INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

580 MARKETPLACE CASTRO VALLEY DIGITAL BILLBOARD PROJECT PLN2019-00117

PREPARED FOR:

Alameda County Planning Department 224 West Winton Avenue, Room 111 Hayward, CA 94544

PREPARED BY:

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OCTOBER 2019

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INTRODUCTION TO THIS DOCUMENT

This document serves as the Initial Study and Mitigated Negative Declaration for the proposed project, and has been prepared in accordance with the California Environmental Quality Act (CEQA; Public Resources Code Sections 1500 et seq.).

Per CEQA Guidelines (Section 15070), a Mitigated Negative Declaration can be prepared to meet the requirements of CEQA review when the Initial Study identifies potentially significant environmental effects, but revisions to the project and/or incorporation of mitigation measures would avoid the effects or mitigate the effects to a point where no significant effects would occur.

This document is organized in three sections as follows:

- *Introduction and Project Information.* This section introduces the document and discusses the project description including location, setting, and specifics of the lead agency and contacts.
- *Mitigated Negative Declaration*. This section summarizes the impacts and lists the mitigation measures identified in the Initial Study and proposes findings that would allow adoption of this document as the CEQA review document for the proposed project.
- *Initial Study Checklist*. This section discusses the CEQA environmental topics and checklist questions, and identifies the potential for impacts and proposed mitigation measures to avoid these impacts.

PUBLIC REVIEW

The Initial Study and Mitigated Negative Declaration will be circulated for a 30-day public review period. Written comments may be submitted to the following address:

Damien Curry Alameda County Planning Department 224 West Winton Avenue, Room 111 Hayward, CA 94544 damien.curry@acgov.org

Adoption of the Mitigated Negative Declaration does not constitute approval of the project itself, which is a separate action to be taken by the approval body. Approval of the project can occur only after the Mitigated Negative Declaration has been adopted.

PROJECT INFORMATION

1.	Project Title:	580 Marketplace Castro Valley Digital Billboard PLN2019-00117			
2.	Lead Agency Name and Address:	Alameda County Planning Department 224 West Winton Avenue, Room 111 Hayward, CA 94544			
3.	Contact Person and Phone Number:	Damien Curry, Planner damien.curry@acgov.org 510.670.6684			
4.	Project Location:	3893 East Castro Valley Boulevard (APN 085-6300-013-05) in Castro Valley, CA (Figure 1)			
5.	Project Sponsor's Name and Address	Bruce Qualls Clear Channel Outdoor, Inc. Northern California Division 555 12th Street, Suite 950 Oakland, CA 94607 510.446.7215			
6.	General Plan Designation:	Community Commercial (Castro Valley General Plan)			
7.	Zoning:	Planned Development			

8. Description of the Project:

Digital Billboard

The proposed project would consist of construction and operation of a new single-sided outdoor advertising digital billboard in Castro Valley, California. Construction of the column for the billboard would involve drilling a hole approximately 78 inches in diameter through the existing concrete and soil below to a depth of approximately 40 feet below grade, with the actual depth to be determined. The billboard is proposed to reach a maximum height of approximately 42 feet and 10 inches. The proposed billboard site plan is shown in **Figure 2**.

A digital billboard consists of a display surface that supports an image generated by rows of light emitting diodes (LED). The image on the billboard is static for a brief period, not less than eight seconds, before cycling to the next image. Operational details provided by the applicant include the following:

• The LED display would be 59 feet and 6 inches wide by 17 feet and 10 inches tall and mounted on a column. The display face would be oriented in a southwesterly direction, facing eastbound highway traffic. The reverse of the billboard face would have a concealing screen consisting of steel mesh; the concealing screen would also





Figure 1. Project Location

October 2019



Figure 2. Project Site Plan Source: AMZ Engineering October 2019



be 59 feet and 6 inches wide by 17 feet and 10 inches tall. The design of the billboard is shown in **Figure 3**.

- Lighting levels on the digital billboard face would not exceed 0.3 foot-candles over ambient levels, as measured using a foot-candle meter at a 350-foot distance according to the guidelines of the Outdoor Advertising Association of America (OAAA).
- Power for the billboard would consist of a central breaker panel with a primary feed of 200 amps at 120/240 single phase or 200 amps at 208Y/120 three phase primary feed; electrical connections would be UL and IEC-approved.
- The digital billboard would be operated with systems and monitoring in place that would either turn off the display or show a "full black" image on the display in the event of a malfunction that affects at least 50 percent of the sign area.
- Light sensors would be installed with the billboard face to measure ambient light levels and to adjust light intensity to respond to changing ambient light conditions.
- The billboard would be programmed for nighttime reduced power operation (to as low as 4 percent of peak power).
- LED lighting has a directional nature and the projected viewing angle values for the proposed billboard is \pm 30° vertically and \pm 60° horizontally. Shaders would be located above each row of LEDs to prevent light from projecting upward into the sky.

Construction of the Billboard

The following information regarding the process involved in installing a digital billboard is based on discussions with the applicant and has taken into account details of the soil characteristics at the site. Site preparation would include the removal of approximately four small trees (roughly 6 feet in height) to accommodate the billboard foundation. Some additional on-site trees would be trimmed to ensure visibility of the billboard.

Construction activities are subject to the Building Code, and a Building Permit is required. Construction of the project would occur over as many as four two-day weekends, depending on construction conditions, and proceed generally as described below.

Weekend 1: On the first day at the site, a crew arrives with a drilling rig. The underground portion of the column (i.e., shaft) would be 78 inches in diameter with an estimated depth of 40 feet. A trench plate is placed over the hole before the crew leaves the site.

Weekend 2: The column for the billboard is delivered to the site. The column is lifted into the foundation hole by a crane, and is maintained in place by I-beams that are welded to the column. A building inspection is required at this point.

Weekend 3: After the building inspection is complete, concrete is poured and allowed to cure for a minimum of three days.





Weekend 4: After the concrete has cured, the crew returns to the site. The I-beam welds are ground off and the I-beams removed. The upper structure components are delivered to the site and assembled on the ground by the crew (usually 4-5 persons). The crane returns to the site and lifts the upper structure into place atop the column.

Electrical service: The project would connect to existing electrical service on the site. Arrangements to extend electrical service to the billboard would be made in advance of the construction activities.

Relocation Agreement

Consistent with County of Alameda and California Department of Transportation (Caltrans) goals to reduce the overall number of billboards, approval of the proposed digital billboard would include an agreement to remove other static billboards within Alameda County. The Relocation Agreement facilitates the removal of existing billboards as a requirement to place a new billboard. The Relocation Agreement is likely to be formalized in coordination with the County subsequent to this document; the preliminary proposal is for the removal of 15 billboard faces. Five billboard faces are proposed for removal in the Ashland Area, four faces are proposed for removal in the Cherryland area, and six billboard faces are proposed for removal in the Castro Valley area along Castro Valley Boulevard. Some of these billboard faces to be removed will be determined in coordination with the County.

Removal and demolition of existing billboards would involve use of a crane to remove the billboard face and if there is a pole, this would be cut and ground down to surface level; if paved, the surface would be patched. Billboard removal would not require additional environmental review as such removal is categorically exempt under CEQA Guidelines Section 15301(I)(4) (demolition and removal of existing small structures).

Project Approvals

The County of Alameda is the lead agency with the authority for approving or denying the project, which would require the following approvals and actions:

- Site Development Review
- Building permits

9. Surrounding Land Uses and Setting:

The project site is on the southern side of the 580 Marketplace property, adjacent to Interstate 580 (I-580). The site is immediately adjacent to a vegetated slope and is generally bounded by I-580 and the Castro Valley Boulevard exit ramp, the vegetated slope, and the 580 Marketplace businesses (see Figure 1). The existing use of the project area as a commercial and retail location would be unchanged by the proposed addition of an unrelated billboard at the site.

The project vicinity consists of a mix of commercial and residential uses. Residential uses in the immediate vicinity lie approximately 625 feet to the east and 550 feet to the north of the project site; residential uses also lie approximately 0.25 to 0.5 mile to the

south of Don Castro Reservoir, across I-580. Commercial uses are found adjacent to the site and hotel uses are found across Castro Valley Boulevard to the north.

General Plan and Zoning Designations

The Castro Valley General Plan designates the land use for the project site as Community Commercial. The site is zoned as Planned Development. The land use designation is intended to provide a wide range of commercial goods and services to meet community needs generally in an auto-oriented setting. Typical uses include community-serving retail and commercial services, comparison retail, and office uses.

10. Other Public Agencies whose Approval is Required:

Appropriate clearance through Caltrans is required for highway-oriented signs. If the freeway segment is determined to be classified as a "landscaped freeway" (as discussed under Regulatory Provisions), a relocation agreement may be required. No other public agency approvals are required for the proposed project.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Pursuant to Public Resources Code §21080.3.1, the County has contacted the California Native American tribes traditionally and culturally affiliated with the project area to inform them of the project and so they may request consultation. To date, no tribes have requested consultation pursuant to Public Resources Code §21083.3.2.

12. Regulatory Provisions: The following regulations are applicable to installation of billboards, and compliance with these regulations has been assumed in analysis of this project.

Federal

The Federal Highway Beautification Act of 1965 (23 United States Code 131) provides for control of outdoor advertising, including removal of certain types of signs, along the interstate highway system. The Act is enforced by the Federal Highway Administration (FHWA).

As part of its enforcement effort, FHWA has entered into agreements regarding the Act with state departments of transportation. The agreements with California are described under the State provisions, below.

State

Caltrans is involved in the control of "off-premise" displays along state highways. Such displays advertise products or services of businesses located on property other than the display. Caltrans does not regulate on-premise displays (Caltrans Landscape Architecture Program, 2008).

California has entered into two agreements with FHWA as part of the implementation of the Highway Beautification Act: one dated May 29, 1965, and a subsequent

agreement dated February 15, 1968. The agreements generally provide that the State will control the construction of all outdoor advertising signs, displays, and devices within 660 feet of the interstate highway right-of-way. The agreements provide that such signs shall be erected only in commercial or industrial zones and are subject to the following restrictions:

- no signs shall imitate or resemble any official traffic sign, signal or device, nor shall signs obstruct or interfere with official signs;
- no signs shall be erected on rocks or other natural features;
- signs shall be no larger than 25 feet in height and 60 feet in width, excluding border, trim and supports;
- signs on the same side of the freeway must be separated by at least 500 feet; and
- signs shall not include flashing, intermittent or moving lights, and shall not emit light that could obstruct or impair the vision of any driver.

California regulates outdoor advertising in the Outdoor Advertising Act (Business and Professions Code, Sections 5200 et seq.) and the California Code of Regulations, Title 4, Division 6 (Sections 2240 et seq.), which incorporate the Federal Highway Beautification Act by reference. Caltrans enforces the law and regulations. Caltrans requires applicants for new outdoor lighting to demonstrate that the owner of the parcel consents to the placement of the sign, that the parcel on which the sign would be located is zoned commercial or industrial, and that local building permits are obtained and complied with. A digital billboard is identified as a "message center" in the statute, which is an advertising display where the message is changed more than once every two minutes, but no more than once every four seconds (Business and Professions Code, Section 5216.4).

In brief, off-premises changeable electronic variable message signs (CEVMS) adjacent to controlled routes shall incorporate standards pertaining to:

- 1. Duration of Message
- 2. Transition Time
- 3. Brightness
- 4. Spacing
- 5. Locations

Most importantly as a result of FHWA recommendations, to ensure driver safety, no offpremise advertising billboard operators presently use moving displays of less than a 4second duration between messages.

Off-premise displays are not allowed along landscaped freeways except when approved as part of Relocation Agreements pursuant to §5412 of the Outdoor Advertising Act. A landscaped freeway is defined as one that is now, or may in the future be, improved by the planting of lawns, trees, shrubs, flowers or other ornamental vegetation requiring reasonable maintenance on one or both sides of the freeway (Government Code §5216). Caltrans has determined that the project site (at postmile 28.08) is outside the landscaped freeway designation on I-580 (beginning at postmile 28.10). The Outdoor Advertising Act contains a number of provisions relating to the construction and operation of billboards:

- The sign must be constructed to withstand a wind pressure of 20 pounds per square feet of exposed surface (§5401).
- No sign shall display any statements or words of an obscene, indecent, or immoral character (§5402)
- No sign shall display flashing, intermittent or moving light or lights (§5403(h)).
- Signs are restricted from areas within 300 feet of an intersection of highways or of highway and railroad rights-of-way, but a sign may be located at the point of interception, as long as a clear view is allowed for 300 feet, and no sign shall be installed that would prevent a traveler from obtaining a clear view of approaching vehicles for a distance of 500 feet along the highway (§5404).
- Message center signs may not include any illumination or message change that is in motion or appears to be in motion or that change or expose a message for less than four seconds. No message center sign may be located within 500 feet of an existing billboard, or 1,000 feet of another message center display, on the same side of the highway (§5405).

Additional restrictions on outdoor signage are found in the California Vehicle Code. Section 21466.5 prohibits the placing of any light source "of any color of such brilliance as to impair the vision of drivers upon the highway." Specific standards for measuring light sources are provided. The restrictions may be enforced by Caltrans, the California Highway Patrol, or local authorities. Modern signs, including the proposed project, have been designed to comply with applicable restrictions.

MITIGATED NEGATIVE DECLARATION

PROJECT DESCRIPTION, LOCATION, AND SETTING

This Mitigated Negative Declaration has been prepared for the proposed 580 Marketplace Castro Valley Digital Billboard Project in Castro Valley, CA. See the Project Information section of this document for details of the project.

