ***Geologist.*** Sutro assisted Sicular Environmental Consultants with the CEQA Initial Study for this subdivision project off the Panoramic Highway in Mill Valley. Pete conducted a peer review of applicant-provided geotechnical investigation report and prepared a draft of the geology/seismicity chapter of the IS/MND. The primary geologic and geotechnical issues involved foundation placement and grading on slopes composed of sheared and fractured mélange of the Franciscan Complex containing sandstone and siltstone. The project is located in a seismically active area on slopes considered to be less than stable.

Marin County Emergency Operation Facility Program EIR, San Rafael, CA, *Geologic Reviewer.* Pete was the senior technical advisor for geology issues. Key issues on the project were ensuring compliance with SB 1953 and associate seismic design requirements, fairly deep subgrade facilities and potential for structural dewatering, and contamination issues. The chief issue of concern was construction in an historic district, and related aesthetic and cultural resources impacts, particularly with regard to the Frank Lloyd Wright Civic Center buildings. The EIR included an extensive examination and comparison of alternative sites for the facility, both on and off the Civic Center campus.

Oak to Ninth Avenue Waterfront Development EIR, Alameda County, CA. ***Senior Geologist and Hydrogeologist.*** Pete was the senior technical leader for the CEQA analysis of hazardous materials, hydrology, and geologic issues, with focus on seismicity. Peter provided final technical review and internal staff technical support through preparation of Final EIR. Major issues included construction on compressible clays, shallow groundwater, storm water discharges, contaminated soil management, and regulatory constraints on Bay Shore construction. In 2008, Pete authored the Revised EIR to comply with a court order that addressed the analysis of seismic risk. The Revised EIR became the subject document in the court case of *Oakland Heritage Alliance vs. the City of Oakland.*

Lehigh/Permanente Quarry Reclamation Plan Amendment EIR, and Associated Follow-on Work Cupertino, CA. ***Senior Geologist/Hydrogeologist***. Pete has been involved with the Lehigh/Permanente Quarry since September 2010, when, as senior technical staff at ESA, he coordinated the effort to assess the North Quarry for the presence of asbestos and crystalline silica. ESA was under contract with the County of Santa Clara, Department of Planning and Development (County). Pete was then senior geologist/hydrogeologist responsible for technical analysis behind the Lehigh Permanente Quarry Reclamation Plan Amendment (RPA) EIR where he led the effort to analyze the geologic, geotechnical, surface water, and groundwater constraints and impacts associated with Lehigh's plan to reclaim the west and east material storage areas. Pete worked with the EIR team and County technical staff to scope the geologic/hydrogeologic analyses, identify technical issues and constraints, develop mitigation measures, respond to comments and provide senior technical review. Following completion of the RPA, work with the County at the Lehigh/Permanente Quarry continued, where as a principal at Sutro Science, LLC, Pete is currently under contract with the County to provide technical assistance pertaining to water quality issues at Pond 30 and assessing potential treatment options for surface water in Permanente Creek.

PETER HUDSON PG, CEG
Principal/Senior Geologist

Treasure Island/Yerba Buena Redevelopment Plan EIR. ***Senior Geologist/ Hydrologist.*** Pete was technical team leader for the hydrology and geotechnical issues for the proposed Treasure Island Development Plan. Issues on this project included flooding, sea level rise, surface water flow, soil and groundwater contamination, settlement, and potential seismic instability for this challenging development on Treasure Island. The proposed project is a nearly 10-year, phased redevelopment to create a new mixed-use community.

Leona Quarry Residential Project EIR, Alameda County, CA. ***Senior Geologist/Hydrogeologist***. Pete was responsible for the CEQA analysis of geologic and hydrologic impacts associated with the conversion of the former quarry to a residential development. Issues included bedrock slope stability, analysis of potential shear zones, post-project surface water management, seismic ground shaking and occurrence of shallow groundwater. Technical challenges included analysis of storm water detention pond and effects potential runoff would have on downstream reaches of area creeks and sizing of culverts to convey storm water while avoiding onsite flooding.

Monte Bello Ridge Open Space Preserve Land Exchange IS. ***Senior Geologist/Hydrogeologist*.** Pete assisted the Midpeninsula Regional Open Space District's (MROSD) with preparation of an IS/MND for a proposed land and easement swap with Ridge Vineyards, which owns land adjacent to Monte Bello Open Space Preserve in the Santa Cruz Mountains. The IS/MND addressed the potential for erosion during construction and operation of the trail and vineyards, potential slope failure, and potential impacts to water quality and biological resources such as dusty-footed wood rats and special-status plants.

Chevron Long Wharf - Environmental Mitigation Monitoring Program, **Stormwater Pollution Prevention Plan (SWPPP) Compliance Support** ***Technical Lead*** Pete was on the environmental mitigation monitoring team that provided mitigation monitoring support to the California State Lands Commission to implement a monitoring program for the Chevron Refinery Long Wharf, in Richmond, As a Qualified SWPPP Practitioner (QSP) Pete's role involved conducting onsite stormwater control evaluations, reviewing the Stormwater Pollution Prevention Plans and other compliance documents provided by the facilities and preparing and reviewing compliance reports. Pete provided technical assistance and applied his experience as a QSP and CEQA/NEPA analyst to help ensure that the facility complied with its Water Quality Mitigation Monitoring/Reporting requirements.

Northeast Rohnert Park Specific Plan EIR, ***Geologist and Hydrologist.*** Pete provided technical data on geology and hydrology for the EIR for the City of Rohnert Park for its proposed Northeast Area Specific Plan. The specific plan called for development of a residential community of approximately 1,060 dwelling units in a variety of housing densities and types, 18-acres of parks and bikeways, and nearly 57-acres of other open space on an approximately 272-acre site adjacent to the northeastern edge of the city. The property consists primarily of former agricultural land, and contains several old buildings as well as two riparian corridors.

Brisbane Baylands Phase I Specific Plan EIR. ***Senior Geologist/Hydrologist.*** Pete was senior technical lead for hydrology, and hazardous materials issues and is overseeing the technical analyses for the EIR on this 659-acre planning area previously occupied by a landfill and a railroad yard. Ground settlement, contaminated groundwater, and altered surface water flows are just some of the challenging technical issues.

JUSTIN TAPLIN, MS

Principal/Senior Environmental Scientist

A skilled and effective scientist, technical manager, and strategic thinker, Justin brings more than 14 years of California based consulting experience to the environmental review and compliance process. He applies expertise in the arenas hydrology, water quality, and water resource regulation/policy with a discerning eye to produce comprehensive and defensible environmental assessments and mitigation strategies. He acts as technical manager, senior reviewer, and lead author for large-scale, often contentious, complex program- and project-level Environmental Impact Reports, Environmental Impact Statements, and other documents pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). As technical manager, he routinely coordinates with engineering and technical sub-consultants with expertise in a variety of fields such as stormwater conveyance, stormwater drainage, hydromodification, coastal hydrology and sea level rise dynamics, and water quality. Prior to co-founding Sutro Science LLC, Justin worked at Environmental Science Associates from 2007 to 2015 as a technical manager contributing to a wide range of development, water supply, energy and infrastructure projects.

