INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

TRACT 8053 RESIDENTIAL SUBDIVISION PROJECT

Prepared For:

COUNTY OF ALAMEDA

COMMUNITY DEVELOPMENT AGENCY
224 WEST WINTON AVENUE
HAYWARD, CA 94544

Prepared By:

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OAKLAND, CA 94610

January 2013

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INTRODUCTION TO THIS DOCUMENT

This document serves as the Initial Study and Mitigated Negative Declaration (IS/MND) for the proposed Tract 8053 Residential Subdivision project. 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 in the Project would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.

This document is organized in three sections as follows:

- Introduction and Project Description. This section introduces the document and discussed the project description including location, setting, and specifics of the lead agency and contacts.

- Mitigated Negative Declaration. This section lists the impacts and mitigation measures identified in the Initial Study, and propose findings that would allow adoption of this document as the CEQA review document for the proposed project.

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

Phil Sawrey-Kubicek, Senior Planner
Alameda County Planning Department
224 W. Winton Avenue, Room 111
Hayward, CA 94544
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Email: phil.sawrey-kubicek@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 Planning Commission. Approval of the project can take place only after the Mitigated Negative Declaration has been adopted.

PROJECT ENTITLEMENTS

Land use and governmental approvals needed for the Project include approval of Tentative Tract Map 8053 for the proposed 23-lot subdivision (Planning Department Case PLN 2010-00100). The original proposal was for a 24-lot subdivision; however, due to conflict with potential wetlands at the proposed retention pond site in Parcel A, the Project has been modified to eliminate one lot, creating the retention pond at that site and preserving the wetland area as a potential conservation easement. The combined wetland and retention pond area is now proposed to be Common Lot Parcel A.

LEAD AGENCY

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PROJECT SPONSOR

Hue and Ylan Tran
4584 Ewing Road
Castro Valley, CA 94546
Contact: Hue Tran, Owner - 510-366-6158

PROJECT LOCATION

The Project site consists of a 5.85-acre vacant property on the south side of Proctor Road, approximately 750 feet east of Walnut Road and adjacent to 4659 and 4651 Proctor Road in the Castro Valley area of unincorporated Alameda County. The Project site is comprised of one parcel owned by Mr. and Mrs. Hue Tran and identified as Assessor's Parcel Number (APN) 84D-1403-14-17. The proposed Project entrance lies between two existing residences (4659 and 4651 Proctor Road).

GENERAL PLAN DESIGNATION

The property is designated Hillside Residential, RH (4-8 dwelling units du/acre), single family residential land use with a minimum building site area of 6,500 square feet per house in the Castro Valley General Plan, adopted March 2012, which is the General Plan for this part of unincorporated Alameda County.

ZONING

R-1-BE-CSU-RV (Single Family Residential, 6,500 square feet minimum building site area).

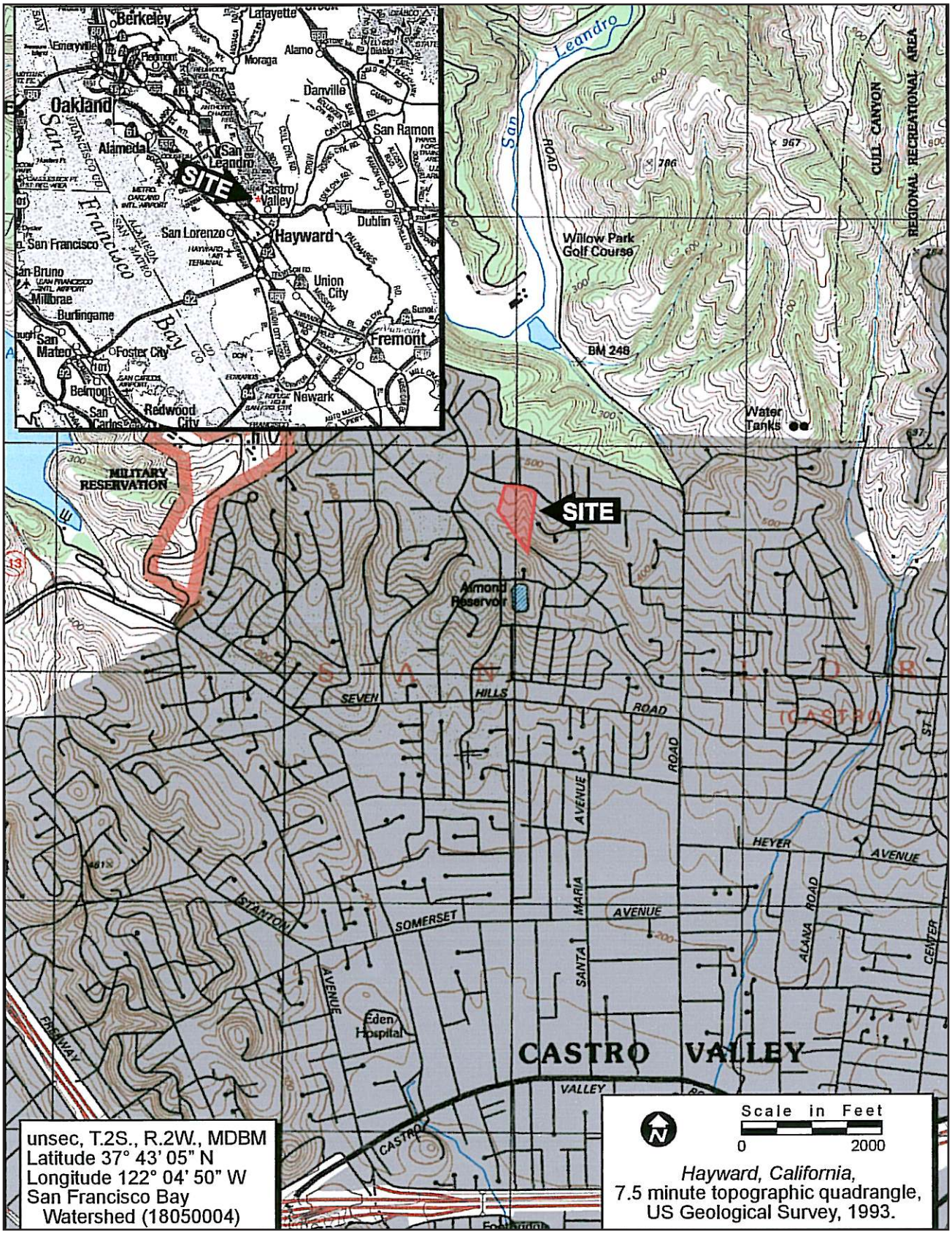


Figure 1: Project Location

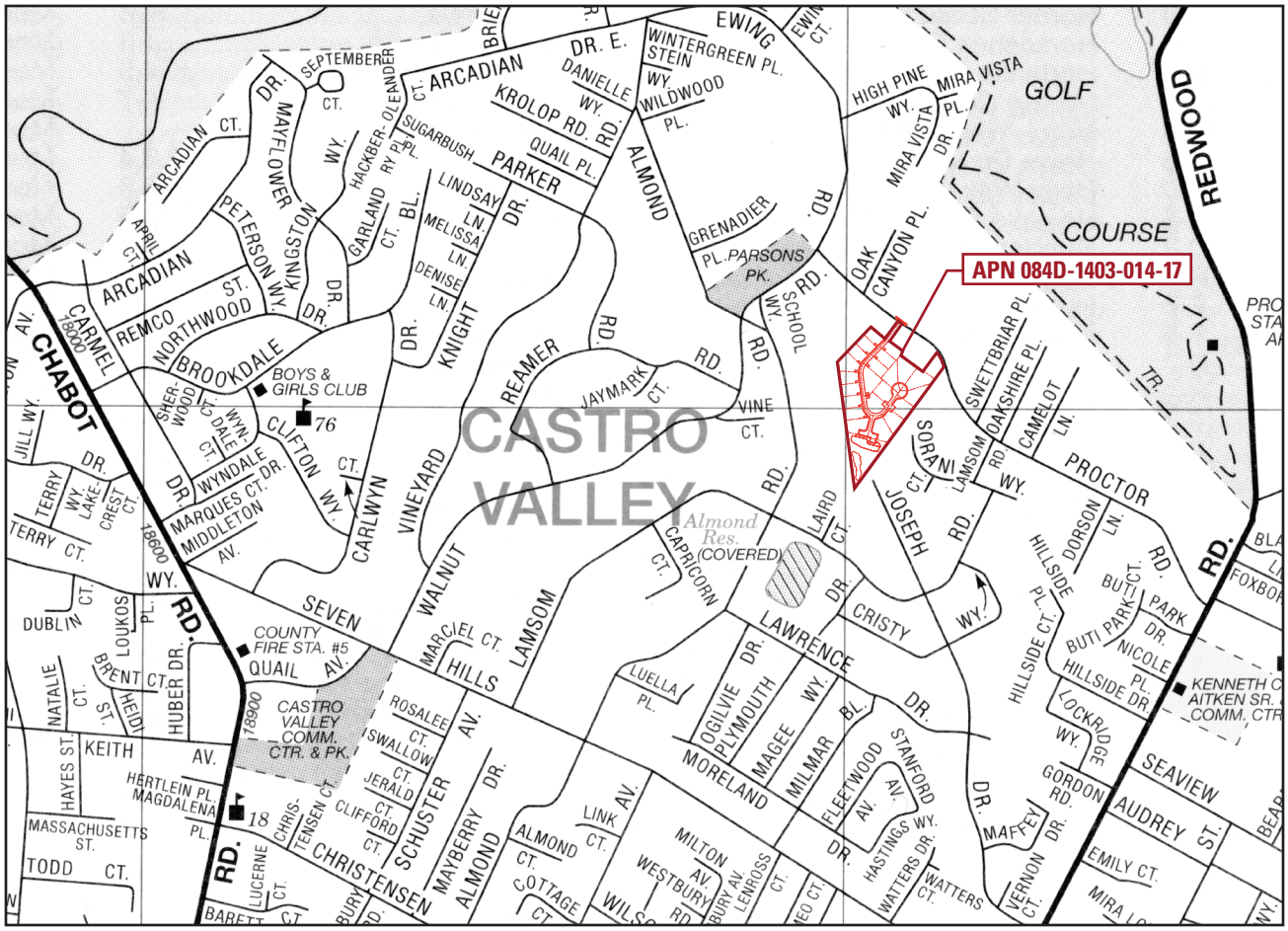


Figure 2: Project Site

EXISTING USES AND SITE CONDITIONS

The Project area includes two residences with separate parcels (4659 and 4651 Proctor Road) adjacent to the Project site. The actual Project site, is comprised of the 5.85-acre nearly rectangular development area with an overall irregular shape extending south of Proctor Road. The Project site's dimensions are approximately 745 feet from north to south and 465 feet wide, with the northern boundary narrowing to about 465 feet behind the existing dwellings. Lot 23 lies at the eastern end adjacent to Proctor Road. The western side is of the site is only 270 feet. The site is relatively flat where the existing dwellings are located. The property then slopes moderately to the south and southeast. A broad topographic swale (trending north to south) is located in the eastern portion of the site.

The dwellings currently within the Project area were built after World War II (1948 and 1946), but were recently remodeled. Previous property owners and renters historically maintained a few livestock (goats and horses) on the rear of the property. The Project site also previously included two storage sheds in the rear of 4651 Proctor Road that were removed for safety reasons due to homeless encampments.

The land has been used as pasture/rural land over the last 65 years or so and may have historically been used as orchard land before the World War II era as fruit tree remnants can be seen at various locations. The southern-most tip of the property corresponds to the lowest elevation on the property. The property drains via an existing storm inlet at that point. The southern portion of the Project site slopes downward to the southern end into a steep-sided bowl. Below this portion is the Joseph Drive subdivision area.

Figure 3 – Aerial

The Project site is undeveloped, and has been used for horse and cattle grazing but not for any human residential use, and there are no structures on the property. The site is dominated by non-native grasses and thistles; a group of Coast live oak trees, pine, and a few eucalyptus trees are located in the south corner of the Project site and near the terminus of Joseph Drive. The thirty (30) - foot stem of the parcel between 4651 and 4659 Proctor is an unpaved gravel road or lane that currently provides access from Proctor Avenue to the upper elevations of the Project site. Aerial and site photos reflect the existing character of the site (**Figures 3 - 5**). As shown in the photos, the site provides vistas for surrounding residences into the canyon of the Project site.

SURROUNDING LAND USES AND SETTING

The Castro Valley area of Alameda County consists both of flatlands and gently rising elevations to the north and east above downtown Castro Valley, characterized primarily by single family residential development and served by a few key arterial roadways. Historically, Castro Valley and the hills to the east were used for various forms of agriculture, the hilly area primarily being used for cattle and horse grazing and for chicken farms. Over the past 20 to 30 years, more and more large parcels in the Castro Valley area have been developed with suburban-style residential subdivisions. Examples of recent and nearby residential development projects and proposals include:

- The 13-lot, 4.46-acre subdivision known as Cardinal Court zoned R-1-BE-CSU-RV 10,000, across Proctor Road, immediately to the north of the Project site, was completed in 2006, but does not border the Project site;
- A 16-home subdivision on 3.45 acres located in an R-1-CSU-RV district at Malabar Avenue south side, approximately 250 feet west of Pepper Street, was completed in 2008; and
- The Joseph Drive development with various tract numbers was developed in the late 1950s and early 1960s. Zoning was for 6,500 square foot lots with over 100 homes.

However, the surrounding area still contains many rural residential properties. The Project site, is one of the largest undeveloped sites in the vicinity. To the north of the Cardinal Court subdivision about a one-quarter (¼) mile from Proctor Road, lies Willow Park Golf Course within Anthony Chabot Regional Park. Immediately east and west of the Project site are more residential homes along Proctor Road. As noted above, the southern tip of the site is adjacent to Joseph Drive residential area. The main thoroughfare of Redwood Road is approximately one-half (½) mile from the Project site and Interstate 580 is about two (2) miles from the site.

PROJECT DESCRIPTION

The property is owned by the Project applicant, Hue Tran. As Project sponsor, Mr. Tran is acting as an agent in pursuit of land use entitlements that would permit and authorize the subdivision of the site into 23 separate residential lots, one common parcel containing the retention pond and the proposed conservation easement. The lots would have an average gross and net size of 9,714 square feet and 8,048 square feet respectively or 3.93 lots per acre, as shown on the Preliminary Site Plan (**Figure 6**). To access the site, a new roadway (Street A) is proposed to be constructed, beginning at Proctor Road. The entrance would be flared out to approximately 27.38 feet curb-to-curb to accommodate fire trucks and per the request of the Alameda County Fire Department. The proposed street name, Proctor Court, would continue southward along the site's western edge to provide access to lots 1-22 and end with a hammer head and the cul-de-sac. Lot 23 would be accessed off of Proctor Road.

The Project sponsor proposes that on-site domestic water and wastewater infrastructure for the future homes would connect to and share the existing utility infrastructure connecting to main service lines beneath Proctor Road and Joseph Drive.

Consistent with current requirements for hydromodification techniques in dealing with stormwater, the proposed drainage plan may include some lined swales on downslope lots and a small bio-retention area and would absorb and filter stormwater from the street surface and from rooftop downspouts. Stormwater flows that would exceed the bio-retention area's capacity for absorption would flow into an on-site stormwater detention basin which would hold and then release the stormwater on a controlled basis so that the amount of stormwater leaving the site, at full build out, would not exceed the amount or rate of runoff from the existing undeveloped property. Preliminary engineering plans for the Project, including the Preliminary Site Plan, the

Preliminary Grading Plan, the Preliminary Utility Plan and the Preliminary Stormwater Control Plan are shown in **Figures 6 - 9**.

PROPOSED ACCESS AND CIRCULATION

As noted, access would be from Proctor Road via Street A between 4651 and 4659 Proctor Road. Proctor Court (Street A) would end in a hammer-head designed for fire truck turnaround and continue into a cul-de-sac also designed as a fire truck turnaround. Lot 23 would be separated at Proctor Road by two lots from 4659 Proctor Road.

SITE PLAN AND ARCHITECTURAL DESIGN CONCEPTS

The Preliminary Site Plan (**Figure 6**) shows the proposed lot lines and designated building maximum envelopes on each lot indicating where future homes would be built. The dwellings would be sited so as to conform to setback standards and height limitations of the provisions of the County Zoning Ordinance.

Two-story homes would be built on the thirteen (13) split-level downslope lots (Lots 4-9, 10-13, and 17-19); nine (9) two-story homes would be on the upper flat-pad lots, and one two-story home would be built on the flat-pad lot on Proctor Road (Lot 23). Each proposed home would have a two-car fully enclosed garage. Varying elevations incorporating exterior detailing would be developed for each plan type. The size of the homes would be a minimum of 1,800 square feet.

Elevations would be designed to minimize the appearance of mass when viewed from the street. Varied rooflines and features such as nested gables would reduce the apparent mass of each home to smaller elements. Variety in the wood and stone elements would be intended to create a degree of individuality to each home. The materials and detailing on the front elevation would be applied consistently on all sides of each home.

All planting areas installed at the time of construction would be irrigated with an automatic irrigation system and irrigated lawn areas would be minimized. In addition to meeting California's Title 24 energy standards, the project would be constructed to comply with 1) the CalGreen California Green Building Standards Code, which guides both building and irrigation systems, and 2) the Water Efficiency Landscape Ordinance (WELO).

In addition, the homes would be designed to be solar-ready, designed structurally to carry the additional roof loads and equipment locations anticipated in the final design. Each home would also include a dedicated circuit in the garage for charging electric vehicles.

CONSTRUCTION SCHEDULE

The Project applicant's preliminary schedule for Project construction indicates that rough grading and construction of Proctor Court, the drainage detention basin, and installation of trunk infrastructure (e.g., drainage, water and sewer utilities, power and cable TV) and mass grading for the 23 home sites would occur in one phase between May and mid-October of 2013. Home building would commence in August 2013 and be completed in the first quarter of 2014.

PROPOSED GRADING

The Preliminary Grading Plan (**Figure 7**) involves movement of 15,430 total cubic yards of material; cuts and fills would be near balanced resulting in approximately 650 cubic yards of material needing to be exported or hauled off site. Cross-section illustrations C-C, D-D, E-E, G-G and H-H as shown on **Figure 7**, indicate the extent to which the grading plan would change the physical

shape and contour of the Project site. A substantial degree of mass grading would be required to develop Proctor Court, with a large cut (about 25 feet deep) into the upper slope (see cross-section E-E). Additional mass grading would involve a combination of cut and fill on the southern portion of the development area (cross-section B-B). Substantial grading to develop the building pads would also be required, primarily with fill (such as in cross-sections D-D and F-F).

OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

- Alameda County Public Works Agency
- California Department of Fish & Game
- U. S. Fish & Wildlife Service
- U.S. Army Corps of Engineers
- Alameda County Fire Department
- Castro Valley Sanitary District
- East Bay Municipal Utility District

FIGURES 4A-4F

Entrance between 4651 and 4659 Proctor Road

Looking north from entrance to Cardinal Court

View to east from ridge

View to west from 4729 Proctor Road

View southeast from ridge

Southern point from end of Joseph Drive

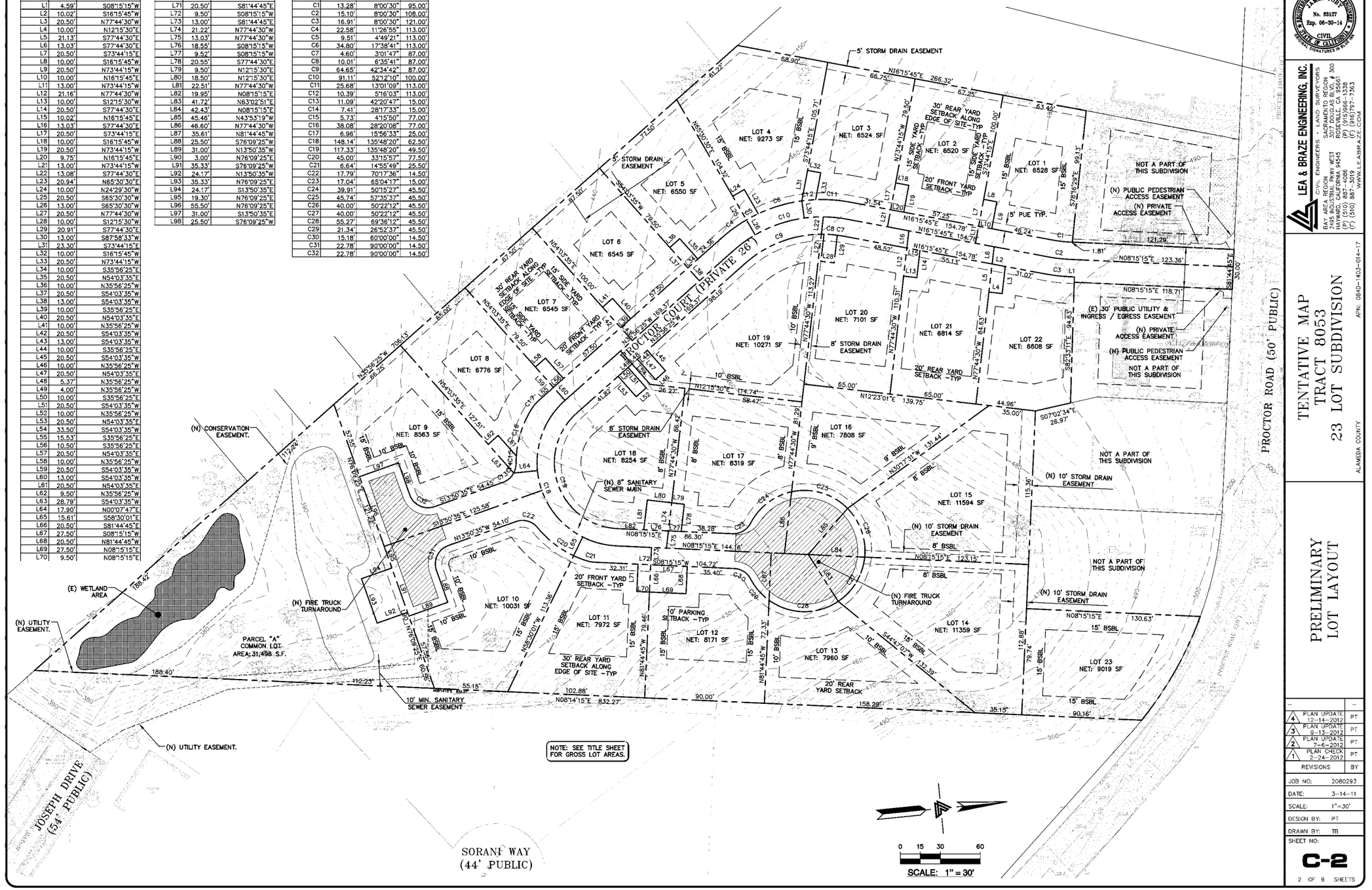
FIGURE 5

View of Hillside and Proctor Road area from Castro Valley Blvd and Santa Maria Avenue

LINE TABLE		
LINE	LENGTH	BEARING
L1	4.59'	S08°15'15"W
L2	10.02'	S16°15'45"W
L3	20.50'	N77°44'30"W
L4	10.00'	N12°15'30"E
L5	21.13'	S77°44'30"E
L6	13.03'	S77°44'30"E
L7	20.50'	S73°44'15"E
L8	10.00'	S16°15'45"W
L9	20.50'	N73°44'15"W
L10	10.00'	N16°15'45"E
L11	13.00'	N73°44'15"W
L12	21.16'	N77°44'30"W
L13	10.00'	S12°15'30"W
L14	20.50'	S77°44'30"E
L15	10.02'	N16°15'45"E
L16	13.03'	S77°44'30"E
L17	20.50'	S73°44'15"E
L18	10.00'	S16°15'45"W
L19	20.50'	N73°44'15"W
L20	9.75'	N16°15'45"E
L21	13.00'	N73°44'15"W
L22	13.08'	S77°44'30"E
L23	20.94'	N65°30'30"E
L24	10.00'	N24°29'30"W
L25	20.50'	S65°30'30"W
L26	13.00'	S65°30'30"W
L27	20.50'	N77°44'30"W
L28	10.00'	S12°15'30"W
L29	20.91'	S77°44'30"E
L30	13.00'	S87°58'33"W
L31	23.30'	S73°44'15"E
L32	10.00'	S16°15'45"W
L33	20.50'	N73°44'15"W
L34	10.00'	S35°56'25"E
L35	20.50'	N54°03'35"E
L36	10.00'	N35°56'25"W
L37	20.50'	S54°03'35"W
L38	13.00'	S54°03'35"W
L39	10.00'	S35°56'25"E
L40	20.50'	N54°03'35"E
L41	10.00'	N35°56'25"W
L42	20.50'	S54°03'35"W
L43	13.00'	S54°03'35"W
L44	10.00'	S35°56'25"E
L45	20.50'	S54°03'35"W
L46	10.00'	N35°56'25"W
L47	20.50'	N54°03'35"E
L48	5.37'	N35°56'25"W
L49	4.00'	N35°56'25"W
L50	10.00'	S35°56'25"E
L51	20.50'	S54°03'35"W
L52	10.00'	N35°56'25"W
L53	20.50'	N54°03'35"E
L54	33.50'	S54°03'35"W
L55	15.53'	S35°56'25"E
L56	10.50'	S35°56'25"E
L57	20.50'	N54°03'35"E
L58	10.00'	N35°56'25"W
L59	20.50'	S54°03'35"W
L60	13.00'	S54°03'35"W
L61	20.50'	N54°03'35"E
L62	9.50'	N35°56'25"W
L63	28.79'	S54°03'35"W
L64	17.90'	N00°07'47"E
L65	15.61'	S58°30'01"E
L66	20.50'	S81°44'45"E
L67	27.50'	S08°15'15"W
L68	20.50'	N81°44'45"W
L69	27.50'	N08°15'15"E
L70	9.50'	N08°15'15"E

LINE TABLE		
LINE	LENGTH	BEARING
L71	20.50'	S81°44'45"E
L72	9.50'	S08°15'15"W
L73	13.00'	S81°44'45"E
L74	21.22'	N77°44'30"W
L75	13.03'	N77°44'30"W
L76	18.55'	S08°15'15"W
L77	9.52'	S08°15'15"W
L78	20.55'	S77°44'30"E
L79	9.50'	N12°15'30"E
L80	18.50'	N12°15'30"E
L81	22.51'	N77°44'30"W
L82	19.95'	N08°15'15"E
L83	41.72'	N63°02'51"E
L84	42.43'	N08°15'15"E
L85	45.46'	N43°33'19"W
L86	46.60'	N77°44'30"W
L87	35.61'	N81°44'45"W
L88	25.50'	S76°09'25"W
L89	31.00'	N13°50'35"W
L90	3.00'	N76°09'25"E
L91	35.33'	S76°09'25"W
L92	24.17'	N13°50'35"W
L93	35.33'	N76°09'25"E
L94	24.17'	S13°50'35"E
L95	19.30'	N76°09'25"E
L96	55.50'	N76°09'25"E
L97	31.00'	S13°50'35"E
L98	25.50'	S76°09'25"W

CURVE TABLE			
CURVE	LENGTH	DELTA	RADIUS
C1	13.28'	8°00'30"	95.00'
C2	15.10'	8°00'30"	108.00'
C3	16.91'	8°00'30"	121.00'
C4	22.58'	11°26'55"	113.00'
C5	9.51'	4°49'21"	113.00'
C6	34.80'	17°38'41"	113.00'
C7	4.60'	3°01'47"	87.00'
C8	10.01'	6°35'41"	87.00'
C9	64.65'	42°34'42"	87.00'
C10	91.11'	52°12'10"	100.00'
C11	25.68'	13°01'09"	113.00'
C12	10.39'	5°16'03"	113.00'
C13	11.09'	42°20'47"	15.00'
C14	7.41'	28°17'33"	15.00'
C15	5.73'	4°15'50"	77.00'
C16	38.08'	28°20'08"	77.00'
C17	6.96'	15°56'33"	25.00'
C18	148.14'	135°48'20"	62.50'
C19	117.33'	135°48'20"	49.50'
C20	45.00'	33°15'57"	77.50'
C21	6.64'	14°55'49"	25.50'
C22	17.79'	70°17'36"	14.50'
C23	17.04'	65°04'17"	15.00'
C24	39.91'	50°15'27"	45.50'
C25	45.74'	57°35'37"	45.50'
C26	40.00'	50°22'12"	45.50'
C27	40.00'	50°22'12"	45.50'
C28	55.27'	69°36'12"	45.50'
C29	21.34'	26°52'37"	45.50'
C30	15.18'	60°00'00"	14.50'
C31	22.78'	90°00'00"	14.50'
C32	22.78'	90°00'00"	14.50'