POTENTIALLY SIGNIFICANT IMPACTS REQUIRING MITIGATION

The following is a list of potential project impacts and the mitigation measures recommended to reduce these impacts to a level of less than significant. Refer to the Initial Study Checklist section of this document for a more detailed discussion.

The digital billboard technology has the potential to operate at levels brighter than those specified as the operational limits. Impacts would remain less than significant under specified operating conditions, which are required to be tested under Mitigation Measure AES-1.

Mitigation Measure AES-1:

Billboard Brightness Field Testing. The Applicant shall demonstrate through field testing compliance with a 0.3-foot-candle increase over ambient light at 350 feet during nighttime conditions upon initial start-up, at 6 months of operation, and at the request of the County for the life of the billboard. The Applicant shall fund field testing by an independent contractor or County staff trained in the use of a handheld photometer to demonstrate continued compliance. The County shall consider citizen complaints consisting of direct personal impacts as cause for requesting field testing.

If increases in ambient light are found to be above the 0.3-foot-candle level, the dimming level shall be adjusted until this level can be demonstrated. This must be completed and demonstrated through follow-up field testing within 24 hours or the billboard shall not be operated until the lighting levels can be brought into compliance.

If no above-threshold levels have been measured in the prior three tests, field testing shall be requested no more often than twice yearly. Otherwise, field tests can be requested up to once monthly.

Project air quality emissions would be below applicable threshold levels; however, the Bay Area Air Quality Management District (BAAQMD) recommends implementation of construction mitigation measures to reduce construction-related emissions and fugitive dust for all projects. These basic measures are included in Mitigation Measure AIR-1 and would further reduce already less than significant construction-period criteria pollutant impacts.

Mitigation Measure AIR-1:

Basic Construction Management Practices. The project applicant shall demonstrate proposed compliance with all applicable regulations and operating

procedures prior to issuance of demolition, building, or grading permits, including implementation of the following BAAQMD's Basic Construction Mitigation Measures:

- i) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- ii) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- iii) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- iv) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- v) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- vi) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- vii) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- viii) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Should construction of the billboard occur during the avian breeding season, birds nesting in the nearby area may be disturbed by construction activities, including tree removal. Native birds are protected from "take" by the federal Migratory Bird Treaty Act and the California Fish and Game Code, and the abandonment of even one active nest as a result of project construction activities could be considered take under the Fish and Game Code. Mitigation Measure BIO-1 would ensure nesting birds will not be disturbed and that the impact would be less than significant.

Mitigation Measure BIO-1:

Nesting Birds. The site and a surrounding radius of not less than 0.5 miles shall be surveyed by a qualified biologist to verify the presence or absence of nesting birds protected under the federal Migratory Bird Treaty Act and the California Fish and Wildlife Code. Pre-construction surveys shall be conducted within 15 days prior to start of work and shall be submitted to the Building Division. If the survey indicates the potential presences of nesting birds, the applicant shall comply with recommendations of the biologist regarding an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The

size of the nest buffer will be based to a large extent on the nesting species and its sensitivity to disturbance.

Construction of the project involves minimal ground disturbance and the potential for unrecorded resources at the site is considered low. In the event archaeological or paleontological resources or human remains are discovered on site, these resources would be handled according to applicable regulations (Public Resources Code Sections 21083.2, 21084.1, 5097.98, 15064.5(d) and/or Section 7050.5 of the Health and Safety Code) and would ensure that potential impacts on unknown cultural resources would be less than significant.

Mitigation Measure CUL-1:

Halt Construction Activity, Evaluate Find, and Implement Mitigation. In the event that archaeological or paleontological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist or paleontologist shall be consulted to determine whether the resource requires further study. The developer shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The archaeologist/paleontologist shall make recommendations concerning appropriate measures that will be implemented to protect the resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts or features, including hearths. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance in terms of CEQA criteria.

Mitigation Measure CUL-2:

Halt Construction Activity, Evaluate Remains, and Take Appropriate Action in Coordination with Native American Heritage Commission. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours of being granted access to the site, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

- 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:
 - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours of being granted access to the site.
 - The descendant identified fails to make a recommendation.
 - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Significant effects could occur if the proposed digital billboard did not comply with restrictions regarding location, intensity of light, light trespass, or other restrictions, or includes driver interaction prior to appropriate study of the safety of that technology. With implementation of Mitigation Measures TRAN-1 and TRAN-2, the County will receive accurate information from the operator regarding compliance on an ongoing basis to ensure that impacts on transportation and traffic safety would be less than significant.

Mitigation Measure TRAN-1:

Annual Report. Upon request by the County, the operator of the digital billboard shall submit to the County, within thirty days following June 30 of each year, a written report regarding operation of each digital billboard during the preceding period of July 1 to June 30. The operator may submit a combined report for all such digital billboards operated by such operator within the County limits. The report shall, when appropriate, identify incidents or facts that relate to specific digital billboards. The report shall be submitted to the Alameda County Community Development Agency and shall include information relating to the following:

- a. Status of the operator's license as required by California Business and Professions Code §§5300 et seq.;
- b. Status of the required permit for individual digital billboards, as required by California Business and Professions Code §§5350 et seq.;
- c. Compliance with the California Outdoor Advertising Act, California Business and Professions Code §§5200 and all regulations adopted pursuant to such Act;
- d. Compliance with California Vehicle Code §§21466.5 and 21467;
- e. Compliance with provisions of written agreements between the U.S. Department of Transportation and Caltrans pursuant to the Federal Highway Beautification Act (23 United States Code §131);
- f. Compliance with mitigation measures identified in the Mitigated Negative Declaration adopted as part of Project approval;
- g. Each written or oral complaint received by the operator, or conveyed to the operator by any government agency or any other person, regarding operation of each digital billboard included in the report;
- h. Each malfunction or failure of each digital billboard included in the report, which shall include only those malfunctions or failures that are visible to the naked

eye, including reason for the malfunction, duration and confirmation of repair; and,

i. Operating status of each digital billboard included in the report, including estimated date of repair and return to normal operation of any digital billboard identified in the report as not operating in normal mode.

Mitigation Measure TRAN-2:

Interactive Technology. The operator shall not install or implement any technology that would allow interaction with drivers, vehicles, or any device located in vehicles, including, but not limited to a radio frequency identification device, geographic positions system, or other device without prior approval of the County, taking into consideration technical studies and Caltrans or U.S. Department of Transportation policies and guidance available at the time of the request.

Construction of the project involves minimal ground disturbance; however, the possibility exists for tribal cultural resources discovery during construction activities. With implementation of Mitigation Measure TCR-1, the potential impact on tribal cultural resources would be less than significant.

Mitigation Measure TCR-1:

Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, Alameda County shall consult with a qualified archaeologist and begin or continue Native American consultation procedures. If Alameda County determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

PROPOSED FINDINGS

Alameda County has determined that, with the implementation of mitigation measures identified in this Mitigated Negative Declaration, the proposed project will not have a significant effect on the environment. If this Mitigated Negative Declaration is adopted by Alameda County, the requirements of CEQA will be met by the preparation of this Mitigated Negative Declaration, and the project will not require the preparation of an Environmental Impact Report. This decision is supported by the following findings:

a. The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community. It does not reduce the number or restrict the range of a rare or endangered plant or animal, since there is no identified area at the project site which is habitat for rare or endangered species. It does not eliminate important examples of the major periods of California history or pre-history, or which represents unique examples of California history or prehistory. The project does not have any significant, unavoidable adverse impacts. Implementation of specified mitigation measures will avoid or reduce the effects of the project on the environment and thereby avoid any significant impacts.

- b. The project does not involve impacts which are individually limited but cumulatively considerable, because the described project will incorporate mitigation measures to avoid significant impacts of the project in the context of continued growth and development in Alameda County.
- c. The project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly, because all adverse effects of the project will be mitigated to less than significant levels.

INITIAL STUDY CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Environmental factors that may be affected by the project are listed alphabetically below. Marked factors (\blacksquare) were determined to be potentially affected by the project, involving at least one impact that is potentially significant, as indicated in the Environmental Evaluation Form Checklist and related discussion that follows. Unmarked factors (\Box) were determined to not be significantly affected by the project, based on discussion provided in the Checklist.



There are no impacts that would remain significant with implementation of the identified mitigation measures.

LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

- □ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- □ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- □ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- □ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

EVALUATION OF ENVIRONMENTAL EFFECTS

The Checklist portion of the Initial Study begins below, with explanations of each CEQA issue topic. Four outcomes are possible.

- 1. A "no impact" response indicates that no action that would have an adverse effect on the environment would occur due to the project.
- 2. A "less than significant" response indicates that while there may be potential for an environmental impact, there are standard procedures or regulations in place, or other features of the project as proposed, which would limit the extent of this impact to a level of "less than significant."
- 3. Responses that indicate that the impact of the project would be "less than significant with mitigation" indicate that mitigation measures, identified in the subsequent discussion, will be required as a condition of project approval in order to effectively reduce potential project-related environmental effects to a level of "less than significant."
- 4. A "potentially significant impact" response indicates that further analysis is required to determine the extent of the potential impact and identify any appropriate mitigation. If any topics are indicated with a "potentially significant impact," these topics would need to be analyzed in an Environmental Impact Report.

This document indicates that no environmental topics would be considered to be "potentially significant" after application of mitigation measures identified in this document and as agreed to by the project applicant.

1. AESTHETICS

We	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
C)	Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			•	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Scenic Vistas (Criterion a)

Figures 4 through **10** show the proposed billboard added to existing views from I-580 and Castro Valley Boulevard. The site and surrounding area are developed with a mix of commercial and residential uses. The project is located behind a commercial building in the 580 Marketplace shopping center development, at the top of a vegetated slope near the freeway, with no substantial views of the San Francisco Bay, scenic hillsides, or Castro Regional Park from or across the site. While the billboard would be visible from both near and far locations, the site is not a scenic resource or vista area and is not identified as a visual corridor in the Castro Valley General Plan.¹ The project would have a *less than significant* impact on scenic vistas.

Scenic Highways (Criterion b)

The segment of I-580 that passes through Castro Valley is eligible to be a California Scenic Highway, although it has not been officially designated as such²; however, it has been identified as a scenic route in the Alameda County General Plan, which appears to designate all major thoroughfares in Alameda County as Scenic Routes.³ The project is located on a developed commercial site surrounded by other development, however, and there are no scenic resources on the project site or in the immediate vicinity that would be substantially damaged by the project. The impact of the project on scenic resources viewable from a state scenic highway or another designated scenic highway would be *less than significant*.

¹ Alameda County Community Development Agency. Castro Valley General Plan, March 2012.

² Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

³ Alameda County. Scenic Route Element of the General Plan, 1966, amended May 1994.



[∞] 40 LAMPHIER•GREGORY **Figure 4. Visual Simulation Locations – Surrounds** Source: Previsualists, Inc. *October 2019*





Figure 5. Visual Simulation, Location 1 Source: Previsualists, Inc. October 2019



Figure 6. Visual Simulation, Location 2 Source: Previsualists, Inc. October 2019





Figure 7. Visual Simulation, Location 3 Source: Previsualists, Inc. October 2019





Figure 8. Visual Simulation, Location 4 Source: Previsualists, Inc. October 2019





Figure 9. Visual Simulation, Location 5 Source: Previsualists, Inc. October 2019





Figure 10. Visual Simulation, Location 6 Source: Previsualists, Inc. October 2019

Visual Character (Criterion c)

The project site is in an urbanized area, within approximately 200 feet of I-580. The proposed billboard is intended to be visible primarily to drivers along eastbound I-580 but would also be visible in some near- and long-range views from commercial and residential areas (see Figures 4 through 10). The proposed billboard is consistent with the character of the area in which it is proposed. Additionally, the County will review the proposed design as part of the entitlement approval process.

The Castro Valley General Plan designation for the project site is Community Commercial, which is intended to provide a wide range of commercial goods and services to meet community needs generally in an auto-oriented setting. The Castro Valley General Plan identifies the removal of billboards along Castro Valley Boulevard as a major initiative to beautify the roadway. Construction and operation of the billboard would not conflict with this initiative or other applicable zoning and other regulations governing scenic quality in the Castro Valley area.

Overall, the project's impact on visual character would be *less than significant*.

In addition, the Relocation Agreement associated with the project would contribute to the removal of other billboard structures, for an overall reduction in the number of billboard faces in the area. By facilitating billboard removal in this area, the Relocation Agreement supports the Castro Valley General Plan Policy 5.3-2 to reduce billboards along Castro Valley Boulevard. See "Project Information" for a discussion of the billboards to be removed.

Light and Glare (Criterion d)

Digital billboards rely on LED technology to display messages on a lit screen. The lighting is designed to make the message displays visible to passing motorists.

The brightness of the LED display on the billboard face is subject to adjustment based on ambient conditions monitored by multiple light sensors. The display, for example, is brighter in the daytime than in darkness and responds to changes in the ambient light conditions. Restrictions on digital billboards, imposed and enforced by Caltrans, preclude lighting that is so directed or intense that it could blind or confuse drivers, or create conditions that make recognition of the roadway or official signage difficult.

Caltrans has imposed these restrictions for traffic safety reasons, and they are discussed in more detail in the Transportation section of this Initial Study. The resulting controls effectively regulate light and glare to ensure that the operation of any digital billboard does not create a substantial new source of light or glare.

