DIPSEA RANCH LAND DIVISION

Amendment to the 2020 Initial Study/Mitigated Negative Declaration

(SCH# 2019129035)

1. Introduction

A. Background of Previous Project Approval

The Dipsea Ranch Land Division project (the "Project") would permit a Land Division to subdivide an existing 8.29-acre lot, located at 455 Panoramic Highway in unincorporated Mill Valley (the "Project site"), to create 3 single-family residential lots. The Project Applicant (the "Applicant") is the property owner, Daniel Weissman.

The Project site is currently developed with a 2,745 square foot (sf) single-family residence, a 1,400 sf 4-car garage, and a 480 sf detached accessory building. Several unpaved roads traverse the lower part of the property, including a gated "Fire Road" that provides access from Panoramic Highway. Access to the new lots would be provided via the existing entry driveway at 455 Panoramic Highway, which would be improved and extended. The Project proposes installation of two new on-site sewage disposal (i.e., septic) systems. Water service would be provided by the Marin Municipal Water District (MMWD), which currently serves the existing residence. The Project proposes the development of a stormwater management system that would utilize a system of storm drains, cisterns, and bioswales to control runoff.

The Project also proposes the permitting of grading activity that took place in March 2014 without the benefit of permits, when a quantity of soil was brought onto the Project site and used as fill to elevate the Fire Road.

As Lead Agency under the California Environmental Quality Act (CEQA), Marin County prepared an Initial Study/Mitigated Negative Declaration (the "2020 IS/MND") for the Project.[1] The 2020 IS/MND, prepared by Sicular Environmental Consulting and Natural Lands Management ("Sicular"), concluded that, with the addition of several mitigation measures, the Project would not have a significant adverse effect on the environment. The Applicant agreed to incorporate the mitigation measures in the Project and the Project therefore qualified for a Mitigated Negative Declaration (MND). During a 30-day public comment period, Marin County received numerous comments on the Project and on the 2020 IS/MND. The County responded to all comments,[2] and, on July 27, 2020, the Planning Commission voted 7-0 to adopt the IS/MND and to approve the Project. The Planning Commission's decision was appealed to the

[1] Marin County Community Development Agency, 2020. Dipsea Ranch Land Division Initial Study and Mitigated Negative Declaration. Prepared by Sicular Environmental Consulting & Natural Lands Management. Adopted by the Marin County Board of Supervisors October 6, 2020. As used in this document, the "2020 IS/MND" includes the Initial Study and Draft Mitigated Negative Declaration issued by the Community Development Agency in December 2019, as well as the response to comments documents cited in the following footnotes, and, by extension, all documents in the Administrative Record.

[2] Marin County Community Development Agency, 2020. Dipsea Ranch Land Division Project Initial Study/Draft Mitigated Negative Declaration: Comments On The Initial Study And Responses To Comments. Prepared by Sicular Environmental Consulting & Natural Lands Management, March 2020.

Marin County Board of Supervisors by the Watershed Alliance of Marin, Sierra Club, and Friends of Muir Woods Park, who submitted additional comments accompanying the appeal. The County responded to the comments received from the appellants, as well as additional comments received during the appeal process.[3] Following a public hearing, the Marin County Board of Supervisors on October 6, 2020 denied the appeal, upholding the adoption of the MND and the approval of the Project. A Notice of Determination was filed by the County Clerk and posted by the State Clearinghouse on October 13, 2020.

B. Lawsuit and Court Order

In November 2020, two of the appealing parties, the Watershed Alliance of Marin and Friends of Muir Woods Park ("Petitioners"), filed a Petition for Writ of Mandate with the Marin County Superior Court, seeking to set aside the County's adoption of the MND and approval of the Project, alleging that the Project would have numerous significant adverse impacts on the environment. On January 10, 2022 the Court issued an Order after Hearing (the "Court Order") granting the Petition for Writ of Mandate in part. The Court found that the 2020 IS/MND did not satisfy the informational requirements of State CEQA Guidelines Section 15063 with respect to three areas: (1) the description of the Project as it pertains to the location of surplus fill, to the extent left on-site; (2) the current condition of soil stability around the Fire Road; and (3) the location of drainages on the property in relation to stream or wetland conservation areas, any mechanisms to be employed to divert water from these areas as discussed by the consultant at the Board of Supervisors hearing, and associated environmental impacts, if any, from the drainages and diversion of water from those areas. The Court denied the Petition as to all other issues raised by the Petitioners.

The Court issued a limited writ directing the County to set aside its resolutions adopting the MND and approving the Project, and to take further action necessary to comply with CEQA and the State CEQA Guidelines, specifically Section 15063. The Court did not direct the County to prepare an Environmental Impact Report (EIR), finding that the Petitioners had not identified substantial evidence supporting a fair argument that the Project may have a significant effect on the environment. Instead, the Court ordered the County to satisfy the instructional requirements of State CEQA Guidelines Section 15063, including whether to issue an MND or order preparation of an EIR.

The Court further found that any further judicial review, including the return on the writ of mandate, shall be limited to the evidence contained in the Administrative Record (AR) lodged in that litigation, plus the addition of any new information limited to the three areas subject to the limited writ. The Court also found that any further judicial review will not include additional information or evidence beyond that already in the AR, concerning environmental impacts that are not subject to the three issues identified in this limited writ.

To comply with the Court Order, Sicular has prepared this Amendment to the 2020 IS/MND on the County's behalf.

[3] Sicular, Dan, 2020. Memo from Dan Sicular, Sicular Environmental Consulting & Natural Lands Management, to Sabrina Cardoza, Rachel Reid, and Tammy Taylor, Marin County Community Development Agency, re: Responses to Issues Raised in the Appeal of the Planning Commission's Approval of the Dipsea Ranch Land Division Project. September 22, 2020. Hudson, Peter, and Justin Taplin, 2020. Letter from Peter Hudson and Justin Taplin, Sutro Science, to Dan Sicular, Sicular Environmental Consulting, re: Technical Review of Lotic Environmental Services Technical Memorandum Submitted in Support of Appeal of Planning Commission Decision on 7/27/20: Dipsea Ranch Land Division Initial Study, Marin County, California. October 5, 2020.

C. Organization of this Amendment

This Amendment to the 2020 IS/MND examines in detail the three issues that the Court found do not meet the informational requirements of CEQA. For each issue, this Amendment includes details of the Court's decision; where and how the issue was addressed in the AR; any new or clarifying information pertaining to the three issues that has come to light since closure of the AR on August 4, 2021; analysis of the issue considering any new and clarifying information; and a determination, per State CEQA Guidelines Section 15070, whether, on the basis of the whole record, there is substantial evidence that the Project would have a significant effect on the environment. Where necessary, changes to the text of the 2020 IS/MND are provided.