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No. 63127
Exp. 06-30-14
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STATE OF CALIFORNIA

TENTATIVE MAP
TRACT 8053
23 LOT SUBDIVISION

APN: 0840-1403-014-17

ALAMEDA COUNTY

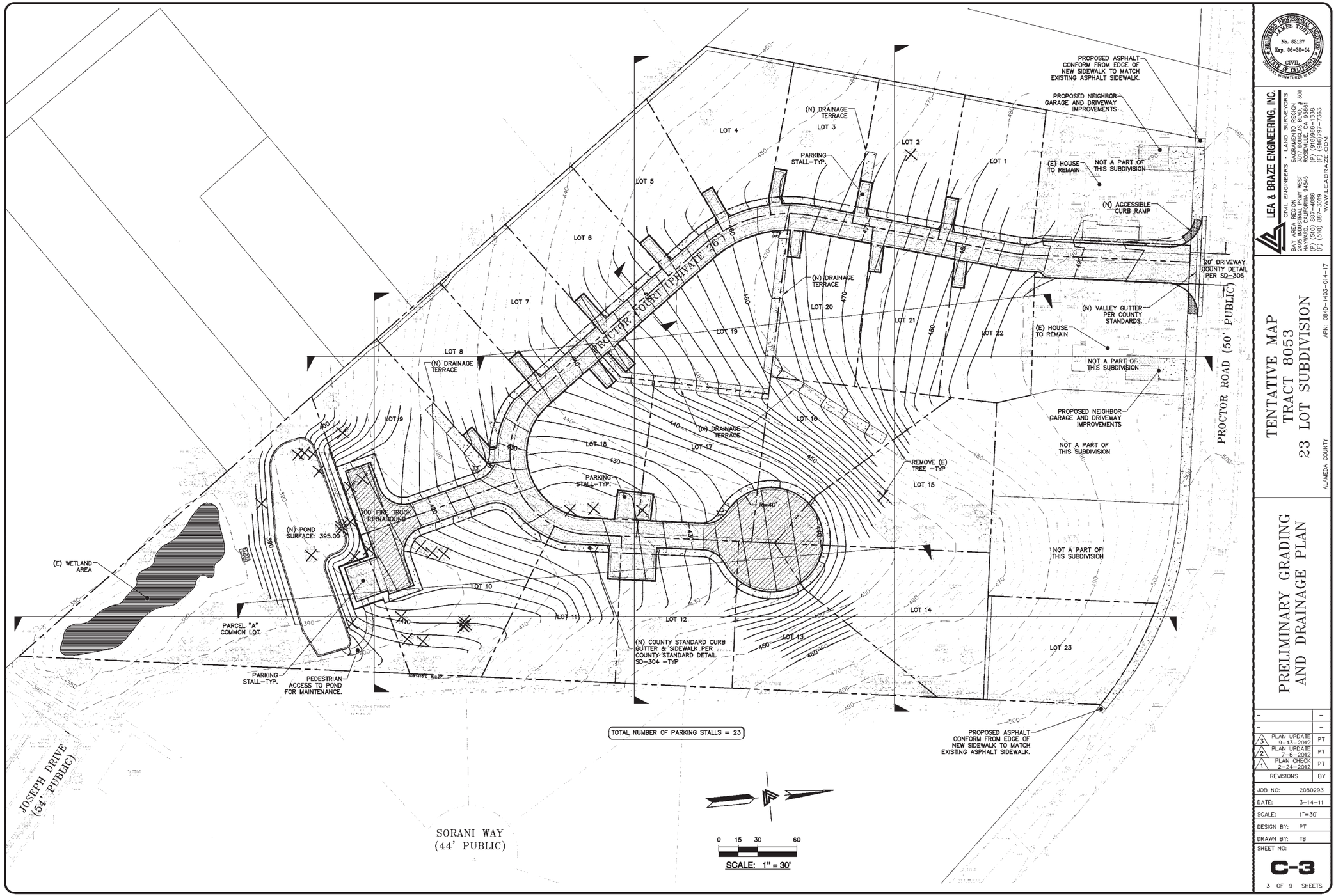
PRELIMINARY LOT LAYOUT

4	PLAN UPDATE 12-14-2012	PT
3	PLAN UPDATE 9-13-2012	PT
2	PLAN UPDATE 7-6-2012	PT
1	PLAN CHECK 2-24-2012	PT
	REVISIONS	BY

JOB NO:	2080293
DATE:	3-14-11
SCALE:	1"=30'
DESIGN BY:	PT
DRAWN BY:	TB
SHEET NO:	C-2

2 OF 9 SHEETS

FIGURE 6 – PRELIMINARY SITE PLAN



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TENTATIVE MAP
TRACT 8053
23 LOT SUBDIVISION

APN: 0840-1403-014-17

ALAMEDA COUNTY

PRELIMINARY GRADING AND DRAINAGE PLAN

3	PLAN UPDATE 9-13-2012	PT
2	PLAN UPDATE 7-6-2012	PT
1	PLAN CHECK 2-24-2012	PT
REVISIONS		BY

JOB NO:	2080293
DATE:	3-14-11
SCALE:	1"=30'
DESIGN BY:	PT
DRAWN BY:	TB
SHEET NO:	C-3

3 OF 9 SHEETS

FIGURE 7 – PRELIMINARY GRADING DRAINAGE PLAN

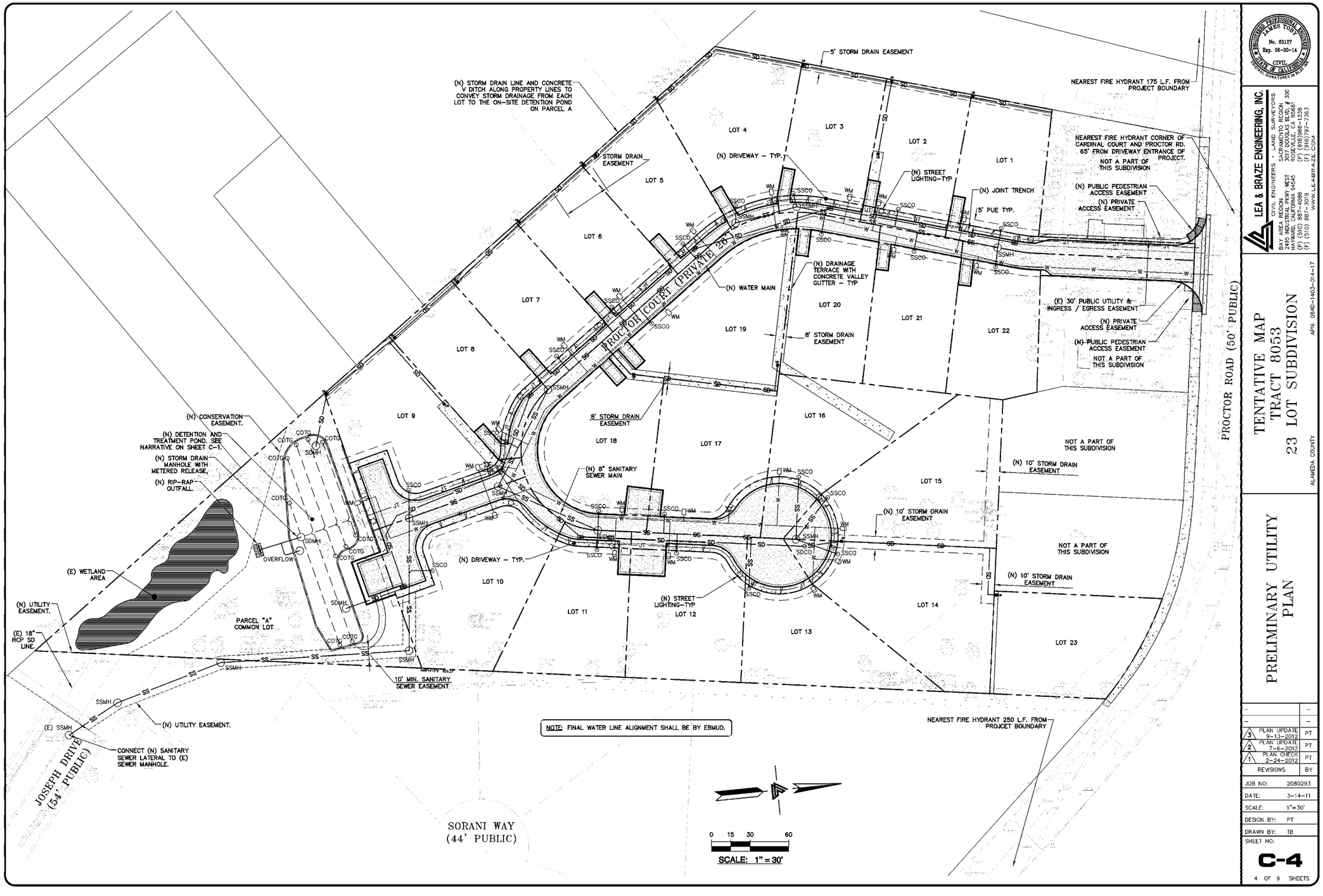


FIGURE 8 – PRELIMINARY UTILITY PLAN

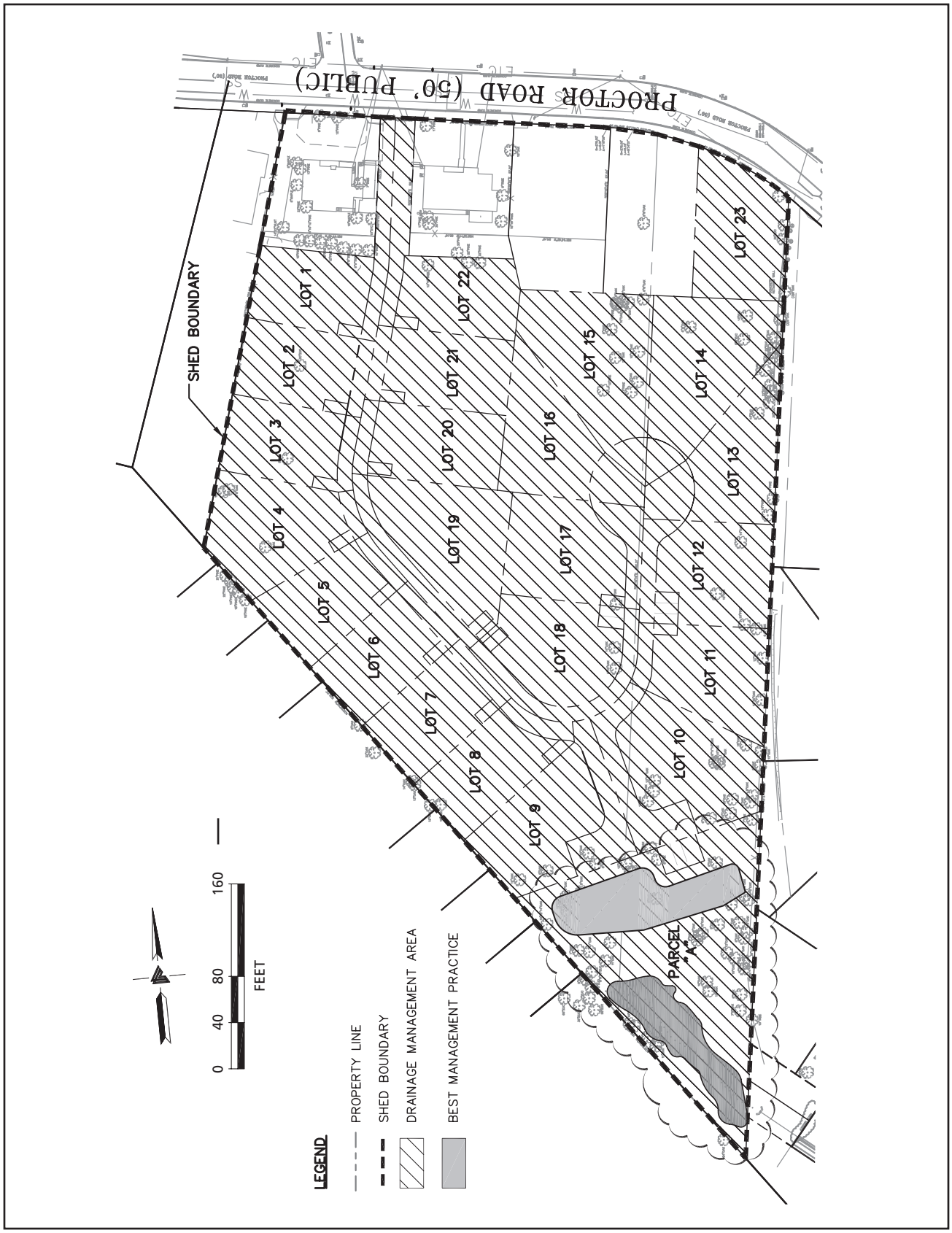


Figure 9: Preliminary Stormwater Control Plan

PROJECT DESCRIPTION, LOCATION AND SETTING

This Mitigated Negative Declaration has been prepared for the Tract Map 8053 Residential Subdivision Project in the Castro Valley area of unincorporated Alameda County. See the Introduction and Project Description section of this document for details of the Project.

POTENTIALLY SIGNIFICANT IMPACTS REQUIRING MITIGATION

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

Table 1: Potentially Significant Impacts and Mitigation Measures

Potentially Significant Impact	**Mitigation Measures** Reduces Impact to a Less Than Significant Level
Aesthetics	
Impact Vis-1: Nighttime Light and Glare. The addition of 23 new homes on the Project site would add new sources of light to the area. Light from inside the homes, as well as street lighting and the movement of vehicles could adversely affect nighttime views by nearby neighbors within the area including incrementally increased loss of starlight visibility**.**	***Mitigation Vis-1: Lighting Design Plan***. The Applicant shall design lighting to be sensitive to neighboring land uses and to minimize energy use, according to standard County lighting guidelines. The Alameda County Planning Department shall review the design plans to ensure compatibility of the Project with all applicable guidelines. The general lighting guidelines for County projects include the following items: • Applicant shall submit a lighting plan for review and approval by the Planning Director prior to issuance of grading permits. • Applicant shall design public area lighting so as to evenly illuminate areas of concern, but so as not to intrude upon private areas any more than necessary. Public areas not essential to security should be illuminated only when necessary for occupation by use of timers or motion detector circuits. • Applicant shall use the lowest wattage lamps reasonable for illumination of the area of concern. • Applicant shall install only full cutoff-shielded lights for illumination of public areas. • Applicant shall design and place night time lighting and security lighting so that it is no higher than necessary to illuminate the area of concern for security or visual comfort, and that the lighting is directed toward the area of concern, and always below the horizontal. • Applicant shall not position night lighting to illuminate areas beyond the site boundaries, nor shall the applicant position general lighting to radiate above the horizontal, but shall place lights or install shielded lights to illuminate only

	the area of concern. • Residents shall extinguish any lights not required for onsite security reasons. • The Homeowners Association shall enforce these conditions through CC&Rs for the Project.
Air Quality	
Impact Air-1: Construction Dust and Exhaust. Construction of the Project would result in temporary emissions of dust and exhaust, from a combination of vehicles, equipment and fugitive dust particles that could adversely affect local air quality.	**Mitigation Air-1**: **Basic Construction Management Practices**. The Project sponsor shall demonstrate 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": a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. A rocked construction entrance using a minimum 8-inch thick and 12-foot wide by 100-foot long area shall be provided during construction as required per County and Reference 1 and 2 standards at the end of the pavement. b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. c. 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. d. 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. e. 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) f. All construction equipment shall be maintained and property 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. g. 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. **Enhanced Control Measures**. In addition, the following measures shall apply as appropriate. • All "Basic" control measures listed above. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).

	• Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.) • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. **Optional Control Measures.** The following options measures shall be employed as required and/or appropriate. • Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas. • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. • Limit the area subject to excavation, grading and other construction activity at any one time.
Biological Resources	
Impact Bio-1: Potential Impact to Special-Status Plan Species. Disturbance of the Project site for grading or construction activities has the potential to impact two special-status plant species – Diablo helianthella and Most beautiful jewel flower, which are ranked 1B by CNPS.	**Mitigation Bio-1: Pre-Construction Survey for Plant Species.** During the months between March and June, and prior to the commencement of grading activities, the Project applicant's biologist shall conduct a survey to validate ECORP's negative findings for these plant species. If examples of these two plant species are not found, no further mitigation is required. If examples are found, impacts to the plants shall be avoided by (a) relocating the plants to locations on the Project site that would not be disturbed by grading and construction activities; and (b) collecting seeds from the plants and planting the seeds elsewhere on the Project site.
Impact Bio-2: Potential Impacts to Nesting Birds and Nesting Bird Habitat. Proposed grading and construction activities on the Project site may result in the removal of vegetation that can serve as nesting habitat for birds such as migrating songbirds. Removal of vegetation could also directly destroy nests, eggs, and immature birds, if present.	**Mitigation Bio-2: Pre-Construction Nesting Bird Survey.** The Project Applicant's biologist shall prepare a nesting bird survey three days prior to the removal of vegetation and/or commencement of construction. The purpose of the survey is to determine the absence or presence of nesting bird species. Nesting bird surveys shall be performed prior to January to identify any potential nesting trees prior to the birds laying eggs. If the survey does not identify any nesting special-status bird species in the area to be disturbed by the construction activity, no further measures are required. However, if nest sites or young are located, a no-disturbance buffer shall be established around the active nest. The biologist will establish a no-disturbance buffer of between 150 and 200 feet and the site protected until August 15 or until the young have fledged (typically 3 to 4 weeks). Further, if nests are found, removal of on-site shrubs and trees should be avoided; if removal cannot be

	avoided, then the removal of this vegetation should occur outside of the breeding season, (i.e., not between the months of January and July).
Impact Bio-3. Potential Stormwater Runoff Impacts to Aquatic Life and Wildlife Habitat. Grading and excavation activities could expose soil to increased rates of erosion and stormwater runoff during construction periods, which could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat.	**Stormwater Treatment Measures.** The Project sponsor shall comply with and implement **Mitigation Measure Geo-1,** which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and the use of best management practices (BMPs) such as hay bales, silt fencing, placement of straw mulch and hydroseeding of exposed soils. In addition, the Project sponsor shall follow all other details of the Erosion Control Plan prepared by Lea & Braze engineers and shown as ER-1 and ER-2 in the plan drawings.
Impact Bio-4: Potential Impacts to Wetlands. Consistent with conclusions reached by ECORP, there is one small area on the Project site that could be subject to the jurisdiction of the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.	**Mitigation Bio-4: Wetland Delineation and On-Site Mitigation. Wetland Delineation and On-Site Mitigation.** The one wetland area is to be avoided completely and the Project applicant shall ensure, to the satisfaction of the Alameda County Planning Director and the ACOE, that such on-site wetland mitigation area is preserved in perpetuity, which may be achieved by creating a Conservation Easement in accordance with Mitigation Bio-5b, and subject to the restrictions as set forth therein.
Impact Bio-5: Potential Interference with Migratory Wildlife Corridors. a) Construction of Street A (Proctor Court) could interfere with the movement of native resident wildlife species or with established migratory wildlife corridors and impede the use of native nursery sites. b) Grading and construction for 23 homes on the Project site would reduce and restrict area for wildlife activity.	**Mitigation Bio-5a: Pre-Construction Nesting Bird Surveys.** To address the potential loss of native nursery sites, implement Mitigation Bio-2 as described above. **Mitigation Bio-5b: Establish Conservation Easement.** The Project shall incorporate a conservation easement across the lower elevations of the Project site, below the proposed limits of grading to prevent future grading alterations, private fencing and the introduction of non-native plants or animals, and to retain it in its current natural state, or allow planting of only native plant species. The Easement shall prohibit structural or recreational improvements or grading disturbance of any kind not required for the installation and proper maintenance of the stormwater protection features. The conservation easement would ensure that to the extent the lower portion of the Project site is used as wildlife corridors and seasonal wetland, such use would be allowed to continue in perpetuity. **Mitigation Bio-5c: Wildlife-Friendly Design Principles Around Stormwater Treatment Features.** Replacement grasses, planting and landscaping of the cut and fill slopes for Street A, the entryway, and around the retention pond area, shall comply with the Bay-Friendly Landscaping Principles as determined by the County Planning Director, with an emphasis on enhancing wildlife habitat values. There shall be no gate at the entrance that would present a barrier to wildlife as required by the Castro Valley General Plan.

Cultural Resources	
Impact Cult-1: Archaeological and Paleontological Resources. The grading and construction associated with the project could uncover potential significant cultural resources.	**Mitigation Cult-1: Cultural Resources.** If archeological resources (i.e., historic, prehistoric, and isolated artifacts and features, including fossils) are inadvertently discovered during project construction, work shall be halted immediately within 50 feet of the discovery, the County shall be notified, and a professional archaeologist and/or paleontologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology and/or history shall be retained to determine the significance of the discovery.
Impact Cult-2: Human Remains. The grading and construction associated with the project could uncover human remains.	**Mitigation Cult-2: Human Remains.** In the event of accidental discovery of human remains, the County Coroner shall be notified *according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code*, and, if the remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) would be notified to identify the Most Likely Descendant (MLD), in accordance with State and federal law. The disposition of the remains shall be coordinated between the County Coroner, NAHC, MLD and the archaeological consultant.
Geology and Soils	
Impact Geo-1: Soil Erosion During Construction. The grading and construction associated with building 23 new homes as well as the access road into the site are activities that could lead to the substantial erosion of topsoil. Given the hilly topography of the Project site, construction activities including mass grading, roadway construction and building 23 new homes could potentially result in substantial soil erosion.	**Mitigation Geo-1: Construction General and SWPP Permit.** The Project sponsor shall obtain coverage under the State Water Resources Control Board (SWRCB) Construction General Permit, including implementation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with procedures and specifications of the Alameda County Clean Water Program. 1. The Project sponsor shall ensure that construction practices for the Project comply with practices to prevent water pollution under the provisions of the Construction General Permit. In order to obtain a permit, the Project applicant must file a Notice of Intent (NOI) with the Regional Water Resources Control Board (RWQCB) prior to the start of construction. 2. Pursuant to the requirements of the Construction General Permit, the Project sponsor shall prepare and implement a SWPPP. The SWPPP shall be consistent with the terms of the General Permit; the Manual of Standards for Erosion and Sedimentation Control Measures by the Association of Bay Area Governments (ABAG); the Best Management Practices (BMPs) as provided in the California Stormwater Quality Association (CASQA) handbooks; policies and recommendations of the local urban runoff program (County of Alameda); and the Staff recommendations of the RWQCB. The SWPPP shall incorporate BMPs to reduce the potential for

	pollutants in runoff waters and to prevent pollutant transport off-site during construction activities. Examples of BMPs include, but are not limited to the following: a) Only clear land which will be actively under construction in the near term (e.g., within the next 6-12 months), minimize new land disturbance during the rainy season, and avoid clearing and disturbing sensitive areas (e.g., steep slopes and natural watercourses) and other areas where site improvements will not be constructed. b) Provide temporary stabilization of disturbed soils whenever active construction is not occurring on a portion of the site through water spraying or application of dust suppressants, and gravel covering of high-traffic areas. Provide permanent stabilization during finish grade and landscape the Project site. c) Safely convey runoff from the top of the slope and stabilize disturbed slopes as quickly as possible. d) Delineate the Project site perimeter to prevent disturbing areas outside the project limits. Divert upstream run-on safely around of through the construction. Runoff from the Project site should be free of excessive sediment and other constituents. Control tracking at points of ingress and egress from the Project site. e) Retain sediment-laden waters from disturbed, active areas within the Project site. f) Perform activities in a manner to keep potential pollutants from coming into contact with stormwater or being transported off-site to eliminate or avoid exposure. g) Store construction, building, and waste materials in designated areas, protected from rainfall and contact with stormwater runoff. Dispose of all construction waste in designated areas, and keep stormwater from flowing onto or off these areas. Prevent spills and clean up spilled materials.
Hazards and Hazardous Materials	
Impact Haz-1: Risk from Wildland Fires. Since the project is the VHFHSZ and in the vicinity of park land and open space grass land that may be potentially subject to wildland fires, this would be a potentially significant impact.	**Mitigation Haz-1: An integrated Final Landscaping and Fire Hazard Management Plan**. A professional Final landscaping and Fire Prevention and Management Plan shall be developed during the Final Map design review phase for the Project site. The plan will incorporate all the important practices of good Fire prevention Management and Smart landscaping designs such as defensible space, vegetation clearance, weed control, dead wood removal, fuel break and modification, backyard and lawn automatic sprinkler system, fire retardant plant selections, restriction and placement of accessory

	buildings and clearance of emergency access and so on. These final fire hazard prevention mitigated measures and practices will be incorporated and controlled by the subdivision HOA. The final plan will be submitted for review and approval by county officials as part of the subdivision Final maps.
Hydrology and Water Quality	
Impact Hyd-1: Construction-Period Erosion and Siltation. Construction of the proposed Project would involve site grading for the access roadway, construction of the proposed on-site storm drain system components and detention basin, trenching for underground utilities, and grading for the 23 home sites. Such disturbance would present a threat of soil erosion by subjecting unprotected bare soil areas to runoff during construction.	**Mitigation Hyd-1a: Implement Mitigation Measures Geo-1.** File a Notice of Intent and obtain approval of and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with **Mitigation Measure Geo-1**. **Mitigation Hyd-1b: Conformance with the County Grading Ordinance.** The Project shall conform to all requirements and provisions of the Alameda County Grading Ordinance. As part of the Grading Ordinance, the Applicant shall obtain a water quality certification or waiver from the Regional Water Quality Control Board. This process ensures conformance to BMPs during construction to control wind and water erosion that could affect surface and ground water quality. **Mitigation Hyd-1c: NPDES Permit No. CAS612008.** Comply with the C.3 Provisions of the Alameda County Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) – NPDES Permit No. CAS612008. The Project sponsor shall demonstrate compliance with the County's NPDES permit C.3 requirements by preparing a detailed Stormwater Management Plan (SMP), incorporating the most appropriate post-construction source control measures into the Project design. All accessible on-site inlets shall be marked with the words "No Dumping! Flows to Bay!" Final landscape plans shall be designed to minimize irrigation and runoff and minimize use of fertilizers and pesticides that could contribute to stormwater pollution. Any native trees, shrubs, and groundcover shall be preserved to the maximum extent feasible. All paved areas shall drain to the retention pond. The Stormwater Management Plan shall be prepared during County's review of project engineering design and shall incorporate the required post-construction (permanent) stormwater quality controls. The SMP should include, but is not limited to the following: 1. The proposed finished grade, 2. The storm drainage system including all inlets, pipes, catch basins, overland flows, outlets and water flow directions, 3. The permanent stormwater treatment system (soil and landscape based treatment facilities, filters and separators), including all design details, 4. Design details of all source control measures

	(preventing contact between stormwater and potential sources of pollution) and site design measures (reductions in flow from impervious surfaces) to be implemented, 5. Calculations demonstrating that stormwater treatment measures are hydraulically sized as specified by the County's stormwater permit, and 6. An Operations and Management Plan to ensure continued effectiveness of structural BMPs and implementation of non-structural BMPs.
Impact Hyd-2: Increased Impervious Surfaces. The Project would increase the amount of impervious surface area on the Project site. Absent an appropriately designed and managed stormwater prevention plan, the increase in impervious surface area could increase the amount of surface runoff and allow pollutants to enter the storm drain system rather than being absorbed by the land and thereby violate Storm Water Quality Regulations.	**Mitigation Hyd-2: NPDES Permit.** Implement **Mitigation Measure Hyd-1c** above**.**
Noise	
Impact Noi-1: Temporary Construction Noise Impacts During Construction. The construction of the Project would generate noise and would temporarily and intermittently increase noise levels at adjacent residential receptors.	**Mitigation Noi-1: Construction Noise Control.** To ensure construction-period noise levels are reduced to the extent feasible, the following construction noise control Best Management Practices shall be employed: • All construction contractors and subconstractors shall comply with the County Noise Ordinance. • Noise-generating activities at the construction site shall be restricted to the hours of 7:00 am to 7:00 pm. on weekdays, 8:00 am to 5:00 pm on Saturdays and Sundays. • All internal combustion engine driven equipment will be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses. • Utilize "quiet" air compressors and other stationary noise sources where technology exists. • The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent noise sensitive residences so that construction activities can be scheduled to minimize noise disturbance. • Designate and identify by name with contact information "Disturbance Coordinator" who would be responsible for responding to any local complaints about construction noise. This information is to be provided to residents within a 300-foot radius of the Project site and placed on

	the Project construction sign at the foot of Proctor Road. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc) and will require that reasonable measures warranted to correct the problem be implemented. The disturbance coordinator shall conspicuously post the coordinator's telephone number at the construction site and include it in the notice sent to neighbors regarding the construction schedule. • Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
Transportation and Traffic	
Impact Tra-1: Conflict with Congestion Management LOS Standards. Increase in traffic due to construction activities could conflict with LOS standards for the project area.	**Mitigation Tra-1: Traffic Control During Construction.** Prior to completion and approval of project plans, the location of the construction staging area shall be identified, as well as provisions incorporated that specify construction debris removal and construction vehicle staging and storage in order to ensure that roads in the vicinity of the Project site will be clear of debris and construction vehicles. Prior to completion and approval of project plans, the contractor and County shall incorporate provisions for traffic control and direction by flagmen if at some point Project construction activities interfere with the smooth flow and safety of motorists and pedestrians.