The billboard would also comply with OAAA guidelines which specify that lighting levels from a digital billboard will not exceed 0.3-foot-candles over ambient levels, as measured using a foot-candle meter at a pre-set distance based on the size of the billboard face. For a 20-foot by 60-foot billboard (the closest standard size, which is just larger than that proposed), this would be 350 feet.⁴ Illuminance would be negligible beyond 607 feet.⁵

⁴ According to OAAA Methodology to Determine Billboard Luminance Levels, provided by Clear Channel.

The Illuminating Engineering Society of North America (IESNA) Lighting Handbook 10th Edition recommendations are in units of "nits," which are appropriate when light is being bounced off a surface, as is the case with a conventional billboard, but is not the case with a digital billboard, which projects light directly. With assumptions about content, nits and foot-candles can be converted for comparison of digital illuminance to conventional billboard luminance. Conversion of nits using conservative assumptions (80% reflectance) and IESNA Handbook recommendations for bright surrounds results in recommendations of 0.256-foot-candles. This is similar to digital billboard-specific recommendations of 0.3-foot-candles. 6

The value of 0.3-foot-candles is used here because, while relatively low, it is practical to measure with a handheld photometer and therefore to verify following installation and during operation. This 0.3-foot-candle level would be perceptible at the low end to the human eye over ambient light on a surface. It would be equivalent to average residential street illumination provided by low wattage street lights (i.e., similar to ambient conditions in the vicinity).

Residences to the north are within 550 feet of the billboard and residences to east are within 625 feet; however, the one-sided display would be oriented in a southwesterly direction, decreasing potential light effects on these residences to the east and north. The nearest residences to the south and southwest of the project site lie across I-580, approximately 1,450 feet to 2,070 feet from the proposed billboard location. Increases at the closest residential and commercial uses would remain barely perceptible and be consistent with the existing urban conditions.

Mitigation Measure AES-1:

Billboard Brightness Field Testing. The Applicant shall demonstrate through field testing compliance with a 0.3-foot-candle increase over ambient light at 350 feet during nighttime conditions upon initial start-up, at 6 months of operation, and at the request of the County for the life of the billboard. The Applicant shall fund field testing by an independent contractor or County staff trained in the use of a handheld photometer to demonstrate continued compliance. The County shall consider citizen complaints consisting of direct personal impacts as cause for requesting field testing.

If increases in ambient light are found to be above the 0.3-foot-candle level, the dimming level shall be adjusted until this level can be demonstrated. This must be completed and demonstrated through follow-up field testing within 24 hours or the billboard shall not be operated until the lighting levels can be brought into compliance.

⁵ Lighting Sciences Inc., November 2008, *Digital Billboard Recommendations and Comparisons to Conventional Billboards*.

⁶ Ibid.

If no above-threshold levels have been measured in the prior three tests, field testing shall be requested no more often than twice yearly. Otherwise, field tests can be requested up to once monthly.

With implementation of Mitigation Measure AES-1, light levels from the proposed billboard will be required to remain consistent with guidelines and within expected ambient light conditions at residential receivers in the area and potential impacts related to light and glare would be *less than significant*.

2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
C)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production(as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				

Agriculture and Forestry Resources (Criteria a-e)

The project site is in a developed urban area adjacent to a highway. No part of the site is zoned for or currently being used for agricultural or forestry purposes or is subject to the Williamson Act. The project would have *no impact* on agriculture and forestry resources.

3. AIR QUALITY

app dist	nere available, the significance criteria established by the plicable air quality management or air pollution control trict may be relied upon to make the following erminations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			•	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?				
C)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

Air Quality Plan (Criterion a)

The project site is subject to the Bay Area Clean Air Plan, first adopted by BAAQMD (in association with the Metropolitan Transportation Commission and the Association of Bay Area Governments) in 1991 to meet state requirements and those of the federal Clean Air Act. As required by state law, updates are developed approximately every three years. The plan is meant to demonstrate progress toward meeting the ozone standards, and includes other elements related to particulate matter, toxic air contaminants, and greenhouse gases (GHGs). The latest update to the plan, adopted in April 2017, is the Bay Area 2017 Clean Air Plan.

BAAQMD recommends analyzing a project's consistency with current air quality plan primary goals and control measures. The impact would be significant if the project would conflict with or obstruct attainment of the primary goals or implementation of the control measures.

The primary goals of the Bay Area 2017 Clean Air Plan are:

- Attain all state and national air quality standards
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants
- Reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050 (This standard is addressed in Section 8: Greenhouse Gas Emissions.)

The project would be required to comply with all applicable rules and regulations related to emissions and energy use. As a billboard project with no proposed stationary emissions sources, it would not result in a new substantial source of emissions or toxic air contaminants or otherwise conflict with the primary goals of the 2017 Clean Air Plan. Other than energy efficiency and recycling requirements (Energy Control Measure EN2 and Waste Management Control Measure WA4), with which the project would be consistent, the Clean Air Plan does not recommend measures directly applicable to this type of use.
The project, therefore, would be generally consistent with the Clean Air Plan and have a *less than significant* impact.

Air Quality Standards/Criteria Pollutants (Criterion b)

Ambient air quality standards have been established by state and federal environmental agencies for specific air pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation. They include ozone precursors (nitrogen oxides and reactive organic gases), carbon monoxide, and suspended particulate matter (PM_{10} and $PM_{2.5}$). The Bay Area is considered "attainment" for all standards, with the exception of ozone and particulate matter.

By its very nature, air pollution is largely a cumulative impact. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.⁷

BAAQMD's latest May 2017 CEQA Guidelines include the following thresholds of significance. These thresholds are average daily emissions of 54 pounds per day or 10 tons per year of nitrogen oxides, reactive organic gases, or $PM_{2.5}$ and 82 pounds per day or 15 tons per year of PM_{10} . Both the daily and annual thresholds apply to operation and only the daily thresholds apply to construction.

Air quality impacts fall into two categories: short-term impacts that would occur during construction of the project and long-term impacts from project operation.

Construction Emissions

BAAQMD presents screening criteria in their CEQA Guidelines that identify project sizes by type that could have the potential to result in emissions over threshold levels. For example, the screening table includes a construction-period criteria pollutant screening level of 114 single family dwelling units or 277,000 square feet of retail uses.⁸ These examples would generally have construction periods spanning one or more years. While construction of billboards is not specifically listed on this screening table, it can be reasonably concluded from a comparison to the entries on this table that the minimal construction activities required for this project, including only a few days of activity, would be well below threshold levels.

BAAQMD recommends implementation of construction mitigation measures to reduce construction-related emissions and fugitive dust for all projects, regardless of the significance level of construction-period impacts. These basic measures are included in

⁷ BAAQMD. California Environmental Quality Act Air Quality Guidelines, May 2017.

⁸ Ibid.

Mitigation Measure AIR-1 and would further reduce construction-period criteria pollutant impacts.

Mitigation Measure AIR-1:

Basic Construction Management Practices. The project applicant shall demonstrate proposed compliance with all applicable regulations and operating procedures prior to issuance of demolition, building, or grading permits, including implementation of the following BAAQMD Basic Construction Mitigation Measures:

- i) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- ii) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- iii) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- iv) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- v) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- vi) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- vii) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- viii) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Operational Emissions

Similar to the analysis for construction-period impacts above, the project was compared to BAAQMD screening criteria for operational pollutants. As it relates to operational pollutants, the screening table includes screening levels of 325 single family dwelling units or 99,000 square feet of regional shopping center uses.⁹ These example uses would use over one million kilowatt-hours (kWh) of electrical energy per year in addition to natural gas and fuel for motor vehicles.¹⁰

⁹ Ibid.

¹⁰ Calculated using California Emissions Estimator Model (CalEEMod version 2016.3.2).

The applicants provided average electricity usage for their digital billboards across the country. Based on that information, the average daily usage for this digital billboard (given its size and single digital face) would be about 195 kWh per day for an average annual usage of about 71,004 kWh. This estimate is expected to be conservatively high as most of the billboards in the average run 24 hours a day and this billboard would be turned off for a portion of the night. The conservatively projected energy usage of the proposed digital billboard is less than one-tenth the emissions of a project that would be expected to have emissions above air quality screening threshold levels.

While operation of digital billboards is not specifically listed on this screening table, it can be reasonably concluded from the above comparison to example uses in the BAAQMD screening table that operational emissions resulting from this project would be well below threshold levels.

Additionally, BAAQMD presents traffic-based screening criteria for carbon monoxide impacts. As operation of the proposed project would not impact traffic levels, the project would be below carbon monoxide threshold levels.

Therefore, the project impact related to operational pollutant emissions would be *less than significant*.

Sensitive Receptors (Criterion c)

For the purpose of assessing a project's impact on exposure of sensitive receptors to risks and hazards, the threshold of significance is exceeded when the project-specific cancer risk exceeds 10 in 1 million, the non-cancer risk exceeds a Hazard Index of 1.0, or $PM_{2.5}$ concentrations exceed 0.3 micrograms per cubic meter. Examples of sensitive receptors are places where people live, play, or convalesce and include schools, hospitals, residential areas, and recreation facilities.

The closest sensitive receptors are residences located within 550 feet of the proposed billboard to the northwest and within 600 feet to the east. The project itself is not considered a sensitive receptor and operation of the project would not be considered a source of hazardous air emissions. Construction activity that includes the use of traditional diesel-powered equipment results in the emission of diesel particulate matter, which is considered a toxic air contaminant and potential health risk. The generation of these emissions would be temporary, confined to the construction-period of a few active days at the site.

BAAQMD does not provide a screening level to determine projects that are small enough that they can be assumed to be below significance thresholds for emissions-related health risks. Additionally, the modeling to quantify health risks was not originally intended for active emissions periods spanning less than 7 years and is not recommended by any agency for use for less than a 2-year period of focused construction, which does not describe the proposed project. It is reasonable to conclude that emissions and the resultant health risks from an exposure period of only a few active days of construction would be substantially less than emissions over a 2-year period and below applicable thresholds of significance. Given the distance to sensitive uses and that the exposure duration would be substantially shorter than that able to be accurately modeled or otherwise expected to result in a significant impact, it can reasonably be concluded that the potential health risk from construction-period emissions would be *less than significant*.

Objectionable Odors (Criterion d)

Operation of the billboard would not result in objectionable odors. During construction, diesel-powered vehicles and equipment would create odors that some may find objectionable. However, these odors would be temporary and not likely to be noticeable much beyond the project site's boundaries. Therefore, the potential for objectionable odor impacts would be *less than significant*.

4. **BIOLOGICAL RESOURCES**

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		•		
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?			•	
C)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				•
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			•	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

Special Status Species and Habitat and Wetlands (Criteria a-c)

A Biological Impact Assessment was conducted by H.T. Harvey and Associates, included in full as **Attachment A**. H.T. Harvey and Associates conducted a site visit on July 18, 2019.

The project site lies at the top of a heavily-vegetated, ruderal grassland hillside immediately south of the 580 Marketplace shopping complex and north of I-580. It is bordered to the south by an existing concrete wall and the East Castro Valley Boulevard Exit from I-580 West runs just south of the project site.

Dominant vegetation within this ruderal habitat includes nonnative wild oat (Avena fatua), orchard grass (Dactylis glomerata), and bristly ox-tongue (Helminthotheca echioides), as well as other nonnative invasive species such as pampas grass (Cortaderia selloana), ice plant (Carpobrotus edulis), fennel (Foeniculum vulgare), and white horehound (Marrubium vulgare). Dominant tree and shrub species include native coast live oak (Quercus agrifolia) and nonnative species such as oleander (Nerium oleander), French broom (Genista monspessulana), silver wattle (Acacia dealbata), and rosemary (Rosmarinus officinalis).

Crow Creek lies approximately 0.32 mile to the west of the project site, and a reach of San Lorenzo Creek is approximately 0.25 mile to the southwest. No channel reach of either Crow Creek or San Lorenzo Creek crosses the project site, and there are no tributaries of either creek that flow within the project site. Just south of the project site boundary, there is a small concrete-lined drainage channel that runs west to east and empties into a runoff catch basin approximately 115 feet southeast of the project site. This drainage channel joins with an underground drainage pipe that runs under the project site, originating from drainage located north in the 580 Marketplace shopping complex. No part of any of the drainage channels or catch basin support any aquatic vegetation, nor are they connected to Crow or San Lorenzo creeks.

The vast majority of plant and animal species occurring on or immediately adjacent to the project site are very common species associated with urban, developed, and ruderal conditions throughout the Bay Area. Due to the developed nature of the project site and surrounding area, no special-status plant or animal species are expected to occur within the project boundary.

Critical habitat for the state and federally threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*) is found approximately 1.65 mile east of the project site in the Palomares area and 1.87 mile north of the project site in the Cull Canyon Regional Recreation Area. Alameda whipsnakes have been recorded 0.78 mile southeast and 1.20 mile north of the project site. Open canopy chaparral and sage scrub habitats, consisting of scattered grassy patches with extensive rocky outcrops and small mammal burrows that are used for refugia from predators and aestivation, are favored by Alameda whipsnakes. Much, if not all, of this chaparral-sage scrub habitat has been lost due to development within the project vicinity, and no suitable habitat for the Alameda whipsnake was found in the project area during the site visit. Given the lack of suitable habitat on and near the site, and the extensive urban development and roadways surrounding the project area, the Alameda whipsnake are not expected to inhabit the project area or project site.

Direct Effects of Billboard Installation

Due to the highly disturbed nature of the project site and the immediate vicinity, it is unlikely that any special-status species would occur on the project site. There was no evidence that sensitive species were present on the project site and no habitat capable of supporting sensitive species is present within or immediately adjacent to the site.