2. Discussion of the Three Issues in the Court Order

A. Surplus Soil

Review of the Court Order

The issue of placement of excess soil from excavation associated with Project construction is discussed on pages 14-15 of the Court Order, which is reproduced in part here (page references to the AR have been omitted):

> Petitioners argue that the [Initial Study/Mitigated Negative Declaration (IS/MND)]… does not sufficiently describe the Project because it does not address the placement of excess fill on the property if the fill is not removed off-site during and/or after construction. Specifically, Petitioners point out that the IS/MND states that approximately 140 cubic yards of excess fill from the Project resulting from new grading will be "stockpiled on-site or hauled off-site and disposed" but does not state where the fill will be stockpiled if left on-site. (Footnote: In response to public comments, staff explained that the IS/MND "assumed" the excess fill would be transported off-site and that this transport was contemplated and included in its determination that there would be no significant impact on traffic or emissions.) Petitioners argue that this omission is significant because the site drains to streams that are tributary to Redwood Creek, which in its lower reaches supports Coho salmon, an endangered species, and steelhead trout, a threatened species, and the average slope of the project site is 36.76 percent….
>
> While the IS/MND does not specify where the 140 cubic yards of excess fill will be placed if left on-site, it does require certain practices or measures to be implemented with respect to stockpiled fill, both during and after construction, to minimize or eliminate any potential impacts regardless of where the fill is placed. As a result, the failure to identify the specific location may not be prejudicial. Petitioners do not address these measures in their briefs or explain how they are inadequate or insufficient to mitigate any potential impacts from stockpiled fill left onsite. Petitioners state in their Opening Brief that "[s]oil erosion anywhere on the site will introduce sediment into these tributaries of Redwood Creek, and over time, ultimately into Redwood Creek itself, degrading its salmonid habitat…," but the cited page from the AR does not support this statement.
>
> The IS/MND states that there are two streams, tributaries to Redwood Creek, that flow along the western and eastern edges of the Project site and meet just south of the property

> boundary. The average slope of the property is 36.76%. The IS/MND also acknowledges that Redwood Creek provides habitat for Coho salmon and steelhead. Given these important characteristics of the Project site, the description of the Project is lacking in that the specific plans for excess fill from the Project's grading activities are not addressed. The Response to Comments notes that the 140 cubic yards is an approximate square pile 30 feet on a side and 4 feet, 4 inches high, and would fit in 15 standard 10 cubic yard dump truck loads. This is not an insignificant amount. If the fill is expected to be removed off-site or placed in an area where potential erosion into the streams is not an issue, the issue of surplus fill may be summarily addressed. However, an environmental review should address this issue in more detail given the County's recognition that the streams downslope are tributaries to Redwood Creek.

Where the Issue was Addressed in the 2020 IS/MND

On page 12,[4] the 2020 IS/MND describes proposed grading activities associated with Project construction:

> The Project proposes new grading, including grading of the entrance to the Project site, new driveway segment, stormwater management system elements, extension of underground utilities, and on-site sewage disposal systems. The Grading Plan estimates earthwork to be a total of 1,709 cubic yards of cut and 1,565 cubic yards of fill (Ziegler Civil Engineering, 2018a). The difference (about 140 cubic yards) would be stockpiled on-site or hauled off-site and disposed.

The potential for soil disturbance during Project construction to result in erosion and sedimentation of streams is examined in the 2020 IS/MND, Section IV.10, Hydrology and Water Quality, on page 106. Soil stockpiling would occur during project construction (and is by definition temporary and construction-related). As discussed on page 106 of the 2020 IS/MND:

> …during construction of the Project, the Applicant would be required to comply with the NPDES [National Pollutant Discharge Elimination System] regulations and apply for coverage under the CGP [Construction General Permit] because ground disturbance at the Project site would exceed one acre. Under the CGP, the Applicant would be required to prepare a SWPPP [Stormwater Pollution Prevention Plan]. The SWPPP must include site-specific erosion and sedimentation control practices and would limit the amount of runoff that may be directed offsite during construction. Compliance with the requirements of the CGP, SWPPP, and the implementation of associated BMPs [Best Management Practices] would prevent erosion and siltation on- and off-site during construction.

Based on the applicability of these regulatory requirements, the 2020 IS/MND concludes that erosion and sedimentation impacts of Project construction would be less than significant. As noted by the Court, however, the 2020 IS/MND does not specifically identify the location or locations that would be used for soil stockpiles.

[4] Page references are to the Initial Study/Draft Mitigated Negative Declaration issued in December 2020, unless otherwise noted.

Also as noted by the Court, the Response to Comments on the Initial Study[5] addresses surplus soil from grading. Response to Comment V-6 states that,

> It is assumed in the Initial Study that the surplus soil would be removed from the Project site. The calculations of construction air emissions and construction traffic in the Initial Study use this assumption. As discussed in Initial Study Section IV.3, Air Quality, topic b, the Project would result in less-than-significant construction emissions. As discussed in Initial Study Section IV.17, Transportation, topic a, page 143, Project construction would not result in a substantial increase in traffic on local roadways and intersections, and the impact of construction traffic would be less than significant.

The response does not, however, discuss soil stockpiling.

New and Clarifying Information

Since closure of the AR, the Applicant has clarified his intent to export surplus soil from grading during Project Construction, and not to stockpile it on-site, stating that, "[t]he approximately 144 cubic yards of surplus soil will be hauled off-site and disposed of in compliance with any and all legal requirements."[6]

Impact Analysis

As noted above, the Court Order states that, "If the fill is expected to be removed off-site or placed in an area where potential erosion into the streams is not an issue, the issue of surplus fill may be summarily addressed" (Court Order, p. 15:22-23). The new information provided by the Applicant clarifies that surplus soil generated by Project construction will not be stockpiled on site, but will be removed off-site. As noted above, the 2020 IS/MND already examines potential impacts associated with construction traffic and related air emissions, including impacts of hauling all surplus soil off-site,[7] and finds that any such impacts would be less than significant. No additional analysis is necessary.

As stated on page 12 of the 2020 IS/MND, the Grading Plan does not include grading of building pads or other grading that may be required for development of proposed lots 2 and 3. The 2020 IS/MND analyzes potential future development of lots 2 and 3 generally, since plans have not been submitted for specific development, apart from plans for access, septic system development, utilities, and stormwater management. As noted on page 11 of the 2020 IS/MND, future development of proposed lots 2 and 3 would be subject to Design Review and would require building and potentially other permits that will consider impacts associated with grading.