Education and Certifications

M.S. Environmental Management. University of San Francisco, California.
B.S. (Hons) Biological Sciences. University of Westminster, UK.

Certified Fisheries Professional (#3146), American Fisheries Society
Advanced CEQA Workshop. AEP, 2015.
CEQA Case Law Updates, Issues, Trends. Sohagi Law Group, 2010.
Stormwater Regulations in CA. NWET, September 2009.
Management of Water in CA. UC Berkeley Extension, 2008.

Relevant Project Experience

34th America's Cup and Cruise Terminal EIR, San Francisco, CA. ***Technical Lead: Hydrology and Water Quality.*** Environmental review for two projects was completed through a single EIR: 1) the 34th America's Cup sailing events; and 2) a new Cruise Terminal located along the San Francisco Bay shoreline. The America's Cup Event Authority proposed a variety of temporary coastal and offshore facilities. The Cruise Terminal involved in-water work along the Bay shoreline. Justin managed all tasks related to the hydrologic and water quality impacts analysis for the EIR and was the section lead author. Technical management required coordination of engineering and technical sub-consultants as well as a team of hydrologists and coastal process engineers. Justin evaluated the project components, which posed several unique hydrologic and water quality impacts along the Bay margin. Key issues included use of temporary project facilities, such as wave attenuators, in-water construction impacts, and temporary land use changes.

Dipsea Ranch Land Division IS, Marin County Community Development Agency, CA. ***Hydrologist.*** Environmental review was conducted for a proposed land division to subdivide an existing 8.3-acre lot in unincorporated Mill Valley to create 3 single-family residential lots. The Project proposes installation of two new on-site sewage disposal systems and a storm water management system that would utilize a system of storm drains, cisterns, and bioswales to control runoff. Justin was responsible for all aspects of hydrology and water quality analysis for the proposed land division as well as future development of the 2 new residential lots as a reasonably foreseeable consequence of approval of the land division. Justin's analysis of impacts considered potential hydromodification impacts within the Redwood Creek watershed from future development as well as a past action involving the unpermitted grading of a fire road, placement of fill, and installation of a culvert.

JUSTIN TAPLIN, MS

Principal/Senior Environmental Scientist

Alta Way Extension IS, Marin County Public Works Department, CA. *Hydrologist*. Marin County is conducting environmental review for a grading permit application to allow the extension of Alta Way, an existing residential street in unincorporated Mill Valley. The extension of Alta Way would provide access and utility extensions to ten undeveloped legal lots of record. Because approval of the grading permit would allow access to undeveloped lots, the analysis of impacts included the proposed extension of Alta Way and the future development of the ten lots. Justin was responsible for all aspects of hydrology and water quality analysis for the future development of the ten new residential lots, located on steep slopes within the Coyote Creek watershed. Justin's analysis of impacts considered public scoping comments related to concerns that existing stormwater infrastructure is insufficient to accommodate stormwater from the project and that increased runoff from the site could increase flooding downgradient for roads, creeks, and residential properties.

Landbank Central Sunnyvale Campus EIR, City of Sunnyvale, CA. *Hydrologist*. Justin assessed potential hydrology and water quality impacts for a proposed campus-style office/R&D facility located in Central Sunnyvale that would likely become the headquarters for a technology firm. Justin conducted a site reconnaissance and observed the existing stormwater drainage and natural water bodies and developed project impact analysis based on existing conditions. Some key issues included assessing proposed stormwater management solutions aimed at reducing pervious surfaces on-site to aid in long-term stormwater runoff and water quality control. He authored a section that was geared toward the new project components within the context of regional stormwater management regulations.

Alpine Road Trail Improvement Project IS/MND. San Mateo County Department of Public Works, CA. *Hydrologist*. Justin was senior reviewer and lead author for hydrology, water quality, and fisheries environmental impact assessments under CEQA for proposed work to restore a 1.84-mile segment of the Lower Alpine Road Trail, which included bank stabilization at three sites along the adjacent Los Trancos Creek, within unincorporated San Mateo County. Justin was responsible for all aspects of the impact analyses and worked with a team of engineers and geomorphologists to assess hydromodification impacts in Los Trancos Creek related to proposed bank armoring strategies for stabilization. Justin worked with local stakeholders, including Stanford University, to develop alternatives and mitigation plans to address stakeholder concerns regarding urbanization and armoring of the creek channel and fisheries habitat impacts.

Vista Grande Drainage Basin Improvement Project EIR/EIS, Daly City, CA. Technical Manager: Hydrology and Water Quality. Justin worked with Daly City and San Francisco Public Utilities to provide CEQA/NEPA documentation, and hydrologic and water quality technical support for a project that proposes to address storm-related residential flooding in the basin while beneficially re-using storm water for management of Lake Merced. Justin designed and implemented water quality investigations (including a water quality sampling program) related to Basin Plan, 303d, and NPDES issues and was lead author and analyst for the hydrology and water quality section of the EIR/EIS. Key issues include stormwater re-use impacts to lake water quality and stratification dynamics, fisheries habitat, coastal erosion impacts from and sea level rise resilience of outfall structures, Operation and management of stormwater treatment wetlands.

Relevant Publications

Roberts, J. W., J. Taplin, E. Zigas. 2017. Disposal of Seawater Desalination Brines and the CEQA/NEPA Process. American Society of Civil Engineers (ASCE): World Environmental and Water Resources Congress, May 1, 2017. Available at: https://ascelibrary.org/doi/abs/10.1061/9780784480632.021

Julia King | JK Botany and Wetland Science

14015 Murphy Ave, San Martin, CA 95046 (408) 591-6465 jkbotany@yahoo.com

Julia King is a senior botanist and wetland scientist with 22 years of professional experience in biological consulting, specializing in field investigations to determine the presence of wetlands and special-status plants and animals. She has expertise in the flora and fauna of Northern California, including terrestrial, freshwater aquatic, and estuarine environments.

Ms. King has experience in the San Francisco Bay Area, Monterey Bay area, Sacramento Valley, Sierra Nevada foothills, and San Joaquin Valley, and has led special-status species investigations in a broad range of soil types and habitats including serpentine, dune, vernal pool, alkali sink, chaparral, valley and foothill grassland, and riparian.

She is a highly trained and experienced wetland scientist and her expertise includes the delineation of wetlands; Clean Water Act Section 404 and Section 401 permitting; mitigation planning; and the creation, restoration, and monitoring of wetland and riparian habitats. She has performed wetland delineations on sites up to 15,000 acres and prepared both Nationwide and Individual Permits for development and infrastructure projects.

Education

B.S. Botany, University of California Davis 1993

Wetland Delineation Training, Wetland Training Institute 1996

Federal Wetland Review, Wetland Training Institute 2015

Experience

JK Botany and Wetland Science | 2013 – Present

- Conducted wetland delineation field work using U.S. Army Corps of Engineers parameters and prepared reports for regulatory agency submittal.
- Led presence/absence surveys for endangered plant species and prepared master list of plant species observed.

ESA | 2011-2014

- Collaborated with botanical teams in special-status plant surveys and prepared reports documenting surveys, habitats, and comprehensive plant lists.

- Evaluated conditions at restoration sites and prepared detailed monitoring reports to record the success of wetland and riparian mitigation sites.
- Performed wetland delineations and produced reports for submittal to regulatory agencies.