PROPOSED FINDINGS

The County of Alameda Community Development Agency 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 the County of Alameda, the requirements of the California Environmental Quality Act (CEQA) will be considered to have been 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. It does not eliminate important examples of the major periods of California history or pre-history, since there is no identified area at the Project site which is habitat for rare or endangered species, or which represents unique examples of California history or prehistory. In addition, the Project is within the scope of use contemplated in the Castro Valley General Plan and 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 the Castro Valley area of 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 an insignificant level.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors which may be affected by the Project, as defined by the California Environmental Quality Act are listed alphabetically below. Factors marked with an X'd-in block (☒) were determined to be potentially affected by the Project, involving at least one impact that has been identified that would reduce the impact to a less than significant level, as indicated in the Environmental Evaluation Form Checklist and related Project, based on discussion provided in the Checklist.

☒ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards/Hazardous Materials	☒ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☒ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	
☒ Mandatory Findings of Significance		

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
Albert Lopez, Alameda County Planning Director

1/24/2013
Date

INITIAL STUDY CHECKLIST

The Checklist portion of the Initial Study begins below, with explanations of each answer. A "***no impact***" response indicates that the impact simply does not apply to the project or any action that would occur due to the Project. 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 below significance thresholds. 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 below significance thresholds. Finally, while this is not the case for any topics in this IS/MND, topics with a ***"potentially significant impact"*** response would indicate the inability to identify mitigation measures to reduce the impact below significance thresholds and would need to be analyzed in an Environmental Impact Report.

This Checklist does not indicate that any 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 sponsor. Therefore, an Environmental Impact Report is not warranted.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
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 the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

PHYSICAL SETTING

The Project site is located in the unincorporated Castro Valley area of Alameda County. Castro Valley is located just east of Hayward in the canyons and on the north and east-facing slopes of the Castro Valley Hills. The landscape of Castro Valley encompasses the transitional foothills between the flatlands of the City of Hayward and the rising Castro Valley Hills to the east. The area consists of flatlands, canyons, and gently rolling hills. Conditions in this area are similar to other portions of the Bay Region along the coast and closest to the Bay where marine influenced climatic conditions make for relatively verdant landscapes.

Public and private vistas and the features within them may be referred to as "view sheds," which, like a watershed, have boundaries defined by the uppermost ridges or hilltops along the horizon of a given location. Like a watershed, everything within its boundaries affects the resulting qualities and benefits. In the case of a watershed, precipitation feeds plants, animals, creeks and rivers, and may be put to beneficial human use; a view shed is defined by what is visible and valued – as well as by (like in a watershed) – what "pollutes" the quality and benefit. The Castro Valley view shed area lies within the horizon formed by the Castro Valley Hills to the east and north, and to the west and southwest, San Francisco Bay and the Coast Range along the Peninsula (and to a small degree, the Marin Headlands and Mount Tamalpais).

The ridge on which the Project site is located is moderately elevated on the north side within that viewshed and is therefore somewhat prominent as viewed from nearby viewpoints, up to half a mile away. The relatively barren expanse of project site below Proctor Road, dominated by nonnative grasses, few trees except at the south end is distinctly different from its surroundings of suburban and rural-residential development. Behind the newest development, across Proctor Road from the project site lies Willow Park Public Golf Course within Anthony Chabot Regional Park.

The elevation of the vicinity, between 400 and 700 feet above sea level, provides many excellent views towards San Francisco Bay, the Peninsula, the San Francisco skyline and the Marin Headlands and Mt. Tamalpais, and the semi-rural qualities of the immediate vicinity, and upper hills further east are also highly valued characteristics of views from homes, parks and roads in the Castro Valley area. According to the California Department of Transportation,[1] there are no state-designated scenic highways providing views of the Project site. Highway 580, about two miles south of the Project site, is an eligible state scenic highway but has not been officially designated as one. Although the site is within a prominent hillside within the Castro Valley area, it lies below the more elevated ridgeline north of the Anthony Chabot Regional Park area below Proctor Road within a canyon and therefore blends into Castro Valley area hills as seen from I-580. The nearest scenic route corridor is Redwood Road, which is approximately one-half (½) mile from the Project site (Alameda County, Title 17 Zoning).[2]

The Project site, at elevation of 400-520 feet above sea level, spans across a south trending small knoll ridge and a swale. In general, the terrain offers gentle gradients, except for segments of the swale, where the sides approach 2:1 horizontal to vertical slopes (Justiniano 2010). For the most part, vegetation on the site consists of non-native grasses and shrubs. There is a stand of oak trees on the south boundary of the site. Riparian vegetation exists at the southern end of the Project site with a seasonal wetland that drains into a storm drain, which is presumed to flow from Castro Valley Creek eventually into San Lorenzo Creek and to the San Francisco Bay (ECORPS 2012). There are no structures on the site, but two within the Project area on Proctor Road. **Figure 3** (aerial view) and the six photographs shown in **Figure 4** depict the current visual character, quality and setting for the Project site.

Historically, the Castro Valley area has had a natural character and visual quality that is typified by semi-rural residential single family and limited agricultural uses and activities. In combination with rolling hills, natural creeks, riparian habitat, chicken farms and residential development, Castro Valley has slowly evolved from a rural to semi-rural character to become a more suburban residential neighborhood with ranch style, single family detached residential subdivisions. More

[1] California Department of Transportation, State Scenic Highway Mapping System, http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm

[2] Alameda County, Code of Ordinances, Title 17, Chapter 17.104.010.

recent residential development in the area includes a 13-unit single family development on Cardinal Court, comprised of a few existing custom single family homes on a sloping site directly north of the Project site across Proctor Road. The evolving physical character of the Project site and its environs can be seen in the series of historical topographic maps that begin in the year 1899 and photographs taken at various points in time between 1939 and 2006. The historical topographic maps and aerial photographs are included in **Appendix A.**

The primary public view of the Project site is looking south from Proctor Road, which provides a view of the knoll on which Street A is proposed. This view is dominated by the clusters of mature Monterey pine trees and Eucalyptus near Proctor Road and in the foreground, and beyond. The nearest private views of the site are looking westward and southward from the upper elevations of the lots on Proctor Road, which would be equivalent to the views shown in some of the site photos (**Figures 4b, 4c, 4d and 4e)**. The ridge along the Project site's north boundary is also visible at present from the lower elevations within Joseph Drive, Sorani Way, and Almond Road and the existing homes that have been built in these subdivisions.

From greater distances, the ridge is directly in the line of site from the half-mile long portion of Seven Hills Road west of Redwood Road, such that the ridgeline is centered within the horizon for eastbound traffic. Views of the ridge and the Project site also exist from within Willow Park Public Golf Course, and from private residences directly north of Proctor Road and from various other viewpoints. Homes along Redwood Road, do not have views of the Project site due to a combination of topography and the groves of eucalyptus and pine on the southern portion. The ridge may also be visible from various schools and parks in the area, such as Redwood High School on Clifton Way, Castro Valley Community Park on Lake Chabot Road, Lake Chabot Regional Park or Proctor Elementary School Community & Recreation Center (about a quarter mile (1/4) east of the Project site).

The Castro Valley area has levels of light and glare that are typical of suburban and rural-residential areas, and thus limited to moderate starlight visibility. There are no large sports facilities or other sources of intensive nighttime lighting in the nearby vicinity, and most light sources are from street lights along Proctor Road, and from residential uses. Daytime glare from structures is residential in nature, not commercial and not generally a concern.

POLICY SETTING

Castro Valley General Plan

The Castro Valley General Plan (CVGP) contains numerous policies that are indirectly intended to protect scenic vistas, views and aesthetic character such as Goal 4.3-1 regarding residential development and that provides for a variety of housing types that will meet anticipated needs while preserving and enhancing the livability and character of Castro Valley's neighborhood. Action 4.3-1 addresses maximum density by zoning designations to comply with design standards and guidelines. Action 4.3-3 specifically notes that for residential development in hillside areas, new hillside residential zoning districts would apply in areas where there are steep slopes, and/or a high fire hazard due to proximity to regional open space. The Project site is on the south side of Proctor Road where homes are adjacent to the Lake Chabot Regional Park. In addition, Policy 5.1-1, Creative Site Design, allows residential development on or near hillsides, canyons, and creeks to employ creative site design, landscaping, and architecture that blend with the characteristics of each location and surroundings, and offer superior design solutions (Alameda County 2012).

Separate action items are also provided in the CVGP under the Natural Setting section that aim towards enhanced visual characteristics, with specific limitations on adequate light and air, landscaping, and street appearance through lot coverage limits, floor area ration or daylight planes,

garage sizes and percentage of paving (Action 5.2-5). Alternative standards are required for environmentally sensitive areas such as clustering, creative building designs and reduction in development by 25% of the maximum permitted (Action 5.2-4).

DISCUSSION OF IMPACTS

a) Scenic Vistas

> *Significance Criteria*: For the purpose of assessing impacts of a proposed Project on scenic vistas, the threshold of significance is exceeded when a Project would result in the obstruction of a designated public vista, such as one recognized in a general or specific plan, or the placement of an arguably offensive or negative-appearing project within such a vista.

Although the Castro Valley General Plan includes many policies regarding preservation and development of visual characteristics and qualities, there are no designations of scenic vistas. However, Policy 5.1-1 described above is interpreted to consider development on a hillside or steep slope that would obstruct a long distance view, or place a new, arguably offensive or negative structure on a ridgeline, to be a significant adverse impact on a scenic vista. More generally, potentially adverse impacts on scenic vistas may result due to the sensitivity of existing residents when an undeveloped property becomes developed and new houses appear within a neighbor's view shed.

To illustrate the visual effect of the Project on some of the views described in the Setting section above, cross-sections were prepared by Lea & Braze Engineers (the Project engineers), as shown in **Figures 10** and **11** (which include aerial map keys to the cross-sections). The first set of cross sections (**Figure 10**) shows how the planned homes on the Project site would appear from nearby residences or properties, including the existing homes on Proctor Road, Cardinal Court, Almond Road, Joseph Drive and Sorani Way. As shown, either the topography would obstruct views from the higher elevations of Proctor Road or the homes would fall below the line of site due to the steepness of the canyon. Topography is shown to be the only obstruction in views from along Proctor Road.

The second set of cross-sections includes the view from Castro Valley Boulevard up and through the Project site (**Figure 5**, and in **Figure 11b,** cross-section e), where Street A would be developed for access to the Project site. As shown in the preliminary site plan (**Figure 6**), Proctor Court would follow a curving route through the subdivision stubbing at a fire truck hammerhead before ending in a cul-de-sac at lots 13 through 16. To maintain an acceptable grade of less than 15 percent on Street A, grading for the roadbed would gently lower Street A where it enters the Project site below existing grade, south of what appears in the cross-section as the property line. The cross-section shows that the house on Lot 21 and 22 would lie below the line of sight and the existing grade.

Landscape treatments, including replacement trees along the drives, would soften its appearance, and would also be substantially distant from Proctor Road with the exception of Lot 23 at the east end of the property on Proctor Road, but no new obstruction would be created within the view downhill. Also in this set of cross-sections are views from Sorani Way (cross-section d) and from Proctor Road and Almond Road (cross-sections b and c), both of which locations provide limited views of the site and the ridgeline due to existing vegetation, although located respectively about a quarter (¼) mile east and southwest of the Project site. As shown in the cross-sections, while the Project site ridge itself may be visible from these locations, the new homes would be mostly constructed within the canyon and would be generally obstructed from most views within the Project area. Therefore, on the basis of the cross-sections and the above analysis, the Project's impact on scenic vistas, including Policy 5.1-1 would be ***less than significant***.

In summary, the seven cross-section view diagrams depicted in **Figures 10 and 11** indicate that future homes on the Project site would either not break the height of the existing ridgeline or would be blocked from most off-site views due to existing vegetation. In either case, the diagrams show that future homes on the Project site would not affect views to and through the site from off-site locations.

It should also be noted that whereas the Project site sits generally to the south, east and west of most homes in the area, the predominant views for local residents are toward the south. The elevation of the upper portion of the site and nearby homes at over 500 feet affords expansive views to the Southeast, South and Southwest. Therefore the most highly-valued South or Southwest views from adjacent residents would be unaffected by the Project.

Under CEQA guidelines, the appearance of new structures within a private vista does not rise to the level of a significant effect on the environment unless the Project is inconsistent with adopted rules, regulations or policies specifically adopted to mitigate such effects. In the case of this Project, the proposed houses (currently conceptual only) would meet the standards of the Castro Valley General Plan design guidelines intended to address this issue, including:

- Semi-custom homes with stepped building pads, which avoid tall downhill facades to reduce visual bulk while retaining the character of the natural slopes of the Project site;

- Limited building height (25-26 feet) in compliance with average height rules of the Castro Valley General Plan and Hillside Development Guidelines (25 feet, with exceptions that apply to many of the proposed lots);
- Although existing natural grades would be altered in accordance with the proposed grading plan to provide economically viable building pads, the overall topographic canyon shape of the site would be preserved; and

- Wetland area preservation at the south end, which ensures that the natural drainage areas and associated wildlife are preserved within the common lot (Parcel "A").

The above design elements which would be taken by the applicant would reduce the aesthetic impact on neighbors' views in a manner consistent with County policy and regulations.

b) Scenic Resources and Scenic Routes

> *Significance Criteria*: For the purposes of assessing impacts of the Project on scenic resources, the threshold of significance is exceeded by any Project-related action that would substantially damage scenic resources (i.e., trees, rock outcroppings, and historic buildings within a state [or local] scenic highway).

As discussed in the Setting section, the Project site is not visible from a designated scenic highway; the nearest local scenic route corridor, Redwood Road, is approximately one-half (½) mile from the Project site; any historic buildings would not be affected and therefore, the Project would have ***no impact*** with regard to visual impacts on scenic resources within a state scenic highway.

c) Visual Character

> *Significance Criteria*: The Project would have a significant environmental impact if it were to substantially degrade the existing visual character or quality of the site and its surroundings.

PROJECT SITE

The visual character of the Project site would be altered by the grading plan and construction of the onsite roads (Proctor Court, hammerhead and cul-de-sac), 23 future single-family homes and the stormwater detention basin. Proposed building sites would utilize single flat-pad foundations on the flat lots and split level pads on the sloped lots to reduce apparent building mass and bulk in accordance with the Castro Valley General Plan and Hillside Area Design Guidelines. Sections I-I, J-J and K-K as shown on the Preliminary Grading Plan (**Figure 7**) illustrate the flat and split-pad concept.

The Project site is located in a residential area characterized by a mixture of single family residential subdivisions, rural-residential properties and private homes with widely varying lot sizes. To ensure conformity with the surrounding neighborhood, the Castro Valley General Plan contains the following policy, action item, and table regarding "prevailing lot size" and development compliance for residential projects in hillside districts:

Policy 5.1-1: **Creative Site Design.** Allow residential development on or near hillsides, canyons, and creeks to employ creative site design, landscaping, and architecture that blend with the characteristics of each location and surroundings, and offer superior design solutions.

Table 4.2-1A: Residential Land Use Classifications – Hillside Residential. This designation is used in areas of steep slopes and /or high fire hazard areas to ensure that adequate mitigations are identified for the development of one-family detached dwellings. Lots range from 5,000 to 10,000 square feet resulting in residential densities between 4 and 8 units per net acre. Minimum lot sizes are to be based on the slope.

The land use policies of the Castro Valley General Plan require 6,500 square foot minimum lot sizes for the Project site under proposed zoning change to RH-6.5 in 2012 from the 2008 designation of R-1 (B-E, CSU, RV); R-1 (B-E). However, the County has not yet adopted the proposed zoning, so as of this writing the new General Plan policies are in effect with the old zoning designations. The Project would create lots that range in size from 6,520 square feet to 11,594 square feet (net), with a median lot size of 7,960 square feet. Lots of this size would be compatible with the prevailing lot size in surrounding subdivisions such as within Cardinal Court to the north and the surrounding residences along Proctor Road (see Land Use **Figure X-1**). The Project's conformance with Policy 5.1-1 ensures that the Project would be in accord with the surrounding visual character of this section of the Castro Valley hillside residential area.

A more extensive evaluation of the proposed Project, in light of applicable policies and guidelines of the Castro Valley General Plan is presented in the Land Use section of this Initial Study (Section X).

While the proposed Street A and future development of 23 homes on the Project site would fundamentally change the visual appearance and character of the currently vacant and undeveloped site, the changed appearance would be compatible with recent residential development in the area. Based on the cross-section illustrations provided in **Figures 10 and 11,** and the Project's general conformity to applicable aesthetic policies and guidelines of the Castro Valley General Plan indicated in Section X of this Initial Study, the Project's effect on the visual character of the site and its surroundings would be ***less than significant***.

d) Light and Glare

Significance Criteria: A project would have a significant environmental effect if it would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The construction and occupancy of new homes and site lighting would increase nighttime lighting on the Project site. Without limitations, the light and glare resulting from the Project could be substantial.

Impact Vis-1: **Nighttime Light and Glare.** The addition of 23 new homes on the project site would add new sources of light to the area. Light from inside the homes, as well as street lighting and the movement of vehicles could adversely affect nighttime starlight views by nearby neighbors within the area including incrementally increased loss of starlight visibility. This impact is considered to be ***potentially significant***.

Mitigation Vis-1: **Lighting Design Plan**. The Applicant shall design lighting to be sensitive to neighboring land uses and to minimize energy use, according to standard County lighting guidelines. The Alameda County Planning Department shall review the design plans to ensure compatibility of the Project with all applicable guidelines. The general lighting guidelines for County projects include the following items:

- Applicant shall submit a lighting plan for review and approval by the Planning Director prior to issuance of grading permits.
- Applicant shall design public area lighting so as to evenly illuminate areas of concern, but so as not to intrude upon private areas any more than necessary. Public areas not essential to security should be illuminated only when necessary for occupation by use of timers or motion detector circuits.
- Applicant shall use the lowest wattage lamps reasonable for illumination of the area of concern.
- Applicant shall install only full cutoff-shielded lights for illumination of public areas.
- Applicant shall design and place night time lighting and security lighting so that it is no higher than necessary to illuminate the area of concern for security or visual comfort, and that the lighting is directed toward the area of concern, and always below the horizontal.
- Applicant shall not position night lighting to illuminate areas beyond the site boundaries, nor shall the applicant position general lighting to radiate above the horizontal, but shall place lights or install shielded lights to illuminate only the area of concern.
- Residents shall extinguish any lights not required for onsite security reasons.
- The Homeowners Association shall enforce these conditions through CC&Rs for the Project.

RESULTING LEVEL OF SIGNIFICANCE

Implementation of Mitigation Vis-1 would reduce this impact to a level of ***less than significant***.