Changes to the Text of the Initial Study

To incorporate the new information provided by the Applicant, page 12 of the 2020 IS/MND is revised as follows:

> The Project proposes new grading, including grading of the entrance to the Project site, new driveway segment, stormwater management system elements, extension of underground utilities, and on-site sewage disposal systems. The Grading Plan estimates

[5] Marin County Community Development Agency, 2020, op.cit.
[6] Weissman, Daniel, 2022. Memo from Daniel Weissman, Property Owner, to Brett Jolly, Attorney, re: Dipsea Ranch IS/MND - IS Amendment. Response to County's Request for Information about the Subdivision.
[7] California Air Resources Board (CARB), 2016. California Emissions Estimator Model (CalEEMod), version 2016.3.2. Model run for the Dipsea Ranch Land Division project, dated 5/31/2019.

earthwork to be a total of 1,709 cubic yards of cut and 1,565 cubic yards of fill (Ziegler Civil Engineering, 2018a). The difference (about 140 cubic yards) would be ~~stockpiled on-site or~~ hauled off-site and disposed in accordance with applicable legal and regulatory requirements.

Impact Conclusion

Considering the new information provided by the Applicant and incorporated into the Project Description, in addition to the previous analysis contained in the 2020 IS/MND and the Response to Comments on the Initial Study and all other information in the AR, handling of surplus soil generated during Project Construction would continue to result in a *less-than-significant* impact on the environment.

B. Fire Road Soil Stability

Review of the Court Order

The issue of Fire Road stability is discussed on page 20 of the Court Order, which is reproduced in part here (page references to the AR have been omitted):

> With respect to soil conditions at the Fire Road itself, the IS/MND acknowledges the 2015 report's identification of the old landslide but focuses on the more recent condition of the property that existed at the time the IS/MND was prepared approximately four years after the 2015 report. The IS/MND states that "[w]hile the fill for the Fire Road was placed on the debris of a former landslide, the grading of the Fire Road appears not to have increased the potential for future landsliding. Conversely, it is likely that grading the roadbed for the Fire Road created a stable terrace on the slope that, in addition to channelizing and routing of storm flows through the culvert under the road, stabilizing the fill soils, and revegetating the slope, reduced the potential for further landsliding in this area. Therefore, impacts to slope stability on the Project site from the unpermitted grading of the Fire Road are less than significant."
>
> While the description of the current state of the property around the roads appears on its face to address slope instability concerns, the IS/MND does not describe the more recent investigation or studies that were conducted to reach these conclusions or support the description of the current state of the property in the IS/MND. The consultant which prepared the 2015 GeoTechnical Report prepared a supplemental report in 2018 for the current Project and did not note any differences or changes in the condition of the property from its 2015 analysis. While the Guidelines require only a brief description of the existing conditions, a minimal description of the current conditions (e.g., creation of a stable terrace) without reference to any supporting study or investigation is insufficient particularly given the earlier study which is potentially inconsistent with this description. Further development of the fire road is not itself part of the Project, but the fire road extends across the lots and its continued use is a reasonably foreseeable use of the Project. As a result, the IS/MND does not satisfy Section 15063 with respect to its description of soil stability around the fire road.

Where the Issue was Addressed in the 2020 IS/MND

On page 12, the 2020 IS/MND describes the purpose and history of the Fire Road grading (references to figures have been omitted):

> The Fire Road provides access to the lower part of the Project site via a gated entrance from Panoramic Highway. In 2014, the Applicant improved a section of the Fire Road near the gate, in order to improve access for vegetation management and firefighting crews….
>
> The work involved the replacement of an existing culvert located under the Fire Road intended to drain the area upslope and placement of fill to raise and broaden the roadway. Based on a comparison of topographic surveys performed in 2009 before the work was undertaken, and 2014 after the work was completed, earthwork involved about 1,200 cubic yards of fill. Following imposition of a Notice of Violation from the Marin County Department of Public Works (DPW) for undertaking the work without a grading permit, erosion control features, including straw mulch and netting, were installed by the property owner. Since then, the Applicant has maintained the road for vegetation management and firefighting access, should the Fire Department wish to use it during an emergency.

The geologic stability of the Fire Road fill with regard to the potential for liquefaction is examined in the 2020 IS/MND Section IV.7, Geology and Soils, on page 79:

> The native soils underlying the Fire Road in the eastern portion of the property consist of sandy clays and the fill for the Fire Road that overlies the native soils is composed of clayey and silty gravels and sand. These materials are fine-grained and not susceptible to liquefaction or related seismically activated ground failures. Therefore, the 2014 unpermitted grading of the Fire Road did not increase or decrease the potential for liquefaction to occur at the Project site.

The geological stability of the Fire Road fill with regard to potential landslides is examined in the 2020 IS/MND Section IV.7, Geology and Soils, on page 79:

> The area where the unpermitted grading for the Fire Road occurred overlies an old landslide identified by previous regional mapping and confirmed by Herzog's geotechnical investigation (Herzog, 2015). While the fill for the Fire Road was placed on the debris of a former landslide, the grading of the Fire Road appears not to have increased the potential for future landsliding. Conversely, it is likely that grading the roadbed for the Fire Road created a stable terrace on the slope that, in addition to channelizing and routing of storm flows through the culvert under the road, stabilizing the fill soils, and revegetating the slope, reduced the potential for further landsliding in this area. Therefore, impacts to slope stability on the Project site from the unpermitted grading of the Fire Road are less than significant.

The geological stability of the Fire Road fill with regard to its location on an unstable geologic unit or a unit that could become unstable is examined in the 2020 IS/MND, Section IV.7, Geology and Soils, on page 80:

> . . . [t]he Fire Road grading stabilized a slope composed of landslide debris by creating a benched slope break with stable fill material and adequate drainage, and had a less-than-significant impact on current or potential future instability of a geologic unit.

While Master Responses 3 (Potential Impacts of Fire Road Grading on Biological Resources) and Master Response 4 (Potential Impacts of Fire Road Grading on Hydrology and Water Quality) in the Response to Comments document[8] do not directly address Fire Road slope stability and potential landslide hazards,

[8] Marin County Community Development Agency, 2020, op.cit.

they do address the stability of the Fire Road fill from a stormwater runoff and erosion standpoint, and provide evidence of regulatory concurrence from the Regional Water Quality Control Board (RWQCB) and the County that the stormwater control practices were implemented in an acceptable manner.

Master Response 4 on page 15:

> The primary concern of RWQCB and County staff at the time was the lack of implementation of Best Management Practices (BMPs) for reducing the mobilization and transport of pollutants associated with construction activities in stormwater runoff and for controlling erosion and sedimentation of disturbed soils. Following inspections by County and RWQCB staff during the time the grading was ongoing in March [2014] the Applicant installed erosion control features, including straw mulch and netting, a tarp over the road surface, and a silt fence.

Master Response 4 on page 18:

> County records and photographs taken during a site inspection by staff from the Department of Public Works and the Stormwater Pollution Prevention Program on March 25 [2014] show that, as of that date, the work had been completed, and adequate erosion control features were already in place.