No wetlands, riparian habitats, or other sensitive habitats are present within the project site or a 100-ft buffer surrounding the project site. Thus, no sensitive habitats would be impacted by the construction of the billboard. Further, no special-status plant or wildlife species are expected to occur within the project area. The only wildlife species that may be using habitats in the immediate vicinity of the project site during construction are common birds that are locally and regionally abundant. Project effects on these species will not be significant under CEQA.

Although no special-status bird species are expected to nest close enough to the project site to be disturbed by project construction, all native bird species that occur in the project area are protected from take by the federal Migratory Bird Treaty Act and the California Fish and Game Code. Abandonment of an active nest because of project construction activities could be considered take under the Fish and Game Code.

Mitigation Measure BIO-1:

Nesting Birds. The site and a surrounding radius of not less than 0.5 mile shall be surveyed by a qualified biologist to verify the presence or absence of nesting birds protected under the Federal Migratory Bird Treaty Act and the California Fish and Wildlife Code. Pre-construction surveys shall be conducted within 15 days prior to start of work and shall be submitted to the Building Division. If the survey indicates the potential presences of nesting birds, the applicant shall comply with recommendations of the biologist regarding an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be based to a large extent on the nesting species and its sensitivity to disturbance.

With implementation of Mitigation Measure BIO-1, the impact related to direct effects on special-status species and habitats would be *less than significant*.

Indirect Effects of Illuminance on Off-Site Areas

The potential for impacts related to illuminance of the billboard on wildlife in off-site areas was assessed. Some animals are extremely sensitive to light cues, which influence their physiology and shape their behaviors, particularly during breeding season. Artificial lighting may indirectly impact mammals and birds by increasing the nocturnal activity of predators and/or causing avoidance of well-lit areas resulting in a net loss of habitat availability and quality.

Areas surrounding the project site are primarily developed urban and ruderal habitats that do not support special-status species. The nearest sensitive habitat (and the species inhabiting them) would be over 1,000 feet south of the project site in the wetland areas of Don Castro Reservoir, 1,600 feet west of the project site at Crow Creek, and over 1,300 feet southwest of the project site at San Lorenzo Creek.

The LED billboard would be angled in such a way as to maximize the amount of visibility from specific portions of I-580 East, so the area of brightest night illuminance projected by the proposed billboard would form a narrow cone directed at oncoming traffic. The illuminance would dissipate over distance such that illuminance beyond 100 feet would be minimal and beyond 607 feet negligible. In addition, given that the proposed billboard would face southwest, no amount of illuminance from the billboard is expected to be projected directly north, south, or east. Although the LED billboard is expected to substantially increase the amount of illuminance currently experienced within the project area, specifically facing southwest, the nearest sensitive habitat (and the species inhabiting them) in that general direction would be at least 1,000 feet away. In those more sensitive locations, increased illuminance from the billboard would be practically nonexistent, given the distance from the billboard and the dense vegetation surrounding both creeks and the wetland area.

Therefore, the LED billboard would not substantially increase the amount of illuminance currently experienced at sensitive habitats (and the special-status species inhabiting them).

The indirect impact of illuminance from the billboard on special-status habitats and species would be *less than significant*.

Wildlife Corridors (Criterion d)

The physical structure of the billboard itself would not impact the movement of any wildlife species; however, it is possible for artificial illuminance to affect avian flight behavior. Artificial illuminance can disorient nocturnally migrating birds moving through the project area, causing them to potentially strike objects such as buildings, adjacent power lines, or even billboards.

The visibility of the proposed digital billboard to birds in flight, and thus the risk they pose to flying birds, depends primarily on the beam angle of the billboard relative to the flightlines of birds and on the luminance (brightness) of the billboard as perceived by the birds.

The directional nature of LED lighting and the projected viewing angle values of $\pm 30^{\circ}$ vertically and $\pm 60^{\circ}$ horizontally suggest that the viewing angle of the billboard will be narrow enough to preclude attracting migrating birds on clear nights, when they fly high enough to be outside the viewing angle of the billboard. Shaders located above each row of lights will prevent light from projecting upward into the sky. As a result, birds flying more than 30° above the billboard's beam angle will not be able to see light from the sign at all. While migrating birds would normally fly higher than 30°, they are forced to fly low during foggy and rainy conditions, which may bring them into the viewing angle of the billboard.

The LED display on the billboard face would be changed every 8 seconds from a static image to a static image, changing the colors, patterns of color, and illuminance of the billboard. Therefore, birds flying near the billboard would not perceive it as a fixed, unchanging light, the type of light most attractive to birds. Migratory birds are attracted to fixed, unchanging light.

If light-sensitive birds were foraging in the areas near the billboard, they could be affected by light at lower altitudes. Of the local special-status species, seabirds and shorebirds are vulnerable to artificial lights. However, the nearest suitable foraging habitat for seabirds and shorebirds includes Don Castro Reservoir, approximately 0.18 mile south of the project site, and Lake Chabot, approximately 3.35 mile northwest of the project site. Suitable foraging habitat for some shorebird species is also found farther away, within wetland areas found along the eastern channel reach of San Lorenzo Creek, which flows into Don Castro Reservoir. Substantial numbers of seabirds and shorebirds are not expected to move back and forth between San Francisco Bay and the project site (or over or past the project site) because the area surrounding the project site is heavily urbanized and the project site is located approximately 6.4 mile east of the Bay.

It is also unlikely that the billboard would impact substantial numbers of roosting birds because the developed and ruderal habitats adjacent to the project site do not provide high quality roosting habitat.

Given the configuration of bird habitats in the vicinity of the site (which does not lend itself to directed bird flights toward the billboard), the changing images that will be displayed on

the LED billboard, the narrow viewing angle, and the use of shaders to prevent light from projecting upward into the sky, the project's impacts on avian flight behavior would be *less than significant*.

Local Policies and Ordinances (Criterion e)

There are no local policies or ordinances related to biological resources applicable to the project. Tree removal planned for the project would occur outside the County right-of-way and the Alameda County Tree Ordinance would not apply. The project would have **no** *impact* with respect to conflicts with local policies and ordinances.

Habitat Conservation Plan (Criterion f)

There is no Habitat Conservation Plan applicable to the project site, and the project would have *no impact*.

5. CULTURAL RESOURCES

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Public Resources Section 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Section 15064.5?				
C)	Disturb any human remains, including those interred outside of formal cemeteries?				

Historic and Archaeological Resources, Human Remains (Criteria a-c)

The project site is previously disturbed and is adjacent to existing buildings which are not considered historic resources. There are no historic resources in the immediate vicinity of the project site.¹¹ Therefore, the project would not have any direct or indirect impacts on historical resources.

The project site is previously disturbed and there are no known resources at the site. A records search performed by the Northwest Information Center (included as Attachment B) confirmed there are no known cultural resources on the site and the potential for unrecorded resources is considered low.

Construction of the project involves minimal ground disturbance. In the event archaeological resources or human remains are discovered on site, these resources would be handled according to applicable regulations (Public Resources Code Sections 21083.2, 21084.1, 5097.98, 15064.5(d) and/or Section 7050.5 of the Health and Safety Code).

Mitigation Measure CUL-1:

Halt Construction Activity, Evaluate Find, and Implement Mitigation. In the event that archaeological or paleontological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist or paleontologist shall be consulted to determine whether the resource requires further study. The developer shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The archaeologist/paleontologist shall make recommendations concerning appropriate measures that will be implemented to protect the resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts or features, including hearths. Any previously undiscovered resources found during construction within the project site shall be

¹¹ Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance in terms of CEQA criteria.

Mitigation Measure CUL-2:

Halt Construction Activity, Evaluate Remains, and Take Appropriate Action in Coordination with Native American Heritage Commission. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

- 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours of being granted access to the site, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.
- 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:
 - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours of being granted access to the site.
 - The descendant identified fails to make a recommendation.
 - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

With implementation of Mitigation Measures CUL-1 and CUL-2, which are standard procedures for any project in California, the impact would be *less than significant*.

6. ENERGY

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			•	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

Energy (Criteria a-b)

Construction of the project would result in the consumption of fuel for construction vehicles and equipment, but the construction activities and related energy usage would be minimal. Operation of the project would result in the consumption of electrical energy. The expected annual average usage would be approximately 71,004 kWh.¹² The digital billboard installed and operated as part of the project would use electrical energy, and would be constructed pursuant to current electrical codes. The project would be required by the County to comply with all standards of Title 24 of the California Code of Regulations, as applicable, aimed at the incorporation of energy-conserving design and construction. These standards would ensure that electrical energy would be used efficiently. The GHG emissions associated with this energy demand are addressed under the Greenhouse Gas Emissions section of this Initial Study.

Although construction and operation of the project would incrementally increase energy consumption, it would comply with all applicable regulations and energy standards, and its use of energy would not be wasteful, inefficient, or unnecessary. The impact related to energy resources would be *less than significant*.

¹² Anticipated energy usage is based on average energy usage for all of the applicant's existing billboards in the United States, adjusted to reflect the size of the current billboard and that it is single-sided rather than double-sided.

7. **GEOLOGY AND SOILS**

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42) 				•
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil, creating substantial risks to life, property, or creek/waterways?			•	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
 f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? 				

Seismic Hazards, Unstable or Expansive Soils (Criteria a, c-d)

The San Francisco Bay Area is a seismically active region, and the billboard structure is likely to encounter strong seismic ground shaking during its lifetime. There are no active earthquake faults known to pass through the project area; the closest fault is the Hayward Fault just over two miles to the east.¹³ The project site would be subject to very strong ground shaking during a seismic event and impacts would be less than significant. There would be *no impact* related to rupture of a known earthquake fault.

¹³ California Department of Conservation. California Geological Survey Regulatory Maps. Website accessed July 11, 2019, at

http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

The project site is located at the top of a vegetated slope in an area that is not considered susceptible to landslides or liquefaction.¹⁴ The project would have **no impact** related to landslide or liquefaction risk.

The site includes area built on Los Osos and Millsholm soils; these soils are well-drained with low permeability.¹⁵ The project requires building permits and will be required to be constructed to the current building code standards including consideration of soil, geologic, and seismic conditions based upon a geotechnical report prepared by a certified professional. Therefore, impacts related to seismic hazards and unstable or expansive soils would be *less than significant*.

Soil Erosion (Criterion b)

The project would not involve grading and only minimal ground disturbance (less than one acre). The project would not involve changes in topography or soil erosion. The impact related to soil erosion would be *less than significant*.

Septic Tanks (Criterion e)

The project would not include the use of septic tanks and associated disposal facilities and would therefore have *no impact*.

Paleontological Resources (Criterion f)

Castro Valley is largely underlain by relatively young Quaternary-age alluvial soils, and there are no known significant paleontological resources in the project area or unique geologic features on the project site.¹⁶ Construction activities would not be expected to result in the discovery of paleontological resources. The potential impact of the project on paleontological resources would be *less than significant*.

¹⁴ Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

¹⁵ U.S. Department of Agriculture. National Cooperative Survey. Website accessed July 11, 2019 at: https://soilseries.sc.egov.usda.gov/OSD_Docs/L/LOS_OSOS.html

¹⁶ Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

8. GREENHOUSE GAS EMISSIONS

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Greenhouse Gas Emissions (Criterion a)

BAAQMD has determined that GHG emissions and global climate change represent cumulative impacts. BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. The operational threshold of 1,100 metric tons carbon dioxide equivalent (MTCO₂e) per year was used for both the construction-period and operational period for a conservative analysis.

CalEEMod's GHG Emissions Model includes a GHG emission factor of 641 pounds of CO_2 per megawatt-hour of electricity use.^{17,18} As discussed in the Energy section of this Initial Study, the annual average energy usage is 71,004 kWh. This results in emissions of 20.64 metric tons CO_2 per year, which is well below the threshold level of 1,100 metric tons.

BAAQMD does not suggest a threshold for assessing construction-period GHG emissions impacts or provide a screening level for comparing projects. The construction-period GHG emissions for the project would be minimal and would add a negligible amount to the lifetime operational GHG emissions discussed above. Therefore, the project impact related to GHG emissions would be *less than significant*.

Greenhouse Gas Reduction Plans (Criterion b)

The Alameda County Unincorporated Community Climate Action Plan, approved by the Board of Supervisors on February 4, 2014, addresses reduction of GHG emissions through a series of 37 local programs and policy measures related to transportation, land use, building, energy, water, waste, and green infrastructure. The Plan is intended enable the County to reduce its community-wide emissions by more than 15% by the year 2020.

GHG emissions associated with the development of the proposed project are estimated to be 20.64 metric tons CO_2 per year, which is less than 0.1% of the projected GHG emissions for the commercial/industrial sector.¹⁹ Development of the project is required to comply with California Title 24 standards for energy efficiency. Development of the project would not

¹⁷ User's Guide for CalEEMod version 2016.3.2, November 2017. Appendix D, Table 1.2.

¹⁸ Other GHGs would have a negligible contribution to overall GHG levels from energy usage, so were not calculated here.

¹⁹ Alameda County. Alameda County (Unincorporated Areas) Community Climate Action Plan. Table 1.1, February 2014.

conflict with the Plan's goals for GHG emissions reduction in the commercial/industrial sector, which are specific to commercial and industrial buildings and include emphasizing energy efficiency retrofits for existing buildings, energy performance requirements for new construction, increasing use of renewable energy, and improving community energy management and therefore are not directly applicable to the project. Therefore, the project would have *no impact* in relation to consistency with GHG reduction plans.