HNTB Corporation | 2009-2011

- Led wetland delineation field work, directing teams in data collection. Prepared wetland delineation and permit documents for submittal to regulatory agencies.
- Conducted presence-absence surveys for special-status plants and created documents characterizing habitats and survey results using regulatory agency standards.

Olberding Environmental | 1997-2009

- Prepared wetland delineation reports and accompanying permitting documents for submittal to regulatory agencies.
- Created planting plans for wetland and riparian mitigation and the guidelines for mitigation and monitoring reports for annual monitoring to meet regulatory agency specifications.

EIP Associates | 1994-1997

- Performed construction monitoring for special-status plants and animals.
- Surveyed habitats for special-status plants and animals and prepared reports documenting results.

SRWWTP Bufferlands | 1993-1994

- Collected, pressed, and mounted botanical specimens for inclusion in Bufferlands herbarium.
- Restored riparian habitat through planting, maintenance, and monitoring of restoration stock.
- Gathered wetland data for the evaluation of vegetation cover to aid in management strategies in wetland habitats.

MIKE COOPER, PE

Mike Cooper has more than 40 years of experience in a variety of areas including design and construction management of municipal, land development, infrastructure and transportation projects. He has had significant roles in the design and construction of the infrastructure for the Hacienda Business Park in Pleasanton, the Evergreen Specific Plan in San Jose, and the Eagle Ridge Golf Course in Gilroy. He has served as acting city engineer and city surveyor for a number of cities in the greater San Francisco Bay Area including serving as acting city surveyor for the City of San Ramon and deputy city engineer for the City of Marina, overseeing the development review and construction inspection of redevelopment projects within the Former Fort Ord.

PROJECT ROLE
Project Manager

EDUCATION
BS in Civil Engineering

REGISTRATION
CA C29072

ADDITIONAL PROJECTS
- Monterey Streetscape Phase 3, Gilroy
- West A Street-I-880 to Hesperian Boulevard, Hayward
- Bordeaux Bike Lanes and Sidewalks, Sunnyvale

REPRESENTATIVE PROJECTS

MISSION BOULEVARD PHASE 3, HAYWARD
Project manager for the preparation of plans for roadway and streetscape improvements on Mission Boulevard. The goal of the project is to relieve traffic congestion, improve traffic flow, and transform the corridor into a beautifully landscaped facility that provides a complete street for pedestrians, bicyclists, transit, trucks, and cars. Additionally, undergrounding of overhead utility lines will improve corridor aesthetics along with improving reliability of service and safety.

LINDEN AND SPRUCE AVENUE TRAFFIC CALMING IMPROVEMENTS, SOUTH SAN FRANCISCO
Project manager responsible for managing the final design of street improvements to this older downtown street, including pavement rehabilitation at intersections, construction of bulb-outs and bus pads, and updating pedestrian ramps.

CHARLESTON-ARASTRADERO IMPROVEMENTS, PALO ALTO
Quality control manager responsible for overseeing the design team in the preparation of the complete street, roadway improvement plans along the corridor. The project will add innovative bicycle transportation solutions which consist of modified signals, green bike lanes, cycle tracks and Copenhagen bike left turn lanes.

SAN RAMON ON CALL ENGINEERING, SAN RAMON
Project manager responsible for providing various services to the City including design of the storm culvert repairs, update of their CIP funding, plan review services, and review of Standard Details and Procedures Manual.

ON-CALL ENGINEERING, CONSTRUCTION INSPECTION AND MANAGEMENT, GILROY
Primary contact for a variety of services to the City of Gilroy including development plan and subdivision map review, serving as acting city surveyor, design of Monterey Streetscape and other CIP projects.

HALE AVENUE EXTENSION, MORGAN HILL
Project manager responsible for oversight of design services for the extension of this arterial street that will provide a long needed bypass for traffic around downtown Morgan Hill. The proposed improvements include a roundabout at West Dunne Street, landscaping, sound walls, a new traffic signal, street lights, and landscaped median island. Significant retaining walls are required to conform to existing ground adjacent to the new street.

SASHA DANSKY, PE, QSD/P

Sasha Dansky has more than 22 years of experience and extensive knowledge in the planning and design of highway and municipal transportation projects. His technical background and understanding of the project development process allows him to serve clients during all stages of a project, from conceptual design to preparation of construction documents. Sasha's experience covers, highway, municipal roadway, transit, drainage, utility, trail and bridge projects. He has extensive knowledge of Caltrans procedures. Mark Thomas' clients benefit from his ability to provide timely solutions to critical issues and to work with Caltrans and other agencies to gain rapid project approvals.

PROJECT ROLE
Principal in Charge, Constructability Reviews

EDUCATION
BS in Civil Engineering

REGISTRATION
CA C60220
CA QSD/P 23432

ADDITIONAL PROJECTS

- West Broadway Village Infrastructure Improvements, Seaside
- On-Call Consulting Services, South San Francisco
- Survey and Civil Design On-Call, San Ramon

REPRESENTATIVE PROJECTS

CHARLESTON-ARASTRADERO IMPROVEMENTS, PALO ALTO

Principal in charge responsible for overseeing design team in the preparation of the complete street, roadway improvement plans along the corridor. The project will add innovative bicycle transportation solutions which consist of modified signals, green bike lanes, cycle tracks and Copenhagen bike left turn lanes.

MISSION BOULEVARD PHASE 3, HAYWARD

Principal in charge for preparation of plans for roadway and streetscape improvements on Mission Boulevard. The goal of the project is to relieve traffic congestion, improve traffic flow, and transform the corridor into a beautifully landscaped facility that provides a complete street for pedestrians, bicyclists, transit, trucks, and cars. Additionally, undergrounding of overhead utility lines will improve corridor aesthetics along with improving reliability of service and safety.

LINDEN AND SPRUCE AVENUE TRAFFIC CALMING IMPROVEMENTS, SOUTH SAN FRANCISCO

Principal in charge responsible for overseeing the final design of street improvements to this older downtown street, including pavement rehabilitation at intersections, construction of bulb-outs and bus pads, and updating pedestrian ramps.

MEMORIAL UNION/UNITRANS TERMINAL MODERNIZATION, DAVIS

Principal in charge for the design and construction of 17 new bus bays, two transit platforms, demolition, grading, historical tree relocation, drainage improvements, lighting, gate structures, landscaping, irrigation, sidewalks, loading/unloading zone, bike racks, improved passenger amenities including shelters and signage as well as increased ADA accessibility.

ON-CALL ENGINEERING SERVICES, DUBLIN

Principal in charge responsible for providing engineering services for task orders under this on-call contract. Task orders include condition assessment of the trail network for the Pathway Maintenance Plan, and design services for the improvements of the Shannon Center Parking Lot.

ON-CALL ENGINEERING SERVICES, NAPA COUNTY

Principal in charge/project manager for a major task order under this on-call contract. Responsible for overseeing all civil PS&E for the 1.25-acre Soscol Gateway Transit Center project in downtown Napa as well as assisting in project entitlements and public art coordination.