Master Response 4 on Page 19:

> As described in [the IS], erosion control features installed in 2014 remain effective in minimizing erosion and sedimentation associated with the Fire Road and vegetation has become established on the fill, stabilizing slopes and exposed soils such that there is no residual or ongoing significant impact relating to erosion, sedimentation, or degradation of water quality. Additionally, installation of a properly sized culvert under the Fire Road driveway apron, and rock lining within the Panoramic Highway stormwater ditch downgradient of the Fire Road driveway, likely has reduced ongoing erosion of the road ditch, as compared to pre-construction conditions.

Master Response 3 on Page 12

> On March 26, 2014, a Notice of Violation was posted on the site and the owners were notified to stop all grading work and to stabilize the entire area. Erosion control features, including straw mulch, netting, and a silt fence, had already been installed on that date. The site was inspected by Marin County Department of Public Works (DPW) and the San Francisco Bay Regional Water Quality Control (RWQCB) and both agencies found the site to be stabilized, with satisfactory erosion control measures in place.

New and Clarifying Information

There is no new or clarifying information applicable to the issue of the geologic stability of the Fire Road.

Impact Analysis

As noted above, the Court Order states that, "[w]hile the description of the current state of the property around the roads appears on its face to address slope instability concerns, the IS/MND does not describe the more recent investigation or studies that were conducted to reach these conclusions or support the description of the current state of the property in the IS/MND" (Court Order, p. 15:22-23). The findings

regarding Fire Road geologic stability presented in the 2020 IS/MND were primarily based on a review of the 2015 geotechnical investigation[9] conducted by Herzog Geotechnical Consulting Engineers (Herzog), review of aerial and oblique photographs from 2013 through 2019, and observations of the Fire Road made on March 14, 2019 during the field assessment associated with the preparation of the 2020 IS/MND. The review of the Herzog report, historic photographs, the onsite examination of the Fire Road, and the preparation of the 2020 IS/MND Geology and Soils section were completed by a California certified engineering geologist (CEG).[10]

As also noted above, the Court Order states that, "The consultant which prepared the 2015 GeoTechnical Report prepared a supplemental report in 2018 for the current Project and did not note any differences or changes in the condition of the property from its 2015 analysis" (Court Order, p. 20:19-21). The 2015 Herzog geotechnical investigation was conducted almost 2 years after the placement and grading of the Fire Road fills, when the proposal was to subdivide the property into 13 individual lots. During that investigation, Herzog identified the Fire Road fill material and underlying landslide debris in an exploratory boring, which was advanced to a depth of 19 feet from the surface of the Fire Road fill section. Herzog described the Fire Road as a "gravel access roadway" extending across "a broad south trending swale that displays topography indicative of an earthflow landslide". Herzog did not report any indications of slope instability, landsliding, or sloughing in the graded Fire Road section during the 2015 investigation. However, Herzog did identify small landslides and sloughing elsewhere on the property, particularly associated with the three narrow dirt roads further to the west that traverse the hillside above the east-trending drainage ravine to the south.

Herzog prepared an update to the 2015 report in May 2018[11] after the Applicant reduced the proposed project from 13 parcels to 3. In the updated report, Herzog concluded that the preliminary conclusions and recommendations presented in the 2015 report were applicable to the revised project with certain modifications. The modifications consisted of a revised exploration/geologic map that showed the proposed driveway location and lot lines, updated seismic criteria, and recommendations for stabilizing driveway fill banks with geogrids. The 2018 geotechnical report did not identify changes in site geologic conditions and, as in the original 2015 geotechnical report, did not identify conditions suggestive of landsliding, sloughing, or slope creep in the graded Fire Road section.

Fire Road Grading

The Fire Road grading occurred in March 2014 and involved the placement of 1,200 cubic yards of imported fill material extending from the entrance at the Panoramic Highway to a point approximately 200 feet west. The graded fill was placed on an existing dirt road that was originally cut into a slope with a gradient of about 5 Horizontal to 1 Vertical [5(H):1(V)] (See Photograph 1). Based on the County's field notes, pre-and post-grading topographic maps (2020 IS/MND, Figure 7, Fire Road Grading), and an exploratory soil boring log,[12] the average fill depth was approximately 8 feet. The final embankment slope developed after grading was approximately 4:1. Photographs taken during the placement and

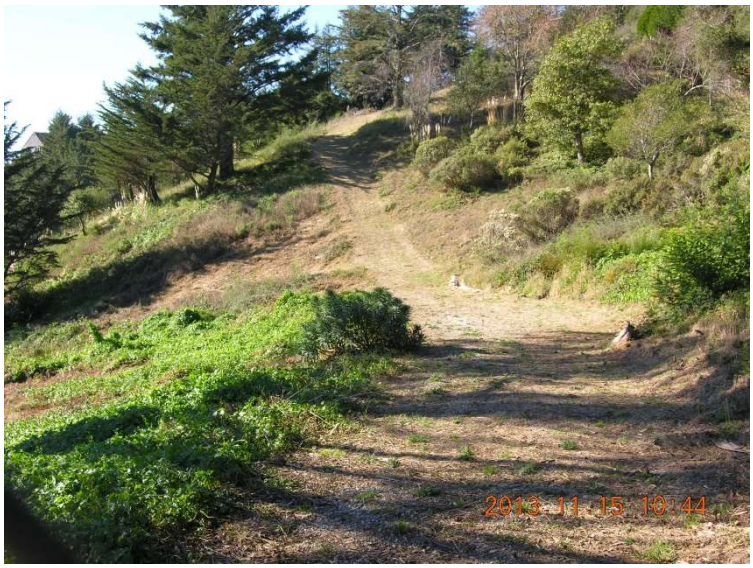
[9] Herzog Geotechnical Consulting Engineers (Herzog), 2015. Preliminary Geotechnical Investigation, 455 Panoramic Highway (APN 46-161-11 & 46-221-07) Mill Valley California. Project No. 2147-02-15, November 3, 2015. Prepared for Daniel Weissman.

[10] Peter B. Hudson, California Professional Geologist (Registration No. 6730) and Certified Engineering Geologist (Registration No. 2348). Certificates are included as Attachment A.