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			•	
C)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				•
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

9. HAZARDS AND HAZARDOUS MATERIALS

Hazardous Materials (Criteria a-b)

As required by state law, digital billboards are designed to withstand wind forces, and are subject to building permit requirements that ensure compliance with applicable building and electrical codes. Soil conditions are identified and considered in the design of such structures. No hazardous materials are emitted during operation of the billboard.

Project operations are not expected to create a significant hazard through the routine transport, use, or disposal of hazardous materials. This analysis assumes that any hazardous materials used during construction activities or for maintenance of the billboard would be used in compliance with applicable regulations. State and federal laws require proper handling, use, and disposal of hazardous materials. These same laws and regulations require the prevention and reduction of injury to people and the environment in the event of an accidental release. Consequently, there are no reasonably foreseeable operational upset or accidental conditions that would involve a significant release of hazardous materials into the environment.

Electronic components of the billboard may contain materials that, when disposed, are considered "e-waste" due to potentially hazardous metals, flame retardants, and other chemicals. The operator is required to follow applicable regulations regarding proper disposal and/or recycling, as appropriate, as components are replaced or removed over time.

With compliance with applicable regulations, the project's impact relating to use or upset of hazardous materials would be *less than significant*.

Hazardous Materials near Schools (Criterion c)

No schools are located within 0.25 mile of the project site. No hazardous materials with the potential for release during operation would be handled on or emitted from the site. As noted above, any hazardous materials used during construction activities or for maintenance of the billboard would be used in compliance with applicable regulations. The project would have *no impact* related to potential exposure of students at nearby schools to hazardous materials at the project site.

Hazardous Material Site (Criterion d)

The project site is not included on a list of hazardous materials sites and it would have **no** *impact*.^{20, 21}

Airport Hazards (Criterion e)

The project site is approximately 4.25 miles northeast of the Hayward Executive Airport and approximately 8.5 miles to the northwest of the Oakland International Airport. The billboard would not be considered a hazard to air navigation as it would not generate smoke or rising columns of air, would not attract large concentrations of birds, would not generate electrical interference that would interfere with aircraft communications or aircraft instrumentation, would not reflect sunlight, and would not direct steady or flashing lights toward aircraft.

There are no other airports, either public or private, within the vicinity of the project. There would be *no impact* from the project related to airport hazards.

Emergency Response Plan (Criterion f)

The project would not alter traffic patterns and would not impair implementation of any adopted emergency response plan or emergency evacuation plan. The project would have *no impact* related to an emergency response plan.

²⁰ GeoTracker database accessed July 11, 2019, at: http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=3893+East+Castro+Valley+Boulev ard.

²¹ EnviroStor database accessed July 11, 2019, at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=3893+East+Castro+Valley+Boulevard.

Wildland Fire (Criterion g)

The project site is located in an urbanized area removed from areas typically subject to wildland fire, and it has not been identified as a very high fire hazard severity zone.²² Therefore, the project would have **no impact** related to wildland fire.

²² Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			•	
C)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
	i) result in substantial erosion or siltation on- or off-site;				
	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
d)	In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?				
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

10. HYDROLOGY AND WATER QUALITY

Water Quality (Criteria a, e)

Operation of the project would not involve the use of water or generation of waste water. Construction activities, such as drilling a hole for the foundation, trenching for electricity connection, and pouring concrete, have the potential to affect water quality through increased sediment loads in runoff. Fuel, oil, grease, solvents, and other chemicals used in construction activities have the potential to create toxicity problems if allowed to enter a waterway. Construction activities are also a source of various other materials including trash, soap, and sanitary wastes.

Construction activities at the project site would be limited to a few active days for installation. Potential impacts would be minimal, and compliance with County and state regulations would reduce any potential impacts on water quality to *less than significant*.

Groundwater (Criterion b)

The proposed project is not expected to involve substantial excavation that would affect groundwater. Dewatering activities are not anticipated to be necessary; should dewatering activities be required, these activities must comply with the General Construction Permit and requirements established by the San Francisco Bay Regional Water Quality Control Board to ensure that such activities would not result in substantial changes in groundwater flow or quality.

Following construction, the project would not substantially change impervious surface area and would not have a substantial impact on groundwater recharge.

Therefore, the proposed project's impact on groundwater would be *less than significant*.

Runoff and Drainage (Criterion c)

The project would not require service for water. Existing drainage at each site would be maintained, and no increases in stormwater would result. The project would have **no** *impact* related to runoff, drainage, or flooding.

Flood Risk (Criterion d)

Project site elevations are approximately 328 feet above mean sea level. Climate change induced sea level rise is estimated at up to 17 inches by 2050 and 69 inches by 2100.²³ The project site is not considered at risk for tsunami inundation.²⁴ Therefore, the site is not in danger of inundation from a tsunami or climate change induced sea level rise. Further, the project is not within a 100-year flood zone²⁵ and does not consist of housing or present a risk for flooding or redirection of flood flows. The project would have **no impact** related to the release of pollutants due to project inundation.

²³ Bay Conservation and Development Commission, adopted Oct 6, 2011, San Francisco Bay Plan.

²⁴ California Department of Conservation. California Geological Survey Tsunami Inundation Maps. Accessed July 11, 2019 at: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=tsunami.

²⁵ Federal Emergency Management Agency. Flood Insurance Rate Map Panel 06013C0560F, June 16, 2009.

11. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

Physical Division of a Community (Criterion a)

The project site is within a developed commercial area adjacent to a freeway. The billboard would not involve any physical changes that would have the potential to divide the established community, and the project would have *no impact*.

Conflict with Land Use Plan (Criterion b)

The project site is within the Castro Valley General Plan planning area. The land use designation for the project site is Community Commercial, which is intended to provide a wide range of commercial goods and services to meet community needs generally in an auto-oriented setting.

The Castro Valley General Plan identifies the removal of billboards as a top priority and establishes a policy specific to Castro Valley Boulevard in support of the goal to revitalize the Central Business District and other commercial areas:

Policy 5.3-2 Castro Valley Boulevard Appearance. Create programs to improve the visual appearance of the private properties on Castro Valley Boulevard through façade improvements, new signs, and reducing the number of billboards.²⁶

The proposed billboard is not located on Castro Valley Boulevard. As discussed in the Project Information section of this document, the applicant has identified five locations along Castro Valley Boulevard for billboard removal as part of the relocation agreement with the County. By facilitating billboard removal in this area, the relocation agreement supports the Castro Valley General Plan policy.

Proposals for new billboards within unincorporated Alameda County require Site Development Review approval subject to the Alameda County Zoning Ordinance. The project will comply with Outdoor Advertising Association of America guidelines to minimize light and glare, as well as applicable highway safety regulations to minimize the potential for hazards. Section 17.52.515 of the Alameda County Zoning Ordinance provides the County discretion to approve new billboards under the Site Development Review process. Pursuant to this section, any such billboards are to be located:

²⁶ Alameda County Community Development Agency. Castro Valley General Plan, March 2012.

- on a parcel that does not contain residential or agricultural uses,
- on or adjacent to a parcel with interstate or primary highway frontage,
- within six hundred sixty (660) feet of the edge of the right-of-way of an interstate or primary highway, and
- in a manner consistent with adopted Scenic Corridor (SC) overlay zones, as required by section 17.30.190.

The project site is on a parcel within approximately 150 feet of the I-580 Castro Valley Boulevard off-ramp, does not contain residential or agricultural uses, and lies just beyond the adopted Dublin Canyon Scenic Corridor overlay zone (**Figure 11**).²⁷ Compliance with the Alameda County Zoning Ordinance sections pertaining to billboards and scenic corridors would ensure the project would have a *less than significant* impact in relation to conflict with a land use plan, policy, or regulation. In addition, the project proposes a relocation agreement that would remove Castro Valley Boulevard billboards to further County policies.

²⁷ The Dublin Canyon Scenic Corridor extends 100 feet from the edge of the paved roadway along 1-580 (and the on and off ramps to and from 1-580).





Figure 11. Dublin Canyon Scenic Corridor Source: Alameda County Community Development Agency October 2019

12. MINERAL RESOURCES

Wo	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				•

Mineral Resources (Criteria a-b)

The site contains no known mineral resources and has not been delineated as a locally important mineral recovery site on any local land use plan.²⁸ The project would have **no** *impact* on mineral resources.

²⁸ Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

13. NOISE

Wo	ould the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			•	
b)	Generation of excessive groundborne vibration or groundborne noise levels?			•	
C)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

Excessive Noise or Vibration (Criteria a-b)

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing, and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods (typically greater than one year).

Significant noise impacts do not normally occur when standard construction noise control measures are enforced, and when the duration of the noise generating construction period at a particular receiver or group of receivers is limited to one construction season or less. In this case, the active construction period would only be a few days. Additionally, noise-sensitive residential uses are located at least 550 feet away from the project site.

Regardless of the potential for significant impact, the Alameda County noise ordinance (Alameda County General Code Section 6.60.070), limits construction noise to 7:00 a.m. to 7:00 p.m. Monday through Friday, and to 8:00 a.m. to 5:00 p.m. Saturday and Sunday. The project will be required to comply with the noise ordinance.

The operation of a digital billboard does not produce substantial levels of vibration or noise.

Impacts from noise and vibration generated by the construction and operation of the billboard would be *less than significant* due to the limited duration of construction activities and distance from sensitive receptors and the lack of substantial levels of vibration or noise during operation.

Airport Noise (Criterion c)

A billboard is not a noise sensitive use, and the project site is not within two miles of an airport. Therefore, the project would have *no impact* related to airport noise.

14. POPULATION AND HOUSING

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				■
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

Substantial Population Growth (Criteria a-b)

As a billboard project, the proposed project would not involve housing or population and would not otherwise induce unplanned population growth or displace existing housing or people. The project would therefore have **no impact** on population and housing.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?				
b) Police protection?				
c) Schools?				
d) Parks?				
e) Other public facilities?				

Public Services (Criteria a-e)

As a billboard project, the proposed project would not involve population increases or otherwise affect demand for public services or related facilities. The project would therefore have *no impact* on public services.

16. RECREATION

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.				
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.				

Recreation (Criteria a-b)

As a billboard project, the proposed project would not involve population increases or otherwise affect demand for recreation or the use, construction, or maintenance of related facilities. The project would therefore have **no impact** on recreation.

17. TRANSPORTATION

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				•
b)	Conflict or be inconsistent with CEQA Guidelines §15064.3 subdivision (b)?				
C)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access?				

Vehicle and Alternative Transportation (Criteria a-b)

The operation of digital billboards would not result in an increase in vehicle trips or changes in air traffic patterns or alternative transportation. Traffic generated for construction would be minimal in both volume and duration. The project would have **no** *impact*.

Hazards (Criterion d)

The proposed project would be to construct and operate a single-sided digital billboard directed for visibility from eastbound lanes of I-580.

Digital billboards employ LED technology and allow for periodic changes in display. The capability of digital billboards to present changing images has raised questions regarding the effect of such signage on traffic safety. The primary concern has been effects on driver attention and whether these effects are connected to an increased incidence of accidents. Concerns have also been raised regarding the potential for such signage to produce light of such intensity or direction that it could interfere with driver vision.

FHWA has addressed signage issues in general, and digital signs in particular. As part of its agreement with various states pursuant to the Highway Beautification Act, for example, FHWA has confirmed that no sign is allowed that imitates or resembles any official traffic sign, and that signs may not be installed in such a manner as to obstruct, or otherwise physically interfere with an official traffic sign, signal, or device, or to obstruct or physically interfere with the vision of drivers in approaching, merging or intersecting traffic. These provisions may be enforced by the FHWA, but the agreement with the State of California also requires Caltrans to enforce these provisions.

The FHWA has responded to the development of signs that present changing messages, either mechanically or digitally, with an interpretation of its agreements with the states pursuant to the Highway Beautification Act. The FHWA discusses changeable message signs in a Memorandum dated July 17, 1996, concluding that a state could reasonably

interpret the provisions of its agreement with the FHWA to allow such signs and that the state should determine the frequency of message change and limitation in spacing.

On September 25, 2007, the FHWA again issued a Memorandum on the subject of offpremises changeable electronic variable message signs, or CEVMS. The Memorandum states that proposed laws, regulations, and procedures that allowed CEVMS subject to acceptable criteria would not violate the prohibition on intermittent or flashing or moving signs as used in the state agreements. The Memorandum identifies ranges of acceptability relating to such signage, as follows:

- Duration of message: Duration of display is generally between 4 and 10 seconds; 8 seconds is recommended
- Transition time: Transition between messages is generally between 1 and 4 seconds; 1 to 2 seconds is recommended
- Brightness: The sign brightness should be adjusted to respond to changes in light levels
- Spacing: Spacing between the signs should be not less than the minimum specified for other billboards, or greater if deemed required for safety
- Locations: Location criteria are the same as for other signage, unless it is determined that specific locations are inappropriate

The Memorandum also refers to other standards that have been found helpful to ensure driver safety. These include a default designed to freeze the display in one still position if a malfunction occurs; a process for modifying displays and lighting levels where directed by Caltrans to assure safety of the motoring public; and requirements that a display contain static messages without movement such as animation, flashing, scrolling, intermittent or full-motion video. Manufacturers and operators of digital billboards currently use a fullblack screen in the event of a malfunction.