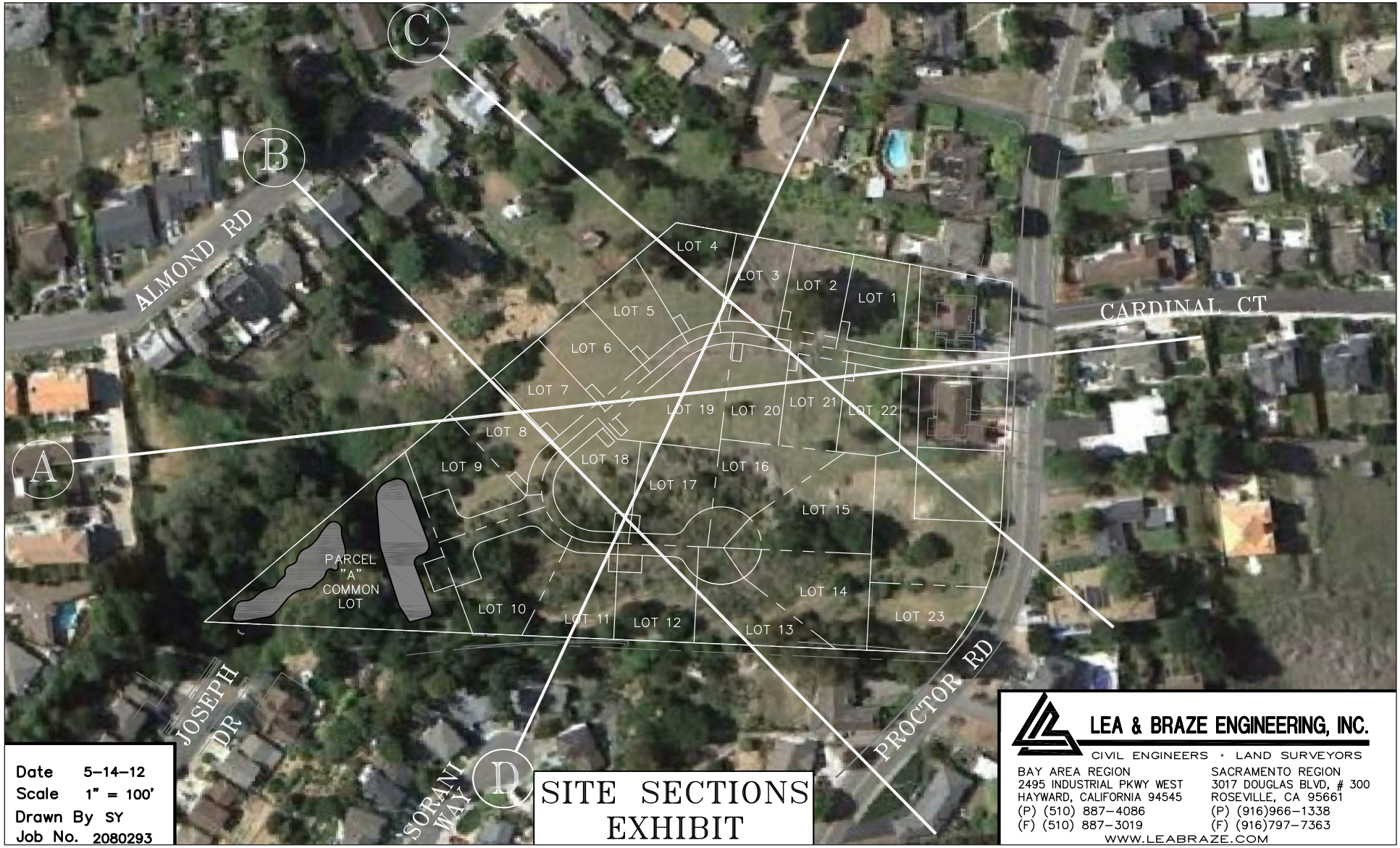


Figure 10a: Key to Cross-Section Views A-D

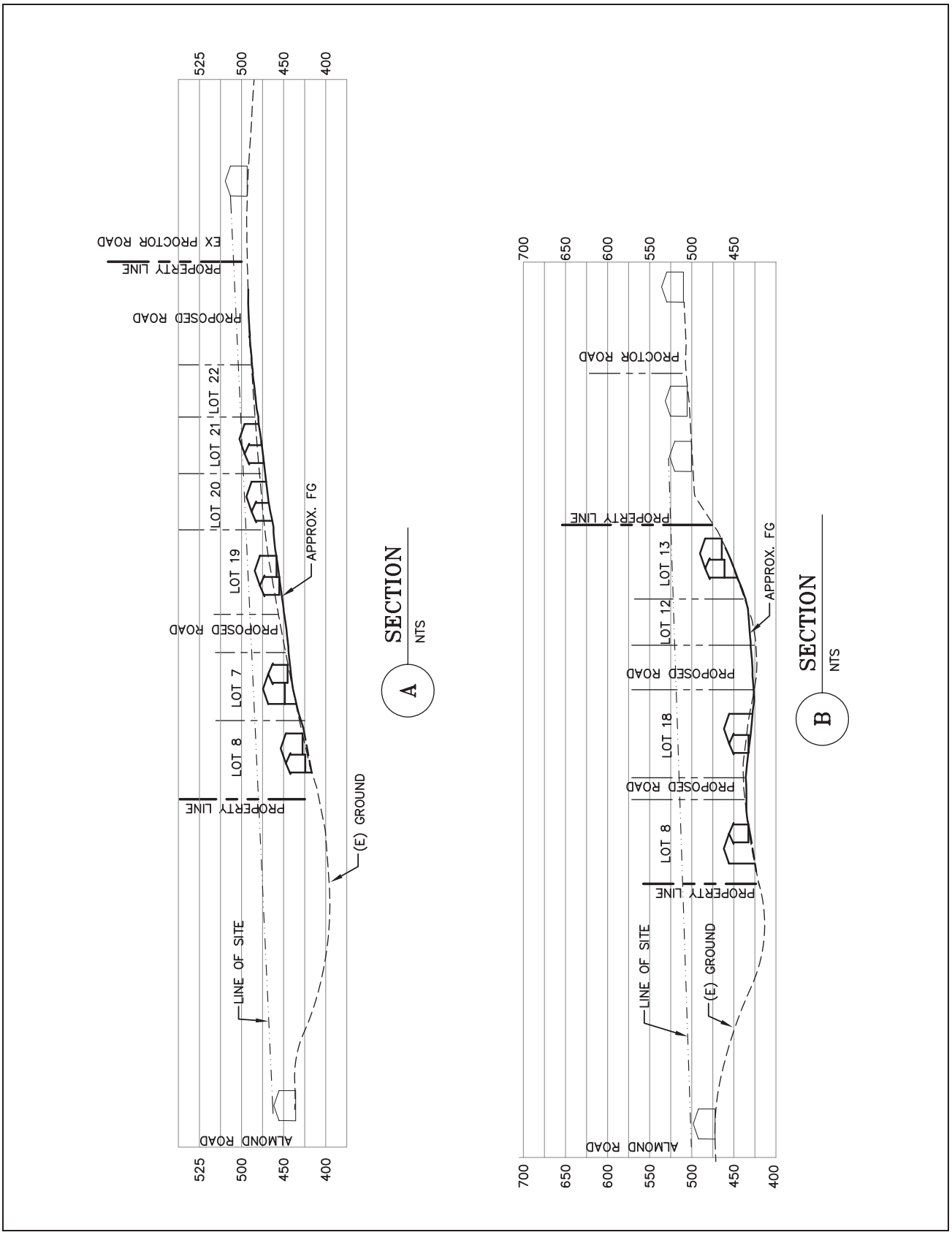


Figure 10b: Cross-Section Views A & B

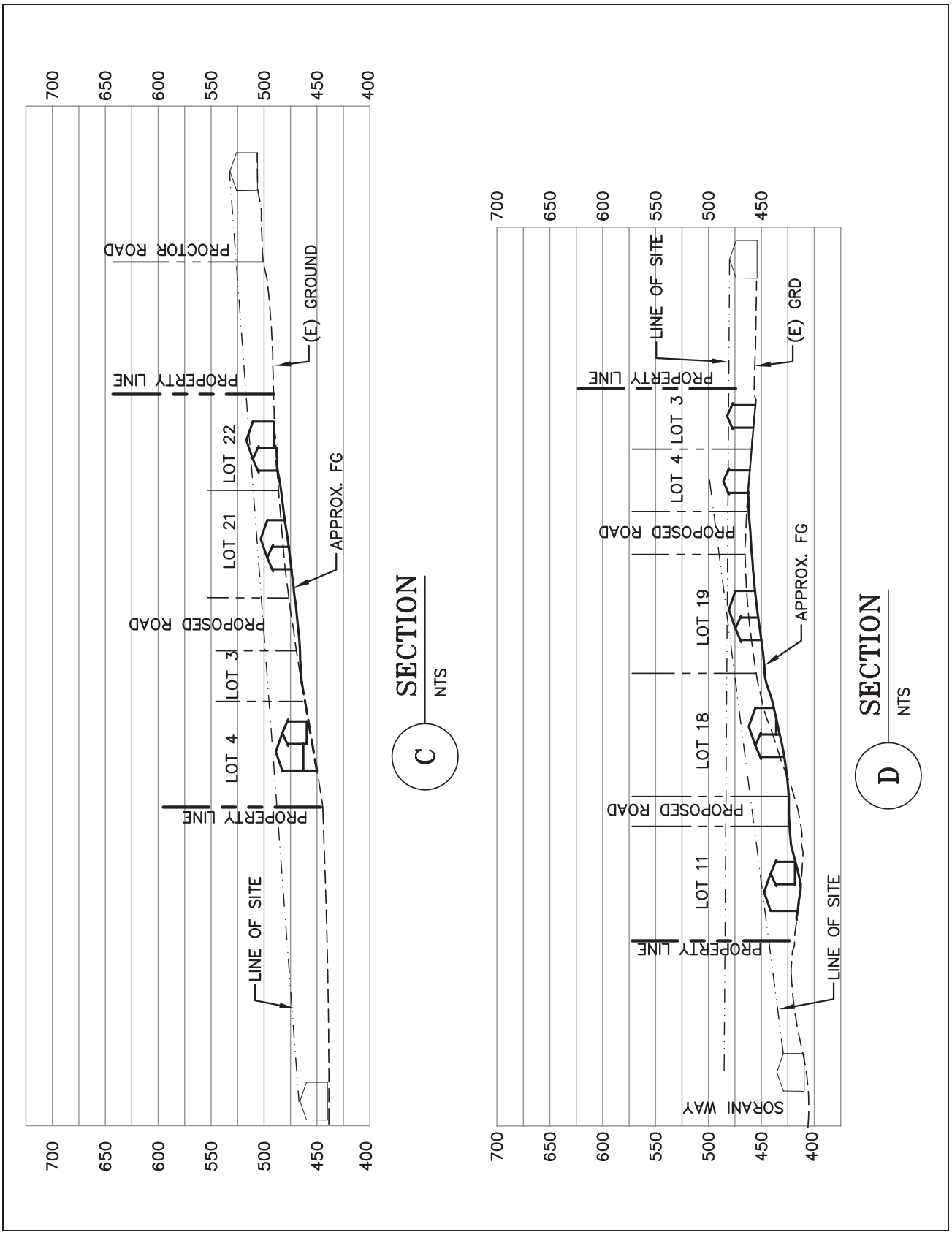
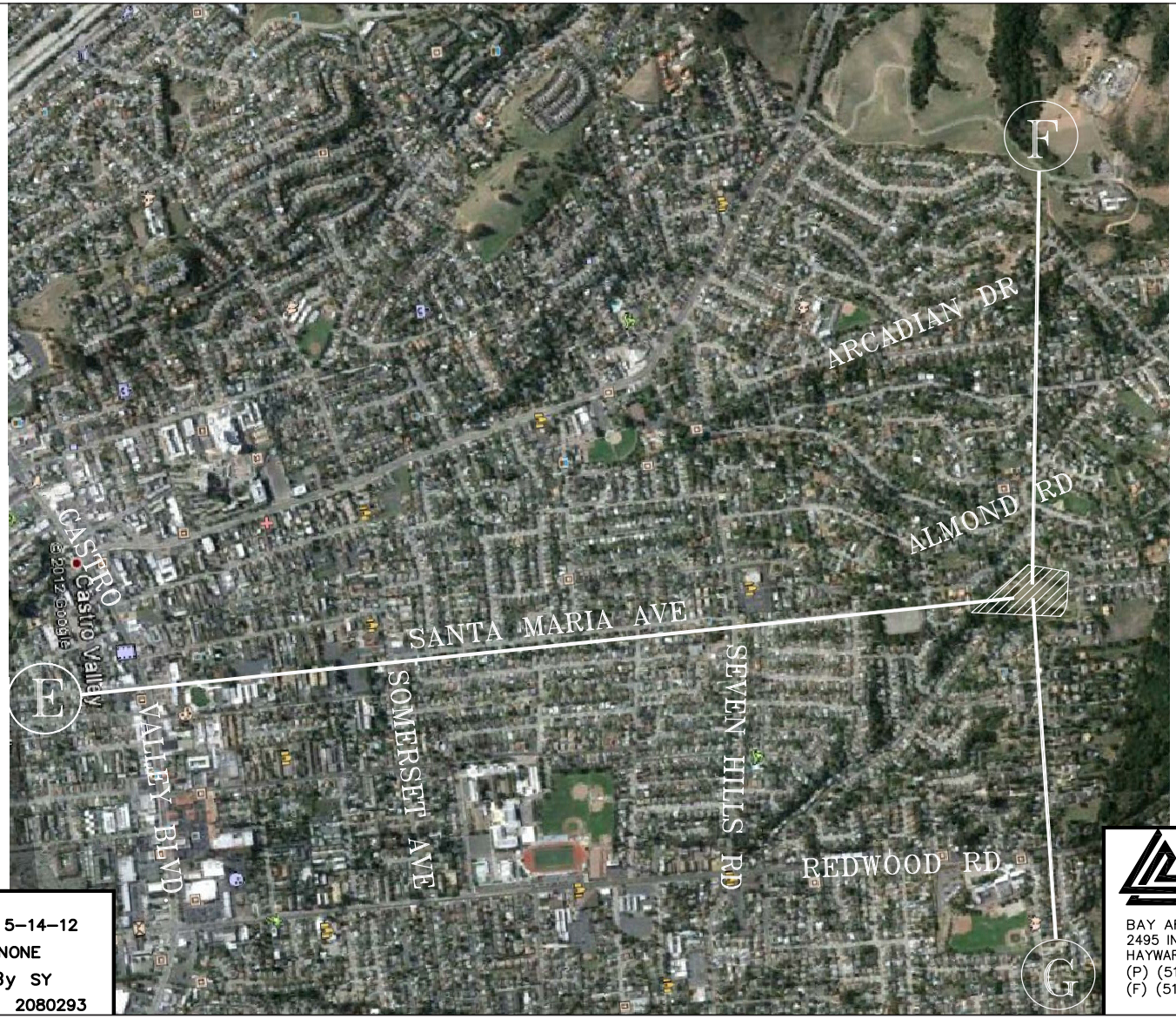


Figure 10c: Cross-Section Views C & D



SITE SECTIONS EXHIBIT

Date 5-14-12
Scale NONE
Drawn By SY
Job No. 2080293

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Figure 11a: Key to Cross-Section Views E-G

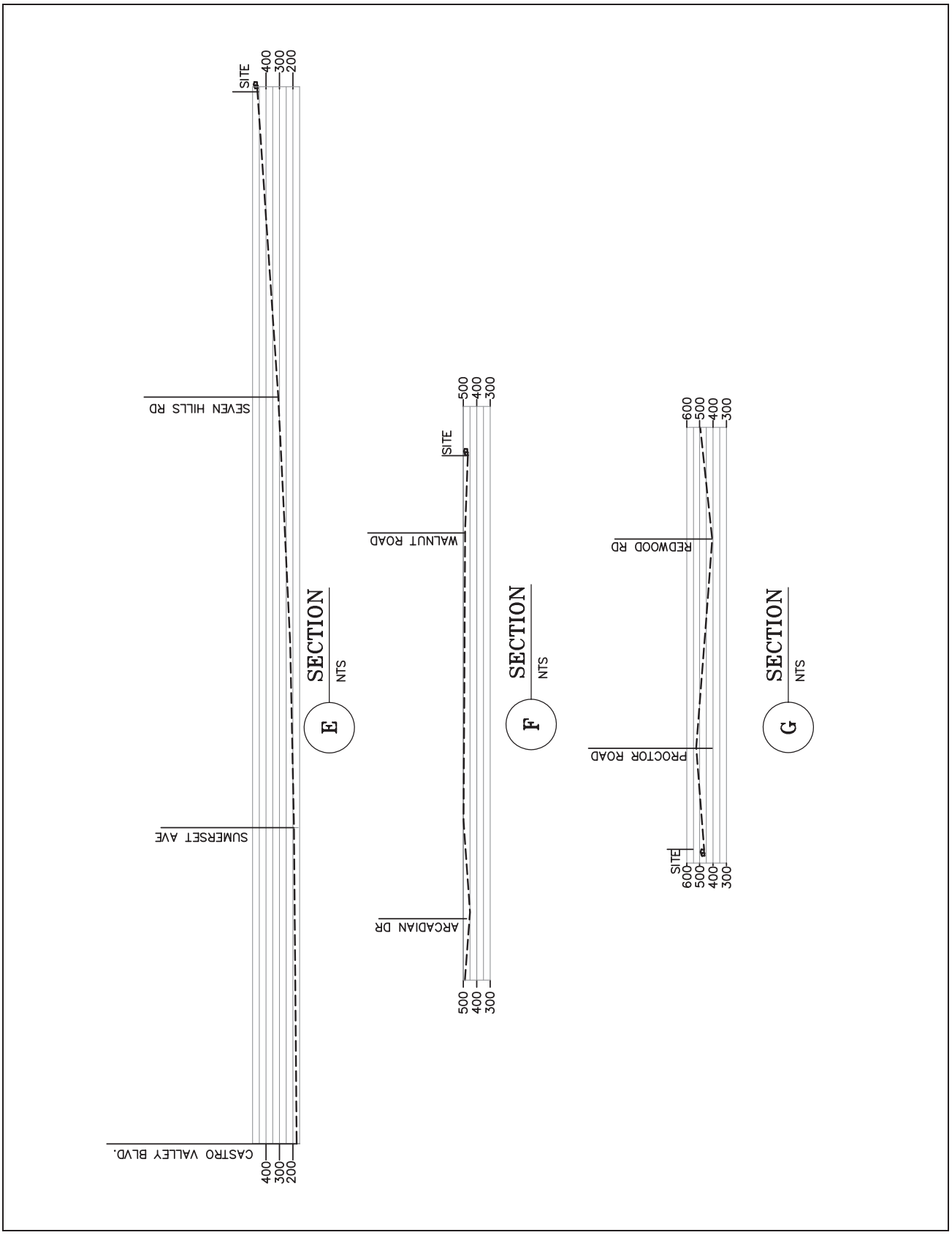

Figure 11b: Cross-Section Views E, F & G

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES. Would the project:				
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 nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

SETTING

While the County of Alameda contains abundant agricultural resources, the unincorporated section of Castro Valley does not possess active agricultural lands. During the building boom that followed World War II and up until the 1970's, most of Castro Valley's 19th century structures and some of those built in the first half of the 20th century were demolished as the area changed from an agriculture-based economy to a suburban bedroom community (Alameda County 2012). The hill areas remain accessible for livestock grazing on privately owned lands and in areas of the adjacent East Bay Regional Park District (EBRPD). The park district maintains the open space lands surrounding Lake Chabot to the north of the proposed Project site.

This part of Alameda County evolved in the post WWII years from a rural agricultural community to primarily suburban density residential development. Residential development became most pronounced beginning in the mid-1950s. Hillside farms and grazing operations have been replaced with residential and related land uses and there remain no agricultural or forest resources, including prime, unique or other farmland of statewide importance. The evolution of the area from agriculture to suburban residential development can be seen in the series of historic topographic maps that date from 1899 and aerial photographs that date from 1939 (**Appendix A**).

Significance Criteria: The Project would have a significant environmental impact if it would result in the conversion of farmland to non-agricultural use, conflict with current zoning for agricultural or forest use or the provisions of a current Williamson Act contract, result in the loss of forest land or involve any environmental changes that could result in the conversion of farmland currently in agricultural uses to non-agricultural uses or conversion of forest land to non-forest use.

a-e) Forests, Farmland, and Williamson Act Contracts

No portion of the Project site is designated agricultural land, forest land or timberland, nor is it considered prime farmland or farmland of statewide importance or zoned for agricultural uses. No land on the Project site is under a Williamson Act contract. All surrounding properties are already developed with single family homes, vacant lots awaiting construction of single family homes in approved subdivisions, or parcels awaiting future subdivision for residential development at some time in the future. The proposed use of the property as a subdivision for 23 single family homes would have ***no impact*** on agricultural and forest resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

SETTING

Climate and Air Quality Conditions

The Project site is located in the foothills of Castro Valley east of the San Francisco Bay Area. Atmospheric conditions, physical features, and land use collectively contribute to the ambient air quality in Alameda County in the east bay area. The climate is usually controlled by marine air coming across the bay from the Pacific Ocean. During the day, especially on summer afternoons, the prevailing wind flows from the north or northwest. In winter, wind speeds are lower, and wind may flow in from the northerly or easterly directions when weather is fair, but storms often bring southerly winds. Wind speeds in the area are generally moderate, with an annual average speed of about 5 mph, although summer afternoon wind speed can average 12 mph or more (at Oakland International Airport). Highest wind speeds occur during afternoons in late spring and summer. The weather is generally characterized by mild winters and cool summers near the bay.

Sensitive Receptors

Some groups of people are more affected by air pollution than others. Children, elderly and people with respiratory disease or chronic health problems are typically more sensitive to air pollution. The land uses associated with possible sensitive receptors include schools, hospitals, playgrounds, retirement homes, child-care centers, convalescent homes, medical clinics and residences. The area surrounding the Project site includes primarily residential homes.

Air Quality Standards for Criteria Pollutants

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. The criteria air pollutants of concern in projects of this type include ozone precursors which include nitrous oxide (NO_x) and Reactive Organic Gasses (ROG), carbon monoxide (CO), nitrogen dioxide (NO_2), and suspended particulate matter (PM_{10} and$PM_{2.5}$).

Besides the "criteria" air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs) under the California Clean Air Act. These contaminants tend to be localized and are found in relatively low concentrations in ambient air. However, they can result in adverse chronic health effects if exposure to low concentrations occurs for long periods. They are regulated at the local, state, and federal level. Particulate matter from diesel exhaust is the predominant TAC in urban air.

State of California and Federal Air Quality Standards

Both the California Air Resource Board and the U.S. Environmental Protection Agency have established ambient air quality standards for common pollutants, including ozone, CO, NO_2, PM_{10} and $PM_{2.5}$. These ambient air quality standards represent safe levels that avoid specific adverse health effects associated with each pollutant. For some of these pollutants, notably ozone and PM_{10}, the State standards are more stringent than the national standards.

In 1988, California passed the California Clean Air Act (CCAA, California Health and Safety Code § 39600 *et seq.*). Under the CCAA, the Bay Area Air Basin is required to have a Clean Air Plan (CAP) to achieve and maintain ozone standards.

Bay Area Air Quality Management District

The Castro Valley area of unincorporated Alameda County is located within the nine county San Francisco Bay Area Air Basin and therefore within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD enforces rules and regulations regarding air pollution sources and is the primary agency preparing the regional air quality plans mandated under state and federal law.

According to the standards of the federal Clean Air Act, the Bay Area is in attainment with all ambient air quality standards except for state and national ozone standards and national particulate matter ambient air quality standards. The nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. 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.

BAAQMD also provides a document titled *California Environmental Quality Act Air Quality Guidelines* ("Guidelines"), which provides guidance for consideration by lead agencies, consultants, and other parties evaluating air quality impacts in the San Francisco Bay Area Air Basin conducted pursuant to CEQA. The document provides guidance on evaluating air quality impacts of development projects and local plans, determining whether an impact is significant, and mitigating significant air quality impacts. BAAQMD's current CEQA Guidelines including thresholds of significance were

adopted on June 2, 2010, with the latest revisions to the BAAQMD Guidelines distributed in May 2011; however, due to a court judgment issued on March 5, 2012, the District recommends reliance on the 1999 Thresholds of Significance at this time.

Impacts

a) Conflict with Air Quality Plan

> *Significance Criteria*: The Project would be considered to have a significant impact if it were to be in conflict with the *Clean Air Plan.*

The Project site is subject to the Bay Area Clean Air Plan (CAP), 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, but also includes other elements. The latest update to the plan, which was adopted in September 2010, is called the Bay Area 2010 Clean Air Plan. The plan serves the following purposes:

a) Update the recent Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone;

b) Provide a control strategy to reduce ozone, particulate matter (PM), TACs, and greenhouse gases in a single, integrated plan;

c) Review progress in improving air quality in recent years; and

d) Establish emission control measures to be adopted or implemented in the 2010-2012 timeframe.

BAAQMD recommends thresholds for local plans, but not for project-level analysis. A plan would be judged to conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the growth assumptions of the CAP of population, employment or regional growth in Vehicle Miles Traveled. The subject Project is a project, not a plan. However, the Project is in an area designated by the Fairview Area Specific Plan for population growth and is consistent with the growth assumptions of that plan (see the discussion under Population and Housing for additional information). The Project would increase residents and trips and therefore contribute to regional air emissions, but this growth is consistent with the CAP assumptions and is therefore considered a ***less than significant*** impact with respect to conflict with an air quality plan.

b) Air Quality Standards

Significance Criteria: The Project would have a significant environmental impact if it would exceed BAAQMD's emission rate thresholds of any criteria pollutant.[3]

Project-related air quality impacts fall into two categories: short-term impacts that would occur during construction of the Project and long-term impacts due to Project operation. Each is discussed separately below.

Project Construction

Project construction would generate emissions of ROG, NO_x, and particulate matter (PM) from worker commute trips, construction equipment, and soil disturbance. Construction emissions are described as "short term" or temporary in duration, but have the potential to cause a significant air quality impact, especially in the case of PM_{10}. Fugitive dust emissions are associated primarily with site preparation and vary as a function of such parameters as soil silt content, soil moisture, wind speed, and acreage of disturbance. Project construction is expected to last six months as a conservative estimate, with the potential for the most construction emissions towards the beginning of construction at the time of initial site preparation (e.g., grading and grubbing). Project construction emissions were calculated using the URBEMIS2007 (version 9.2.4) program assuming a five-month construction process and are outlined in **Table III-1** and **Appendix C**. Note that even with unmitigated conditions, the project construction emissions are very low and are less than significant.

Construction-Period Criteria Pollutants

Impact Air-1: Construction-Period Dust and Emissions. Construction of the Project would result in temporary emissions of dust and exhaust emissions. While these emissions are below applicable thresholds of significance, without appropriate measures to control these emissions, these impacts would be considered ***significant.***

The 1999 BAAQMD did not establish air emissions thresholds associated with construction projects. Construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. Fine particulate matter (PM_{10}) is the pollutant of greatest concern with respect to construction activities. However, BAAQMD recommends implementation of construction mitigation measures to reduce construction-related emissions for all projects, regardless of the significance level of construction-period impacts. The District has identified a set of feasible PM_{10} control measures for construction activities.[4] These basic measures are included in Mitigation Measure Air-1, below and would further reduce construction period criteria pollutant impacts.

Mitigation Air-1: Basic Construction Management Practices. The Project shall demonstrate compliance with all applicable regulations and operating procedures prior to issuance of building or grading permits, including implementation of the following Basic Construction Mitigation Measures recommended by BAAQMD:

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[3] The BAAQMD CEQA Guidelines updated in June 2010 included reference to thresholds of significance and were further updated in May 2011. On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted the Thresholds. (http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx)

[4] BAAQMD CEQA Guidelines, 1999, Table 2. Feasible Control Measures for Construction Emissions of PM_{10}.

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. A rocked construction entrance using a minimum 8-inch thick and 12-foot wide by 100-foot long barrier shall be provided during construction as required per County and Reference 1 and 2 standards at the end of pavement.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. 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.

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

e. 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.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five (5) minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g. 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.

h. 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.

Enhanced Control Measures: In addition the following measures will apply as appropriate.

- All "Basic" control measures listed above.

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).

- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)

- Limit traffic speeds on unpaved roads to 15 mph.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

- Replant vegetation in disturbed areas as quickly as possible.

Optional Control Measures: The following optional measures shall be employed as required and/or appropriate.

- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.

- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas.

- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

- Limit the area subject to excavation, grading and other construction activity at any one time.

Resulting Level of Significance

Implementation of the above mitigation measure would reduce this impact to a level of ***less-than significant***.

TABLE III-1
EMISSIONS SUMMARY OF UNMITIGATED WINTER CONSTRUCTION ACTIVITIES

Pollutant	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Grading (lbs/day)	3.57	29.73	15.64	0	30.70	7.47	2,349.16
Construction (lbs/day)	4.27	19.05	16.93	0	1.38	1.26	2.062.08
BAAQMD Thresholds of Significance (lbs/day)	80	80	N/A	N/A	80	N/A	N/A

Source: URBEMIS 2007 v. 9.2.4 Outputs

Operational Emissions

As it relates to operational pollutants, this table includes a screening level of 23 single family dwelling units. According to BAAQMD, if a project meets the screening criterion, it would not result in the generation of pollutants exceeding the thresholds of significance.

The proposed project would increase vehicle trips by approximately 46 vehicles during an average weekday, resulting in a net increase in mobile source emissions. Long term operational emissions of ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ would be expected from vehicle emissions and the fugitive dust related to vehicular travel.

Long-term operational emissions were calculated using the URBEMIS2007 (version 9.2.4) software, based on trip generation rates obtained from the traffic analysis for the proposed project. Long-term operational emissions are summarized in **Table III-2** and **Appendix C**. Note that even with

unmitigated conditions, the project construction emissions are very low and are ***less than significant***.

Maximum daily emissions outlined in **Table III-2** would not exceed BAAQMD significance thresholds for ROG, NOx, and PM_{10}. The BAAQMD has not adopted a recommended significance threshold for $PM_{2.5}$. Because emissions associated with the long-term operation of the proposed project would not exceed BAAQMD significance thresholds, long-term operational air quality impacts would be considered ***less than significant***.

TABLE III-2
EMISSIONS SUMMARY OF UNMITIGATED WINTER AND SUMMER OPERATIONAL ACTIVITIES

Pollutant	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2
Total Winter Emissions (lbs/day)	1.39	2.26	16.03	0.01	2.82	0.54	1,407.14
Total Summer Emissions (lbs/day)	2.87	1.84	15.29	0.02	2.82	0.54	2,006.50
Thresholds of Significance (lbs/day)	80	80	N/A	N/A	80	N/A	N/A

Source: URBEMIS 2007 v. 9.2.4 Outputs

Additionally, BAAQMD presents as screening criteria for carbon monoxide impacts traffic-based criteria. As operation of the proposed Project would not significantly impact traffic levels, the Project would be below carbon monoxide threshold levels (see the Transportation section for additional details).

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

b) Cumulatively Considerable Net Increase

> *Significance Criteria*: The Project would have a significant environmental impact if it would contain any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard

The attainment status for the Basin is summarized in **Table III-3**. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation(s) was caused by an exceptional event, as defined in the criteria.

Following years of declining emissions and ambient concentrations of ozone, the Bay Area in 1995 was re-designated as an attainment area for the national 1-hour ozone standard. However, unusual heat waves triggered new exceedances of the national ozone standard during the summers of 1995 and 1996. As a result, in 1998 US EPA re-designated the region back into nonattainment status for the national 1-hour ozone standard. The region also periodically exceeds State ambient air quality standards for ozone and particulate matter. The State standards for these pollutants are more stringent than the national standards. Exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights (for particulate matter) or hot, sunny summer afternoons (for ozone). As noted in **Table III-3**, the Basin is currently designated nonattainment for the State and National ozone standards, as well as

the State PM_{10} and $PM_{2.5}$ standards. The Basin is designated either attainment or unclassified for the remaining federal and state ambient air quality standards (BAAQMD 2012).

As discussed in IIIb) of this section, the proposed project would not substantially contribute to existing exceedances of federal and State standards for ozone, nor for PM_{10} and $PM_{2.5}$ exceedances of State standards. The County has recently undertaken a Greenhouse Gas Inventory and has completed a Countywide Climate Action Plan. Further discussion of Greenhouse Gases is located in section IV.

TABLE III-3
FEDERAL AND STATE ATTAINMENT STATUS FOR SAN FRANCISCO BAY AREA AIR BASIN

Pollutants	Federal Classification	State Classification
Ozone	Non-attainment	Non-attainment
$PM_{2.5}$	Attainment	Non-attainment
PM_{10}	Unclassified	Non-attainment
CO	Attainment	Attainment
NO_2	Unclassified	Attainment
SO_2	Attainment	Attainment

Notes: CO = carbon monoxide; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; $PM_{2.5}$ = particulate matter less than 2.5 micrograms in diameter; PM_{10} = particulate matter less than 10 micrograms in diameter.
Source: BAAQMD 2012.

d) Sensitive Receptors

Significance Criteria: For the purpose of assessing impacts of a proposed Project on exposure of sensitive receptors to risks and hazards, the threshold of significance is exceeded when the project-specific cancer risk exceeds 10 in one million or the non-cancer risk exceeds a Hazard Index of 1.0 and ambient $PM_{2.5}$ increases greater than 0.3 micrograms per meter squared annual average. Examples of sensitive receptors are places where people live, play or convalesce and include schools, hospitals, residential areas and recreation facilities.

Toxic Air Contaminants (TACs) are a defined set of airborne pollutants that may pose a present or potential hazard to human health (cancers or acute or chronic non-cancerous effects). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air, and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). The California Air Resource Board (CARB) reports that recent air pollution studies have shown an association that diesel exhaust and other cancer causing toxic air contaminants emitted from vehicles are responsible for much of the overall cancer risk from TACs in California. Particulate matter emitted from diesel-fueled engines (diesel particulate matter [DPM]) was found to comprise much of that risk. In August, 1998, CARB formally identified DPM as a TAC. Fine particulate matter ($PM_{2.5}$), a component of DPM as well as originating from other sources, is considered by the Bay Area Air Quality Management District (BAAQMD) to be the biggest contributor to public health impacts in this air basin.

Construction activity that uses traditional diesel-powered equipment such as bulldozers, generators and delivery trucks results in the emission of DPM, including fine particulate matter. However, construction activities do not require a permit from BAAQMD as an emissions source. Due to the variable nature of construction activity, the generation of Toxic Air Contaminant (TAC) emissions would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations.

The modeling of carcinogenic or chronic health risks is based upon long-term exposure and becomes inaccurate when used for shorter durations. The intended shortest duration for these modeling techniques is nine years. However, in reality, the local air districts in California are frequently assessing risk from short term activities related to construction, mitigation of contaminated soils, and so forth. BAAQMD has adopted the recommendations of the California Office of Environmental Health Hazard Assessment (OEHHA) and recommends use of the models for exposure periods of 2 years or more.

BAAQMD recommends assessment of community risks and hazards within a 1,000 foot radius of a project boundary. Residences, which are considered a sensitive use, are located within this distance from portions of the Project site. However, the health risk models and methods are not considered accurate for such short durations as the approximately 10-month construction-period for this Project. Given that the exposure duration would be shorter than that able to be accurately modeled, it can reasonably be assumed that the potential health risk from construction-period emissions would be ***less than significant***.

Residential uses, such as those proposed under the Project would not be considered to have substantial emissions of TACs during operation. However, the proposed new residential units would be considered new sensitive receptors. BAAQMD provides map-based Highway Screening and Stationary Source Screening Analysis Tools, which show that the Project site is not within 1,000 feet of potential sources of significant health risks.

Therefore, the health risk at this location both on nearby existing residences and the proposed residences would be ***less than significant***.

e) Objectionable Odors.

> *Significance Criteria:* The Project would result in a significant environmental impact if it were to create objectionable odors affecting a substantial number of people.

Residential uses are not considered a significant source of objectionable odors during the operational period.

During construction diesel-powered vehicles and equipment would create odors that some may find objectionable. 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 is considered ***less than significant.***

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
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 U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, 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?	☐	☐	☐	☒

INTRODUCTION AND BACKGROUND

A biological resources survey was conducted for the Project in May 2010 by ECORP Consulting, Inc.[5] The purpose of the study was to identify sensitive plant and wildlife species, sensitive habitats and potential biological constraints, including wetlands. The ECORP report is based, in part, on reference material and information about the habitats potentially existing on the Project site obtained from the California Natural Diversity Database (CNDDB 2010) and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California regarding species of plants and animals that could potentially utilize the described habitats. The study area surveyed in the ECORP report consisted of both the 5.85-acre Project site and the adjacent properties not included in the proposed Project.

[5] ECORP Consulting, Inc. *4659 Proctor Road, Castro Valley, California – Biological Reconnaissance Survey*, May 2010.

A field reconnaissance investigation was conducted on May 20, 2010. A follow-up site visit was made by another ECORP biologist (Daria Snider), on May 10, 2012. The purpose of the follow-up visit by Snider was to further assess the presence or absence of wetlands. Information provided from the ECORP report, as supplemented by Snider's site visit in May 2012 serve as the basis for the following evaluation of potential impacts to biological resources. The ECORP Biological Assessment Memorandum and the ECORP Draft Wetlands Memorandum is included as **Appendix B**.

EXISTING SETTING

Special-status species are plants and animals that are legally protected under the California and/or federal Endangered Species Acts or other regulations, as well as other species that are considered rare enough by the scientific community to warrant special considerations. The primary information source on the distribution of special-status species in California is the California Natural Diversity Data Base (CNDDB) inventory, which is maintained by the Natural Heritage Division of the California Department of Fish and Game (CDFG). CNDDB records (CNDDB 2010) indicate that special-status plants and animals occur in the general vicinity of the project (**Table IV.1**). These species occur within such habitat types as freshwater wetlands and ponds; grassland, woodland, and shrub vegetation cover; streams and rivers; or rock outcrops. Some of these habitat types do not occur on the Proctor Road Project site.