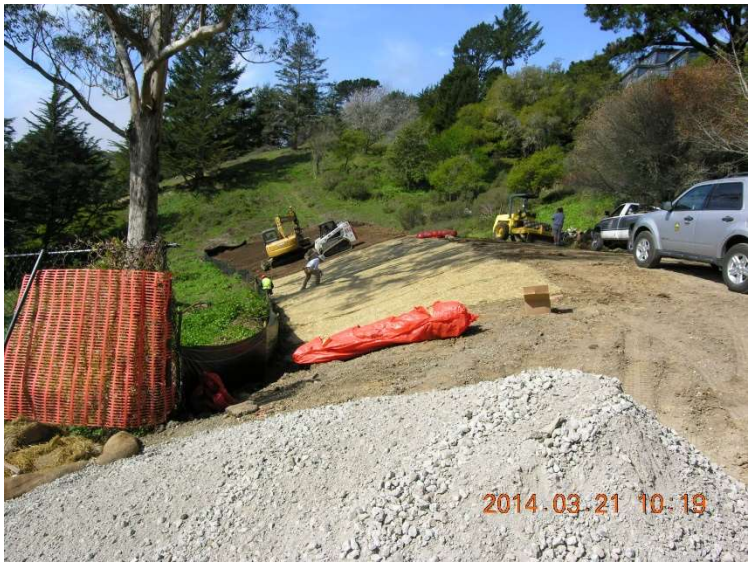
[11] Herzog Geotechnical Consulting Engineers (Herzog), 2018. Report Update Preliminary Geotechnical Investigation, 455 Panoramic Highway (APN 46-161-11 & 46-221-07) Mill Valley California. Project No. 2147-02-15, May 1, 2018. Prepared for Daniel Weissman.

[12] Herzog, 2015, op. cit.

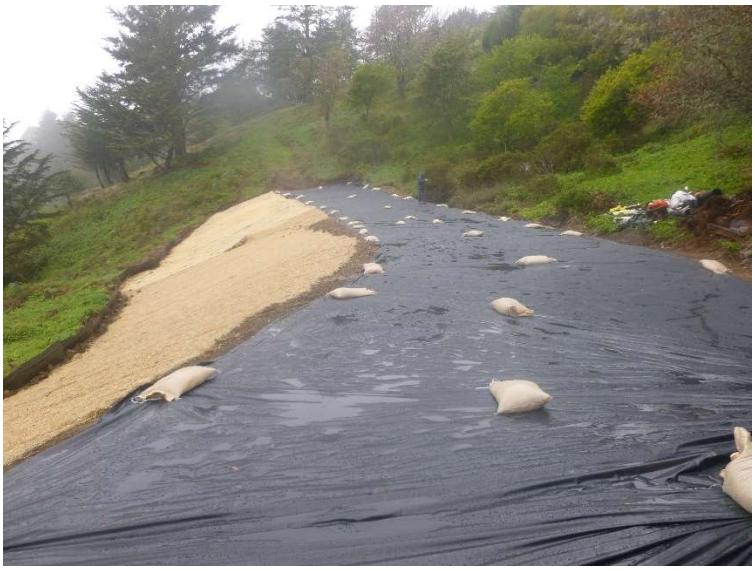
Photographs of Fire Road



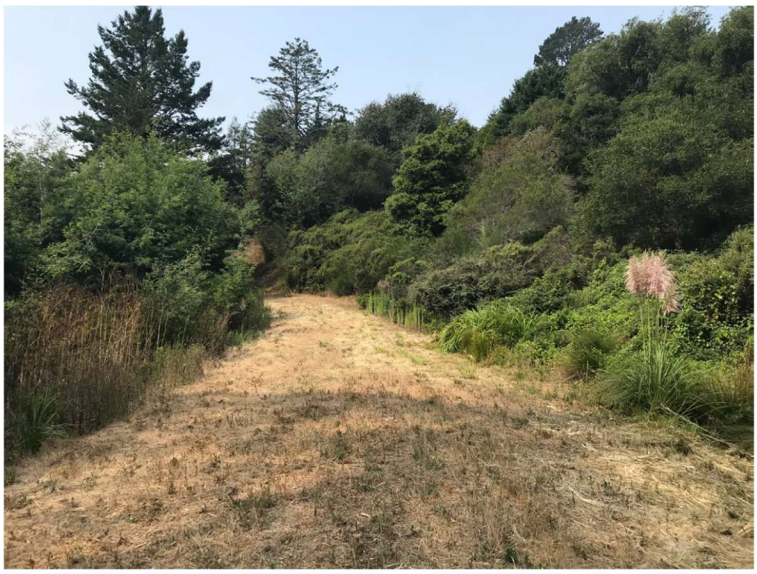
Photograph 1. Condition prior to grading (2013).



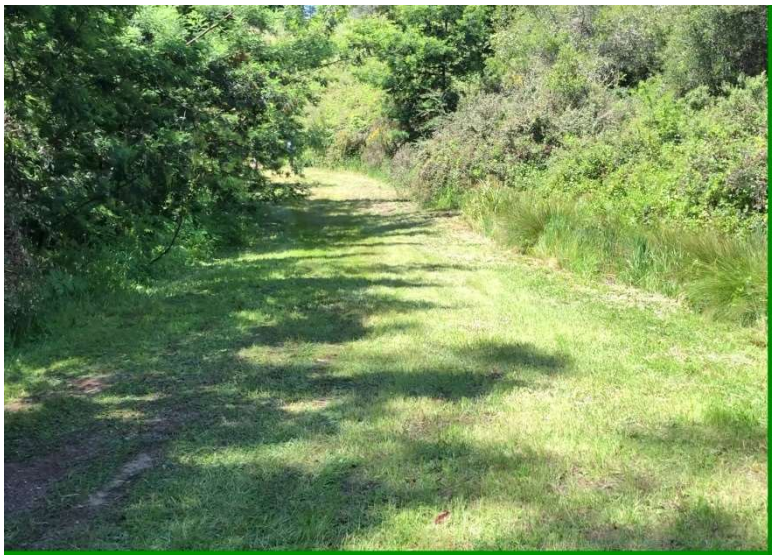
Photograph 2. Grading activities under way, March 2014



Photograph 3. Grading complete, BMPs installed. March 2014



Photograph 4. Condition in March 2019.



Photograph 5. Condition in May 2022.

grading of fill reveal the use of a "sheepsfoot" soil compactor, which suggests that the fill was compacted as it was placed (See Photograph 2). Photographs also reveal that erosion control BMPs were implemented to reduce downslope erosion (See Photographs 2 and 3). These BMPs include the use of straw blankets to disperse run off and encourage sheet flow, plastic to reduce stormwater infiltration on the roadbed and encourage run off, and silt fences to reduce the potential for sediment to travel beyond the base of the fill slope. The Fire Road grading project also included the placement of a culvert that conveys flow from the upslope drainages under the Fire Road.