In addition to the provisions of the Highway Beautification Act (23 United States Code §131) and the FHWA memoranda discussed above, the State of California has adopted the Outdoor Advertising Act (Business and Professions Code §§5200 et seq.) and regulations implementing its provisions (California Code of Regulations, Title 4, Division 6, §§2240 et seq.). These include provisions that specifically address message centers, which are defined as "an advertising display where the message is changed more than once every two minutes, but no more than once every four seconds" (§5216.4).

Consistent with the memoranda executed pursuant to the Highway Beautification Act, the Outdoor Advertising Act provides that message center displays that comply with its requirements are not considered flashing, intermittent, or moving light. (§5405(d)(1)) The requirements provide that such signs must not display messages that change more than once every 4 seconds, and that no message center may be placed within 1,000 feet of another message center display on the same side of the highway.

The California Vehicle Code regulates the brightness of billboard lighting. Vehicle Code §21466.5, which identifies the applicable standard, may be enforced by Caltrans, the California Highway Patrol, or local authorities. Vehicle Code §21467 provides that each

prohibited sign, signal, device, or light is a public nuisance and may be removed without notice by Caltrans, the California Highway Patrol or local authorities.

Caltrans requires that any person engaged in the outdoor advertising business must obtain a license from Caltrans and pay the required fee (§5300). No person may place any advertising display in areas subject to Caltrans authority without having a written permit from Caltrans (§5350).

These provisions of law and regulation effectively regulate sign location and brightness to ensure that digital billboards will not be located in such a manner as to create hazards due to lighting conditions themselves. Digital billboards are equipped with sensors that modify the brightness of the sign in response to ambient lighting conditions, thus ensuring that the brightness of the display in evening, nighttime, or dawn conditions does not present a traffic hazard.

As digital billboard technology has developed, the issue has been raised as to whether digital billboards themselves, regardless of compliance with such operating restrictions, present a distraction to drivers and thereby create conditions that could lead to accidents. FHWA has monitored the issue closely, and released its report updating the agency's view of the issues and research most recently in 2012.^{29, 30}

The FHWA reports address the basic research question of whether operation of a CEVMS along the roadway is associated with a reduction of driving safety for the public. The reports identify three fundamental methods for answering this question: (1) whether there is an increase in crash rates in the vicinity of CEVMS, (2) whether there is an increase in near-crashes, sudden braking, sharp swerving and other such behaviors in the vicinity of CEVMS, and (3) whether there are excessive eye glances away from the roadway in the vicinity of CEVMS.

The reports discuss existing literature and reports of studies, key factors and measures relating to CEVMS, and effects on traffic. An extensive bibliography is included in the reports. The reports do not purport to provide guidance to states on the control of CEVMS. The report confirms that there have been no definitive conclusions about the presence or strength of adverse safety impacts from CEVMS. Similarly, a study performed under the National Cooperative Highway Research Program (NCHRP), Project 20-7 (256) titled "Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs" (NCHRP Report) reviewed existing literature. These reports agree that digital billboards should be regulated as a means of protecting the public interest. A subsequent FWHA report confirmed through a study using an eye-tracking system that the percentage of time

²⁹ U.S. Department of Transportation Federal Highway Administration, The Possible Effects of Commercial Electronic Variable Message Signs (CEVMS) on Driver Attention and Distraction: An Update, February 2009, Publication no. FHWA-HRT-09-018. Available at https://www.fhwa.dot.gov/real_estate/oac/possible_effects/.

³⁰ U.S. Department of Transportation Federal Highway Administration, Driver Visual Behavior in the Presence of Commercial Electronic Variable Message Signs (CEVMS), September 2012, Publication no. FHWA-HEP-16-036. Available at https://www.fhwa.dot.gov/real_estate/oac/visual_behavior_report/final/.

that drivers dedicated to the road ahead was not significantly affected by the presence of CEVMS. $^{\rm 31}$

Various restrictions have been identified in reports that relate to the location and operation of digital billboards that seek to reduce safety concerns. These relate to brightness, message duration and message change interval, billboard location with regard to official traffic control devices, roadway geometry, vehicle maneuver requirements at interchanges (i.e., lane drops, merges and diverges), and specific constraints on the placement and operation of such signs. Regulation of operations could include, for example, the time any single message may be displayed, the time of message transition, brightness of the sign and controls that adjust brightness based on the ambient light environment, and design and placement that ensures that the sign does not confuse drivers, or create dangerous glare.

Restrictions on digital billboards contained within the Outdoor Advertising Act and enforced by Caltrans regulate many of the conditions that have been identified as relevant to traffic safety. Caltrans regulates the location and size of each proposed digital billboard through its application process as well as the distance between such signs. California statutory provisions regulate brightness of displays. Through state law and the Vehicle Code, such signage would be prohibited from displaying flashing lights or images.

There are various studies supporting conflicting conclusions regarding the safety of digital billboards and incidence of driver distraction. The analysis in this document has been performed using state and federal published studies and adopted regulations as the best information available at this time.

Significant effects could occur if the proposed digital billboard did not comply with restrictions regarding location, intensity of light, light trespass, or other restrictions, especially those enforced by Caltrans pursuant to its authority under the agreements between the U.S. Department of Transportation under the Highway Beautification Act, and the Outdoor Advertising Act. Mitigation Measure TRAN-1 requires that the County receive accurate information from the operator regarding compliance on an ongoing basis.

Mitigation Measure TRAN-1:

Annual Report. Upon request by the County, the operator of the digital billboard shall submit to the County, within thirty days following June 30 of each year, a written report regarding operation of each digital billboard during the preceding period of July 1 to June 30. The operator may submit a combined report for all such digital billboards operated by such operator within the County limits. The report shall, when appropriate, identify incidents or facts that relate to specific digital billboards. The report shall be submitted to the Community Development Director and shall include information relating to the following:

a. Status of the operator's license as required by California Business and Professions Code §§5300 et seq.;

³¹ Ibid.

- b. Status of the required permit for individual digital billboards, as required by California Business and Professions Code §§5350 et seq.;
- c. Compliance with the California Outdoor Advertising Act, California Business and Professions Code §§5200 and all regulations adopted pursuant to such Act;
- d. Compliance with California Vehicle Code §§21466.5 and 21467;
- e. Compliance with provisions of written agreements between the U.S. Department of Transportation and the Caltrans pursuant to the Federal Highway Beautification Act (23 United States Code §131);
- f. Compliance with mitigation measures identified in the Mitigated Negative Declaration adopted as part of Project approval;
- g. Each written or oral complaint received by the operator, or conveyed to the operator by any government agency or any other person, regarding operation of each digital billboard included in the report;
- h. Each malfunction or failure of each digital billboard included in the report, which shall include only those malfunctions or failures that are visible to the naked eye, including reason for the malfunction, duration and confirmation of repair; and,
- i. Operating status of each digital billboard included in the report, including estimated date of repair and return to normal operation of any digital billboard identified in the report as not operating in normal mode.

Another area of concern is the potential development of interactive billboards that would be capable of communicating with vehicles or passenger devices. The use and development of this technology could have consequences and should be identified by the operator prior to any implementation. Mitigation Measure TRAN-2 requires notice to the County in the event such features are proposed. The mitigation measure also confirms prohibitions on visual effects.

Mitigation Measure TRAN-2:

Interactive Technology. The operator shall not install or implement any technology that would allow interaction with drivers, vehicles, or any device located in vehicles, including, but not limited to a radio frequency identification device, geographic positions system, or other device without prior approval of the County, taking into consideration technical studies and Caltrans or U.S. Department of Transportation policies and guidance available at the time of the request.

Implementation of Mitigation Measures TRAN-1 and TRAN-2 would ensure ongoing compliance with traffic safety regulations and control the use of visual effects and driver interaction that could distract drivers. With implementation of these mitigation measures, impacts on transportation and traffic safety would be *less than significant*.

Inadequate Emergency Access (Criterion e)

The proposed billboard would be located outside travelled portions of the roadway and would present no obstacles to emergency access. The project would have *no impact* on emergency access.

The billboard would have the capacity to display official messages regarding emergencies, and could perform as part of the emergency response system, thus resulting in beneficial effects.

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact	
a)	trib sec lan anc	use a substantial adverse change in the significance of a bal cultural resource, defined in Public Resources Code tion 21074 as either a site, feature, place, cultural dscape that is geographically defined in terms of the size d scope of the landscape, sacred place, or object with tural value to a California Native American tribe, and that				
	i)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		•		
	ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

18. TRIBAL CULTURAL RESOURCES

Tribal Cultural Resources (Criterion a)

The project site is previously disturbed, and a search of the Sacred Lands File did not identify any Sacred Lands that could be impacted by the project. In July 2019, the County sent letters describing the proposed project to the local Native American tribes provided by the California Native American Heritage Commission as having an interest in the project area. To date, no requests for consultation were received from the tribes and no tribal concerns or tribal cultural resources have been identified.

Construction of the project involves minimal ground disturbance. Based on a County-wide study, the project area is of high to extreme archaeological sensitivity as shown in **Figure 12**.³² Based on the specific characteristics of the site, however, the Northwest Information Center characterizes the probability of encountering Native American resources at the site as low (see Attachment B). In the event tribal cultural resources are discovered on site, Mitigation Measure TCR-1 would be required to protect these resources.

Mitigation Measure TCR-1:

Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, Alameda County shall consult with a qualified archaeologist and begin or continue Native American consultation procedures. If Alameda County determines that the

³² Quaternary Research Group, Archaeology in Alameda County, October, 1976




Figure 12. Archaeological Sensitivty of Project Area Source: Quaternary Research Group, 1976 October 2019

resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

With implementation of Mitigation Measure TCR-1, the impact on tribal cultural resources would be *less than significant*.

19. UTILITIES AND SERVICE SYSTEMS

Wo	ould the project	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				•
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				-
C)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				•
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Utilities (Criteria a-e)

The proposed billboard would require electrical service. Providing such service through extension of existing electrical service already at the site would not result in any significant effects.

The project would not generate any wastewater or require a supply of potable water. Construction and operation of the digital billboard would not require other utility services, would not affect drainage, and would not generate an excess of solid waste.

Installation of the proposed billboard would require coordination with various other utility companies via the Underground Service Alert to prevent conflicts with subterranean utilities. The project would have *no impact* on utility services.

20. WILDFIRE

	ocated in or near state responsibility areas or lands classified as y high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				•
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
C)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				•
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

Wildfire Risk and Emergency Response (Criteria a-d)

The project site is within the Castro Valley Urban Area, which has not been identified as a very high fire hazard severity zone.³³ Most of the Castro Valley Urban Area, including the project site, falls within a Local Responsibility Area and is under the jurisdiction of the Alameda County Fire Department. The proposed project would have **no impact** related to wildfire risk and emergency response.

³³ Alameda County Community Development Agency. Castro Valley General Plan Draft Environmental Impact Report, April 2007.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		-		
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		■		
C)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

21. MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Quality (Criterion a)

As discussed under previous topic areas, the only biological resources with the potential to be significantly impacted are nesting birds, and there are no known cultural or tribal cultural resources at the site. With the implementation of mitigation measures identified in this document, the project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community. The project would not have an impact on rare or endangered wildlife species, or eliminate important examples of the major periods of California history or prehistory.

Cumulative Impacts and Adverse Effects on Human Beings (Criteria b-c)

Caltrans limits billboards to one every 500 linear feet along the length of the highway and digital billboards to every 1,000 linear feet, which leaves the possibility that additional billboards could be added along I-580 in the vicinity. This has the potential to result in additional cumulative aesthetics impacts. Any additional billboards, whether digital or conventional, would be required to comply with spacing requirements and undergo Design Review and County approval processes, which generally require relocation/removal of one or more other billboards for a net reduction in the total number of billboards. While the specific location of future billboard proposals cannot be known at this point, it can be concluded that specifics of impacts to views would be considered for each proposed location. Therefore, the project's contribution to cumulative impacts in relation to aesthetics would be considered less than significant.

The project otherwise does not have individually limited but cumulatively considerable adverse impacts and would not involve substantial adverse effects on human beings, either directly or indirectly, including effects for which project-level mitigation were identified to reduce impacts to less than significant levels. These include impacts related to disturbance of nesting birds during construction and the discovery of unknown cultural resources during construction. These potential effects would be less than significant with implementation of mitigation measures identified in this document and would not contribute in considerable levels to cumulative impacts.

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Alameda County

This document was prepared in consultation with Damien Curry, Community Development Agency, Alameda County.

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ATTACHMENT A

Biological Impacts Assessment



July 25, 2019

Rebecca Auld Lamphier-Gregory 1944 Embarcadero Oakland, CA 94606

Dear Ms. Auld:

Per your request, H. T. Harvey & Associates has performed a biological impacts assessment for the construction of a new Clear Channel LED billboard located at 3893 East Castro Valley Boulevard in Castro Valley, California (Figure 1). The new billboard would have an overall height of 42 feet (ft), 10 inches above existing grade with a single 17 ft, 10 inch by 59 ft, 6 inch LED display screen. The billboard would be single-sided, facing southwest towards Interstate 580 (I-580). Rear and side concealing screens would be installed on the east, north, and south sides of the billboard, respectively. The proposed billboard model is a Daktronics DB-6400 LED display, which we understand is the same billboard technology as that utilized for the Clear Channel LED billboard along Hesperian Boulevard, which we analyzed in February 2019. Therefore, we have made the same assumptions regarding illuminance that we made in our analysis of the Hesperian Boulevard billboard.