The Project site is a vacant property that has not previously been developed, but has been regularly disked. The site is covered with non-native grasses and other vegetation. Cattle and horses used both for grazing. The ECORP report stated that based on an initial reconnaissance-level survey, the Project site contained some areas with positive indications of wetland soils, hydrology and vegetation. Some areas of standing water and a drainage ditch were observed on the site at the time of the mid-May survey that exhibited criteria used by the ACOE to determine if there are water bodies or wetlands that fall under their jurisdiction as "waters of the United States" (see the following discussion of ACOE regulations and requirements).

Specifically, ECORP staff observed potential seasonal wetlands occurring within the overall Project site boundaries in a slight depression where water ponds during storm events and forms wetland conditions, including one located near the southern boundary (within proposed Lot A and retention pond).

When Peter Balfour visited the site in May 2010, he did not identify any wetlands on the site. However, Balfour did note a "low lying area is relatively wet compared with other areas of the site and it is clearly evident that the site drains from this point." Based on the observations during the more recent site visit in May 2012 the biologist noted the presence of wetland indicators (plants, soil and hydrology) located near the southern edge of the site. As stated in the letter report dated May 10, 2012, the ECORP wetland scientist notes that there is only one potential wetland on the overall Project site that being the depression located on the flat portion of Parcel "A" as indicated in **Figure IV-1**.

Several special-status bird and raptor species were also determined to have a potential to forage and nest near the site, which indicated the necessity of conducting a nesting bird survey no less than 72 hours prior to grading or clearing activities to determine if protected bird species are absent or present on the site. Specific protocols are then required to avoid direct loss of species. Alameda whipsnake (*Masticophis lateralis),* a federal and state threatened species, is shown to have potential habitat on the eastern portion of the Project site, however, the species was not observed during the field visit and potential presence is unlikely due to the past history of ground disturbance from disking and isolation from surrounding areas as the site is surrounded by residential development. The potential for burrowing owls to be present on the overall Project vicinity was deemed likely, however burrowing owls are not expected with the Project site proper

due to the lack of observed small mammal burrows and other secondary evidence such as regular fire suppression management practices.

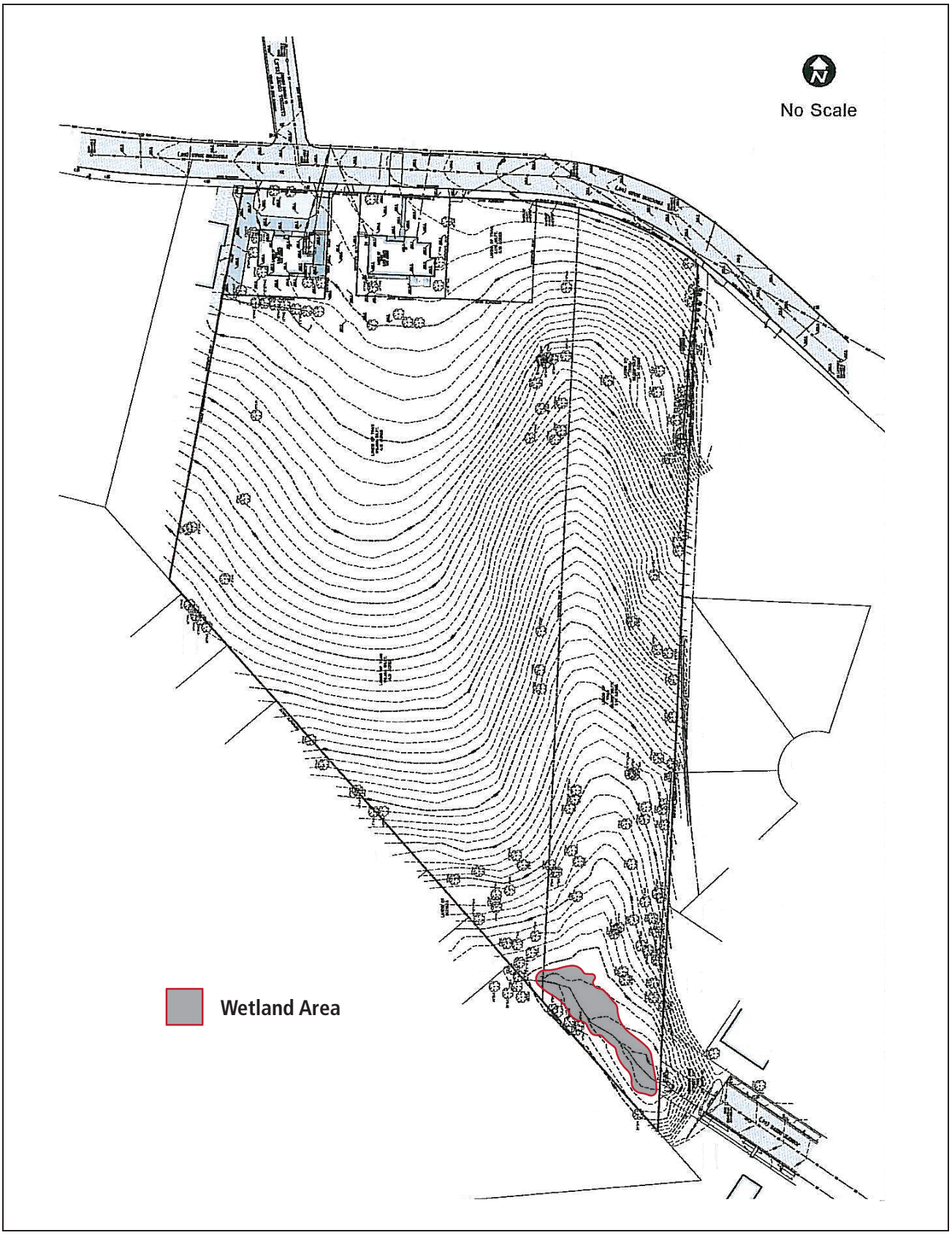

Figure IV-1: Potential Wetland Areas and Drainage Feature

TABLE IV-1
SPECIAL-STATUS SPECIES OCCURRENCES WITHIN FIVE (5) MILES OF THE PROJECT STUDY AREA

Species	Legal Status [1] Federal/State/CNPS	Characteristic Habitat	Potential Occurrence Within the Project Site
Vascular Plants			
Astragalus tener var. tener/ alkali milk-vetch	—/—/1B	Alkali playa, valley and foothill grassland and vernal pools.	Habitat does not occur on the site. The species has a low probability of occurrence.
*Balsamorhiza macrolepis var. macrolepis/*Big-scaled Balsamroot	—/—/1B	Valley needlegrass grassland, woodland, sometimes on serpentine	Habitat does occur on the site. No serpentine areas occur on site. The species has a low probability of occurrence.
Centromadia parryi ssp. Congdonii/Congdon's tarplant	—/—/1B	Alkaline valley and foothill grassland.	Habitat does not occur on the site. Alkaline areas do not occur on site. The species has a low probability of occurrence given past disturbances and fire suppression.
Fritillaria liliaceae/ Fragrant fritillary	—/—/1B	Serpentine areas in Coastal Prairie, Valley Grassland, Northern Coastal Scrub, wetland-riparian	Habitat does not occur on the site. No serpentine areas occur on site. The species has a low probability of occurrence.
Helianthella castanea/ Diablo helianthella	—/—/1B	Riparian in Chaparral, Foothill Woodland, Northern Coastal Scrub, Valley Grassland.	Potential habitat does occur on the site. The species has a low probability of occurrence given past disturbances and fire suppression activities.
Holocarpha macradenia/ Santa Cruz tarplant	FT/CT/1B	Coastal Prairie, Valley Grassland on coastal terraces	Suitable habitat not present. Species not expected.
Monolopia gracilens/ Woodland woollythreads	—/—/1B	Serpentine soils in Mixed Evergreen Forest, Redwood Forest, Chaparral	Habitat does not occur on the site. No serpentine areas occur on site. The species has a low probability of occurrence given past disturbances and fire suppression activities.
Plagiobothrys glaber/ Hairless popcorn flower	--/--/List 1A (Presumed Extinct in California)	Meadows and seeps, marshes and swamps	Habitat does occur on the site. The species has a low probability of occurrence.
Streptanthus albidus ssp. Peramoenus/ most beautiful jewel-flower	—/—/1B	Serpentine soils in Chaparral, Valley Grassland, Foothill Woodland	Habitat does occur on the site. No serpentine areas occur on site. The species has a low probability of occurrence given past disturbances and fire suppression activities.
*Valley Needlegrass Grassland/*Valley Needlegrass Grassland	—/—/—	Occurs on fine textured soils, often near oak woodland communities, and typically contains approximately 20- to 50-percent cover by purple needlegrass (*Nassella pulchra)* (Holland 1986).	Property historically disturbed. Community does not occur on the site.
Animals			
Antrozous pallidus / Pallid bat	—/SC/—	Roosts in caves, crevices, unused man-made structures, rock outcrops, and woodland near open grasslands for foraging.	Unused structures in surrounding area may provide suitable habitat.
Aquila chrysaetos/ Golden eagle (nesting and wintering)	—/CSC/—	Rolling foothills, grassland and oak interface, cliff- walled or large	Species is not likely to nest in the area. Habitat is not present

		trees in open areas provide nesting habitat.	
*Ardea herodias/*great blue heron (rookery)	—/—/—	Rookery sites (marsh, riparian)	Suitable habitat does not occur on site. Nesting habitat is similarly absent.
Athene cunicularia/ burrowing owl	—/SC/—	Open, dry annual or perennial grasslands, deserts, and scrublands with low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Marginal habitat present due to regular fire suppression activities. No evidence of species observed during field surveys.
Dendroica petechial brewsteri/ yellow warbler	—/SC/—	Riparian	May occur as migrant. Not expected to nest on site.
Emys marmorata/ western pond turtle	—/SC/—	Creeks, ponds, rivers	Suitable habitat is not present.
*Eumops perotis californicus/*western mastiff bat	—/SC/—	Mines, rocky ledges, structures, vertical cliff faces	Suitable habitat lacking.
Euphydryas editha hayensis/ Bay checkerspot butterfly	FT/—/—	Areas supporting dwarf plantain plant or less frequently the owl's clover or paintbrush	Suitable habitat does not occur on site.
Falco mexicanus/ prairie falcon	—/—/—	Grassland	No suitable habitat.
Lasiurus cinereus/ hoary bat	—/SC/—	Dense foliage of medium to large trees	Potential habitat in foliage of large trees on site.
Masticophis lateralis euryxanthus/ Alameda whipsnake	FT/CT/—	Valley-foothill hardwood habitat on south-facing slopes and ravines, and rock outcrops, where shrubs (sage scrub) form a vegetative mosaic with oak trees and grasses.	Potential habitat does occur within eastern portion of the site. The species was not observed during field visits. The species has a low probability of occurrence given past history of disturbance and isolation from surrounding areas (i.e., surrounded by residential development). Property does not occur within critical habitat.
Melospiza melodia pusillula / Alameda song sparrow	—/SC/—	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits *Salicornia* marshes; nests low in *Grindelia* bushes (high enough to escape high tides) and in *Salicornia.*	Suitable habitat is not present.
Microcina lumi/ Lum's micro-blind harvestman	—/—/—	Moist serpentine rocky areas.	No suitable habitat occurs on site.
*Neotoma fuscipes annectens/*San Francisco dusky-footed woodrat	—/SC/—	Riparian areas.	Riparian areas are absent. Not expected to occur due to land uses/disturbances and isolation from surrounding areas (i.e., surrounded by residential development).
Rana draytonii/ California red-legged frog	FT/SC/—	Streams, marshes, ponds. Lowlands and foothills in a variety of aquatic, riparian, and upland environments. Breeding adults are often associated with areas of dense, shrubby riparian vegetation and deep (greater than 0.7 meter [2 feet]) still or slow moving water. Requires 11-20 weeks of permanent water for larval development.	Suitable breeding habitat is absent and the property is surrounded by developed residential areas. Species not expected to occur on site.

Reithrodontomys raviventris/salt-marsh harvest mouse	FT/CT/—	Primarily inhabits pickleweed saline emergent wetlands of the San Francisco Bay and its tributaries.	No suitable habitat occurs on site.

[1]Status explanations: ***Federal*** *-- no designation.* ***State*** *SC = considered a Species of Special Concern by CDFG. -- no designation.* ***California Native Plant Society*** *1B = List 1B species: rare, threatened, or endangered in California and elsewhere.*

REGULATORY CONSIDERATIONS

This section provides an overview of the laws and regulations that influence biological resources. Many of these regulations would not apply to the Project if sensitive biological resources are avoided.

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act (FESA). Section 9 of the Act protects listed species from *take*, which is broadly defined as actions to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." FESA protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the United States Fish and Wildlife Service (USFWS), which administers the FESA for all terrestrial species. The first pathway, Section 10(a) incidental take permit, applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the FESA. The second pathway, Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

The Migratory Bird Treaty Act (MBTA)

The MBTA implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the Fish and Game Code (FGC).

All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC], § 703 et seq.) and California statute (FGC § 3503.5). The golden eagle and bald eagle are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC, § 669 et seq.).

Section 401 of the Clean Water Act (CWA)

The CWA requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The appropriate Regional Water Quality Control Board regulates section 401 requirements.

Executive Order 13112 – Invasive Species

EO 13112 directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. The order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore

native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species. As part of the proposed action, the USFWS and U.S. Army Corps of Engineers (USACE) would issue permits and therefore would be responsible for ensuring that the proposed action complies with Executive Order 13112 and does not contribute to the spread of invasive species.

Section 404 of the Clean Water Act

The U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA). Waters of the United States include wetlands, lakes, and rivers, streams, and their tributaries. Wetlands that fall under the jurisdiction of the ACOE (referred to as "jurisdictional wetlands") are defined as areas "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" Areas not considered to be jurisdictional waters include, for example, non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated or created bodies such as small ponds, lakes or swimming pools, and water-filled depressions. (33 CFR 328.3; 40 CFR 230.3).

Project proponents must obtain a permit from ACOE for all discharges of fill material into waters of the United States, including jurisdictional wetlands, before proceeding with a proposed action. If wetlands are jurisdictional and could be filled as part of the Project, ACOE may issue either an individual permit or general permit. Individual permits are prepared on a project-specific basis for projects that are expected to have adverse effects on the aquatic environment. If federally listed species are associated with the wetlands, ACOE is more likely to require an individual permit. General permits are prior-authorized permits issued to cover similar activities that are expected to cause only minimal individual and cumulative adverse environmental effects.

A Section 404 permit may not be required if the Project avoids the discharge of any fill material into waters of the United States, including wetlands. If the Project cannot be designed to avoid the discharge of fill or excavating in waters of the United States, including wetlands, a Section 404 permit must be obtained.

The following conditions would need to be met as part of the Section 404 permitting process:

- Procurement of Section 401 water quality certification from the Regional Water Quality Control Board;

- Compliance with the federal ESA, involving consultation with USFWS if the Project is likely to jeopardize the continued existence of a threatened or endangered species or its critical habitat; and

- Compliance with the requirements of Section 106 of the Natural Historic Preservation Act.

California Department of Fish and Game (CDFG)

Under the **California Endangered Species Act** (CESA), CDFG has the responsibility for maintaining a list of endangered and threatened species (Fish and Game Code - FGC 2070). Sections 2050 through 2098 of the FGC outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the FGC prohibits the taking of plants and animals listed under the CESA. Section 2081 established an incidental take permit program for state-listed species. CDFG

maintains a list of "candidate species" which are species that CDFG formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the **Native Plant Protection Act of 1977** (FGC Section 1900 et seq.) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by CDFG). An exception to this prohibition in the Act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFG and give that state agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed (FGC, Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way"). Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

CDFG also maintains lists of "species of special concern" which serve as species "watch lists." The CDFG has also identified many "Species of Special Concern." Species with this status have limited distribution or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and thereby warrant specific protection measures.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. The CEQA Guidelines Section 15065 ("Mandatory Findings of Significance") requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 ("Rare or Endangered Species") provides for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society's (CNPS) Lists 1A, 1B, and 2 would typically be considered under CEQA.

Sections 3500 to 5500 of the FGC outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these Sections may not be taken or possessed at any time. The CDFG cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Section 3503.5 of the FGC it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, CDFG encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under FGC Section 206.591. Authorization from CDFG would be in the form of an Incidental Take Permit.

California Regional Water Quality Control Board

The San Francisco Bay Water Quality Control Board (Water Board) has regulatory authority over wetlands and water ways under both the Federal Clean Water Act (CWA) and the State of California's Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the Water Board has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications under Section 401 of the CWA which are issued in conjunction with permits issued by the Army Corps of Engineers (ACOE) under Section 404 of the CWA. When the Water Board issues Section 401 certifications, it simultaneously issues general Waste Discharge Requirements for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the ACOE (e.g., isolated wetlands, vernal pools, seasonal streams, intermittent streams, channels that lack a nexus to navigable waters, or stream banks above the ordinary high water mark) are regulated by the Water Board under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of ACOE jurisdiction may require the issuance of either individual or general waste discharge requirements.

Applicable Local Laws, Regulations and Ordinances

Castro Valley General Plan (Update 2012) – Community Character and Design Element

Action 5.2-4: Alternative Standards for Environmentally Sensitive Areas. Require subdivisions to be designed to avoid areas that are environmentally sensitive, or have high fire hazards, steep slopes, natural vegetation, or mature trees.

Castro Valley General Plan (Update 2012) – Biological Resources Element

Goal: Protect Castro Valley's native wildlife through conservation and restoration of natural habitat.

Policy 7.1-3: Open Space Preservation. Preserve the undeveloped areas designated as open space within planned unit developments as permanent open space.

Policy 7.1-4: Open Space Objectives. Require that open space provided as part of a development project be designed to achieve multiple objectives, including but not limited to: recreation, scenic values, habitat protection, and public safety.

Action 7.1-1: Biological Resources Overlay Zone. Establish a biological resources overlay zone (BROZ) delineating, high, moderate, and low priority areas for habitat preservation, to ensure maximum protection of biological resources.

Action 7.1-6: Riparian Woodlands and Wetlands Mitigation. Require replacement mitigation of woodland and wetland habitat at a ratio to be determined by the value of the habitat to be lost. The County shall support the creation of wetland or other habitat mitigation banks.

In addition, to the goals, policies and action items listed above, the Castro Valley General Plan includes a table of listed species and associated vegetation found primarily within Castro Valley (see **Table 7.1 and Figure 7-1** CVGP) and a map of the Biological Resources Overlay Zone (see **Figure 7-2** CVGP). The Project site is considered to be a parcel with the BROZ and as such is specifically subject to the requirements of **Action 7.1-1**. The Project site is also within the potential habitat of the Alameda whipsnake as show in Figure 7-1 of the CVGP, however, as noted in the report by ECORP, there is a low probability of occurrence due to past history of site disturbance and habitat isolation.

IMPACTS

a/b) Special-Status Species and Riparian Habitat

Significance Criteria:

a) The Project would have a significant environmental impact if it were to 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) The Project would have a significant environmental impact it were to 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.

Although the Project site is located with an already developed residential area, special-status species have the potential to occur. Special-status species are those species listed as "threatened" or "endangered" by the Federal or State Endangered Species Acts. In addition, CEQA requires that impacts to "locally rare" species also be addressed. For the purposes of this analysis, a list of species of special concern with the potential to occur in the Project Area was identified based on listing in the following information resources:

- California Natural Diversity Database
- US Fish and Wildlife Service Database
- California Native Plant Society (CNPS) Ranking
- Table 7.1-1 of the Castro Valley General Plan

The research and site survey work completed by ECORP identified special-status plant and wildlife species that occur in the habitats found within the site boundaries. However, most of the plant and several of the animal species identified in the research require a specific habitat microclimate or other condition that was found not to occur within the site.

Plants

The Project site supports three habitat types, consisting of ruderal upland grassland dominated by non-native grasses, drainage and potential seasonal wetland. The grassland on the site is characterized by dominant grass and forb species such as wild oat, barley, rip gut brome and ryegrass. The entirety of the grassland areas on site have been mowed on a regular basis for the purposes of fire control.

The ECORP report includes a list of special-status plants with the potential to occur within or in the immediate vicinity of the site and identifies two that have the potential to occur on the site based on the presence of suitable habitats and soil types. These plants are the most beautiful jewel-flower and Diablo helianthella. The ECORPS report states that neither plant was observed during the May 2010 survey, which occurred during the blooming period and concluded that both plant species are presumed absent from the site (see **Table IV-1**).

Animals

Seeds and vegetation provided by the annual grassland habitat provide an abundance of foraging opportunities for a variety of animals. Common mammals that might be expected to occur in this habitat include western gray squirrel, black-tailed deer, black-tailed jackrabbit, striped skunk and opossum. Reptiles such as the gopher snake and common garter snake may be present.

With respect to special-status wildlife, ECORP's search and review of the CNDDB database revealed special-status species that could potentially occur in the non-native annual grassland habitat on the Project site, including specifically the California red-legged frog and the Alameda whipsnake. Despite occurrences of these species within the vicinity of the site within the last ten years, suitable habitat does not occur on the site to support these species. On the basis of this information, ECORP concluded that the California red-legged frog and the Alameda whipsnake are presumed absent from the site.

With respect to foraging or nesting raptors, such as the Cooper's hawk, sharp-shinned hawk, red-tailed hawk, red shouldered hawk, white-tailed kite, and American kestrel, no nests were observed during the May 2010 survey. Due to the lack of small mammal burrows on site, and the tall, dense vegetation that covers the site, the Project site is considered unsuitable habitat to support the burrowing owl; none were observed during the survey and this species is presumed absent from the site. Regarding special-status mammals, ECORP states that the property provides only marginally suitable foraging habitat for bat species and bat species are presumed absent from the site due to the lack of empty structures, recent occurrences and marginal foraging habitat. An occurrence of San Francisco wood rat, a California species of concern, is documented almost one mile to the southeast of the Project site. Given the absence of an established riparian area and the long-term presence of residential and feral cats (and non-native rodents) in the area, the presence of this species is not expected to occur at the Project site.

Plant and Animal Habitat

The ECORP report found that the Project site does provide suitable habitat types and soil conditions to support two special status plant species that have been found on nearby locations. These two plant species are Diablo helianthella and most beautiful jewel flower. Disturbance of the site has the potential to adversely affect or destroy these plants if present. A second site visit should be made during the blooming period (March/April – June) and prior to any disturbance of the site to validate that these two plant species are not present or, if such plants are found, to take appropriate measures to avoid or minimize impacts. These two plant species are ranked 1B by the California Native Plant Society (CNPS), a designation reflecting that CNPS considers these plants as rare, threatened or endangered and therefore they meet the criteria for CEQA Guidelines 15380 which would require mitigation to avoid or reduce impacts.

Impact Bio-1: **Potential Impact to Special-Status Plant Species.** Disturbance of the Project site for grading or construction activities has the potential to impact two special status plant species – *Diablo helianthella* and Most beautiful jewel flower, which are ranked 1B by CNPS. Adverse impacts to these plants, if present, are a ***potentially significant impact.***

Mitigation Bio-1: **Pre-Construction Survey for Plant Species.** During the months between March and June, and prior to the commencement of grading activities, the Project applicant's biologist shall conduct a survey to validate ECORP's negative finding for these plant species. If examples of these two plant species are not found, no further mitigation is required. If examples are found, impacts to the plants shall be avoided by (a) relocating the plants to

locations on the Project site that would not be disturbed by grading and construction activities; and (b) collecting seeds from the plants and planting the seeds elsewhere on the Project site.

Impact Bio-2: **Potential Impacts to Nesting Birds and Nesting Bird Habitat.** Proposed grading and construction activities on the Project site may result in the removal of vegetation that can serve as nesting habitat for birds such as migrating songbirds. Removal of vegetation could also directly destroy nests, eggs, and immature birds, if present. Adverse impacts to nesting bird habitat and nesting birds are a ***potentially significant impact.***

Mitigation Bio-2: **Pre-Construction Nesting Bird Surveys.** The Project Applicant's biologist shall prepare a nesting bird survey three days prior to the removal of vegetation and/or commencement of construction. The purpose of the survey is to determine the absence or presence of nesting bird species. Nesting bird surveys shall be performed prior to January to identify any potential nesting trees prior to the birds laying eggs. If the survey does not identify any nesting special-status bird species in the area to be disturbed by the construction activity, no further measures are required.

However, if nest sites or young are located, a no-disturbance buffer shall be established around the active nest. The biologist will establish a no-disturbance buffer of between 150 and 200 feet and the site protected until August 15 or until the young have fledged (typically 3 to 4 weeks).

Further, if nests are found, removal of on-site shrubs and trees should be avoided; if removal cannot be avoided, then the removal of this vegetation should occur outside of the breeding season, (i.e., not between the months of January and July).

Impact Bio-3. **Potential Stormwater Runoff Impacts to Aquatic Life and Wildlife Habitat.** Grading and excavation activities could expose soil to increased rates of erosion and stormwater runoff during construction periods, which could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. This would be a ***potentially significant impact.***

Mitigation Bio-3. **Stormwater Treatment Measures.** The Project sponsor shall comply with and implement **Mitigation Measure Geo-1,** which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and the use of best management practices (BMPs) such as hay bales, silt fencing, placement of straw mulch and hydroseeding of exposed soils. In addition, the Project sponsor shall follow all other details of the Erosion Control Plan prepared by Lea & Braze engineers and shown as ER-1 and ER-2 in the plan drawings.

RESULTING LEVEL OF SIGNIFICANCE

Implementation of **Mitigation Measures Bio-1 – Bio-3** would assure that potential impacts to special-status plant species, nesting birds and bird habitat, and aquatic life would be reduced to levels of ***less than significant.***

(c) Wetlands and Sensitive Natural Communities

Significance Criteria: The Project would have a significant environmental impact if it were to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

As noted above, the ECORP report identified one small area on the property as potential seasonal wetlands and a formal wetland delineation was prepared that determined an area of 0.111 acres as seasonal wetland (ECORP 2012). The draft wetland delineation has been submitted to the Army Corps of Engineers to confirm the presence and size of the wetlands. In light of this determination by ECORP, the project applicant has re-designed the proposed subdivision to avoid impact to the seasonal wetland by eliminating the original Lot 10 as a residential home and consolidating it with the original proposed Parcel A. The revised retention pond is on the site of the original Lot 10 and now on the a larger consolidated Parcel A. The remaining area of the expanded parcel A is preserved as a conservation easement, including the wetland area. However, if the one potential wetland area is determined to be subject to the jurisdiction of the ACOE, it would be considered a potential significant impact and mitigation would be required as set forth below.

Impact Bio-4. Potential Impacts to Wetlands. Consistent with conclusions reached by ECORP, there is one small area on the Project site that could be subject to the jurisdiction of the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. Disturbance of this area by grading or other activities, without proper permitting authorized by the ACOE, and appropriate mitigation, would result in a loss of wetlands and a ***potentially significant impact.***

Mitigation Bio-4. Wetland Delineation and On-Site Mitigation. . A qualified biologist has been engaged to finalize the draft wetland delineation documentation for formal review by the U.S Army Corps of Engineers (ACOE) . Based on the current project plan, there is no disturbance as there is no fill required in the wetland area. Total avoidance of the wetland area shall be carried out. However, at the final project stage, should any disturbance or filling become necessary, appropriate ACOE permits shall be obtained if the ACOE determines that the potential wetland area on the Project site is subject to its jurisdiction. Applicant shall subsequently comply with all the requirements of the ACOE. The Project applicant shall ensure, to the satisfaction of the Alameda County Planning Director and the ACOE, that such on-site wetland mitigation area is preserved in perpetuity, which may be achieved by creating a Conservation Easement in accordance with Mitigation Bio-5b, and subject to the restrictions as set forth therein.

RESULTING LEVEL OF SIGNIFICANCE

Compliance with the requirements of the ACOE, and the on-site preservation of the identified wetland area as called for in **Mitigation Measure Bio-4,** would assure that potential impacts to wetlands would be reduced to a level of ***less than significant.***

d) Migratory Fish or Wildlife Movement/Nursery Sites

Significance Criteria: The Project would have a significant environmental impact if it were to 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 nursery sites.