Observations Made During May 4, 2022 Site Geologic Examination

In response to the Court Order, an additional field examination of the Fire Road was conducted on May 4, 2022 by the same California certified engineering geologist who prepared the 2020 IS/MND Geology and Soils section. The following describes observations made during that field examination:

The graded Fire Road section is approximately 200 feet in length and varies in width between 20 and 25 feet. The roadbed is flat and covered with vegetation. Upslope of the roadbed is a vegetation-covered slope with a gradient of approximately 5(H):1(V). Vegetation consists of a dense mixture of grasses, low bushes, and trees. The fill embankment downslope of the roadbed is at a gradient of about 4(H):1(V) and supports vegetation similar to that in the upslope portion as well as several acacia trees. The condition of the Fire Road section at the time the 2020 IS/MND was being prepared is shown in Photograph 4 and the current condition (May 2022) is shown in Photograph No. 5.

The examination of the graded Fire Road section involved a visual assessment of the road and downslope fill embankment, which specifically focused on common indicators of soil movement and slope instability or failure. These include sloughing along the embankment face, longitudinal or arcuate cracking on the roadbed, distressed or downslope angled trees (indicator of slope creep), locally displaced soil on the embankment slope (indicator of landsliding and slope failure), areas of comparatively sparse vegetation (indictor of soil creep or areas of sloughing), gully or rill erosion on the road bed (indicator of concentrated stormwater flow over exposed soil) and depressions on the roadbed above the culvert (indicator of "piping"[13]). Consistent with the observations made during the March 14, 2019 field examination, observations made on May 4, 2022 revealed no conditions indicating slope instability or failure. The Fire Road fill appears intact and the dense vegetation that has established on the 4(H):1(V) embankment slope contributes to its overall stability. Additionally, field examination of the culvert indicated that it is effectively conveying flow beneath the Fire Road. Based on these observations, we conclude that the Fire Road is a well-drained structure that has remained stable for the past 8 years, and that exhibits no indication of future instability.

Changes to the Text of the Initial Study

To incorporate the geologic analysis of the Fire Road section that was performed by a certified engineering geologist on March 14, 2019 and then updated in May 2022, page 79 of the 2020 IS/MND is revised as follows:

> The area where the unpermitted grading for the Fire Road occurred overlies an old landslide identified by previous regional mapping and confirmed by Herzog's geotechnical investigation (Herzog, 2015). While the fill for the Fire Road was placed on the debris of a former landslide, the grading of the Fire Road, <u>as examined by a certified engineering geologist on two separate</u>

[13] Piping is the erosion of backfill material around a subsurface feature, such as a culvert, caused by percolating water. Piping can create voids that can lead to caving and localized settlement at the surface.

occasions, 3 years apart, appears not to have increased the potential for future landsliding. Conversely, it is likely that grading the roadbed for the Fire Road created a stable terrace on the slope that, in addition to channelizing and routing of storm flows through the culvert under the road, stabilizing the fill soils, and revegetating the slope, reduced the potential for further landsliding in this area. Therefore, impacts to slope stability on the Project site from the unpermitted grading of the Fire Road are less than significant.

Impact Conclusion

The observations made during the May 4, 2022 examination of the Fire Road by a California certified engineering geologist verify the conclusions of the 2020 IS/MND: the Fire Road is stable and shows no indication of instability. On the basis of the whole record, there is not substantial evidence that the Project would have a significant effect on the environment with regard to slope stability from the 2014 grading of the Fire Road. The 2014 grading of the Fire Road would continue to result in a *less-than-significant* impact on the environment.

C. Stormwater and Septic Systems and the SCAs and WCA

Review of the Court Order

The issue of stormwater drainage associated with the Project's proposed stormwater system running through the stream conservation area (SCA) and wetland conservation area (WCA) is discussed on pages 25-26 of the Court Order, which is reproduced in part here (page references to the AR have been omitted):

> Petitioners also contend that, contrary to the IS/MND's statement that drainage systems are set back at least 100 feet from wetlands, the Project has on-site drainage that will run through the stream conservation area ("SCA") and/or wetland conservation areas ("WCAs"). The Court agrees with Petitioners that there is some conflicting information in the record regarding the location of the drainages on the property and, specifically, whether they run through any WCA or SCA. The IS/MND states that any development, as well as onsite septic and drainage systems, will be outside any WCA or SCA. At the hearing before the Board of Supervisors, however, evidence was presented showing drainages within these areas. The consultant from Sicular was asked about the development of stormwater drainage facilities within the defined WCA. He responded that they were proposing to route some of the outflow from the proposed stormwater drainage system to the existing road ditch and culvert, which then drains downslope into the natural tributary to Redwood Creek. He stated that the proposed stormwater drainage system would not increase runoff so there would not be any additional erosion or sedimentation.
>
> Weissman's Opposition does not address the inconsistency between the statements in the IS/MND and the acknowledgement of the consultant at the hearing that there is some drainage within the WCA. While the consultant explained that the drainage system would be built to divert water to the existing culvert, Weissman does not point to anything in the record which demonstrates this is an actual requirement or feature of the Project. The IS/MIND should clarify the information regarding the location of drainages at the property in relation to any SCA or WCA and discuss, if applicable, any mechanisms to divert water away from these areas and related environmental impacts, if any.

Where the Issue was Addressed in the 2020 IS/MND

The potential for impacts related to erosion, hydromodification, flooding, stormwater drainage, and polluted runoff from altered drainage patterns resulting from implementation of the Project is assessed in the 2020 IS/MND, Section IV.10, Hydrology and Water Quality, under Impact C beginning on page 102. As discussed on page 103 of the 2020 IS/MND:

> All surface drainage from the Project site flows to two unnamed channels located along the western and eastern edges of the Project site and then downstream approximately 0.8 miles to the confluence with Redwood Creek. The proposed Project would not involve the direct alteration of a stream or river (including the two unnamed channels) and would not substantially alter on-site drainage patterns; stormwater runoff during construction and following completion of the Project would continue to primarily flow downgradient to the two unnamed channels bounding the Project site. The following assessment focuses on hydrologic and water quality related impacts that could result from the proposed addition of impervious surfaces and implementation of a stormwater management system associated with the Project.

As discussed on page 104 of the 2020 IS/MND:

> The Applicant's civil engineer completed a hydrologic and hydraulic study (hydrologic study) for the Project (Ziegler Civil Engineering, 2018a). The hydrologic study included a detailed review of the hydrologic characteristics of the sub-watershed and Project site. Model-based analyses were conducted to quantify changes to runoff rates and volumes resulting from implementation of the Project and to determine drainage patterns. The hydrologic study assessed potential impacts from increased runoff and altered drainage patterns and the model results were incorporated into the engineering design for a stormwater management system … The resulting proposed stormwater management system comprises of a network of pervious paving, cisterns, bio swales, and detention areas to increase storage, treat runoff, and attenuate peak runoff rates in a manner that mimics pre-development hydrologic conditions at the Project site consistent with the applicable regulations.