VANESSA MIRRO, M.A., RPA

Principal-in-Charge

EDUCATION

M.A., Colorado State University, 2002

B.A., University of Western Ontario, 1998

YEARS OF PROFESSIONAL EXPERIENCE

22

REGISTRATIONS / CERTIFICATIONS

Register of Professional Archaeologists (2003)

PERMITS / LICENSURE

Principal Investigator, California BLM Statewide Cultural Resources Use Permit CA-18-27, expires 08/19/21

PROFESSIONAL AFFILIATIONS

Society for American Archaeology

American Cultural Resource Association Board of Directors

A leader in the industry both in California and nationwide, Vanessa Mirro carries over 20 years of experience in cultural resources management (CRM) in California, the eastern United States, and Canada. Before PaleoWest, she spent 17 years building a leading CRM firm in California, leaving there as Vice President in 2017. She is expert in project management, business development, tribal consultation, and regulatory compliance. She has held executive, Board, and Chair positions for leading national industry organizations like the American Cultural Resources Association (ACRA) and the Register of Professional Archaeologists (RPA). Ms. Mirro has directed hundreds of projects and prepared and implemented management and treatment plans for major undertakings in transportation, renewable energy, water infrastructure and storage, gas and electric transmission, ensuring their compliance with the NHPA, CEQA, and other federal and state laws. These include large-scale, multi-year projects and on-call contracts, such as cultural resource investigations for the Metropolitan Water District of Southern California; the Coachella Valley Water District; PG&E's Groundwater Remediation Project; California Department of Transportation's On-call Cultural and Paleontological Resources Services contract; the Riverside County Transportation Department's On-Call Cultural Resources Services contract; the State Route 79 Realignment Project; and Metropolitan Water District's San Diego Pipeline No. 6 Project. As well, Ms. Mirro has conducted successful consultation with numerous agencies, descendant communities, and Native American groups.

SELECT PROJECT EXPERIENCE

Marysville Ring Levee Pre-activity Survey and Monitoring Project, Marysville, CA Principal-in-Charge *(February 2020-present)*. Responsibilities include oversight of field efforts, U.S. Army Corps of Engineers consultation, and review of technical memoranda for the project. Client: Odin Construction Services

Cultural Resource Services for the Twenty-Nine Palms Band of Mission Indians, Indio, CA. *Principal-in-Charge (2013-present).* Assisted the tribe with the development of their Tribal Historic Preservation Office (THPO) Program, which included reservation-wide surveys, database development, management plans, and report preparation. Client: Twenty-Nine Palms Band of Mission Indians.

Feather River West Levee Pre-activity Survey. Principal-in-Charge *(March-April 2020).* Responsibilities include coordination with the U.S. Army Corps of Engineers, Sacramento District, oversight of a pre-activity survey of 105 acres surrounding 1.6 miles of levee, documentation of an abandoned historical highway, and preparation of the technical memorandum for record. Client: Odin Construction Services

Cultural Resources Studies for the San Francisco-4Terra Investments 350 8th Street Project in San Francisco County, CA. *Principal Investigator (2016-2018).* Responsibilities include oversight of archival

and literature searches, data recovery efforts, archaeological monitoring, feature interpretation, report preparation. Client: AERC

Cultural Resources Studies for the San Francisco Public Utilities Commission Hetch Hetchy Reliable Power Project in San Francisco and Tuolumne County, CA. *Principal Investigator (2018-2019).* Responsibilities include supervision of archival and literature searches, archaeological survey, development of a cultural resource management plan, final report preparation. Client: RMC/Woodard Curran

Cultural Resources Studies for the Restoration Design Group Wildcat Creek and Greenway Trail Project in Contra Costa County, CA. *Principal Investigator (2018-2019).* Responsibilities include oversight of archival and literature searches, archaeological survey, development of area of potential effects maps, report preparation. Client: Restoration Design Group

Cultural Resources Studies for the Nichelini Vineyards Road Project in Napa County, CA. *Principal Investigator (2018-2019).* Responsibilities include supervision of archival and literature searches, archaeological survey, development of area of potential effects maps, archaeological site boundary testing, National Register of Historic Places eligibility recommendations, report preparation. Client: Triad/Holmes Association

Avenue 50 Bridge over Coachella Stormwater Channel Project, Coachella, Riverside County, CA. *Principal-in-Charge and Principal Investigator (2017).* Responsible for oversight of cultural resource studies (ASR, HRER, and HPSR) and preparation of an APE Map in support of the proposed improvements to the Avenue 50 bridge over the Coachella Stormwater Channel for the City of Coachella (Caltrans Local Assistance Project). Client: ATHALYE Consulting and Engineering Services, Inc.

PG&E Hinkley Groundwater Remediation Project, San Bernardino County, CA. *Principal Investigator (2011-2017).* Ms. Mirro was responsible for overseeing all cultural and paleontological services performed for PG&E's Hinkley Groundwater Remediation project. Studies associated with the project include archaeological surveys, built environment assessments, paleontological surveys, and reporting. Client: PG&E

Cultural Resource Assessment for the Coachella Valley Water District Coachella Canal Irrigation Laterals Replacement Project, Riverside County, CA. *Principal-in-Charge (2015).* Responsible for oversight of archival research and records searches, Native American coordination, field survey, identification and evaluation historic-period irrigation laterals and roads for the NRHP and CRHR, consultation with the Bureau of Reclamation and SHPO, and compliance with Section 106 and CEQA. Client: Coachella Valley Water District

Class III Cultural Resources Assessment for the Cultural Resource Assessment for the Coachella Canal-SilverRock Project, Riverside County, CA. *Principal-in-Charge (2009-2010).* Responsible for performing research and records searches, Native American coordination, field survey, documentation and evaluation of the Coachella Canal, and consultation with the Bureau of Reclamation and SHPO. Client: Coachella Valley Water District

Allen Estes, Ph.D.

Senior Archaeologist

EDUCATION

Ph.D., Near Eastern Studies, University of California, Berkeley

Senior Archaeologist and Project Director, Dr. Allen Estes has over 25 years of experience in supervising archaeological projects including the management of surveys, excavation, construction monitoring, artifact analysis, curation, and technical reporting. Dr. Estes began his archaeological career in 1986 working for the University of California, Berkeley at the site of Tel Dor, Israel and served through 2006 as the Assistant Director of U.C. Berkeley's project team. As a member of PaleoWest, he expertly guides clients through CEQA compliance for issues pertaining to cultural resources and has worked on projects under the oversight of local and state agencies such as the City and County of San Francisco Planning Department, Caltrans and San Francisco Public Utilities Commission. Dr. Estes also has directed work on projects in California, Nevada, Arizona and Utah under federal agencies such as the US Army Corps of Engineers, the National Forest Service and the Bureau of Land Management. Dr. Estes has experience in preparing research designs and predictive models, performing background studies, archival research, and impact evaluations, and has broad field experience in intensive field surveys, excavations on prehistoric and historic sites, and burial recovery. He meets the Secretary of the Interior's Standards for History and Archaeology.

Select Project Experience

Westlake Farms Pipeline Crossing Project, Kings County, California. Responsible for conducting field surveys and XP-1 testing, resource documentation, and Section 106 compliant technical report preparation for the construction of a water pipeline under US Army Corps of Engineers jurisdiction.