The Project site is situated in a mixed suburban and semi-rural area with single family residential subdivisions adjacent on the west, east and north and south sides. However, much of the surrounding area to the north across Proctor Road has remained sparsely developed due to ownership by the East Bay Regional Parks District (EBRPD). The area north of Proctor Road is very sparsely developed and the San Lorenzo Creek is less than two miles away to the South. The undeveloped hill areas to the north of the site, extend for substantial distances (several miles) and would clearly provide a migratory corridor for a range of species, including mammals, birds, amphibians and aquatic species. Urban and wild, native and non-native wildlife such as western gray squirrel, black-tailed deer, black-tailed jackrabbit, striped skunk and opossum, may be expected to range through the region along the EBRPD lands and the creek valleys of the Castro Valley hills area. As discussed above, the Project may have adverse effects on nesting songbirds (Impact Bio-2), which constitutes a ***potentially significant impact*** on the use of native nursery sites.

However, the Project site itself was cleared of most native plant life for fire control purposes over recent years, and with the exception of the Eucalyptus, oaks and pine areas that lies across the south, west and east sides of the site, has limited tree or native shrub cover. Although the ECORP Report identified only a limited extent of biological resources on the Project site, there is a very high likelihood that the adjacent hills across the street from the site constitute a corridor for migrating wildlife. The new roadway, grading and retaining walls could create a new barrier to migratory species, and new lighting and non-native landscaping could also adversely affect existing migratory patterns, although the new detention pond may provide a benefit to native and urban wildlife. Migratory wildlife would have to cross Street A at least twice to transit the corridor. Therefore the potential of the Project to interfere with native resident or wildlife species or with established native resident or migratory wildlife corridors or the movement of wildlife would be a ***potentially significant impact.*** Effects on migratory fish or aquatic species, including some potentially significant impacts (as defined in Impact Bio-3), would also occur, but would be reduced to less-than-significant levels by Mitigation Bio-3.

Impact Bio-5: **Potential Interference with Migratory Wildlife Corridors.**

a) Construction of Street A (Proctor Court) could interfere with the movement of native resident wildlife species or with established migratory wildlife corridors and impede the use of native nursery sites.

b) Grading and construction for 23 homes on the Project site would reduce and restrict area for wildlife activity.

Mitigation Bio-5a: **Pre-Construction Nesting Bird Surveys.** To address the potential loss of native nursery sites, implement Mitigation Bio-2 as described above.

Mitigation Bio-5b: **Establish Conservation Easement:** The Project shall incorporate a conservation easement across the lower elevations of the Project site, below the proposed limits of grading to prevent future grading alterations, private fencing and the introduction of non-native plants or animals, and to retain it in its current natural state, or allow planting of only native plant species. The Easement shall prohibit structural or recreational improvements or grading disturbance of any kind not required for the installation and proper maintenance of the stormwater protection features. The conservation easement would ensure that to the extent the lower portion of the Project

site is used as wildlife corridors and seasonal wetland, such use would be allowed to continue in perpetuity.

Mitigation Bio-5c: **Wildlife-Friendly Design Principles Around Stormwater Treatment Features.** Replacement grasses, planting and landscaping of the cut and fill slopes for Street A, the entryway, and around the retention pond area, shall comply with the Bay-Friendly Landscaping Principles as determined by the County Planning Director, with an emphasis on enhancing wildlife habitat values. There shall be no gate at the entrance that would present a barrier to wildlife as required by the Castro Valley General Plan.

RESULTING LEVEL OF SIGNIFICANCE

Implementation of **Mitigation Measures 5a, 5b and 5c** would assure that potential impacts on the movement of native resident wildlife species or with established migratory wildlife corridors would be reduced to a ***less than significant*** level.

e) Conflict with Biological Resource Protection Policies

Significance Criteria: The Project shall have a significant environmental impact if it were to conflict with any local policies or ordinances protecting biological resources, such as tree preservation ordinance or the Castro Valley Biological Resources Overlay Zone (BROZ).

The Castro Valley General Plan (CVGP), adopted by the County Board of Supervisors March 2012, protects areas with important biological resources, such as creeks, hillsides, and riparian areas, by requiring special review of proposed development projects. Large, mature trees are not specified for protection in the CVGP and the Alameda County Tree Ordinance applies only to county right-of-way areas. As noted previously, the Project site is an identified parcel within the BROZ and is designated as moderate priority grassland. However, the CVGP also states that isolated patches of non-native dominant habitat surrounded by development are considered a low priority for preservation. In addition, the CVGP requires alternative standards for environmentally sensitive areas that have high fire hazards, steep slopes, natural vegetation, or mature trees. The Project site would be considered an environmentally sensitive area under this definition.

The BROZ Action 7.1-1 requires an environmental assessment by a qualified biologist, to establish development constraints specific to the property in question. The reports by ECORP concluded that the most sensitive area on the Project site was a potential seasonal wetland of 0.111 acres. This determination resulted in a re-design of the proposed project to avoid the wetland area. Alternative standards for environmentally sensitive areas in Action 5.2-4 provide for modifications to required lot sizes and design standards including, but not limited to:

- Creating smaller lots clustered together with permanent open space designations for steep slopes and environmentally sensitive areas;
- Creative building designs within a planned unit development; and/or
- Reduction in development intensity up to 75 percent of the maximum permitted.

As noted above, the Project sponsor has eliminated the originally proposed Lot 10 for home construction so as to move the required retention pond to that area, leaving the potential wetland area untouched. In addition, homes would be constructed with building designs that would minimize visual impact to the surrounding residents as shown in the visual analysis and section (**Figures 10a – 10c, 11a and 11b**). Therefore, the Project would have a ***less than significant impact*** on biological resource protection policies.

f) Habitat Conversation Plan or Natural Community Conservation Plan

Significance Criteria: The Project would have a significant environmental impact if it were to result in a conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

No adopted HCP, NCCP, or other approved conservation plan applies to the Project area. Therefore, the Project would not hinder the implementation of any HCP or NCCP, and would have ***no impact*** on such considerations.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

INTRODUCTION

An archival and records review was completed by the *California Historical Resources Information System*, Northwest Information Center, Sonoma State University, Rohnert Park (CHRIS/NWIC File No. 11-1094 dated April 3, 2012). This document is included as **Appendix D.**

The Native American Heritage Commission (NAHC) was contacted for a search of the *Sacred Lands Inventory* on file with the Commission (Palma 2012). The NAHC responded indicating that a search had failed to indicate the presence of Native American cultural resources in the immediate project area. This document is included as **Appendix G.**

REGIONAL SETTING

Prehistoric Period

The Project area is located within territory occupied by the Ohlone or Coastanoan Indians (meaning coast people, as they primarily live along the bay and delta). The Ohlone were the first people to reside in the area we now call Castro Valley (www.mycastrovalley.com). Richard Levy has suggested that Ohlone peoples came into the San Francisco Bay Area about 500 A.D. from the San Joaquin- Sacramento River areas, probably displacing Hokan speakers, coinciding with what the archaeologists have referred to as a Late Horizon assemblage (Bean 1994). As many as 30 or 40 Ohlone villages once rimmed the shores of San Francisco Bay. Most villages consisted of between 10 to 15 families.

Over 400 shell mounds, remnants of the Ohlone's sea food consumption, remained as artifacts of village life until the early 1900s, witness to a thriving population. The landscape was very different in the days of the Ohlone. Marshes spread for thousands of acres, fringing the shores of the bay. The area was filled with huge flocks of waterfowl and birds. Tall bunch grasses covered vast meadowlands and tree spotted savannahs. Oak, Bay, and Redwood forests covered many of the surrounding hills. Huge herds of deer and antelope grazed the meadowlands. Competing for game were wolf packs, grizzly bears, bob cats, mountain lions, and coyotes.

Historic Period

The first Spanish explorers to visit the east bay included Captain Pedro Fages (1772) with an expedition of fourteen soldiers and some other personnel, all on horseback. Fages' expedition explored from Monterey up through the length of the Santa Clara Valley and along the east side of San Francisco Bay to the mouths of the rivers, with a return by way of present Walnut Creek and the Pleasanton vicinity (Bean 1994).

Don Guillermo Castro was born in California, then a Mexican possession in 1810. In 1838, he was listed as a surveyor of government lands in San Jose, and it is about this time he acquired his land grant, roughly 28,000 acres then known as Rancho San Lorenzo. This land included those areas now known as Hayward, San Lorenzo, Castro Valley, as well as Cull, Crow and Palomares canyons. The sprawling grant encompassed about 41 square miles.

In the 1860s to the 1880s when California was a major grain producer for the world market, wheat, barley, and other grains were the most common crops in the Bay Area. By 1900, these grains depleted the soil, productivity declined, and the center of world grain production moved elsewhere (Corbett 2003).

The major buildings on most Bay Area farms in the 19th and 20th centuries were a main house and a barn. In addition, extra barns, tankhouses, small dwellings and bunkhouses, and a variety of sheds and specialized buildings were built according to particular needs and circumstances. Today there are few properties remaining that represent the history of farms in Castro Valley. No thorough historic architectural survey has been done of Castro Valley, so the number and character of remaining farms is unknown.

Archaeological and Paleontological

Paleontological resources of the region generally involve marine invertebrates in the older marine deposits, but could also include marine mammals, whales, pinnipeds, and sea cows and Pleistocene terrestrial mammals in the alluvium and Pleistocene formations.

LOCAL SETTING

The property at 4659 and 4651 Proctor Road was developed during the period from 1899 to 1945, the years when farming was the principal activity of the property. The subject property is approximately 5.85 acres. The site has not been previously surveyed for cultural resources but has been severely impacted by past farming or ranching activities. Archaeological survey of this site is therefore unnecessary.

Although the Ohlone Indians lived in this area, Castro Valley in general has been substantially impacted by 100 years of urbanization, farming, road construction, and other developments. Relatively few archaeological investigations have been documented in this area, and the presence of archaeological materials is still possible, although most likely in subsurface contexts.

Paleontological Resources

Erosion and excavation can expose marine and terrestrial fossils, particularly at outcrops. No bedrock was encountered to a depth of 10 feet. Some fossils have been encountered in the Cull Canyon Mulholland Formation, which is in the vicinity of the Project site (Edwards 2003).

IMPACTS

a) Potential Disturbance to Historical Resources.

> *Significance Criteria*: The Project would have a significant environmental impact if it were to cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the *CEQA Guidelines*, if it is associated with events important to California's history, is associated with the lives of important persons, embodies distinctive construction characteristics, or contributes important prehistoric of historic information.

Local, state and federal inventories include no recorded buildings or structures within the Project area. There are no structures remaining on the Project site. Therefore, with respect to historical resources, there would be ***no impact***.

b, c) Archaeological or Paleontological Resources

> *Significance criteria:* The Project would cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines §15064.5, directly or indirectly destroy a unique paleontological resource or unique geologic feature.

According to a Northwest Information Center (NWIC) records search requested for this analysis (**Appendix D)** there is no record of any cultural resources studies that cover the Project area and there are no recorded archaeological resources. In addition to these inventories, the NWIC base maps show no recorded buildings or structures. There are no recorded cultural resources in the Project area. The NWIC report states that "…the proposed project area has the possibility of containing unrecorded archaeological site(s)."

The nearest previously discovered prehistoric resources revealed one such site in nearby Anthony Chabot Park (Banks, 1982). This site consists of four groups of bedrock mortars located in the vicinity of the Willow Park Public Golf Course approximately one-half (½) mile from the Project site (ibid.) As the Project site has been disked in the recent past and no resources were uncovered, the potential of identifying unrecorded resources at the site is low.

However, it is possible that unknown archaeological or paleontological material could be uncovered during the cut-and-fill and other earth-moving activities associated with the project, resulting in a potentially significant adverse impact under CEQA. The following mitigation measure would be required.

Implementation of Mitigation Measures **Cult-1** and **Cult-2** would avoid or reduce potential significant impact to archaeological and paleontological resources to a less-than-significant level.

Impact Cult-1: **Archaeological and Paleontological Resources.** The grading and construction associated with the project could uncover potential significant cultural resources.

Mitigation Cult-1: If archeological resources (i.e., historic, prehistoric, and isolated artifacts and features, including fossils) are inadvertently discovered during project construction, work shall be halted immediately within 50 feet of the discovery, the County shall be notified, and a professional archaeologist and/or paleontologist that meets the Secretary of the Interior's Standards

and Guidelines for Professional Qualifications in archaeology and/or history shall be retained to determine the significance of the discovery.

d) Human Remains

Significance Criteria: The Project would have a significant environmental impact if it were to result in the disturbance of any human remains, including those interred outside of formal cemeteries.

It is unlikely that any project construction would disturb human remains, but the following mitigation measure is still required.

Impact Cult-2: **Human Remains.** The grading and construction associated with the project could uncover human remains.

Mitigation Cult-2: *In the* event of accidental discovery of human remains, the County Coroner shall be notified *according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code*, and, if the remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) would be notified to identify the Most Likely Descendant (MLD), in accordance with State and federal law. The disposition of the remains shall be coordinated between the County Coroner, NAHC, MLD and the archaeological consultant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving:				
i) 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?	☐	☒	☐	☐
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 risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

INTRODUCTION AND SETTING

The information and analysis regarding potential environmental impacts related to geologic conditions and soils at the Project site is based on a report by the Project applicant's soils engineer and engineering geologist, Henry Justiniano & Associates geotechnical consultants. The report presents the methods and results of the consultant's studies and provides recommendations to avoid or minimize potential impacts related to the underlying geology of the Project site. Excerpts of the Justiniano report are included in the discussion that follows, below. The full report can be found in **Appendix E**.

The Justiniano report states that the site is underlain by less than five (5) feet of alluvial fan and colluvial soil deposits, and the swale's side slopes are blanketed by a thin (less than two (2) feet thick) layer of top soil and residual soils. These near surface soils were classified as silty clays that poses low to moderate shrink/swell potential. The near surface soils and the underlying strata, possess geotechnical characteristics to receive the proposed Project of residential homes. Mass

grading would be required to construct the access roads to the future lots and a stormwater detention/treatment pond would receive runoff. The engineered fill materials would require a 90 percent relative compaction and all disturbed slope areas track-walked, and seeded, to prevent erosion. The soil and bedrock materials have variable plasticity characteristics - low plasticity index = between 12 and 15, moderate to high plasticity of 22. Therefore, the near surface soils can be categorized as low to moderately expansive, inorganic clays.

The site is not located within the current Alquist-Priolo Earthquake Hazard Zone (formerly ban Alquist-Priolo Special Studies Zone) of the active Hayward Fault and no signs of active faults were found during field exploration. Hence, the potential for surface fault rupture at the site is low. However, the Project site is located approximately 1.8 miles northeast of the Hayward Fault, 20.2 miles northeast of the San Andreas Fault and 7.1 miles southwest of the Calaveras Fault, all of which are historically active.

IMPACTS

a) Seismic Hazards

Seismic hazards are generally classified as two types, primary and secondary. Primary geologic hazards include surface fault rupture. Secondary geologic hazards include ground shaking, liquefaction, dynamic densification, and seismically induced ground failure. The Project site is located in a seismically active area and may be subject to moderate to strong ground shaking. Earthquake faults in the Project region include the Hayward fault, approximately 1.8 miles to the southwest, the Calaveras fault, mapped 7.1 miles to the east, the Concord-Green Valley fault, mapped 12.9 miles to the north, the Greenville-Marsh Creek fault, mapped 16.9 miles to the east, and the San Andreas fault, mapped 20.2 miles to the southwest.

i) Surface Fault Rupture

Significance Criteria: The Project would have a significant environmental impact if it were to expose people or structures to potential substantial adverse effects associated with the surface rupture of a known earthquake fault.

According to the Justiniano report, as well as the Alquist-Priolo Earthquake Fault Zoning Act, no active faults are located within the Project site. The Justiniano report notes that no active faults were observed at the Project site; therefore the potential for surface fault rupture is low. Therefore, the Project would have a ***less than significant*** impact on exposing people or structures to danger from surface rupture of a known earthquake fault.

ii) Strong Seismic Ground Shaking

Significance Criteria: The Project would have a significant environmental impact if it were to expose people or structures to potential substantial adverse effects associated with strong seismic ground shaking.

Given that there is no active fault at the Project site, damage from a seismic event is most likely to occur from the secondary impact of strong seismic ground shaking originating on a nearby fault. Estimates of actual ground shaking intensity at a particular location are made according to the Modified Mercalli Intensity Scale, which accounts for variables such as the size and distance from the earthquake. For the Project site, Mercalli Intensity estimates indicate that earthquake-shaking intensity would vary depending upon where the seismic event originates. For the Maximum Credible Earthquake (MCE) equivalent to the 1906 San Francisco earthquake along the San Andreas fault the shaking intensity would be VI, moderate. All future homes constructed at the Project site

would be designed in accordance with all seismic provisions of the most recent revision of the Uniform Building Code (UBC) and with County of Alameda and State of California Standards for seismic construction, potential impacts related to seismic ground-shaking would be reduced to a level of ***less than significant***.

iii) Liquefaction

Significance Criteria: The Project would have a significant environmental impact if it were to expose people or structures to potential substantial adverse effects associated with seismic-related ground failure, including liquefaction.

Liquefaction is the temporary transformation of saturated, loose cohesionless soils into a viscous liquid during strong ground shaking from a major earthquake. The site is underlain by clayey soils and bedrock. Therefore, the risk of liquefaction at the site is believed to be low. Dynamic compaction is the densification of dry, loose sandy soil above the water table. Loose, relatively clean sandy soil was not encountered in the test pits and borings, hence, the potential for dynamic compaction is considered to be low. Potential impacts related to liquefaction would be ***less than significant***.

iv) Landslides

Significance Criteria: The Project would have a significant environmental impact if it were to expose people or structures to substantial hazards from landslides.

A landslide is a mass of rock, soil, and debris displaced down slope by sliding, flowing or falling. The Association of Bay Area Governments indicates the landslide susceptibility history for the Project Area as "few landslides." This is consistent with the findings of the Justiniano report which found no mapped landslides at the Project site in the geologic literature or the consultant's files and did not find evidence of active landslides during their field exploration. The foregoing evidence suggests that the relatively low threat of landslides and compliance with the standard building practices of Alameda County means that the potential for hazards or damage resulting from landslides is ***less than significant.***

b) Erosion or Loss of Topsoil

Significance Criteria: The Project would result in a significant environmental impact if it were to result in substantial soil erosion or in the loss of topsoil.

Impact Geo-1: **Soil Erosion during Construction.** The grading and construction associated with building 23 new homes as well as the access road into the site are activities that could lead to the substantial erosion of topsoil. Given the hilly topography of the Project site, construction activities including mass grading, roadway construction and building 23 new homes could potentially result in substantial soil erosion. This impact is considered ***potentially significant***.

Mitigation Geo-1: **Construction General and SWPPP Permit**. The Project sponsor shall obtain coverage under the State Water Resources Control Board (SWRCB) Construction General Permit, including implementation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with procedures and specifications of the Alameda County Clean Water Program.

1. The Project sponsor shall ensure that construction practices for the Project comply with practices to prevent water pollution under the provisions of the Construction General Permit. In order to obtain a permit, the Project applicant must file a Notice of Intent (NOI) with the Regional Water Resources Control Board (RWQCB) prior to the start of construction.

2. Pursuant to the requirements of the Construction General Permit, the Project sponsor shall prepare and implement a SWPPP. The SWPPP shall be consistent with the terms of the General Permit; the Manual of Standards for Erosion and Sedimentation Control Measures by the Association of Bay Area Governments (ABAG); the Best Management Practices (BMPs) as provided in the California Stormwater Quality Association (CASQA) handbooks; policies and recommendations of the local urban runoff program (County of Alameda); and the Staff recommendations of the RWQCB. The SWPPP shall incorporate BMPs to reduce the potential for pollutants in runoff waters and to prevent pollutant transport off-site during construction activities. Examples of BMPs include, but are not limited to the following:

    a) Only clear land which will be actively under construction in the near term (e.g., within the next 6-12 months), minimize new land disturbance during the rainy season, and avoid clearing and disturbing sensitive areas (e.g., steep slopes and natural watercourses) and other areas where site improvements will not be constructed.

    b) Provide temporary stabilization of disturbed soils whenever active construction is not occurring on a portion of the site through water spraying or application of dust suppressants, and gravel covering of high-traffic areas. Provide permanent stabilization during finish grade and landscape the Project site.

    c) Safely convey runoff from the top of the slope and stabilize disturbed slopes as quickly as possible.

    d) Delineate the Project site perimeter to prevent disturbing areas outside the project limits. Divert upstream run-on safely around or through the construction. Runoff from the Project site should be free of excessive sediment and other constituents. Control tracking at points of ingress to and egress from the Project site.

    e) Retain sediment-laden waters from disturbed, active areas within the Project site.

    f) Perform activities in a manner to keep potential pollutants from coming into contact with stormwater or being transported off site to eliminate or avoid exposure.

    g) Store construction, building, and waste materials in designated areas, protected from rainfall and contact with stormwater runoff. Dispose of all construction waste in designated areas, and keep

stormwater from flowing onto or off these areas. Prevent spills and clean up spilled materials.

RESULTING LEVEL OF SIGNIFICANCE

Preparation and diligent implementation of the SWPPP in accordance with procedures administered by the Alameda County Clean Water Program as required by Mitigation Measure Geo-1 would ensure that the Project would have a ***less than significant*** impact on erosion.

c) Geologic Instability

Significance Criteria: The Project would have a significant environmental impact if 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.

Consistent with the findings of the Justiniano report and summarized in the discussion of landslides in section a)-iv, above, potential impacts related to these geologic hazards are relatively low. Compliance with the standard building practices of Alameda County ensures that potential hazards related to geologic instability would be ***less than significant.***

d) Expansive Soils

Significance Criteria: The Project would have a significant environmental impact if located on expansive soil, creating substantial risks to life or property.

As stated previously, the Justiniano geotechnical study found that the soil at the Project site has low expansion potential. Accordingly, potential impacts related to expansive soils are ***less than significant***.

e) Septic Tanks.

Significance Criteria: The Project would have a significant environmental impact if it involved construction of septic systems in soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

The Project does not propose to build any new septic tank or alternate waste disposal systems. Therefore, the Project would have ***no impact*** on soils due to septic systems.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSION. Would the project:				
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?	☐	☐	☒	☐

SETTING AND REGULATORY

In addition to the air pollution discussed in the Air Quality section, other emissions may not be directly associated with adverse health effects, but are suspected of contributing to global warming. Global warming has occurred in the past as a result of natural processes, but the term is often used now to refer to the warming predicted by computer models to occur as a result of increased emissions of greenhouse gases (GHGs).

The Global Warming Potential (GWP) concept is used to compare the ability of each GHG to trap heat in the atmosphere relative to carbon dioxide (CO_2), which is the most abundant GHG. CO_2 has a GWP of 1, expressed as CO_2 equivalent (CO_2e). Other GHGs, such as methane and nitrous oxide are commonly found in the atmosphere at much lower concentrations, but with higher warming potentials, having CO_2e ratings of 21 and 310, respectively. In the United States in 2010, CO_2 emissions accounted for about 84 percent of the GHG emissions, followed by methane at about 10 percent and nitrous oxide at just under 5 percent.[6]

Senate Bill 97—Modification to the Public Resources Code

Pursuant to Senate Bill 97, the California Natural Resources Agency reviewed and adopted the amendments to the CEQA Guidelines on December 30, 2010 prepared and forwarded by the Governor's Office of Planning and Research (OPR). The Amendments became effective on March 18, 2010, including the addition of the above GHG emissions environmental topic and checklist items.

AB 32 and the Air Resource Board's Climate Change Scoping Plan

In 2006, the governor of California signed AB 32, the Global Warming Solutions Act, into legislation. The Act requires that California cap its GHG emissions at 1990 levels by 2020.

On December 12, 2008, the California Environmental Protection Agency Air Resources Board (ARB) adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Assembly Bill 32 Scoping Plan contains the main strategies California will use to reduce the greenhouse gases by 174 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario that cause climate change.

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[6] *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010*. U.S. EPA. April 15, 2012, Table 2-1: Recent Trends in U.S Greenhouse Gas Emissions and Sinks.

The scoping plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation regulation to fund the program. ARB acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. In August 2011, the Scoping Plan was re-approved by the Board, and includes the Final Supplement to the Scoping Plan Functional Equivalent Document (FED).

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

The Project site falls within the San Francisco Bay Area Air Basin and therefore under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD California Environmental Quality Act Air Quality Guidelines ("Guidelines"), has been recently updated with a preferred method for quantifying greenhouse gas (GHG) emissions from a project with the use of the BAAQMD GHG Model (BGM). The Air District developed this model to calculate GHG emissions not included in URBEMIS (used in the Air Quality section), such as indirect emissions from electricity use and waste and direct fugitive emissions of refrigerants. BGM quantifies different types of GHG emissions in terms of CO_2e and contains a broad range of GHG reduction strategies that may be applied to projects. BGM also adjusts for state regulations, specifically California's low carbon fuel rules and Pavley regulations. This GHG analysis is consistent with the May 2011 Guidelines and recommended methodologies.

IMPACTS

a) Greenhouse Gas Emissions

Significance Criteria: The Project would have a significant environmental impact if it would exceed BAAQMD's Greenhouse Gas (GHG) emissions rate threshold of 1,100 metric tons CO_2e per year.

Using the BMG, IPA staff calculated the project's "unmitigated" new GHG emissions at 413.01 MT/yr, which is below the significance threshold of 1,100 MT/yr. This calculation does not account for drought tolerant landscaping, low flush toilets, solar or tankless water heater, reduction of solid waste by 10%, cool roofs, and use of ammonia to reduce refrigerant emissions, which can be incorporated into construction to further reduce GHG emissions. To show the benefit of these measures, IPA staff also calculated the "mitigated" net GHG emissions at 157.23 MT/yr. Based on these calculations, the project would not generate significant GHGs.[7]

BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions, but given the relatively small size of the Project and the fact that it is well below the operational GHG emissions level, it can be concluded that GHG emissions would be well below significant levels.

Therefore, the Project impact related to greenhouse gas emissions would be ***less than significant.***

b) Consistency with Greenhouse Gas Reduction Plans

[7] Calculations were originally done for 24 lots, the elimination of one lot would result in a slightly lower calculation, but no additional impact.

Significance criteria: The Project would have a significant impact on the environment if it were in conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

In June 2011, the Alameda County Board of Supervisors approved in principle the Alameda County (Unincorporated Areas) Community Climate Action Plan (CCAP) for the unincorporated areas of Alameda County, including the Castro Valley area where the Project is located. This 10-year plan is intended to help reduce greenhouse gas emissions from Alameda County by approximately 15% by 2020 through a variety of measures and policies for new development, transportation improvements, encouragement of renewable energy, energy and water efficiency improvements and green infrastructure. The CCAP is not considered to be fully implemented as it must first be analyzed under the California Environmental Quality Act (CEQA). Environmental review is ongoing at the time of this analysis per the County's website [http://www.acgov.org/cda/planning/landuseprojects/climateaction/]. The proposed Project would not directly relate to the measures in the CCAP, which focus largely on regional improvements to public transit, bicycle and pedestrian connectivity and use, development in denser transit-oriented and mixed-use areas, and integration of and incentives for community-wide energy- and water-efficiency, renewable energy, water conservation and waste reduction.

The CCAP also contains a chapter on Building Energy Strategies and Measures, in which it promotes green building practices. In keeping with the related CCAP regulations, the project sponsor will incorporate measures from the Energy Performance in New Construction and Renewable Energy, where feasible such as: **E-9** -exceeding the California Title-24 standards for energy efficiency by 30 percent, **E-10 –** use of building materials containing recycled content and **E-15 –** incorporating a renewable energy program for each residential home.

The proposed Project therefore would be in compliance with the goals and policies of the CCAP and state-wide GHG reduction regulations and plans, and the impact would be ***less than significant.*** The Project is also consistent with the Castro Valley General Plan.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
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 §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 area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

SETTING

A "hazardous material" is a substance or combination of substances that, because of its quantity, concentration, physical, chemical, or infectious characteristics, may pose a potential hazard to human health or the environment when handled improperly. Within typical construction sites, materials that could be considered hazardous may include fuels, motor oil, grease, various lubricants, solvents, soldering equipment, and glues.

A "hazardous waste" because of its nature, presents the same risk to human health as hazardous material. Proper management of hazardous materials and hazardous wastes are integrated; both substances present the same threat to the environment when improperly managed to soil or

groundwater or through airborne release in vapors, fumes or dust. The California Code of Regulations (Title 22, Sections 66261.20-24) contains technical descriptions of characteristics that could cause soil or groundwater to be classified as hazardous waste.

An environmental hazards inquiry was requested from Environmental Data Resources, Inc (EDR) and the full report can be found in **Appendix F**. A power transmission line was identified approximately one-eighth (1/8) mile from the Project site and one sensitive receptor was noted to be less than one-sixteenth (1/16) mile from the site. The sensitive receptor flagged in the Detail Map 2S is Catherine Eckhardt, owner of the "Growing Years of 20320 Anita Avenue, Castro Valley, a day care business. The San Francisco Nike Battery 31, which shows as a military reservation in historical maps from 1959, 1968 and 1973, approximately one-half (½) mile from the Project site, appears to have been in civilian use since at least 1980. The site at 19501 Lake Chabot Road is currently a residential house that may have been on record due to a source of unsafe water report in 1993. The alleged contaminated water source was resolved long ago.