As discussed on page 105 of the 2020 IS/MND:

> Hydrologic study results for the sub-watershed area under the pre- and post-project condition show that the proposed Project would not increase peak discharge rates and stormwater volumes discharged from the Project site (Ziegler Civil Engineering, 2018a, 2018c). The proposed stormwater management system would mimic the pre-project hydrology of the Project site and would slightly decrease overall the peak discharge rate for the sub-watershed area.

As discussed on page 106 of the 2020 IS/MND:

> The proposed stormwater management system, including bioswales, has been designed consistent with setbacks established for all existing and proposed septic system components. The setbacks ensure that leachfields and other septic system components would be a minimum distance of 25 feet on all sides (and generally a greater distance of 50 feet or more) from areas of infiltration associated with bioswales, paths of concentrated stormwater flow, or other stormwater management system structures (Weissman, 2019). The setbacks would minimize the potential for stormwater to intersect leachfields in a manner that results in excessive infiltration and soil

> saturation of leachfields, to avoid pollutants being transported in stormwater or leachfields not operating as designed.

Based on the design of the proposed stormwater management system and applicable regulatory requirements, the 2020 IS/MND concludes that the Project would not result in the substantial alteration of any drainage patterns, creeks, or streams and the proposed stormwater management system would not result in a significant impact related to erosion, sedimentation, hydromodification, flooding, or polluted runoff, including within SCAs and WCAs.

Master Response 8 (Stream Classification) in the Response to Comments (RTC), pages 36-37, further discusses the regulatory requirements relating to SCAs in the context of the proposed Project (text and figure references have been removed):

> The 100-foot development setback is the most protective of the SCA defined setback requirements; smaller setbacks of 20-foot and 50-foot can apply to parcels under 2 acres in size. Consistent with CWP Policy BIO-4.1, aquatic resources, including ephemeral, intermittent and perennial streams as well as wetland features, would be protected through the establishment of the defined SCAs, which provide a 100-ft buffer within which no development or disturbance may occur. (Setbacks apply to future development, not existing improvements.) The SCA includes the creek itself and is measured from the top of the creek bank. The SCAs protect stream and streamside habitats from the impacts of new development by providing habitat for aquatic species, absorption of water, and distribution of flood waters…
>
> The model analysis results presented in the hydrologic study, and incorporated into the impact analyses presented in the IS/MND following independent peer review by the Initial Study consultant team, demonstrate that the proposed Project would not increase peak discharge rates and stormwater volumes discharged from the Project site and that the proposed stormwater management system would mimic the pre-Project hydrology of the Project site (see Master Response 11). As such, the proposed Project would not result in hydromodification-related or water quality impacts, either on-site or downstream within the Redwood Creek watershed.

New and Clarifying Information

In a memo responding to the County's request for information,[14] the Applicant reconfirmed and clarified that, consistent with the discussion in the 2020 IS/MND, the proposed stormwater management system would mimic the pre-project hydrology of the Project site, ensuring that stormwater continues to follow existing drainage courses and pathways. The existing drainages ultimately flow into and through the identified on-site SCA and WCA to the two unnamed channels located along the western and eastern edges of the Project site and then downstream approximately 0.8 miles to the confluence with Redwood Creek:

> We reconfirm that the Project's Drainage & Stormwater conceptual design proposes no new stormwater management system features, septic system features, or any other new improvements within any SCA or WCA. Once treated through a series of new cisterns / sediment removal tanks, stormwater runoff is then discharged naturally downslope maintaining the existing drainage

[14] Weissman, 2022, op. cit.

topography, patterns, and flows. This design will ensure that the post-project hydrology is substantially unchanged if not improved from pre-project hydrology.[15]

Impact Analysis

As required by the Court, the following discussion clarifies the information regarding the location of drainages at the property in relation to SCAs and WCAs and discusses related environmental impacts. To confirm drainage patterns and surface water features on the Project site in the context of the proposed stormwater management system and the SCA and WCA boundaries, a hydrologic field examination was conducted on May 4, 2022 by the hydrologist who prepared the IS/MND. The hydrologic field examination involved a visual assessment of the existing topography, drainage patterns, and fall lines[16] as well as identifying the SCAs and WCAs. Project plans[17] were carefully reviewed in the field to confirm the location of proposed built elements (e.g., cisterns and conveyance pipes) associated with the stormwater management system as well as confirmation of the condition and conveyance capacity of existing drainage features and the locations where on-site stormwater runoff flows into and through the SCAs and WCAs as part of the planned stormwater system.

The hydrologic field examination confirmed the information and findings presented in the 2020 IS/MND, Section IV.10, Hydrology and Water Quality, that assesses impacts related to altered drainage patterns, hydromodification, and water quality associated with the proposed stormwater management system. Based on the hydrologic field examination, it was confirmed that all built elements of the stormwater management system are proposed outside of SCAs and WCAs, and that existing drainage features within SCAs and WCAs will not be altered as part of the planned stormwater system and are in good condition and of sufficient capacity for stormwater conveyance with vegetative cover stabilizing natural drainage channel soils. The on-site existing natural drainage channels displayed no signs of active erosion. The observations and findings made during the hydrologic field examination are incorporated into the following analysis.

Under existing conditions, on-site drainages flow into the intermittent/ephemeral surface water features associated with the identified SCA and WCA. Following implementation of the Project, stormwater would continue to flow into the identified SCA and WCA at a volume and rate that mimics pre-project hydrology. The Project proposes no stormwater management system features, septic system features, or any other construction within any SCA or WCA. All constructed elements of the stormwater management system, such as cisterns and sediment removal tanks, would be located outside of SCAs and WCAs. Further, drainage patterns of the Project site and stormwater discharge volumes and rates would be substantially unaltered as a result of Project implementation, ensuring hydromodification impacts onsite or downstream are minimized or avoided. Additionally, the stormwater management system would treat on-site stormwater quality via bioswales and cisterns, avoiding or minimizing the transport of pollutants (such as sediment) downstream. Discharge from the proposed stormwater management system would flow downslope and eventually enter natural drainage channels and would therefore flow through SCA and WCA setback areas, as is true of existing site drainage. In maintaining pre-project drainage patterns, stormwater volumes, and stormwater flow rates following Project implementation, water would not be

[15] Ibid.
[16] The most direct drainage pathway for runoff based on local topography.
[17] The following 2018 Plan Set sheets were reviewed in the field:
Sheet 6: Site Plan Overview: 50 Scale;
Sheet 17: Drainage Plan BASMAA;
Sheet 19 - Tentative Map – Site Plan.
Citation: Ziegler Civil Engineering, 2018a. Dipsea Ranch Land Division Plan Set. Revised December 20, 2018.

diverted away from the surface water features associated with the SCAs and WCAs and impacts related to hydromodification, including those associated with both substantially increased and/or reduced stormwater runoff, would be less than significant.