Project Director, Hecker Pass Specific Plan Amend No. 6 Project, Santa Clara County, California. Responsible for supervising field surveys, resource documentation, and technical report and Caltrans documents preparation for the construction of roundabout on Highway 152. .

Project Director, Evergreen Circle Project, San Jose, California. Responsible for managing archaeological testing and monitoring, resource documentation, and technical report preparation for the construction of a residential development in San Jose, CA. Worked with the Native American Most Likely Descendant on burial recovery protocols.

Project Director, SFPUC Reliable Power Project, Tuolumne County, California. Served as project director and field supervisor for field surveys, resource documentation and assessment, and technical report preparation along transmission line corridor. Also prepared Cultural Resources Management Plan for the SFPUC.

UNEV Pipeline Project, multiple counties in Utah and Nevada. Project direction responsible for conducting field surveys, resource documentation, and technical report preparation for the construction of a new petroleum pipeline, along with associated staging, access and infrastructure for the Bureau of Land Management.

Project Director, Fort Irwin Project, Fort Irwin, California. Project direction responsible for conducting field surveys, test excavation, resource documentation, artifact analysis, and technical report preparation for the construction of desert training areas at the Fort Irwin Army Base for the US Army.

Brenna Wheelis, B.A.

Senior Archaeologist/Project Manager

As an Senior Archaeologist and Project Manager, Ms. Wheelis is responsible for the identification of client needs and project outcomes, coordination and management of field and laboratory activities, and timely completion of project deliverables. Other project management responsibilities include conducting cultural sensitivity training for construction personnel, field training and supervision of new staff, field direction of testing and data recovery activities, crew scheduling, and crew safety mitigation. Laboratory management tasks include facility maintenance, production and upkeep of WSA project inventory catalogs, curation preparation, and coordinating access and analysis schedules.

EDUCATION

B.A., Magna Cum Laude, Social and Behavioral Sciences, California State University, Monterey Bay, 2009

PROFESSIONAL AFFILIATIONS

California Historical Society

Society for California Archaeology

Select Project Experience

Project Manager, Arcadia Sports Complex, San Jose, California. Community softball field development overseen by the City of San Jose's Department of Public Works. Ms. Wheelis's involvement in the Project began in June of 2018 when construction crews inadvertently impacted prehistoric human remains. Ms. Wheelis worked with the lead agency, the Native American Most Likely Descendent (MLD), and the general contractor to develop modified excavation strategies for the remaining construction in the sensitive area of the project. Ms. Wheelis is responsible for managing all project components, including budget oversight, collaboration with client and lead agency, and coordination with the MLD.

Project Manager, Transbay Redevelopment Block 8, City and County of San Francisco, California. Preparation of an Archaeological Resources Report (ARR) on behalf of the Transbay Joint Powers Authority (TJPA), outlining the results of an implemented Archaeological Research Design and Testing Plan (ARDTP) for a mixed-use tower development located in an area with moderate historic and prehistoric sensitivity. Project ARR components included determining eligibility of archaeological features for, administration contributing staff, laboratory analysis management, budget oversight, and coordination with client and lead agency.

Field Director, Transbay Transit Center Program: Bus Storage, City and County of San Francisco, California. Director of field activities during implementation phase of an ARDTP addressing the Transbay Transit Center Program's future Bus Storage facility. Responsibilities included identification and mitigation of potential work environment hazards, directing of field staff and data recovery efforts, investigation and recordation of archaeological components, project coordination with client and subcontractors.

Senior Staff Archaeologist, Pier 70, City and County of San Francisco, California. Administration and supervision of archaeological training, including direction of daily monitoring log format, instruction on comprehensive documentation of historic archaeological resources as directed by San Francisco Office of Environmental Planning, mitigation of mechanical excavation strategies, and project coordination with client and project management.

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ELLEN J. GARBER

Ms. Garber joined Shute, Mihaly & Weinberger in 1987, and is a partner with the firm. She received her law degree from the University of California at Berkeley. Prior to attending law school, Ms. Garber was an urban planner in both government and private practice.

Ms. Garber's practice consists primarily of representing public agencies in CEQA and land use litigation, and advising them on CEQA/NEPA compliance, including emerging greenhouse gas issues and climate action plans; reuse and redevelopment of contaminated property and closed military bases; solid waste site closure and reuse; water quality and air quality; and issues related to land use planning, municipal finance (special assessments, taxes and fees), and leasing and sale of public land.

Ms. Garber's representative CEQA compliance experience includes preparation of programmatic EIRs intended to be used for tiering, combined programmatic/project documents describing complex projects, project EIRs, tiered and supplemental/subsequent environmental documents, negative declarations and addenda. Some of Ms. Garber's CEQA compliance experience includes EIRs and an addendum for the state's Delta Plan; the SEIS/EIR and addenda for the Transbay Transit Center; EIRs and tiered documents for University of California campus Long Range Development Plans and projects; EIRs and EIS for the redevelopment of Alameda Point (Naval Air Station Alameda), including Section 7 consultation; the EIR for the UC Merced University Community for the County of Merced; EIRs and tiered documents for Comprehensive Flood Control Improvements for the Sacramento Area (including levee improvements, setback levees, and Folsom Dam) and for the Natomas Levees Improvement Program for the Sacramento Area Flood Control Agency; the EIR for the State's first AB 900 project, Apple Campus 2, for the City of Cupertino, and the EIR for Cupertino's general plan update as well as tiered documents for infill development projects.

Ms. Garber is a member of the Bar of the State of California and also is a member of the American Institute of Certified Planners. She was an early leader in the formation of the Executive Committee of the State Bar of California Environmental Law Section, and served on the Executive and Legislation Committees for many years. She frequently speaks on and teaches CEQA and land use law, was the author of two studies regarding the use of planning and institutional controls in the context of brownfields redevelopment and military base reuse, and is a contributor to land use and environmental publications.

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RONALD TEITEL
CARTOGRAPHER/GRAPHIC DESIGN

EXPERTISE

- Technical/Informational Graphics
- GIS
- Visual Simulations
- Shadow Study Modeling
- Presentation and Marketing Material Design
- Publications Illustration and Design

PROFILE

Mr. Teitel is a geographer with 32 years of experience in cartographic techniques, graphic design and presentation. He specializes visual simulations as well as complex mapping projects and accurate interpretation of informational graphics used in proposals, presentations and report reproduction.

Mr. Teitel's experience with GIS includes compiling spatial data from census information, field observations, aerial photos and internet mapping sources and combining them into a usable graphic format.