State Regulations

Statewide, the California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. The federal Environmental Protection Agency (EPA) regulates the management of hazardous materials and wastes. The primary federal hazardous materials and waste laws are contained in the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and the Toxic Substances Control Act (TSCA). These laws apply to hazardous waste management, soil and groundwater contamination, and the controlled use of particular chemicals. In California, the federal EPA has delegated most of its regulatory responsibilities to the state.

Besides the DTSC, the state agencies most involved in enforcing public health and safety laws and regulations include the California Occupational Safety and Health Administration (Cal/OSHA), the Office of Emergency Services, the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Board (RWQCB), the California Air Resources Board (CARB), and the California Integrated Waste Management Board (CIWMB)[8]. The California Governor's Office of Planning and Research annually publishes a listing of potential and confirmed hazardous waste sites throughout the State of California under Government Code Section 65962.5, known as the Cortese List, based on input from the DTSC, SWRCB, CARB, and the CIWMB.

IMPACTS

a - b) Transport, Use or Disposal of Hazardous Materials

Significance Criteria: The Project would have a significant environmental impact if it were to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or if it were to 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.

[8] California Integrated Waste Management Board is now known as CalRecycle (http://www.calrecycle.ca.gov/).

The proposed Project would involve site grading, construction of a stormwater detention basin and ultimate construction of 23 single family homes on the 5.85-acre Project site. The width of the private roadway (Street A) would narrow to 26 feet from the flared entrance as it approaches the first residential lot and would continue at that width ending in a hammerhead at the south end of the property and cul-de-sac turn-around at the northerly end of the property. It is possible that equipment used at the site during construction activities could utilize substances considered by regulatory bodies as hazardous, such as diesel fuel and gasoline; however, significant quantities of hazardous material would not be stored on-site. All construction activities would be required to comply with Title 49 of the Code of Federal Regulations, US Department of Transportation (DOT), State of California, and local laws, ordinances and procedures. Proper management of hazardous materials and hazardous wastes are integrated; both substances present the same threat to the environment when improperly managed. Potential impacts related to the routine transport, use and disposal of hazardous materials would be ***less than significant***. However, it is recommended that the Project applicant and construction contractor implement feasible Best Management Practices (BMPs) during construction to ensure conformity with applicable regulations and further minimization of the potential negative effects of routine use of hazardous materials:

- Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils;
- Properly dispose of discarded containers of fuels and other chemicals.

A residential subdivision is a land use that does not involve the heavy usage, transport, or disposal of hazardous materials and only a minimal amount of routine day-to-day routine cleaning and maintenance materials would be stored onsite.

c - d) Presence of Hazardous Materials

Significance Criteria: The Project would have a significant environmental impact if it were to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter (1/4) mile of an existing or proposed school, or if it was located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 ("Cortese List").

A search of relevant public agency databases containing records of past occurrences involving hazardous wastes was conducted for the Project site. As discussed above, a copy of the report prepared by Environmental Data Resources, Inc. (the "EDR" Report) and accompanying historic topographic maps can be found in **Appendices A&F**. The EDR report found no evidence of any hazardous substances stored on, under or used on the Project site. A review was also made of Alameda County records of known sites involving hazardous materials and the Project site were not listed. Historic topographic maps dating back to 1899 document the absence of structures on the property. On the basis of the EDR report findings, the historic maps and Alameda County records there would be ***no impact*** related to the potential exposure of construction workers or future residents to hazardous materials on the Project site.

The EDR report also found that the Project site is not listed in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. There would be ***no impact*** due to such a listing or related hazard to the public or environment (http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm).

e) Safety Hazards Due to Nearby Public Airport

Significance Criteria: The Project would have a significant environmental impact if it were 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), if it would result in a safety hazard for people residing or working in the Project area; or if it were located within the vicinity of a private airstrip, if it would result in a safety hazard for people residing or working in the Project area.

The closest airport to the Project site is the Hayward Air Terminal, located approximately 4.2 miles to the West. Oakland International Airport is over five miles away from the Project site to the West. The Project site is not within an airport land use plan, nor is the Project close enough for the airport to pose a unique safety hazard to residents or workers in the Project area. Therefore, the Project would have ***no impact*** due to nearby airports.

f) Safety Hazards Due to Nearby Private Airstrip

Significance Criteria: The Project would have a significant environmental impact if it were located within vicinity of a private airstrip, if it would result in a safety hazard for people residing or working in the Project area.

The Proposed project site is located approximately 1.5 miles from the Castro Valley Sutter Medical Center, which is located at 20103 Lake Chabot Road, which includes a new helistop. Operations are at irregular times from various directions depending upon the medical emergency. The distance of the helistop from the Project site is sufficiently far away so that no safety hazard exists to the people living or working in the area. Therefore, the Project would have a ***less than significant impact*** due to proximity to a nearby private airstrip or helipad/helistop.

g) Emergency Response Plan

Significance Criteria: The Project would have a significant environmental impact if it were to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

There are no emergency response or evacuation plans in effect in the Project area. Therefore the Project would have ***no impact*** on the implementation of any adopted emergency response plan or emergency evacuation plan. The Alameda County Fire Department was consulted regarding interior circulation within the Project site as well as ingress/egress and all comments were incorporated into the current tract map layout.

h) Exposure of People or Structures to Wildland Fires

Significance Criteria: The Project would have a significant environmental impact if it were to expose people or structures to a significant risk of loss, injury or death involving wildland fires.

The Castro Valley area is considered a "local responsibility area" (LRA) with respect to fire protection, meaning that services are provided by a local as opposed to a state agency. The Project site is identified on the State Fire Hazard Severity Zone map (CalFire 2008) as being within a very

high fire hazard severity zone (VHFHSZ). Under the current California Fire guidelines for fire hazard reduction in such zones, setbacks for all parcels of one acre and larger shall provide a minimum 30 foot setback for building and accessory buildings from all property lines. For parcels less than 1 acre, local jurisdictions may allow, under mitigated circumstances, projects to provide for the same practical effect.

A letter from the applicant was sent to the Alameda County Fire Chief requesting for the use of Vegetation and Fire Hazard Protection plan, in addition to other requirement, as practical effect for the required 30 foot setback requirement and exceptions for lots with less than one acre. The letter was approved by the Alameda County Fire Department and the approved letter is included in the **Appendix H under Alameda County Fire Department**. Revised tentative building lot envelopes with requested setbacks are shown in Figure 6 Lot layout based on the application of the Practical effect of the 30 foot setback requirement to all exterior lots of the subdivisions.

For Fire hazard prevention, the project will comply with the Wildland-Urban Interface Building Code Standards under Chapter 7A C.B.C with fire retardant building materials. Fire hydrants, Building Sprinkler system, standard road and emergency access and clearance with well posted signs shall be installed. In addition, a professional Vegetation and Fire Hazard Management Plan will be prepared and submitted for approval by the County Fire Department. A redesign of the tentative map would be required should the Fire Department not approve the Fire Hazard Management plan. Once the Fire Hazard Management plan is approved, it will be incorporated and enforced by the Project HOA.

Potential impacts resulting from exposure of people or structures to the risk of wildland fires is considered ***less than significant with mitigation.***

Impact Haz-1: **Risk from Wildland Fires**. Since the project is located in the VHFHSZ and in the vicinity of park land and open space grass land that may be potentially subject to wildland fires. This would be a ***potentially significant impact***.

Mitigation Haz-1: An integrated **Final Landscaping and Fire Hazard Management Plan**. A professional Final Landscaping and Fire Prevention and Management Plan shall be developed during the Final Map design review phase for the Project site. The plan will incorporate all the important practices of good Fire prevention Management and Smart landscaping designs such as defensible space, vegetation clearance, weed control, dead wood removal, fuel break and modification, backyard and lawn automatic sprinkler system, fire retardant plant selections, restriction and placement of accessory buildings and clearance of emergency road access and so on. These final plan and Fire hazard mitigated measures and practices will be incorporated, controlled and enforced by the subdivision HOA. The final plans will be submitted for review and approval by county officials as part of requirement for the subdivision final maps.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?	☐	☐	☐	☒
j) Inundate by seiche, tsunami or mudflow?	☐	☐	☐	☒

REGIONAL SETTING

Climate

The Project site is located in Castro Valley within Alameda County at the foot of the East Bay Hills. Castro Valley is approximately 5-6 miles inland from the San Francisco Bay shoreline. The Castro Valley area has a Mediterranean climate, moderated by the marine conditions associated with San Francisco Bay. The Climate is characterized by warm, dry summers and cool, wet winters. The mean annual precipitation is 20 inches, most of which falls in the period between October and April.

LOCAL SETTING

Surface Water

Lakes and reservoirs are common within the region. Alameda County has several man-made lakes, including Lake Chabot that lies east of San Leandro and north of Castro Valley. Cull Canyon and Don Castro reservoirs are less than two miles Southeast and South respectively of the Project site. These reservoirs are used for both water storage and recreation. Dams and reservoirs in the Castro Valley area (on Cull and San Lorenzo Creeks) are relatively small and pose less extensive safety hazards than larger dams in the County.

The Project site is within the northeastern edge of Castro Valley, a local plain that carries a system of coalescing streams that drain westerly to San Francisco Bay. The parcel is at an elevation of about 400-520 feet mean sea level (msl) on the upper, northern edge of the East Bay Hills, a system of northwest-trending ridges and valleys on the eastern side of San Francisco Bay. San Lorenzo Creek departs from a steep-sided valley on the western edge of the hills and drains onto the plain of Castro Valley about two miles south of the site property. Castro Valley Creek follows the base of the hills about two miles south of the site before joining San Lorenzo Creek to the southwest.[9] With the exception of minor drainage to San Leandro Creek and Lake Chabot, all streams and surface runoff from the Castro Valley area converge and flow into San Lorenzo Creek and then to San Francisco Bay.

The Alameda County Flood Control and Water Conservation District is responsible for resolving flood, drainage, and water supply problems. Castro Valley is within the District's Zone 2, consisting of the drainage basin and alluvial plain of San Lorenzo Creek. Portions of Castro Valley are within flood hazard areas (areas subject to inundation by a 100 year flood) mapped under provisions of the U.S. National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973. The American Land Title Association Policy (ALTA) does not show the Project site as in a flood hazard zone (July 2012).

Groundwater

Castro Valley, Crow Canyon and Cull Canyon are free groundwater areas, replenished by direct infiltration and percolation of rainfall and stream flow excesses of applied irrigation water, and by subsurface inflow from adjacent, non-water bearing foothills. Free groundwater is unconfined groundwater whose upper surface is a free water table (University of Arizona 2003). These free groundwater areas are upstream from, and comprise the principal source of recharge for the confined groundwater area of the East Bay Plain. Data is limited with respect to the number and yield of wells in the Castro Valley area; the very few existing wells are principally domestic.

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[9] Hayward Area Historical Creek Map, http://museumca.org/creeks/AA-OBHayward.html

Free groundwater was not encountered at the Project site in any of the borings made by Justiniano at the time of drilling. However, since the property is underlain by bedrock, perched groundwater could exist at other locations within the depths explored. Some of the overburden soils encountered in the borings were in a near-saturated condition.

The Castro Valley Sanitary District (CVSD) provides sewage collection and system maintenance to portions of the Castro Valley community east of El Portal Ridge. The District operates six pump stations and 125 miles of sewer pipe. As the Project site was not previously developed for residential use, there is no reason to assume that any septic system remains on the site.

Water Quality

A portion of the water supplied within the East Bay Municipal Utility District (EBMUD) service area (including Castro Valley) is obtained from watershed lands within or adjoining the Project area. However, only a small portion, or roughly five percent, of the EBMUD water supply is obtained from local runoff on these watershed lands. Most of that supplied comes from the watershed of the Mokelumne River, fed primarily by melting snows of the Sierra Nevada, and brought to the district by aqueducts. Water that is not immediately put through filter plants and distributed is stored in one of five terminal reservoirs until demand requires release into filter plants. Two of these, Upper San Leandro Reservoir and Chabot Reservoir, are within the Castro Valley area. Surrounding lands are owned by EBMUD (and EBRPD) and protected to ensure against contamination of waters in the reservoir (Alameda County 1985).

Topography and Existing Drainage Patterns

The Project site falls approximately 120 feet in elevation from Proctor Road to a nearly flat plateau at its lowest elevation (374 feet). Stormwater on the Project site generally flows in two directions, south and southeast (**Figure IX-1**). Stormwater runoff from the 5.85-acre Project site flows to a depression near the southern boundary into a storm drain that flows in a southerly direction and ultimately into the San Lorenzo Creek, which flows generally in a westerly direction until it discharges ultimately into San Francisco Bay.

REGULATORY SETTING

The proposed Project must be constructed in accordance with several regulatory programs, laws, and regulations that aim to protect surface water and ground water resources. In some cases, Federal laws are administered and enforced by state and local government. In other cases, state and local regulations in California are stricter than those imposed by Federal law. This section summarizes relevant regulatory programs, laws, and regulations with respect to hydrology and water quality and how they relate to the proposed Project.

Federal Laws and Regulations

Clean Water Act of 1977

The Clean Water Act (CWA) establishes the framework that permits discharge of waste to surface waters. This National Pollutant Discharge Elimination System (NPDES) permit typically has conditions specific to the permitted operation. It may set limits on acidity (pH), chemical concentrations, oil and grease, dissolved and suspended solids, and temperature. In lieu of an NPDES permit, a project may use Notices of Intent (NOIs) to comply with the general NPDES requirements that regulate storm water and other discharges to water by establishing effluent limitations, monitoring, and reporting requirements. The CWA also prohibits the discharge of pollutants to storm water. The CWA is administered by the United States Environmental Protection Agency (US EPA). The US EPA has delegated most authority on water pollution issues to the state.

At the state and regional level, the CWA is administered and enforced by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB).

The CWA also prohibits the discharge of pollutants to stormwater. The new Construction General Permit, finalized in July 2010, includes both large and small construction (one acre and above) and addresses stormwater concentrations as Total Maximum Daily Load (TMDL) for pollutants of concern. The CWA is administered by the United States Environmental Protection Agency (USEPA). The USEPA has delegated some authority for implementing the CWA to the State of California.

State Laws and Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the SWRCB and the RWQCB as the principal state agencies having primary responsibility for coordinating and controlling water quality in California. The Porter-Cologne Water Quality Control Act defines water quality objectives as "…the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area" [Water Code Section 13050(h)]. It also requires the Regional Water Board to establish water quality objectives, while acknowledging that it is possible for water quality changes, to some degree, without unreasonably affecting beneficial uses.

NPDES Permit Requirements

The CWA has nationally regulated the discharge of pollutants to the waters of the U.S. from any point source since 1972. In 1999, the SWRCB adopted a Construction General Permit (General Permit). The General Permit is a National Pollution Discharge Elimination System (NPDES) permit that implements Section 402(p)(2)(B) of the CWA. Construction activities are regulated by the RWQCB, and are subject to the permitting requirements of the General Permit. The RWQCB established the General Construction Permit program to reduce surface water impacts from construction activities. The General Construction Permit requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for construction activities.

The SWPPP must be prepared the Alameda County Public Works Agency (PWA) and approved by the State Water Resources Control Board (SWRCB) before construction begins. The Grading Department, within the PWA, has the authority under the County's NPDES program to require revisions to the SWPPP. The SWPPP must include specifications for Best Management Practices (BMPs) to be implemented during project construction and be subject to regular inspections by the Project Qualified Stormwater Professional (QSP). BMPs are measures undertaken to control degradation of surface water by preventing soil erosion or the discharge of pollutants from the construction area. This General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs). For the project area, the applicable regional board is the San Francisco Bay Regional Water Quality Control Board.

Local Regulations

The Castro Valley General Plan

The *Castro Valley General Plan* contains policy action items related to water. The policy and actions include:

- Policy 10.2-3: **Flooding.** Lower the risk for flooding by protecting and improving existing drainage patterns.

- Policy 10.2-4: **Reduce Pollution.** Protect surface water quality by reducing the release of non-point source pollutants into storm drain system and waterways.

- Action 10.2-3: Continue to ensure that all construction and development activities comply with all applicable San Francisco Bay Regional Water Quality Control Board (RWQCB) stormwater and water quality requirements, including the NPDES C.3 requirements related to post-construction stormwater runoff.
- Action 10.2-4: Ensure compliance with the Alameda Countywide Clean Water Program (ACCWP) Stormwater Quality Management Plan. Require development and redevelopment projects to prepare and implement site-specific plans that control and manage stormwater runoff and quality through the incorporation of appropriate source controls, site design strategies, and post-construction stormwater treatment.
- Action 10.2-7: Restrict grading and construction activities to dry periods, whenever feasible. Require additional erosion prevention measures during the wet weather period from mid-October through mid-March, unless emergency and maintenance action is necessary to protect life and property is required.

Figure IX-1: Existing Drainage Flow Directions

The Alameda County Municipal Regional Stormwater NPDES Permit (MRP) (RWQCB Order R2-2009-0074; NPDES Permit No. CAS612008) for Alameda County incorporates updated state and federal requirements related to the quantity and quality of post-construction stormwater discharges from development projects. Provision C.3 of the NPDES permit governs storm drain systems and regulates post-construction stormwater runoff.

Provision C.3 of the NPDES permit requires the flow of stormwater and stormwater pollutants to be controlled from new development sites. Current NPDES permit requirements include implementation of source control and site design measures and stormwater treatment measures by projects that create or replace 10,000 square feet or more of impervious surface, such as the proposed Project. In addition to incorporating treatment controls, projects must also provide flow control so that post-project runoff does not exceed estimated pre-project rates and durations.

IMPACTS

Proposed Drainage and Stormwater Control and Protection Plan

The civil engineers for the Project (Lea & Braze Engineering) have prepared a Stormwater Control Plan that demonstrates how the Project would comply with the County's C.3 requirements (see **Appendix J**). The overall objective is to use a variety of means to capture, control, detain and ultimately release stormwater in an amount and at a rate no greater than the amounts and rates of stormwater runoff in the Project site's existing undeveloped condition. The design is based on criteria applicable to the Project as set forth in a document prepared for the Alameda County Clean Water Program: *Hydrograph Modification Management Plan Part A: General Provisions for Hydromodification Management.* The anticipated performance of the design has been validated by subjecting it to the Bay Area Hydrology Model (BAHM), with the results of the model run showing successful compliance. Consistent with this document, the preliminary Stormwater Control Plan has a controlled-release detention basin, as described further below.

e. **Stormwater Runoff and Detention Basin**

Stormwater from roof downspouts is proposed to be splash blocked onto adjacent landscaped areas and directed to either a lined swale behind the houses or to the subdivision street frontage. There will be opportunities on each on-site lot for low impact design, including infiltration trenches and rain water harvesting. All storm water that is concentrated in the swales or street gutter system will be directed to the project bio-retention area located at the low point of the project. **(see Figure 9)** This system will provide both treatment for storm water quality and hydromodification to reduce peak flows per the Alameda County Clean Water Program.

Stormwater that enters the retention pond would be absorbed through natural percolation into 18-inches of sandy loam soil and then percolate down through 12-18 inches of ½-inch sized drain rock. Flows percolating downward past the drain rock layer would infiltrate into the ground or would be picked up in a 6-inch perforated subdrain and gravity flow into the on-site stormwater detention basin located on Parcel A as shown in **Figure IX-2.**

Figure IX-2: Future Drainage Flow Directions

As shown in the details and site-section illustrations on **Figures 7, 8 and IX-2**, a storm drain detention basin is proposed for storing stormwater runoff. The detention basin is not intended as a full-fledged industrial stormwater treatment and pollutant removal facility. However the detention basin, properly designed with the aid from the Bay Area Hydrology Model software will be an effective facility on the project site to improve the quality of the stormwater released and simultaneously store excess stormwater, controlling the rate of the water being released into the County's stormwater system in accordance with the County's C.3 and hydro-modification regulations.

a, f.) **Water quality standards, objectives and waste discharge requirements.**

Significance Criteria: The Project would have a significant environmental impact if it were to violate or conflict with any water quality standards, objectives or waste discharge requirements, or substantially degrade any surface water body or groundwater, or adversely affect the beneficial uses of such waters, including public uses and aquatic, wetland and riparian habitat. Significant environmental impacts would also result if the Project were to increase pollutant discharges to receiving waters (marine, fresh, and/or wetlands) during or following construction (considering water quality parameters such as temperature, dissolved oxygen, turbidity, and typical stormwater pollutants such as heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

Non-point source pollutants (NPS) are washed by rainwater from roofs, landscape areas, and streets and parking areas into the drainage network. NPS can include sediment, nutrients, bacteria and viruses, oil and grease, organics, pesticides, and gross pollutants (floatables). An increase in NPS pollutants could have adverse effects on wildlife, vegetation, and human health. NPS pollutants could also infiltrate into groundwater and degrade the quality of potential groundwater sources.

Impact Hyd-1: **Construction-Period Erosion and Siltation**. Construction of the proposed Project would involve site grading for the access roadway, construction of the proposed on-site storm drain system components and detention basin, trenching for underground utilities, and grading for the 23 home sites. Such disturbance would present a threat of soil erosion by subjecting unprotected bare soil areas to runoff during construction, which could result in siltation to receiving waters, a ***potentially significant impact***.

Mitigation Hyd-1a: **Implement Mitigation Measure Geo-1**. File a Notice of Intent and obtain approval of and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with **Mitigation Measure Geo-1**.

Mitigation Hyd-1b: **Conformance with the County Grading Ordinance**. The Project shall conform to all requirements and provisions of the Alameda County Grading Ordinance. As part of the Grading Ordinance, the Applicant shall obtain a water quality certification or waiver from the Regional Water Quality Control Board. This process ensures conformance to BMPs during construction to control wind and water erosion that could affect surface and ground water quality.

Mitigation Hyd-1c: **NPDES Permit No. CAS612008**. Comply with the C.3 Provisions of the Alameda County Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) – NPDES Permit No. CAS612008. The Project sponsor shall demonstrate compliance with the County's NPDES permit C.3 requirements by preparing a detailed Stormwater Management Plan (SMP), incorporating the most appropriate

post-construction source control measures into the Project design. All accessible on-site inlets shall be marked with the words "No Dumping! Flows to Bay!" Final landscape plans shall be designed to minimize irrigation and runoff and minimize use of fertilizers and pesticides that could contribute to stormwater pollution. Any native trees, shrubs, and groundcover shall be preserved to the maximum extent feasible. All paved areas shall drain to the retention pond. The Stormwater Management Plan shall be prepared during County's review of project engineering design and shall incorporate the required post-construction (permanent) stormwater quality controls. The SMP should include, but is not limited to the following:

1. The proposed finished grade,

2. The storm drainage system including all inlets, pipes, catch basins, overland flows, outlets and water flow directions,

3. The permanent stormwater treatment system (soil and landscape based treatment facilities, filters and separators), including all design details,

4. Design details of all source control measures (preventing contact between stormwater and potential sources of pollution) and site design measures (reductions in flow from impervious surfaces) to be implemented,

5. Calculations demonstrating that stormwater treatment measures are hydraulically sized as specified by the County's stormwater permit, and

6. An Operations and Management Plan to ensure continued effectiveness of structural BMPs and implementation of non-structural BMPs.

RESULTING LEVEL OF SIGNIFICANCE

Implementation of Mitigation Measures Hydro-1 through Hydro-1c would reduce the potential impacts on water quality resulting from construction and post-construction activities to a level of ***less than significant***.

b) Depletion of Groundwater Supplies

Significance Criteria: The Project would have a significant environmental impact if it substantially depletes groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

The Project would not construct any wells, nor would it pump or extract groundwater in any way. Potable water for the future homes would be provided by the East Bay Municipal Utilities District (EBMUD). Thus, there would be ***no impact*** with respect to groundwater or groundwater recharge***.***

c, d & e) Drainage

Significance Criteria: The Project would have a significant environmental impact if it were to substantially alter the existing drainage pattern of the site in a manner which would result in substantial erosion or siltation; if it were to substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; if it were to 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 if it were to degrade water quality.

Failure to comply with the County's C.3 NPDES requirements would represent and result in a ***potentially significant impact*** to water quality.

Impact Hyd-2: **Increased Impervious Surfaces**. The Project would increase the amount of impervious surface area on the Project site. Absent an appropriately designed and managed stormwater prevention plan, the increase in impervious surface area could increase the amount of surface runoff and allow pollutants to enter the storm drain system rather than being absorbed by the land and thereby violate Storm Water Quality Regulations. This impact is considered to be ***potentially significant***.

Construction of homes, the detention basin and the access roadways would increase the amount of impervious surface area present on the site from zero in its current condition to a minimal amount with the exception of the concrete gutters, if pervious pavement is used, when the project is fully built out. Impervious surface area prevents storm water from being absorbed into the soil. During the life of the Project, typical landscape, atmospheric deposition, and vehicular and household chemicals could contaminate runoff from the Project site. Such contaminants typically include cleaning solvents, pesticides, fertilizers, lubricants, metals, and fuel products. As it flows over these surfaces, the water picks up and carries away these pollutants, which might be present on these surfaces. In this way, the stormwater acts as a vehicle for pollution entering the storm water drainage system. The potential for the Project to increase pollutant levels in the stormwater would violate Storm Water Quality Regulations.

Mitigation Hyd-2: **NPDES Permit.** Implement **Mitigation Measure Hyd-1c** above.

RESULTING LEVEL OF SIGNIFICANCE

Without the proposed stormwater prevention plan and on-site detention basin, the increase in impervious surface would result in an increase in stormwater runoff compared with existing conditions. However, implementation of the Stormwater Control Plan, in compliance with the Alameda Countywide Clean Water Program, C.3 Stormwater Technical Guidance Manual, dated August 2006, as proposed by the Project applicant, and when compliance is confirmed and validated to be in compliance, potential impacts to water quality and the public drainage system would be considered reduced to a ***less than significant*** level.

g - j) Flood Hazards, Seiche, Tsunami

Significance Criteria: The Project would have a significant environmental impact if it were to place any housing units within a designated 100-year flood hazard area; if it placed any structures in a manner which would impede or redirect flood flows; or if it were to result in the exposure of people or structures to flooding hazards or inundation by seiche, tsunami or mudflow.

The site is not located in a 100-year flood hazard area as mapped on Flood Insurance Rate Map (FIRM) or the Alameda County Public Works Agency 100-year flood delineation map. The site is not at a shoreline elevation or near a water body where risk of seiche or tsunami would be a hazard. There would be ***no impact*** with regard to flooding or related hazards.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SETTING

The Project site is located in the Castro Valley area of unincorporated Alameda County, in the higher elevations of the East Bay Hills, just south of Lake Chabot, an area characterized by rolling hills. Surrounding land uses include residential subdivisions, including the newer Cardinal Court subdivision, and homes on Proctor Road. These homes are interspersed with a few undeveloped residential parcels of one-half (1/2) acre to a little more than an acre. The community character is a mixture of suburban and rural residential. Development on the north side of Proctor Road (from Redwood Road to Ewing Road) is generally more sparse and rural, with the exception of the recent Cardinal Court subdivision. Development to the south of the Project consists of older, larger tracts with smaller lot sizes as evidenced along Joseph Drive, Sorani Way and Lamson Road.

LAND USE AND PLANNING POLICIES

The main tools used in land use regulations are planning documents, ordinances, and permitting procedures, as employed by local agencies. The general plan assembles the local jurisdiction's basic land use doctrine and regulates future land use decisions. Zoning ordinances govern the type and intensity of land uses and set standards for development within a city or county. The following outlines the general plans and zoning ordinances that govern the proposed project sites and surrounding lands.

Plans, policies and regulations applicable to the Project site include the *Castro Valley General Plan*, a new plan that was adopted in 2012, and the Alameda County Zoning Ordinance. The Land Use Map for Castro Valley is structured to function as a new zoning map for Castro Valley (Alameda County 2010). Figure 4-4 (in the Castro Valley General Plan), Substantive Zoning Changes, shows locations where the new Land Use Map will require changes to the County Zoning districts. The proposed Project falls under the land use category of Hillside Residential, existing zoning of: R-1-B-E-CSU-RV; 6,500 square foot minimum building site area.

IMPACTS

a) Dividing an Established Community

Significance Criteria: The Project would have a significant environmental impact if it were to physically divide an established community.