Methods

Prior to conducting a field visit, I reviewed the California Natural Diversity Database (CNDDB 2019) to determine whether there were known occurrences of special-status species in the vicinity of the proposed billboard, so that the potential effects of billboard construction and operation could be assessed in the context of these species' distributions. I then conducted a site visit on July 18, 2019 to provide a basis for determining the potential direct and indirect effects of the billboard's lighting on wildlife. The site visit was conducted in the predawn hours to observe qualitatively the existing ambient lighting in the project vicinity. I remained on site until after sunrise, at which time I inspected habitat conditions in areas immediately surrounding the potential for the installation and operation of the new billboard to impact biological resources, such as special-status species and sensitive/regulated habitats, based on the conditions at the proposed project location.

Existing Site Conditions

The proposed project site is located on the north side of I-580, at the top of a heavily-vegetated, ruderal grassland hillside immediately south of the 580 Marketplace shopping complex, and is bordered to the south

Subject: 3893 East Castro Valley Boulevard Clear Channel Billboard Project – Biological Impacts Assessment (HTH #4354-01)



:\Projects4300\4354-01\Report\Figure 1 Vicinity Map.mxd

H. T. HARVEY & ASSOCIATES

Ecological Consultants

Figure 1. Vicinity Map 3893 East Castro Valley Boulevard Clear Channel Billboard Project Biological Impacts Assessment (4354-01) July 2019 by an existing concrete wall (Photo 1). The East Castro Valley Boulevard Exit (Exit 37) that comes off of I-580 West, runs adjacent to the south-facing hillside, just south of the project site.

Dominant vegetation on the project site and adjacent southern hillside consists of ruderal grassland species such as nonnative wild oat (Avena fatua), orchard grass (Dactylis glomerata), and bristly ox-tongue (Helminthotheca echioides) - as well as other nonnative invasive species such as pampas grass (Cortaderia selloana), ice plant (Carpobrotus edulis), fennel (Foeniculum white vulgare), and horehound (Marrubium vulgare). Dominant tree and shrub species include native coast live oak (Quercus agrifolia) and nonnative species such as oleander (Nerium French broom (Genista oleander), monspessulana), silver wattle (Acacia dealbata), and rosemary (Rosmarinus officinalis) (Photo 2). A cellular service tower is located approximately 60 ft southeast of the project site (Photo 3).

Crow Creek is located approximately 0.32 mile (mi) west, and the nearest reach of San Lorenzo Creek is located approximately 0.25 mi southwest of the project site. Crow Creek runs south under Castro Valley Boulevard and I-580, and joins the southwestern reach (in relation to the project site location) of San Lorenzo Creek, which enters Don Castro Reservoir, located in the Don Castro Regional Park, approximately 0.18 mi south of the



Photo 1. Looking north toward the project site, which is located at the top of the concrete wall.



Photo 2. Looking west from the center of the proposed project site.

project site. The reach of San Lorenzo Creek located approximately 0.36 mi east of the project site, also runs south under I-580 and enters Don Castro Reservoir. No channel reach of either Crow Creek or San Lorenzo Creek crosses the project site, and there are no tributaries of either creek that flow within the project site. There is a small concrete-lined drainage channel that runs west to east, just south of the project site boundary and empties into a runoff catch basin located approximately 115 ft southeast of the project site, just west of the cell tower structure.



Photo 3. Looking southeast from the proposed project site towards a cellular tower structure.

This drainage channel joins with an underground drainage pipe that runs under the project site, originating from drainages located north in the 580 Marketplace shopping complex. However, no part of any of the drainage channels or catch basin support any aquatic vegetation, nor are they connected to any natural waterway (i.e., Crow or San Lorenzo Creek). At the time of the site visit, the drainage channel was dry, covered by residual grasses and forbs. However, the drainage catch basin contained approximately 1 inch of standing water. Land uses north of the project site consist of residential and commercial properties, extensive roadways, and urban parkland. South of I-580 is Don Castro Regional Park and Reservoir, surrounded by residential neighborhoods and commercial properties.

The vast majority of plant and animal species occurring on or immediately adjacent to the project site are very common species associated with urban, developed, and ruderal conditions throughout the Bay Area. Common bird species expected to occur here include the Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), American crow (*Corrus brachyrhynchos*), California scrub-jay (*Aphelocoma californica*), Bewick's wren (Thryomanes bewickii), and lesser goldfinch (*Spinus psaltria*). Due to the ruderal habitat conditions of the project area, and extensive roadways (i.e., I-580, East Castro Boulevard) and development surrounding the project site, we do not expect any special-status plant or animal species to occur within the project boundary.

Critical habitat designated by the U.S. Fish and Wildlife Service for the state and federally threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*) is found approximately 1.65 mi east of the project site in the Palomares area and 1.87 mi north of the project site in the Cull Canyon Regional Recreation Area. Alameda whipsnakes have been recorded 0.78 mi southeast and 1.20 mi north of the project site (CNDDB 2019). Open canopy chaparral and sage scrub habitats, consisting of scattered grassy patches with extensive rocky outcrops

and small mammal burrows that are used for refugia from predators and aestivation, are favored by Alameda whipsnakes (Stebbins and McGinnis 2012). Such habitats are found within the greater Castro Valley region, most notably north and east of the project site in the surrounding hills. However, much, if not all of this chaparral-sage scrub habitat has been lost due to development within the project vicinity. During the site visit, no suitable habitat for the Alameda whipsnake, including small mammal burrows or rocky outcrops, was found within the project area. Thus, given the lack of suitable habitat on and near the site, and the extensive urban development and roadways surrounding the project area, we would not expect the Alameda whipsnake to occur within the project area or on the project site. Further, all access and work activities to be conducted in the construction of the new billboard will primarily be done from pavement areas in a small footprint of disturbed ruderal grassland.

Biological Impacts Assessment

Potential project impacts on biological resources were evaluated from three different perspectives:

- the direct effects of the installation of a digital billboard on biological resources (e.g., habitat impacts or disturbance during construction);
- the indirect effects of illuminance from a digital billboard (i.e., the amount of light from the billboard that lands on a certain area) on sensitive species in adjacent areas; and
- the potential effects of a digital billboard's luminance (i.e., the amount of light leaving the billboard's surface in a particular direction, or brightness of the digital billboard's surface as seen by the eye) on the behavior of birds flying in the site vicinity.

In each case, the standards against which we measured the significance of potential impacts were the California Environmental Quality Act (CEQA) significance criteria. These potential impacts are assessed in detail below.

Direct Effects of Sign Construction

All activity associated with the construction of a new LED billboard at the project site is presumed to take place within 5 ft south of the existing concrete curb separating the paved driveway of the shopping complex from the ruderal grassland of the project site on top of the hillside, with most activity concentrated in the immediate vicinity of the billboard support column. Four small trees, approximately 6 ft in height, will need to be removed for the foundation of the sign. Some additional on-site trees would need to be trimmed as well for visibility purposes for the proposed LED billboard face. No wetlands, riparian habitats, or other sensitive habitats are present within the project site or a 100-ft buffer surrounding the project site. Thus, no sensitive habitats would be impacted by the construction of the billboard.

As described above, no special-status plant or animal species are expected to occur within or immediately adjacent to the project site, and wildlife species that may occur here are common species that are locally and regionally abundant. Therefore, due to the very limited size of the project footprint, the project would result in modification of habitat used by a very low number of individuals. As a result, only a very small proportion of

regional populations of these species would be affected, and project effects on these species would not be significant under CEQA. Further, no special-status bird species are expected to nest close enough to the project site to be disturbed by project construction. However, all native bird species that occur in the project area are protected from take by the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. Direct destruction of an active nest would violate the MBTA and Fish and Game Code, and abandonment of an active nest because of project construction activities could be considered take under the Fish and Game Code. As a result, we recommend that construction of the billboard take place during the non-breeding season (roughly September 1 – January 31). Alternatively, if construction during the non-breeding season is not feasible, preconstruction surveys should be conducted to determine whether any nests of protected birds are present in areas where they may be disturbed (in which case a biologist should determine the size of a buffer around each nest necessary to avoid nest abandonment during construction).

Indirect Effects of Illuminance of Adjacent Areas

The intensity, spectral quality (i.e., the distribution of blue, green, red, and other portions of the light spectrum emitted by a light source), duration, and periodicity of exposure to light affect the biochemistry, physiology, and behavior of organisms (The Royal Commission on Environmental Pollution 2009). Many animals are extremely sensitive to light cues, having evolved behavioral and/or physiological responses to natural variations in light levels resulting from the day–night cycle, the cycle of the moon, and the seasonal light cycle. Responses can affect processes as diverse as growth, metabolism, patterns of movement (e.g. migration), feeding, breeding behavior, molting, and hibernation (Ringer 1972, de Molenaar et al. 2006). This holds true for birds (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006, Da Silva et al. 2015), mammals (Beier 2006, De Molenaar et al. 2003 as cited in Longcore et al. 2016, Voigt et al. 2017), and other taxa as well, suggesting that increases in ambient light may interfere with these processes across a wide range of species, resulting in impacts on wildlife populations.

Artificial lighting may also indirectly affect birds and mammals. For example, artificial lighting has been shown to increase the nocturnal activity of predators like owls, hawks, and mammalian predators (Negro et al 2000, Longcore and Rich 2004, DeCandido and Allen 2006, Beier 2006). In addition, it has been found to affect the composition of the invertebrate community present in the area (Davies et al. 2012), and some bat species have been found to congregate around artificial light sources because of the high numbers of flying insects they attract (Frank 1988, Eisenbeis 2006). The presence of artificial light may also influence habitat use by rodents such as the salt marsh harvest mouse (Beier 2006), and by breeding birds (Rogers et al. 2006, de Molenaar et al. 2006), by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.

Areas surrounding the proposed project site are primarily developed urban and ruderal habitats that do not support sensitive species that might be significantly impacted by illuminance from the proposed LED billboard. Nevertheless, common, urban-adapted species using the project area may be subject to increased predation, decreased habitat availability (for species that show aversion to increased lighting), and alterations of physiological processes if the proposed LED billboard produces substantially greater illuminance than existing lighting in the project area.

Our assessment of the impact of illuminance of adjacent areas by the LED billboard took into account the existing conditions as well as any expected changes in illuminance that would result from construction of an LED billboard. Currently, the area surrounding the proposed project site is subject to very little artificial illumination. There are two streetlights located on the south side of I-580 East that are within 400 ft south and 600 ft southeast of the project site. There are three streetlights illuminating Exit 37, two of which are located 240 ft and 386 ft southeast of the project site, and another located 627 ft west of the project site. In addition, parking lot and building security lighting is present within the adjacent 580 Marketplace shopping complex. However, very little light from all sources illuminates the south facing hillside, the project site, or the southwest facing area towards I-580, as that is the direction that the new proposed LED billboard will face.

According to material provided by Clear Channel Outdoor, the proposed LED billboard is expected to provide a maximum of 2.23-foot candles (fc) of illuminance (above and beyond ambient light conditions) at 100 ft (L. Musica, pers. comm.) within its viewing angle. Illuminance would decrease with lateral distance from the center of the viewing angle, so that areas 100 ft from the billboard on either side of the center of the viewing angle would experience even less illuminance. The viewing angle of the proposed LED billboard would be \pm 30° vertically and \pm 60° horizontally on one side (R. Hatton, pers. comm.).

The LED billboard would be angled in such a way as to maximize the amount of visibility from specific portions of I-580 East, so the area of brightest night illuminance projected by the proposed billboard would form a narrow cone directed at oncoming traffic (Figure 2). Further, the illuminance would dissipate so that illuminance beyond 100 ft would be minimal and that beyond 500 ft negligible (Figure 3) (LSI 2006). Although the LED billboard is expected to substantially increase the amount of illuminance currently experienced within the project area, specifically facing southwest, the nearest sensitive habitat (and the species inhabiting them) would be over 1,000 ft south of the project site in the wetland areas of Don Castro Reservoir; 1,600 ft west of the project site at Crow Creek; and over 1,300 ft southwest of the project site at San Lorenzo Creek. In those more sensitive locations, increased illuminance from the proposed LED billboard would be practically nonexistent, given the distance from the billboard and the dense vegetation surrounding both creeks and the wetland area. In addition, given that the proposed billboard would face southwest, no amount of illuminance from the billboard is expected to be projected directly north, south, or east, due to concealment screens installed on all non-illuminating sides of the billboard. For all these reasons, it is our opinion that increased illuminance of existing habitats will have a less-than-significant effect on these habitats and the species that inhabit them.

Potential Effects of LED Billboard's Luminance on Avian Flight Behavior

Migrating Birds. The primary way in which the luminance of an LED billboard might affect the movements of birds in the project area is through the disorientation of nocturnally migrating birds. Hundreds of bird species migrate nocturnally in order to avoid diurnal predators and to minimize energy expenditures. Evidence that migrating birds are attracted to artificial light sources is abundant in the literature as early as the late 1800s (Gauthreaux and Belser 2006). Although the mechanism causing the attraction is unknown, the attraction is well documented (Longcore and Rich 2004, Gauthreaux and Belser 2006). Migrating birds may alter their

orientation upon sighting an artificial light source, such as a billboard, and become drawn toward it. Once a bird is within a lighted zone at night, it may become "trapped" and not leave the lighted area (Herbert 1970, Longcore and Rich 2004). The disorienting effects of artificial lights directly affect migratory birds by causing collisions with light structures, buildings, communication and power structures, or even the ground (Gauthreaux and Belser 2006). Indirect effects might include orientation mistakes and increased length of migration due to light-driven detours. Migrating birds are much more likely to be impacted by a billboard's luminance during foggy or rainy weather, when visibility is poor (Longcore and Rich 2004, Gauthreaux and Belser 2006). Research also suggests that the color of the light may play a significant role in determining whether birds become disoriented. Birds are able to orient to the Earth's magnetic field under monochromatic blue or green light, but apparently cannot do so under red or white light (van de Laar 2007, Poot et al. 2008, and Longcore 2016).