EXPERIENCE

Consultant, Cartography/Graphic Design
1999-present

Environmental Science Associates
Senior Graphic Artist

EDUCATION

San Francisco State University, San Francisco, California
Geography
Bachelor of Arts, 1988

LIST OF PROJECTS

- Alta Way Road Extension Initial Study
- Gallinas Levee Upgrade Initial Study
- Dipsea Ranch Land Division Initial Study
- San Rafael Rock Quarry Supplemental Environmental Review
- Redwood Landfill EIR
- SSIP Central Bayside System Improvement Project for the SFPUC
- The 34th America's Cup and James R. Herman Cruise Terminal and Northeast Wharf Plaza Project - San Francisco Planning Department
- EBMUD Water Treatment and Transmission Improvements Program
- SFPUC Crystal Springs Pipeline No. 2 Replacement Project
- San Francisco Groundwater Supply Project
- Alameda Siphons Seismic Reliability Upgrade Project
- SFPUC Water System Improvement Program EIR
- SFPUC Calaveras Dam Replacement Project
- Treasure Island / Yerba Buena Island Redevelopment Project EIR - San Francisco Planning Department
- Jackson Street Chinese Hospital Replacement Project - San Francisco Planning Department
- North Richmond Specific Plan
- Oakland Zoo in Knowland Park Master Plan Mitigated Negative Declaration - Oakland Zoo East Zoological Society

EAGLE EYE EDITING

LORALIE FROMAN, Technical Editor/Writer
415-647-5697
eagle4eye@comcast.net

PROFESSIONAL HISTORY

Eagle Eye Editing provides technical editing, writing, and document preparation services for Bay Area environmental firms as well as public and private clients. Loralie Froman, principal, is a 25-year veteran of the environmental consulting field.

SELECT PROJECT EXPERIENCE

Relevant Development Projects

For ESA, served as editor for the San Francisco Marina Renovation Project Initial Study/EIR, the City and County of San Francisco's Piers 29-31 Mixed-Use Recreation Project EIR, and the UC Santa Cruz Long Marine Laboratory Coastal Long Range Development Plan. For RS&H, provided editorial services for the San Francisco International Airport Shoreline Protection Project and Harbor Dredging Project.

Transportation Projects

For RS&H, currently providing technical editing for the Bob Hope "Hollywood Burbank" Airport Replacement Terminal EIS. For ESA, provided editing for the OAK Airport Development Program EIS/EIR and SEIS and the SFO Master Plan EA. For AECOM, edited the Comprehensive Transportation Management Plan for Parklands in Southwestern Marin County and the Marin Comprehensive Transportation Management Plan. For CirclePoint, provided editorial services for a Supplemental EIR for the Santa Clara Valley Transportation Authority's proposed extension of BART in the Silicon Valley. For Transportation Resource Associates, edited and rewrote a series of safety and procedures manuals for San Francisco's MUNI bus and rail operators, including the text for an interactive transportation website.

Water System Treatment and Transmission Facilities Projects

For ESA+Orion, provided editorial services for the Program EIR and multiple project EIRs for the SFPUC's Water System Improvement Program. For ESA, served as editor for EBMUD's Water Treatment and Transmission Improvements Program EIR, California America Water's Monterey Peninsula Water Supply Project EIR, and the San Pablo Dam Seismic Upgrade Project EIR; Contra Costa

Water District's Los Vaqueros Reservoir Expansion Project EIS/EIR; and CALFED's Los Vaqueros Expansion Studies Concept Report, Planning Report, and technical memoranda.

Water-Related Planning Projects

For ESA+Orion and RMC, edited the City and County of San Francisco's Recycled Water Master Plan. For ESA, served as editor for the SFPUC's Groundwater Supply Project EIR. For AECOM, edited the City of Santa Cruz's Integrated Water Plan Program EIR. For RMC, edited the SFPUC's Retail Water Conservation Plan.

Pipeline Facilities Projects

For Panorama Environmental, provided editorial services for the Alameda–North Bay Farm Island Pipeline Crossings Project Draft EIR. For ESA, provided editing for EBMUD's West of Hills Northern Pipelines Project EIR. For ESA+Orion, edited the following SFPUC WSIP pipeline project EIRs: Seismic Upgrade of Bay Division Pipelines Nos. 3 and 4, San Antonio Backup Pipeline, and Crystal Springs Pipeline No. 3 Replacement. For ESA, edited the EIR analyzing the Livermore–Amador Valley Water Management Agency's proposal to provide pipeline facilities in the Amador Valley. Also provided editing for the Fairfield Sewer System and Treatment Plan Master Plan EIR (for ESA) and Lake County's LACOSAN Full-Circle Effluent Pipeline Project EIR (for EDAW).

EDUCATION

CALIFORNIA STATE UNIVERSITY, SAN FRANCISCO
Bachelor of Arts, Humanities. Certificate, Technical Writing. 1984.

CERTIFICATIONS

San Francisco City Administrator's Office, Woman-Owned Local Business Enterprise, Certification No. CMD051912776

State of California, Department of General Services, Small Business Certification, ID No. 20274

Eagle Eye Editing

Loralie Froman
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Brian R. Vahey
863 30th Avenue
San Francisco, CA 94121
(415) 221-3370

Experience:

Freelance Desktop Publishing/Word Processing (1996 – present)

Twenty-three years of experience in Word Processing for environmental planning, engineering, and other clients. Specializing in production of long, complex, technical reports in compliance with formatting style.

Desktop publishing of final reports, newsletters and proposals using InDesign, Adobe Acrobat, and Photoshop. Digital photography and post-processing for web and print purposes.

Clients include environmental planning firms, consulting engineering firms, and federal agencies, such as the National Park Service and Presidio Trust.

Recent major projects completed include the *Transit Effectiveness Project EIR* for the City of San Francisco, the *Calaveras Dam Replacement Project EIR* and numerous permitting documents and biological assessments related to that project, the *SFPUC Habitat Reserve Program*, *Final Pulgas 3 Initial Study*, the *Presidio Trust Management Plan Main Post Update – Draft SEIS* for the Presidio Trust, the *South Bay Salt Pond Restoration Project FEIR* for EDAW, the *Yosemite National Park Vegetation Management Plan* for the National Park Service, and photography and desktop publishing for the *Embarcadero Historic District National Register Nomination* for the Port of San Francisco.

URS Corporation, San Francisco (2001 – ongoing)

On-call Word Processor for major engineering firm. Extensive experience producing proposals, environmental documents, and specifications involving complex formatting, tables, equations, etc.

Dames & Moore, Inc., San Francisco (November 1990 – July 1996)

Production Word Processing for engineering consulting firm. Responsible for creation of styles and macros for standard formats and training of other operators in their use.

Computer Skills: Twenty-three years of experience with Word, Excel, and Adobe Acrobat, using all advanced functions such as macros, stylesheets, tables, equations, merge, and graphics. Fifteen years PageMaker, InDesign, and Photoshop experience.

Education: New York University, New York – B.F.A., Film and Television

Many seminars and courses on computer and software applications, time management and productivity

"Registered" means a professional licensed to practice in the state of California (e.g., architect, engineer, land surveyor).

"Right-of-way" means the strip of land within which a public road is or will be contained and which is defined by the offer of dedication document. It is almost always wider than the actual physical road and is in no case less wide.

Road. Used interchangeably with street and means the actual physical surface or way over which vehicles pass. This does not include curbs, gutters, sidewalks or unpaved shoulders.

"Turnaround" means an enlarged or otherwise enhanced area of a road, driveway or parking area designed to allow vehicles to reverse direction safely and with relative ease.

"Turnout" means a section of a driveway or road constructed wider than the remainder to allow two vehicles to pass each other.