In summary, the stormwater management system is designed not to prevent stormwater runoff, but to control it so that it does not concentrate or increase in volume to the extent that it would cause erosion and sedimentation; the system is designed with the intent of maintaining existing stormwater flows and drainage patterns downslope and into the natural drainages within the watershed.

Changes to the Text of the Initial Study

For the purpose of clarification, and consistent with new information provided by the Applicant and new hydrologic field observations conducted in May 2022, page 105 of the 2020 IS/MND is revised as follows:

> Hydrologic study results for the sub-watershed area under the pre- and post-project condition show that the proposed Project would not increase peak discharge rates and stormwater volumes discharged from the Project site (Ziegler Civil Engineering, 2018a, 2018c). The proposed stormwater management system would mimic the pre-project hydrology of the Project site and would slightly decrease overall the peak discharge rate for the sub-watershed area (Table 10-2). Discharge from the proposed stormwater management system would flow downslope and eventually enter natural drainage channels and would therefore at some point flow through SCA and WCA setback areas, as is true of existing site drainage. In maintaining pre-project drainage patterns, stormwater volumes, and stormwater flow rates following Project implementation, water would not be diverted away from the surface water features associated with the SCAs and WCAs. Further, no new stormwater management system features, septic system features, or any other new improvements would be constructed within any SCA or WCA. Therefore, the Project is consistent with applicable regulatory stormwater standards for development and would not result in hydromodification-related impacts on-site or downstream.

Impact Conclusion

Considering the clarifying information provided by the Applicant and incorporated into the 2020 IS/MND, in addition to the previous analysis contained in the 2020 IS/MND and the Response to Comments on the Initial Study and all other information in the record, maintaining pre-project drainage patterns, stormwater volumes, and stormwater flow rates following Project implementation, and ensuring stormwater would not be diverted away from the surface water features associated with the SCAs and WCAs, impacts related to hydromodification, including those associated with both substantially increased and reduced stormwater runoff patterns, would result in a *less-than-significant* impact on the environment.

3. Summary and Conclusion

A. Impact Summary

The foregoing reexamination and additional analysis of each of the three issues raised in the Court Order leads to the same conclusion: on the basis of the whole record, there is not substantial evidence that the Project would have a significant effect on the environment that has not already been identified and mitigated in the 2020 IS/MND. With the adoption of previously identified mitigation measures, all of which have been incorporated into the Project by the Applicant, the Project does not have the potential to cause a significant environmental impact.

B. Summary of Text Changes

For the purposes of clarification and to incorporate new information, the following changes are made to the text of the 2020 IS/MND (additions are underlined; deletions are ~~struck-through~~):

To incorporate new information provided by the Applicant regarding disposition of surplus soil from grading activities, page 12 of the 2020 IS/MND is revised as follows:

> The Project proposes new grading, including grading of the entrance to the Project site, new driveway segment, stormwater management system elements, extension of underground utilities, and on-site sewage disposal systems. The Grading Plan estimates earthwork to be a total of 1,709 cubic yards of cut and 1,565 cubic yards of fill (Ziegler Civil Engineering, 2018a). The difference (about 140 cubic yards) would be ~~stockpiled on-site or~~ hauled off-site and disposed in accordance with applicable legal and regulatory requirements.

To incorporate the geologic analysis of the Fire Road section that was performed by a certified engineering geologist on March 14, 2019 and then updated in May 2022, page 79 of the 2020 IS/MND is revised as follows:

> The area where the unpermitted grading for the Fire Road occurred overlies an old landslide identified by previous regional mapping and confirmed by Herzog's geotechnical investigation (Herzog, 2015). While the fill for the Fire Road was placed on the debris of a former landslide, the grading of the Fire Road, as examined by a certified engineering geologist on two separate occasions, 3 years apart, appears not to have increased the potential for future landsliding. Conversely, it is likely that grading the roadbed for the Fire Road created a stable terrace on the slope that, in addition to channelizing and routing of storm flows through the culvert under the road, stabilizing the fill soils, and revegetating the slope, reduced the potential for further landsliding in this area. Therefore, impacts to slope stability on the Project site from the unpermitted grading of the Fire Road are less than significant.

For the purpose of clarification, and consistent with new information provided by the Applicant and new hydrologic field observations conducted in May 2022, page 105 of the 2020 IS/MND is revised as follows:

> Hydrologic study results for the sub-watershed area under the pre- and post-project condition show that the proposed Project would not increase peak discharge rates and

stormwater volumes discharged from the Project site (Ziegler Civil Engineering, 2018a, 2018c). The proposed stormwater management system would mimic the pre-project hydrology of the Project site and would slightly decrease overall the peak discharge rate for the sub-watershed area (Table 10-2). Discharge from the proposed stormwater management system would flow downslope and eventually enter natural drainage channels and would therefore at some point flow through SCA and WCA setback areas, as is true of existing site drainage. In maintaining pre-project drainage patterns, stormwater volumes, and stormwater flow rates following Project implementation, water would not be diverted away from the surface water features associated with the SCAs and WCAs. Further, no new stormwater management system features, septic system features, or any other new improvements would be constructed within any SCA or WCA. Therefore, the Project is consistent with applicable regulatory stormwater standards for development and would not result in hydromodification-related impacts on-site or downstream.

C. Environmental Determination

Because the Project, as mitigated, does not have the potential to cause a significant environmental impact, a Mitigated Negative Declaration shall again be prepared.

ATTACHMENT A

Peter B. Hudson, California Professional Geologist (Registration No. 6730) and Certified Engineering Geologist (Registration No. 2348), Certificates of Registration

STATE OF CALIFORNIA

State of California
Department of
Consumer Affairs

BOARD FOR GEOLOGISTS AND GEOPHYSICISTS

CERTIFICATE

IT IS HEREBY CERTIFIED THAT

PETER BRADFORD HUDSON

IS A DULY

CERTIFIED ENGINEERING GEOLOGIST

Certificate No EG 2348

BOARD FOR GEOLOGISTS AND GEOPHYSICISTS

By Craig A Copeland
President

Paul Sweeney
Executive Officer

This 16th day of August, 2004

DEPARTMENT OF CONSUMER AFFAIRS
BOARD
FOR
GEOLOGISTS & GEOPHYSICISTS
STATE OF CALIFORNIA

EGGEG1 5/31/03

STATE OF CALIFORNIA

State of California Department of Consumer Affairs

State Board of Registration for Geologists and Geophysicists

CERTIFICATE

IT IS HEREBY CERTIFIED THAT

PETER BRADFORD HUDSON

IS A DULY

REGISTERED GEOLOGIST

Certificate No. 6730

STATE BOARD OF REGISTRATION FOR
GEOLOGISTS AND GEOPHYSICISTS

By Leena N. Hoose
President

Dalton Pollard
Executive Officer

This 10th day of December, 1997

EGGGEO 10/28/96.