Local Birds. Seabirds may be especially vulnerable to artificial lights because many species are nocturnal foragers that have evolved to search out bioluminescent prey (Imber 1975, Reed et al. 1985, Montevecchi 2006), and thus are strongly attracted to bright light sources. Seabirds that use the San Francisco Bay and various inland bodies of water in the greater East Bay Area include primarily gulls, terns, and cormorants, none of which is generally a nocturnal forager; however, they may still forage to some extent during the night. As described above for migrating birds, when seabirds approach an artificial light, they seem unwilling to leave it and may become "trapped" within the sphere of the light source for hours or even days, often flying themselves to exhaustion or death (Montevecchi 2006).

In addition to seabirds, the San Francisco Bay complex hosts tens of thousands of breeding, migrant, and wintering shorebirds. Shorebirds forage in San Francisco Bay nocturnally as well as diurnally, and move frequently between foraging locations in response to tide levels and prey availability. Biologists and hunters have long used sudden bright light as a means of blinding and trapping shorebirds (Gerstenberg and Harris 1976, Potts and Sordahl 1979), so evidence that shorebirds are affected by bright light is well established, though impacts of a consistent bright light are undocumented. Nevertheless, based on the above studies, it is reasonable to conclude that shorebirds, like other bird species, may be disoriented by a very bright light in their flight path.

Large numbers of seabirds and shorebirds are not expected to move back and forth between San Francisco Bay and the project site (or over/past the project site) because the area surrounding the project site is heavily urbanized and the project site is located approximately 6.4 mi east of the Bay. Suitable foraging habitat for some seabird and shorebird species within the project area includes Don Castro Reservoir, located 0.18 mi south of the project site, and Lake Chabot, located 3.35 mi northwest of the project site. We would expect small numbers of seabirds such as terns to utilize both areas, given that each body of water is regularly stocked with sports fish species such as rainbow trout (*Oncorbynchus mykiss*) and channel catfish (*Ictalurus punctatus*), and suitable foraging habitat for some shorebird species is found within wetland areas found along the eastern channel reach of San Lorenzo Creek, which flows into Don Castro Reservoir. Thus, we would expect small numbers of seabirds and some shorebird species to move through the project area, potentially within areas illuminated by the billboard light. However, the number of seabirds and shorebirds using these areas would be very small.



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Ecological Consultants

Figure 2. Brightest area provided by the proposed Clear Channel LED billboard at night 3893 East Castro Valley Boulevard Clear Channel Billboard Project Biological Impacts Assessment (4354-01) July 2019



H. T. HARVEY & ASSOCIATES

Ecological Consultants

Figure 3. Area over which light from the proposed Clear Channel LED billboard will dissipate 3893 East Castro Valley Boulevard Clear Channel Billboard Project Biological Impacts Assessment (4354-01) July 2019 Although the project site does not provide high-quality habitat for a large number or diversity of passerine birds, a few common, urban-adapted species are expected to occur in the project vicinity, as described above. Passerine birds have been documented responding to increased illumination in their habitats with nocturnal foraging and territorial defense behaviors (Longcore and Rich 2004, Miller 2006, de Molenaar et al 2006), but absent significant illumination, they typically do not forage at night, leaving them less susceptible to the attraction and disorientation caused by luminance when they are not migrating.

Effects of the 3893 East Castro Valley Boulevard LED Billboard on Flight Behavior. The visibility of the proposed LED billboard to birds in flight, and thus the risk it poses to flying birds, depends primarily on the beam angles of the sign relative to the flight lines of birds and on the luminance (brightness) of the sign as perceived by the birds. The directional nature of LED lighting and the projected viewing angle values of $\pm 30^{\circ}$ vertically and $\pm 60^{\circ}$ horizontally suggest that the viewing angle of the sign will be narrow enough to preclude attracting migrating birds on clear nights, when they fly high enough to be outside the viewing angle of the sign. Louvers that shade the LED lights from above, creating a sharper image, assist in reducing reflection and help diffuse light – concurrently preventing light from projecting upward into the sky. As a result, birds flying more than 30° above the center of the sign's beam angle (i.e., southwest) will not be able to see light from the sign at all. However, migrating birds are forced to fly low during foggy and rainy conditions, which may bring them into the viewing angle of the billboard.

The proposed billboard could produce a peak value of approximately 641 candelas¹ (cd)/ft² of luminance (LSI 2006). However, in practice, the LED billboard will be operated so that its peak luminance would be approximately 46 cd/ft² in the center of the beam angle (R. Hatton, pers. comm.). For comparison, a full moon at its brightest point produces approximately 232 cd/ft² (LRC 2006). The proposed billboard would be equipped with a light sensor that adjusts the brilliance of the billboard in response to available ambient light, dimming the luminance as ambient light lessens. Further, the peak luminosity for an LED billboard cited above assumes that the display on the billboard is solid white. In practice, the display on the planned LED billboard would contain a variety of colors, which would substantially reduce the amount of luminance produced and reduce the potential for the light to disorient migrating birds.

Additionally, the LED display on the billboard can be changed every 8 seconds from a static image to a static image, resulting in a changing light source. Colors and patterns of color on the billboard would thus be changing, and birds flying near the sign would not perceive it as a fixed, unchanging light, the type of light that appears to be most attractive to birds (Jones and Francis 2003, Gauthreaux and Belser 2006, Gehring et al. 2009).

¹ The 'candela' is a unit of luminous intensity in the International System of Units, defined as the luminous intensity in a given direction of a source that emits monochromatic radiation of frequency 540 × 1012 hertz and has a radiant intensity in that same direction of 1/683 watt per steradian (unit solid angle). The candela has replaced the standard candle as a unit of luminous intensity in calculations involving artificial light.

As described above, the light beams from the proposed billboard would be angled in such a way as to maximize the amount of visibility from specific portions of I-580 to the southwest (Figure 2). Because the area immediately surrounding the project site is heavily urbanized, we do not expect large numbers of birds (including species of conservation concern) to be using a northeast to southwest flight corridor (i.e., the alignment of the beam of the proposed LED billboard) through the project area. As described above, the nearest suitable foraging habitat for seabirds and shorebirds is located at Don Castro Reservoir, located 0.18 mi to the south, Lake Chabot located 3.35 mi to the northwest, and San Francisco Bay located approximately 6.4 mi to the west. Therefore, it is unlikely that seabirds or shorebirds would be traveling from San Francisco Bay any further east than Don Castro Reservoir, and if flying to Lake Chabot from the Bay, are far more likely to follow the coastline of the Bay north, and then travel eastward or vice-versa - essentially not even entering the project area. Therefore, we do not expect large numbers of seabirds and shorebirds to travel between Don Castro Reservoir and Lake Chabot or to fly past the site. Further, we do not expect any birds moving through or around the project area to be attracted to the sign for such a long duration that bird-strike mortality occurs or substantial interference with bird movements occurs. It is also unlikely that the billboard would impact substantial numbers of roosting birds because the developed and ruderal habitats adjacent to the project site do not provide high quality roosting habitat.

It is possible that some birds that find themselves near the center of a sign's beam angle may be attracted to the sign. However, we do not expect this effect to result in long-term consequences, such as increased bird-strike mortalities or substantial interference with bird movements, because a relatively limited area at low altitude above I-580 would be within the center of the sign's beam angle.

Given the configuration of bird habitats in the vicinity of the site (which does not lend itself to directed bird flights toward the sign), the changing images that will be displayed on the LED billboard, the narrow viewing angle, and the use of overhead louvers and concealment screens to prevent light from projecting upward into the sky and out to the north, south and east, we expect the sign's impacts on avian flight behavior and avian roosting behavior to be less than significant.

Summary

Based on the information provided by Clear Channel Outdoor concerning the LED billboard, our review of literature concerning lighting effects on wildlife, our reconnaissance-level surveys of the project site, and our knowledge of likely avian flight lines in the vicinity of the site, we do not expect the construction of a new LED billboard to result in significant impacts on wildlife. If the assumptions made in our analysis concerning the LED billboard's characteristics (e.g., illuminance, luminance, or beam angle) differ from actual characteristics of the billboard, additional analysis may be necessary to determine whether impacts are significant.

Please feel free to contact me at <u>speterson@harveyecology.com</u> or (408) 458-3230 if you have any questions regarding our report. Thank you very much for contacting H. T. Harvey & Associates regarding this project.

Sincerely,

0 In

Stephen L. Peterson, M.S. Project Manager, Senior Wildlife Ecologist

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ATTACHMENT B

Northwest Information Center Records Search Results and Native American Heritage Commission Sacred Lands Search Results



July 30, 2019

Sharon Wright Lamphier-Gregory, Inc. 1944 Embarcadero Oakland, CA 94606 NWIC File No.: 19-0133

Re: Record search results for the proposed 580 East Castro Valley Digital Billboard Project, Castro Valley, California

Dear Ms. Wright,

Per your request received by our office on July 19, 2019, a priority response records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for Alameda County. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

Review of this information indicates that there has been no cultural resource studies of the proposed project location. The proposed project area contains no recorded archaeological resources. The State Office of Historic Preservation Historic Property Directory (OHP HPD) (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places) lists no recorded buildings or structures within or adjacent to the proposed project area. In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the proposed project area.

At the time of Euroamerican contact, the Native Americans that lived in the area were speakers of the Chochenyo Costanoan/Ohlone language, part of the Utian language family (Levy 1978:485-486). There are no Native American resources in or adjacent to the proposed project area referenced in the ethnographic literature.

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Alameda County have been found on the banks and mid-slope terraces above seasonal and perennial waterways, and at foothill to valley interfaces. The proposed project area lies on bedrock formations away from and at higher elevations from San Lorenzo Creek. Given the dissimilarity of one or more of these environmental factors, there is a low potential for unrecorded Native American resources to be within the proposed project area.

Review of historical literature and maps indicated early to mid-20th century historicperiod activity within the proposed area; however, the more recent construction of the existing retail shopping center has likely removed any evidence of this past activity. With this in mind, there is a low potential for unrecorded historic-period archaeological resources to be within the proposed project area.

RECOMMENDATIONS:

1) There is a low possibility of identifying Native American and historic-period archaeological resources and further study is not recommended at this time.

2) We recommend the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/373-3710.

3) If the proposed project area contains buildings or structures that meet the minimum age requirement of 45 years, prior to commencement of project activities, it is recommended that said buildings or structures be assessed by a professional familiar with the architecture and history of Alameda County. Please refer to the list of consultants who meet the Secretary of Interior's Standards at <u>http://www.chrisinfo.org</u>.

4) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

5) If archaeological resources are encountered <u>during construction</u>, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. <u>Project personnel should not collect cultural resources</u>. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies. 6) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: <u>http://ohp.parks.ca.gov/default.asp?page_id=1069.</u>

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. Please contact this office if you have any questions, (707) 588-8455.

Sincerely, Coordinator

LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Historical Resources Information System, Northwest Information Center, the following literature was reviewed:

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**Note that the Office of Historic Preservation's *Historic Properties Directory* includes National Register, State Registered Landmarks, California Points of Historical Interest, and the California Register of Historical Resources as well as Certified Local Government surveys that have undergone Section 106 review.

NATIVE AMERICAN HERITAGE COMMISSION Cultural and Environmental Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone: (916) 373-3710 Email: <u>nahc@nahc.ca.gov</u> Website: <u>http://www.nahc.ca.gov</u>



July 24, 2019

Sharon Wright Lamphier-Gregory

VIA Email to: swright@lamphier-gregory.com

RE: **580 Marketplace Castro Valley Billboard Project**, City of Castro Valley; Hayward USGS Quadrangle, Alameda County, California.

Dear Ms. Wright:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>negative</u>. The absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

le Totton

Øay<mark>/</mark> Totton, B.S., M.A., Ph.D. Associate Governmental Program Analyst

Attachment

Native American Heritage Commission Native American Contact List Alameda County 7/24/2019

Amah MutsunTribal Band

Valentin Lopez, Chairperson P.O. Box 5272 Galt, CA, 95632 Phone: (916) 743 - 5833 vlopez@amahmutsun.org

Costanoan Northern Valley Yokut

Amah MutsunTribal Band of

Mission San Juan Bautista Irenne Zwierlein, Chairperson 789 Canada Road Costa Woodside, CA, 94062 Phone: (650) 851 - 7489 Fax: (650) 332-1526

Costanoan

Indian Canyon Mutsun Band of Costanoan

amahmutsuntribal@gmail.com

Ann Marie Sayers, Chairperson P.O. Box 28 Costanoan Hollister, CA, 95024 Phone: (831) 637 - 4238 ams@indiancanyon.org

Muwekma Ohlone Indian Tribe

of the SF Bay Area Monica Arellano, 20885 Redwood Road, Suite 232 Costanoan Castro Valley, CA, 94546 Phone: (408) 205 - 9714 marellano@muwekma.org

North Valley Yokuts Tribe

Katherine Erolinda Perez, Chairperson P.O. Box 717 Linden, CA, 95236 Phone: (209) 887 - 3415 canutes@verizon.net

Costanoan Northern Valley Yokut

The Ohlone Indian Tribe

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Bay Miwok Ohlone Patwin Plains Miwok

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resource Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 580 Marketplace Castro Valley Billboard Project, Alameda County.