"Uniform Construction Standards (UCS)" means the drawings contained in the current volume of "The Uniform Construction Standards, Approved and Adopted by Cities of Marin and County of Marin." This volume is available from the agency. (Ord. 3181 § 5 (part), 1994)

I. ROADS

24.04.020 General.

All new roads shall be constructed to the standards set forth in this chapter except as otherwise provided herein. These individual standards notwithstanding, the design of a road shall take into account the combined effect of the individual elements (e.g., centerline radii, grade, cross-slope) in making up the total road. Care shall be taken to avoid combining individual design elements at the extreme limits of acceptability along the same section of road. Where this is necessary due to severe physical, right-of-way or other constraints, then design modifications and/or other mitigating measures may be required as determined appropriate by the agency. These measures may include but are not limited to additional width, longer radii, slope grading, vegetation removal, striping or other lane and/or road edge delineation, signs, signals and barriers. Under certain circumstances, reductions in these standards may be allowed in accordance with Section 24.15.010 of this title. (Ord. 3181 § 5 (part), 1994)

24.04.030 Road classifications.

The design criteria for a road shall be based on the classifications defined below. Use figures (i.e., units served and ADT) shall be based on the ultimate development of the area served by the road as defined by the Marin countywide plan and/or any general, specific or community plan applicable to the area.

"Arterial road" means all arterial roads as specified in the countywide plan or the Marin county annual road list, and other major roads with an actual or projected ADT over two thousand.

"Industrial commercial road" means a road providing access to, or through, an industrial or commercial zone or an area of high truck and/or other large vehicle traffic.

"Collector road" means a road with an actual or projected ADT from one thousand to two thousand.

"Residential road" means a road providing access to a generally residential area and which serves or may serve twenty or more dwelling units, and a maximum potential ADT of one thousand.

"Minor residential road" means a road providing access to a generally residential area and which serves or may serve seven to nineteen dwelling units, and a maximum potential ADT of five hundred.

"Limited residential road" means a road which serves two to six dwelling units, and a maximum potential ADT of one hundred fifty. (Ord. 3181 § 5 (part), 1994)

24.04.035 Design speed.

All roads except limited residential roads shall have a minimum design speed of twenty-five mph. (Ord. 3181 § 5 (part), 1994)

24.04.040 Centerlines.

The centerlines of all roads shall be continuations of the centerlines of existing roads in adjacent and contiguous territory. For cases in which straight continuations are not physically possible, such centerlines may be continued by curves, and shall be in general conformity with the plans made for the most advantageous development of the area in which the development lies. (Ord. 3181 § 5 (part), 1994)

24.04.045 Centerline radii.

The centerline radii of all roads shall be designed in general accordance with the procedures contained in the current edition of the CalTrans Highway Design Manual. (Ord. 3181 § 5 (part), 1994)

24.04.050 Vertical curves.

Vertical curves shall be used at any change in grade of one percent or more. The length of the vertical curve shall be determined according to the procedure contained in the current edition of the CalTrans Highway Design Manual or as required by the agency. (Ord. 3181 § 5 (part), 1994)

24.04.055 Cross-slope and superelevation.

(a) Superelevation shall be provided where appropriate and as required by the agency. Where required it shall be in general accordance with the procedures contained in the current edition of the CalTrans Highway Design Manual. The maximum superelevation allowed shall be eight percent.

(b) Where superelevation is not required, the cross-slope shall be a minimum of two percent and a maximum of eight percent. The road shall be either cross-sloped to the cut bank side or crown-sloped as required for proper drainage. (Ord. 3181 § 5 (part), 1994)

24.04.060 Intersections.

(a) Roads shall intersect each other as near to a right angle as is practical. Where several streets converge at one point, special approach treatment shall be provided to optimize driver sight distance and pedestrian safety. Provisions may include, but are not limited to, setback lines, special rounding, slope grading and/or vegetation removal. Block corners shall be rounded at the property line by a radius of not less than twenty feet and curb or pavement returns shall have a minimum radius of twenty-five feet.

(b) Care shall be taken to avoid sight restrictions caused by the combined vertical alignments of two or more intersecting streets.

(c) Design of intersections shall comply with Chapter 13.18, Visibility Obstructions, of the Marin County Code which prohibits sight obstructions including landscaping over thirty inches in height within defined areas adjacent to intersections. (Ord. 3181 § 5 (part), 1994)

24.04.070 Extensions.

Where a development adjoins undeveloped property, provisions shall be made for adequate street access thereto. (Ord. 3181 § 5 (part), 1994)

24.04.080 Access to major streets.

Where a development abuts upon an arterial road or other major road, a parallel service road or limited right of access to the arterial or major road may be required. (Ord. 3181 § 5 (part), 1994)

24.04.090 Blocks.

Long blocks are generally encouraged, and are required adjacent to main thoroughfares for the purpose of reducing the number of intersections; however, blocks should not exceed twelve hundred feet in length. (Ord. 3181 § 5 (part), 1994)

24.04.100 Alleys.

Alleys may be required in commercial or industrial areas where trucks stopping on the access streets would impede traffic flow and/or cause a traffic hazard. (Ord. 3181 § 5 (part), 1994)

24.04.110 Width.

(a) The following table sets forth the minimum widths for the improved section measured from face of curb to face of curb. Where no curb or berm is proposed the paved width shall be one foot greater

than that listed to allow for edge striping and pavement edge raveling.

Road Classification	Minimum Paved Width
Limited residential road	20' with shoulders 24' with curbs
Minor residential road	28'
Residential road	36'
Collector road	40'
Arterial and industrial/commercial	As required

(b) Additional width may be required for left turn storage, intersection widening, bus lanes and multipurpose pathways.

(c) Shoulders shall be provided on each side of all roads. Shoulders shall normally be four feet wide although wider shoulders may be required as deemed appropriate by the agency. (Ord. 3181 § 5 (part), 1994)

24.04.120 Grades.

Grades shall not exceed six percent on arterial, industrial/commercial and collector roads, twelve percent on residential roads, or eighteen percent on minor and limited residential roads. Continuous steep grades shall be avoided. (Ord. 3181 § 5 (part), 1994)

24.04.130 Retaining walls.

For all roads, both public and private, the following standards and restriction shall apply:

(a) On the downhill side of the road, timber walls shall not be allowed.

(b) On the uphill side of the road, timber walls may be allowed depending on site conditions, as determined by the agency, but shall not exceed three feet in height (measured from the road surface).

(c) If the use of timber walls is allowed, pressure treated timbers shall be used and shall conform to the requirements of the standard specifications of the cities and county of Marin.

(d) Notwithstanding the above criteria, the use of timber walls may not be allowed where the agency determines that the proposed location would present inordinately difficult problems for future repair and/or replacement.

(e) Mitigation of the visual impact of walls may be required. Measures may include, but are not limited to, surface texturing, coloring and landscaping. (Ord. 3181 § 5 (part), 1994)

24.04.140 Entry treatment.

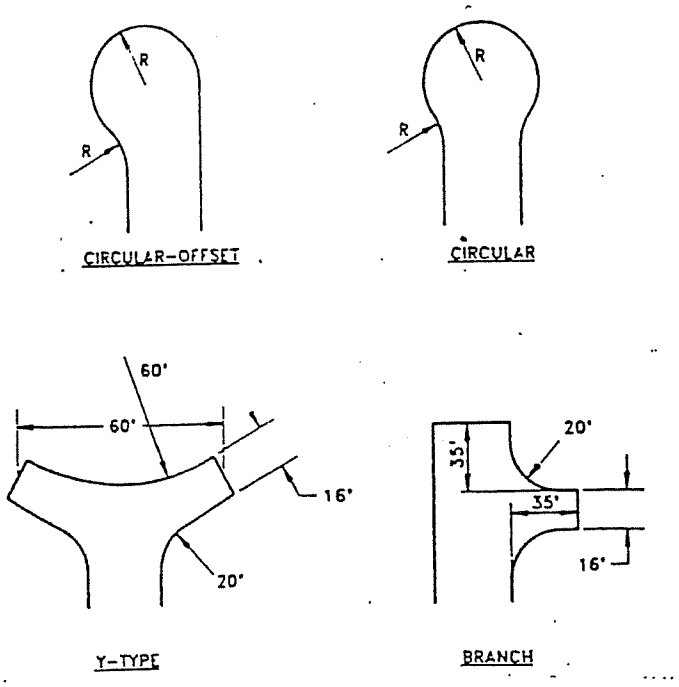
Where any form of entry treatment (e.g., pillars, walls, signs) to a specific area is allowed, they shall be located at least five feet beyond the edge of pavement. In addition, where they would be located within the county maintained right-of-way, a recorded encroachment permit must be obtained to authorize their installation and provide for their maintenance. (Ord. 3181 § 5 (part), 1994)

24.04.150 Turnarounds.

(a) The end of a cul-de-sac road shall be provided with a turnaround using one of the designs shown in Figure 24-1. Type (a) or (b) may be used at the end of any road provided that the appropriate radius is used as shown below. Measurement shall be to face of curb or, where no curb is proposed, to six inches inboard of the proposed edge of pavement.

R = 30 feet for all residential roads
R = 60 feet for industrial/commercial roads
R = 40 feet for other roads

FIGURE 24-1: CUL-DE-SACS



(b) For all residential cul-de-sac roads where severe topographic and/or right-of-way constraints warrant, Types (c) or (d) turnarounds may be used where allowed by the director.

(c) The slope in any direction for any turnaround should not be more than five percent and shall not be more than eight percent.

(d) Where the street may be extended at some time in the future, a temporary turnaround shall be required and the stub end of the street shall be closed with an approved barricade or gate if a fire road or other such access extends from the end of the paved road.

(e) Alternatives and/or exceptions to the above standards may be considered, but shall be submitted to the appropriate fire department or fire protection district for review, comment, advice and mitigation suggestions. (Ord. 3181 § 5 (part), 1994)

24.04.160 Turnaround islands.

Islands within turnarounds will not be allowed on roads that are currently or are proposed to be county-maintained roads. On other roads they may be considered provided they are approved by the appropriate fire department or protection district and the agency. Where allowed, provisions must be made for long-term maintenance of the island landscaping or other architectural treatment. (Ord. 3181 § 5 (part), 1994)

24.04.170 Curbs—General.

Curbs and gutters or berms shall be required adjacent to all parking lanes and where physical separation, delineation or stormwater control is necessary. P.C.C. curbs and gutters shall normally be required in order to minimize long-term maintenance. A.C. berms may be allowed where appropriate at the discretion of the agency. (Ord. 3181 § 5 (part), 1994)

24.04.190 Surfacing.

Surfacing shall consist of a minimum of two inches of A.C. over six inches of Class II aggregate base or an alternate of either P.C.C. or deep-lift A.C. Alternates are subject to the review and approval of the agency. Surfacing requirements within the rural corridor and coastal recreation corridor for roads serving only residential and agricultural property which is zoned into parcels of ten acres or larger may be reduced or waived except where the grade exceeds twelve percent. (Ord. 3181 § 5 (part), 1994)

24.04.200 Structural section.

The roadbed design shall be based on a traffic index established by the agency and in accordance with the standard procedure used by CalTrans or such other method as is in general use and considered sound practice by the agency. (Ord. 3181 § 5 (part), 1994)

24.04.210 Street names.

All street names shall be subject to the approval of the planning commission, sheriff's office and the appropriate fire department or protection district. Duplication of existing names within the surrounding community will not be allowed unless the streets are obviously in alignment with existing

streets of the same names and not so far removed as to be confusing. (Ord. 3181 § 5 (part), 1994)

24.04.220 Street name signs.

At least one street name sign shall be placed at all street intersections. The word "Private" shall be placed on all name signs for private roads. (Ord. 3181 § 5 (part), 1994)

24.04.230 Private roads.

Private roads shall be constructed to the standards specified in this chapter with the following additional requirements:

(a) Private roads shall connect to public roads by means of a driveway approach or alternative feature, approved by the agency, which shall clearly define the limits of each.

(b) When a private road is proposed to extend off of the end of a public road, the public road shall have a turnaround. (Ord. 3181 § 5 (part), 1994)

II. DRIVEWAYS

24.04.235 General.

All new driveways shall be constructed to the standards set forth in this chapter except as otherwise provided herein. The following individual standards notwithstanding, the design of a driveway shall take into account the combined effect of the individual elements (e.g., centerline radii, grade, cross slope) in making up the total driveway. Care shall be taken to avoid combining individual design elements at the extreme limits of acceptability along the same section of driveway. Where this is necessary due to severe physical, easement or other constraints, then design modifications and/or other mitigating measures may be required as determined appropriate by the agency. These measures may include but are not limited to: additional width, longer radii, slope grading, vegetation removal, striping or other lane and/or road edge delineation, signs, signals and barriers. Under certain circumstances, reductions in these standards may be allowed in accordance with Section 24.15.010 of this title. (Ord. 3181 § 5 (part), 1994)

24.04.240 Intersections.

Where a driveway intersects a road, every attempt shall be made to intersect at ninety degrees or as close to that angle as possible. (Ord. 3181 § 5 (part), 1994)

24.04.250 Minimum length.

A minimum driveway length of twenty feet should be provided from the front of the garage or parking structure to the back of sidewalk or to the edge of pavement where no sidewalk exists. A lesser length may be approved for constrained sites. (Ord. 3181 § 5 (part), 1994)

24.04.255 Centerline radii.

The centerline radius of driveways extending in excess of one hundred fifty feet from a public or private road should not be less than forty feet and shall not be less than thirty feet. (Ord. 3181 § 5 (part), 1994)

24.04.260 Widths.

(a) The minimum improved width of a driveway serving a single dwelling unit is twelve feet.

(b) The minimum improved width of a driveway serving two to six dwelling units is sixteen feet. Subject to the review and approval of the agency, this may be reduced to a minimum of twelve feet along all or part of its length if extenuating circumstances exist. In evaluating a proposal for such a reduction, the amount of grading and tree removal and the height of any retaining walls necessary to obtain the full width shall be of paramount consideration.

When such a reduction is proposed the design shall be submitted to the appropriate fire department or protection district for review, comment, advice and mitigation suggestions. In addition, one or more turnouts may be required as determined appropriate by the agency.

(c) A driveway which serves or may be extended in the future to serve more than six dwelling units shall be considered equivalent to a private road and designed accordingly. If the initial use of such a road will be by less than six units, then construction