New development or other physical structures, such as a freeway or very large vertical structure (e.g., a hospital or a school) may adversely divide an established community if it results in a street closure, obstructs other established patterns of travel (e.g., foot, bicycle, etc.) or is especially inconsistent with its surroundings. The Project site occupies a relatively small area within a much larger area of small subdivisions, rural residential parcels, and a few large institutionally-owned properties (e.g., East Bay Regional Parks District). The most recent residential subdivision is Cardinal Court, which has an entrance on the north side of Proctor Road across from the Project site. The Project is consistent with the emerging suburban character of the community and with existing land use regulations applicable to the site. The Project would have ***no impact*** of dividing an established community.

b) Conflicts with Land Use Plan or Zoning

Significance Criteria: The Project would have a significant environmental impact if it were to result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect.

The proposed Project would fall into the land use category of Hillside Residential with 4-8 du/acre. According to Table 4.2-1A - Residential Land Use Classifications in the General Plan, "minimum lot sizes are to be based on the slope."

The proposed project would be designed to be consistent with the Alameda County and Castro Valley's commitment to sustainable design principles and applying those principles to all projects that it undertakes. To fulfill the County's commitment to the environment, the design and construction of the proposed project would incorporate sustainable design principles that: a) optimize energy efficiency, b) promote user productivity and health, c) utilize construction techniques and materials that promote resource conservation and environmental responsibility using the following guidelines: durable, recyclable, recycled content, locally available, minimize construction waste, and d) can be easily modified as user needs change (Alameda County, 2012).

General Plan land use policy 4.3-9 require that public streets be provided for new subdivisions greater than 10 lots with limited exceptions, particularly in hillside areas. The proposed private street meets the intent of the subdivision standards to provide adequate access for residents, emergency vehicles, and service vehicles and is discussed in more detail under Action Item 4.3-9 on page 124-125.

Land use policies are addressed in the Castro Valley General Plan in two sections: Land Use and Development and Community Character and Design. The project's consistency with Castro Valley General Plan policies regarding land use is addressed in **Table X-1** pursuant to CEQA Section 15125(d):

TABLE X-1
PROJECT CONSISTENCY WITH THE CASTRO VALLEY GENERAL PLAN - LAND USE POLICIES

General Plan Policies	Consistency With General Plan	Analysis
Policy 4.3-1 Infill Housing and Mixed-Use. Provide areas for infill housing and mixed-use development to meet a wide range of housing needs	Yes	The proposed Project provides for new infill housing on a currently vacant 5.85-acre lot within the Proctor Road residential neighborhood.
Action 4.3-9 Streets in New Subdivisions. Streets in new subdivisions shall provide adequate access for residents, emergency vehicles, and service vehicles. • Public streets shall be provided for subdivisions greater than 10 lots. • In subdivisions with 10 or fewer lots, particularly in hillside areas, private streets may be permitted, provided that they meet established standards.	Yes	The proposed Project provides a private main road and ancillary streets that have been reviewed by the Alameda County Fire Department for adequate access to fire trucks with regard to width and fire truck turn-around space in both the hammerhead and cul-de-sac that are proposed for the 23-lot subdivision. The proposed new street was intentionally not designed to public street standards, however, the engineering design and standards for the private street do provide adequate access for residents, emergency vehicles, and service vehicles as required for private streets. A public street was considered during the conceptual design phase and it was determined that a public street would not be feasible or practical for this project location. This is due to a combination factors such as the hillside topography, space constraints at the entrance, conservation considerations for less grading, less impervious surface, less retaining walls and the preservation of the rural characteristics of the neighborhood. Thus, the option of a private street was determined to be the more feasible and environmentally superior alternative.
Action 4.3-10 **Private Street Standards.** Establish consistent standards for private streets depending on the number of units that the street will serve the number of required parking spaces per unit, and reasonable access requirements and operational needs of emergency access vehicles and garbage. • Minimum paved roadway width requirements (i.e., 20 feet for roads serving five or more units or when part of required fire apparatus access, and 12 feet for roads serving between two and five units that is not part of required fire apparatus access). • Turnarounds • Landscaping • Red curbs and signage for no parking zones • Sidewalks, and • Parking standards.	Yes	The proposed Project would provide a 20-foot private street curb-to-curb with a 5' sidewalk on one side of the street that would be a fire lane. No parking would be allowed on either side of the street. Proper signage and striping would be part of the project improvement plans. On-site parking would include a total of 23 common parking stalls (one common stall per lot). Lot 23 parking would be on Proctor Road. A total of 17 trees would be removed that would be replaced with 34 new trees in a minimum of 24-inch boxes (2:1 replacement) to be placed along the entire length of the private street. Turnarounds include the fire truck hammerhead and the cul-de-sac. A secondary access to the project site from Joseph Drive (to the South) was considered and studied. However, the secondary access option at Joseph Drive was considered infeasible from several aspects including engineering and environmental compliance. This option also received very strong neighborhood objections.

General Plan Policies	Consistency With General Plan	Analysis
Action 4.3-12 **Gated Streets.** Revise zoning regulations and subdivision regulations for Castro Valley to prohibit gates across public and private streets.	Yes	The proposed Project would not include any gates across the private streets proposed.
Policy 5.1-1 **Creative Site Design.** Allow residential development on or near hillsides, canyons, and creeks to employ creative site design, landscaping, and architecture that blend with the characteristics of each location and surroundings, and offer superior design solutions.	Yes	The proposed project would employ site design that would limit the view of the new homes from the established surrounding residential areas. The preliminary landscape plan shows only the trees to be replaced along the private street; however, the Project would utilize recommendations from the *Bay-Friendly Landscape Guidelines* and implement sustainable practices for construction, installation and maintenance of the subdivision landscaping. See the visual analysis in the Aesthetics section.
Action 5.1-1 **Require Visual Impact Analysis**. Require visual impact analysis during the development review process for public and private projects to ensure protection of views to natural areas from public streets, parks, trails, and community facilities.	Yes	The proposed Project review has included a visual impact analysis showing views from existing houses across the Project site (see Figures 10a through 11b). The proposed private street presents less visual impacts and maintains a more appropriate rural character in the area as compared to the visual impacts of a larger and wider Public street.
Action 5.1-2 **Cluster Development.** Encourage planned unit developments that cluster lots and preserve large areas of open space for new subdivisions in hillside, creek, and canyon areas and in areas with significant biological resources.	Yes	The proposed Project design has arranged the lots as closely together as feasible, retaining a buffer at the southern portion that including a wetland feature as well as the west and east sides, retaining some existing vegetation and mature trees.
Policy 5.2-1 **Neighborhood Character.** Ensure that new residential development is consistent with the desired community character, protects sensitive biological resources, and is not subject to undue natural hazards.	Yes	The two older homes on Proctor Road that are within the Project area have recently been upgraded and modernized. A relatively new subdivision has been constructed directly across Proctor Road called Cardinal Court that also includes modern homes. The proposed project would blend into the surround community and would protect the wetland feature in "Parcel A" at the southern end. A vegetative buffer and a fire sprinkler system meeting NFPA 13D in each home as requested by the Alameda County Fire Department would ensure that the subdivision is protected against fire hazards as the site is known to be located within the Very High Fire Hazard Zone.
Policy 5.2-2 **Residential Design.** Ensure that residential development projects comply with all adopted design standards and guidelines.	Yes	The proposed residential subdivision would comply with all adopted design standards and guidelines, which include the BROZ and County Design Guidelines for Single-Family Subdivisions and Hillside Development. A visual analysis has been prepared by the project engineers to show that homes would be situated and designed to minimize impact

General Plan Policies	Consistency With General Plan	Analysis
		on the existing surrounding residences.
Policy 5.2-3 **Design Exceptions.** Exceptions to design standards and guidelines will only be considered through a discretionary review process, and only approved if: • There are site-specific conditions that make it physically infeasible to follow the standards or guidelines; and • The proposed design provides an equal or better design solution in terms of livability for residents and impacts on neighboring properties.	Yes	The proposed Project is not requesting any design standard and guideline exceptions.
Policy 5.2-4 **Lots Sizes.** Lot sizes shall be consistent with the desired character of the area.	Yes	The proposed Project lots would range in size from 6,520 square feet to 11,594 (net), with an average lot size of 8,048 square feet. The minimum building site area for parcels in this subdivision is 6,500 square feet according to the zoning ordinance. With the elimination of the original Lot 10 for residential development, density would still remain between 4 and 8 units per net acre. Comparing the proposed lots with existing lots in the surrounding area show that the proposed lots would be comparable and would conform to or exceed the minimum dimensions required in the Castro Valley General Plan and Zoning Ordinance. See Figure X-1, below.
Action 5.2-4 **Alternative Standards for Environmentally Sensitive Areas.** Require subdivisions to be designed to avoid areas that are environmentally sensitive, or have high fire hazards, steep slopes, natural vegetation, or mature trees. To accommodate such conditions, provide for modifications to required lot sizes and design standards including, but not limited to: • Creating smaller lots clustered together with permanent open space designations for steep slopes and environmentally sensitive areas; • Creative building designs within a planned unit development, and/or • Reduction in development intensity up to 75 percent of the maximum permitted.	Yes	Site grading and landform disturbance involving approximately 15,790 cubic yards of material would affect about 50 percent of the total site area in order to establish appropriate grades for future residential home construction and the road, hammerhead and cul-de-sac. The grading plan would balance cut and fill resulting in a minimum amount of material to be exported (650 cy). While the mass grading plan would alter the contours of the site, the basic canyon landform and physical qualities of the site would be retained. The proposed grading plan would keep grading to a minimum to achieve the project objectives (i.e., to create an economically viable small-medium scale subdivision) and would not alter the natural land form except as necessary to create vial buildable lots that, in all other respects, would comply with the Castro Valley General Plan and Alameda County Zoning Ordinance policies and requirements. The visual effect of the proposed grading plan can be seen in ***Figure 7.*** A draft wetland delineation study conducted by ECORP has determined that the Project site includes a potential seasonal wetland feature at the southern end, therefore the subdivision design was modified to avoid construction

General Plan Policies	Consistency With General Plan	Analysis
		impacts to the seasonal wetland. The draft delineation has been submitted to the US Army Corps for review and approval. The proposed retention pond for C.3 and hydromodification purposes has been relocated to previously identified Lot 10, lowering the number of proposed single family homes from 24 to 23. The buildings have been conceptually designed to limit visual impact on the surrounding neighborhood residents, and would be grouped together around the main road, fire truck hammerhead and cul-de-sac, with one lot (Lot 23) directly off Proctor Road.

CONCLUSION:

The foregoing discussion, comment and/or analysis indicate that the Project would either specifically conform to or be consistent with all of the design guidelines provided in the Castro Valley General Plan. Given the limited visibility of the future homes, and the overall preservation of the topographical character of the site, there would be ***no impact*** on land use plan or zoning.

c) Conflict with Conservation Plan

Significance Criteria: The Project would have a significant environmental impact if it were to result in a conflict with any applicable habitat conservation plan or natural community conservation plan.

There are no conservation plans either currently in force or proposed for application to the subject property or nearby areas. Therefore, the Project would have ***no impact*** on conservation plans.

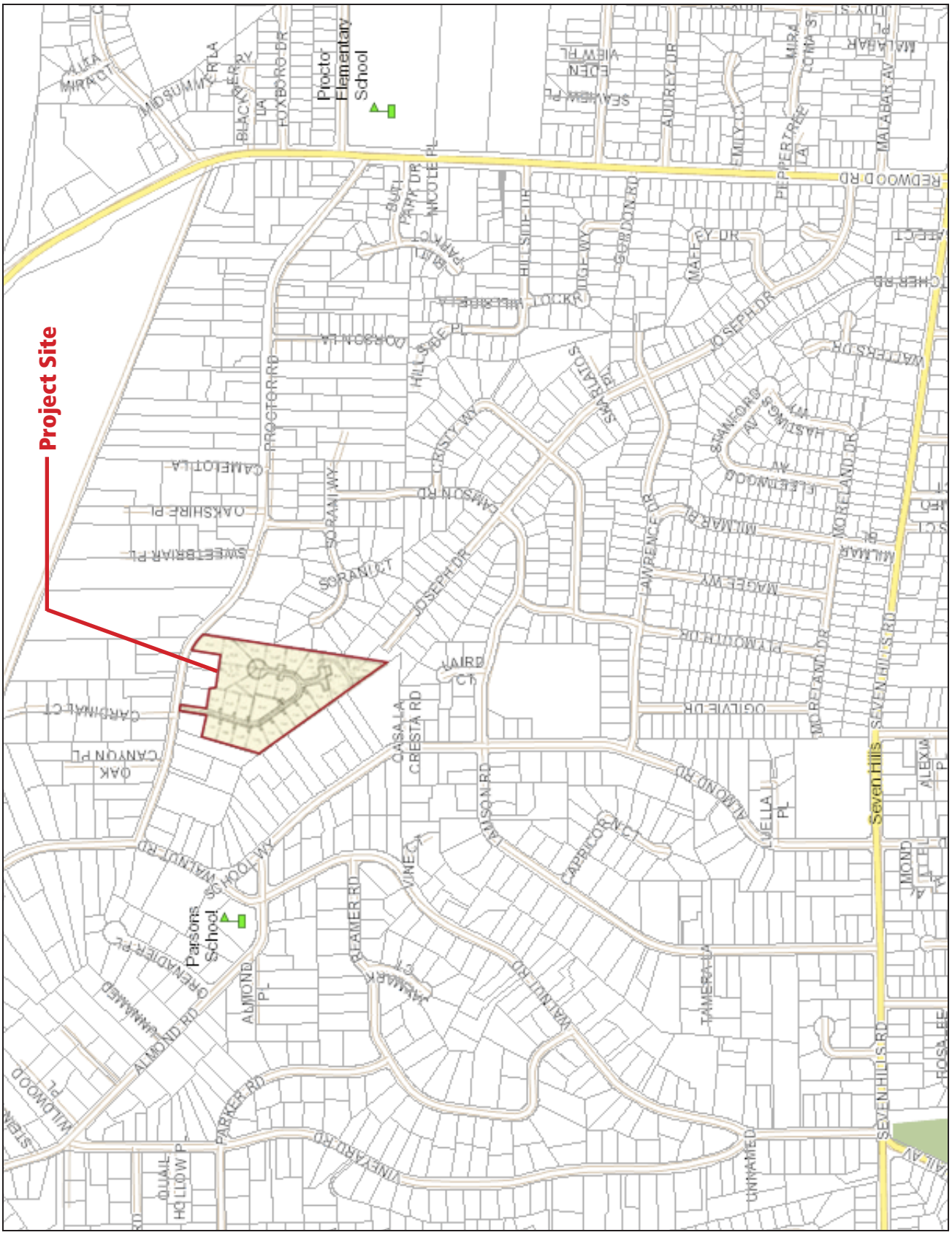

Figure X-1: Lot Size Comparison with Nearby Subdivisions

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
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?	☐	☐	☐	☒

SETTING

The California Division of Mines and Geology (CDMG) has classified lands within the San Francisco – Monterey Bay Region into Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974. CDMG mapping shows that there are no significant mineral resources located at the Project site.

IMPACTS

a, b) Loss of Mineral Resources

Significance Criteria: The Project would have a significant environmental impact if it were to 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, or if it were to 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.

The site contains no known mineral resources. The Conservation Element of the Castro Valley General Plan does not identify any mineral resources in the vicinity and, based on the geological information provided in the Justiniano report, the underlying soils do not have extractive value. Therefore, the Project would have ***no impact*** with regard to mineral resources or result in the loss of availability of any locally important resource recovery site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

INTRODUCTION

Analysis Methodology

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent upon the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average-hourly noise level (in Leq) and the average-daily noise levels (in Ldn/CNEL).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates at a rate between 3.0 to 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source (US EPA 1971).

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted: the so-called "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged. Regarding increases in A-weighted noise levels, knowledge of the following relationships will be helpful in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans.
- Outside of the laboratory, a 3-dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial.
- A 10-dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

A limitation of using a single noise-level increase value to evaluate noise impacts, as discussed above, is that it fails to account for pre-project noise conditions. With this in mind, the Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that take into account the ambient noise level. The FICON recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been asserted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics, such as the average-daily noise level (i.e., CNEL, L_{dn}). FICON-recommended noise evaluation criteria are summarized in **Table NOI-1** (FICON 2000).

TABLE NOI-1
FEDERAL INTERAGENCY COMMITTEE ON NOISE
RECOMMENDED CRITERIA FOR EVALUATION OF INCREASES IN AMBIENT NOISE LEVELS

Ambient Noise Level Without Project	Increase Required for Significant Impact
< 60 dB	5.0 dB, or greater
60-65 dB	3.0 dB, or greater
> 65 dB	1.5 dB, or greater

Source: FICON 2000

As depicted in **Table NOI-1**, an increase in noise level of 5.0 dB, or greater, would typically be considered to result in increased levels of annoyance where existing ambient noise levels are less than 60 dB. Within areas where the ambient noise level ranges from 60 to 65 dB, increased levels of annoyance would be anticipated at increases of 3 dB, or greater. Increases of 1.5 dB, or greater,

could result in increased levels of annoyance in areas where the ambient noise level exceeds 65 dB. The rationale for the FICON-recommended criteria is that as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant increases in annoyance (FICON 2000). These criteria have since been used by various other agencies and jurisdictions for the evaluation of project-generated increases in ambient noise levels.

In determining the daily level of environmental noise, noise studies need to differentiate between daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, L_{dn} (day/night average sound level), was developed. The L_{dn} divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Community Noise Equivalent Level (CNEL) is another 24-hour average, which includes both an evening and nighttime weighting.

SETTING

The Project Area is located within the Castro Valley Hills area of Alameda County. The Castro Valley Hills area, especially the area near the Project Site, is a mixed rural residential and suburban residential community. The surrounding noise environment is typical of such a setting, i.e. minimal noise levels.

As a guideline, the State of California Department of Health Services has identified Ldn or CNEL values of 60 dBA or less as normally acceptable outdoor levels for residential use. CEQA does not define what noise level increase would be considered "substantial". However, in CEQA noise analysis it is common to define a noise impact as significant if the pre-existing noise environment is greater than L_{dn} = 55, if the Project would increase noise levels by more than 3 dBA at noise-sensitive receptors. Where the existing noise level is lower than L_{dn} = 55, a somewhat higher increase is generally tolerated before a finding of significance is made.

Local regulations are set forth in the Noise Element of the Castro Valley General Plan, Alameda County General Plan and in the County's Noise Ordinance, part of the General Ordinance Code of Alameda County.[10] The County General Plan Noise Element states that noise generated by new projects shall meet the acceptable exterior noise levels standards of the Noise and Land Use Compatibility Guidelines, which state that for residential use, noise levels are not to exceed 65 dB L_{dn} for one minute during the day (7 a.m. to 10 p.m.) or 60 dB L_{dn} for one minute during the evening (10 p.m. to 7 a.m.).

IMPACTS

a - c) Excessive Noise or Vibration; Effect on Ambient Noise Levels

> *Significance Criteria*: The Project would have a significant environmental impact if it were to result in exposure of persons to or generation of noise levels in excess of standards established in the Castro Valley General Plan or the County's Noise Ordinance, generation of excessive groundborne vibration or groundborne noise levels, or a permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

[10] Alameda County General Code, Chapter 6.60, Table 6.60.040B

The Project would increase the ambient noise levels in the Project area but only because it is currently an undeveloped site. As a proposed residential subdivision of 23 single-family homes on lots in excess of 6,500 square feet, to be developed in a manner consistent with the land use character and intensity prevailing in the surrounding area, and being subject to applicable County noise limitation policies, noise levels of the completed Project would be typical of noise associated with residential subdivisions and in particular would be similar to the noise levels in existing residential enclaves in the Fairview area. While ambient noise levels would increase slightly once the new houses are occupied on the Project site, it is not likely that the change would be noticeable on a permanent basis. Also, the Project would not be a source of vibration and none are located in the vicinity. Therefore, the Project would have ***no impact*** concerning operational noise levels, groundborne noise or vibration, and a ***less than significant impact*** regarding permanent changes in ambient noise levels in the area.

d) Temporary Ambient Noise Levels.

Significance Criteria: The Project would have a significant environmental impact if it were to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Noise would be generated from the operation of onsite construction equipment for site grading, roadway construction, utility trenching, construction of the future single family homes, and for construction-related traffic. Noise from typical construction activities ranges from 75 to 85 dB at 50 feet, and could include a temporary increase in ground vibration. Distance from the proposed home sites to nearby residences ranges from 250 to over 400 feet, although grading and road construction activities for the access roadway and construction of the on-site detention basin would be within 100 feet of some residences. Construction traffic would access the site from Proctor Road which could adversely affect residents with additional traffic noise.

Analysis Results

Short-term Construction

The construction and site work required by the proposed project includes excavation, fill, and grading of the Project site, on-site drainage modifications and connections, electrical connections, water connections, and other minor construction. Grading and site improvements would take approximately five months. Overall construction of the proposed project would be completed in one phase, with an expected completion date in Spring 2014.

Onsite noise-generating equipment required for demolition and grading activities is anticipated to include bulldozers, backhoes, cranes, jackhammers, a rotodrill, a ripper, scrapers, and loaders. Haul trucks would also be used for material transport to and from the project site. **Table NOI-2** lists typical uncontrolled noise levels generated by individual pieces of construction equipment at a distance of 50 feet. As indicated, individual construction equipment noise levels can vary from approximately 74 to 89 dBA at 50 feet for brief periods. Average-hourly noise levels would vary depending on the specific activities conducted and equipment being used. Use of equipment noise-control devices (e.g., mufflers, shrouds) would reduce individual equipment noise levels by approximately 10 dBA.

The nearest noise-sensitive receptors include residential dwelling units located to the north, along Proctor Road, and to the south along Joseph Drive and Sorani Way. The nearest residential-use properties would be located within approximately 25-50 feet of onsite construction activities. During peak construction periods, predicted exterior noise levels at these nearest residential dwellings could reach levels of approximately 75 to 80 dBA L_{eq}, depending on the specific

equipment used and duration of the activities conducted. When noise levels generated by construction activities near residential land uses are being evaluated, activities occurring during the more noise-sensitive nighttime hours (i.e., 10 p.m. to 7 a.m.) are of increased concern.

Because exterior ambient noise levels typically decrease during the nighttime hours as community activities (e.g., commercial activities, vehicle traffic) decrease, construction activities performed during these more noise-sensitive periods of the day can result in increased annoyance and potential sleep disruption for occupants of nearby residential dwellings.

TABLE NOI-2
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Equipment	Typical Noise Level (dBA Lmax) 50 feet from Source
Backhoe	80
Compactor	82
Dozer	85
Grader	85
Loader	85
Truck	88
Air Compressor	81
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Mobile	83
Generator	81
Jack Hammer	88
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Scraper	89
Note: Use of equipment noise-control devices (e.g., mufflers, shrouds) would reduce individual equipment noise levels by approximately 10 dBA.	

Sources: FTA 2006

The County of Alameda Noise Ordinance (Chapter 6.60-070) restricts construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays and Sundays.

The construction of the Project would generate noise and temporarily increase noise levels at nearby residential receivers. Noise impacts resulting from construction depend on the noise levels generated by different types of construction equipment operating on site, the timing and duration of noise generating activities, the presence of intervening terrain or noise barriers, and the distance between construction noise sources and noise sensitive receptors.

TABLE NOI-3
REPRESENTATIVE VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 Feet (In/Sec)
Large Bulldozers	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers	0.003

Source: FTA 2006, Caltrans 2004.

The most severe construction noise impacts are those occurring during noise-sensitive times of the day (early morning, evening, or nighttime hours) and when construction involves areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. Limiting the hours when construction can occur to daytime hours is a simple method to reduce the potential for noise impacts. In areas immediately adjacent to construction, controls such as constructing temporary noise barriers and utilizing "quiet" construction equipment also help reduce the potential for construction-related noise impacts.

It is anticipated that the site grading and utility installation phases of the Project would be completed over a period of less than one construction season (approximately 4 months), and that construction of the homes would occur in, most likely, two phases – some in 2013 and the rest in 2014.

Project construction would be expected to generate worst-case hourly average noise levels of about 78 dBA to 89 dBA Leq at the nearest noise-sensitive receivers. Construction noise levels would generally exceed 60 dBA Leq and the ambient noise environment by at least 5 dBA Leq during noisy construction phases. However, these noise levels would be intermittent and temporary and would not be expected to last for a period of greater than one construction season.

Significant noise impacts do not normally occur when standard construction noise control measures are enforced at the site and when the duration of the noise generating construction period at a particular receiver or group of receivers is limited to not more than two construction seasons. Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction material, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life. Absent noise reduction and time- limiting restrictions could result in construction noise that would be considered a ***potentially significant impact***.

Impact Noi-1: **Temporary Construction Noise Impacts During Construction**. The construction of the Project would generate noise and would temporarily and intermittently increase noise levels at adjacent residential receptors.

Mitigation Noi-1: **Construction Noise Control.** To ensure construction-period noise levels are reduced to the extent feasible, the following construction noise control Best Management Practices shall be employed:

- All construction contractors and subcontractors shall comply with the County Noise Ordinance.

- Noise-generating activities at the construction site shall be restricted to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, 8:00 a.m. to 5:00 p.m. on Saturdays and Sundays.

- All internal combustion engine driven equipment will be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses.

- Utilize "quiet" air compressors and other stationery noise sources where technology exists.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent noise sensitive residences so that construction activities can be scheduled to minimize noise disturbance.

- Designate and identify by name with contact information "Disturbance Coordinator" who would be responsible for responding to any local complaints about construction noise. This information is to be provided to residents within a 300-foot radius of the Project site and placed on the Project construction sign at the foot of Proctor Road. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. The disturbance coordinator shall conspicuously post the coordinator's telephone number at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.

RESULTING LEVEL OF SIGNIFICANCE

Implementation of the foregoing noise reduction measures including compliance with the Alameda County Noise Ordinance would ensure that construction-related noise impacts would be ***less-than-significant***.

e - f) Airport Land Use Plans and Aircraft Noise.

> *Significance Criteria*: The Project would have a significant environmental impact if it were 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) or in the vicinity of a private airstrip and were to expose people residing or working in the Project area to excessive noise levels.

The Project site is not subject to an Airport Land Use Plan and is not near a private airstrip. The closest airport to the Project site is the Hayward Air Terminal, located approximately four (4) miles to the southwest. Oakland International Airport is located approximately six (6) miles northwest of the Project site, and a substantial proportion of inbound jet aircraft overfly the Fairview area. However, overhead aircraft noise is a common and unavoidable annoyance of urbanized areas. In conclusion, airport-related noise would have *a* ***less than significant impact*** on future Project residents.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SETTING

The Project site is a vacant undeveloped parcel; structures such as outbuildings that were previous constructed on the property have been removed due to potential hazards. The site is in a suburban, residential area and the proposed single-family residential Project would be consistent with the Castro Valley General Plan which includes policies for hillside residential development.

DISCUSSION OF IMPACTS

a) Population Growth

Significance Criteria: The Project would have a significant environmental impact if it were to induce either directly or indirectly substantial population growth.

The Project would not result in significant increases in population, demand for housing, or expansion of public or private services. The Project would result in the construction of 23 new single family homes. Based on the average of 2.71 persons per household in Alameda County (2010 Census), it is estimated that the Project would result in approximately 62 additional residents. The addition of 62 new residents in an area designated by the Castro Valley General Plan for population growth does not qualify as substantial increase in population. Therefore, the impact of the Project on population growth is ***less than significant***.

b, c) Displacement of Housing or People

Significance Criteria: The Project would have a significant environmental impact if it would result in the displacement of substantial numbers of existing housing units or people living at the Project site.

The Project would develop 23 new housing units on a vacant undeveloped site. The Project does not involve displacement of any housing units or displace any existing residents. The Project would have ***no impact*** on housing and household displacement.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. 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:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☐	☒

IMPACTS

The Project is located in the Castro Valley area, and is an unincorporated community of Alameda County. For the purposes of this section, the following significance criteria would hold for all impact assessments:

DISCUSSION OF IMPACTS

> *Significance Criteria*: The Project would have a significant environmental impact if it were to result in substantial adverse physical impacts associated with the provision of 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 fire protection, police protection, schools, parks and recreational facilities, or other government facilities.

Service request letters were sent to all appropriate agencies with a potential interest in this project. Responses to service requests can be found in **Appendix H**.

a. Fire Protection

The Alameda County Fire Department (ACFD) provides fire and paramedic service to most of the Castro Valley Planning Area. ACFD Station 5 (18770 Lake Chabot Road) services the northwestern area of Castro Valley. The station has one engine company, which also staffs a patrol unit used for grass fire responses (Kahn/Mortimer/Associates, 2007).

The Project would add approximately 62 new residents and 23 new structures to an area already adequately served by fire protection resources. The addition of such a small number of residences would not affect fire department service ratios or response times, nor would any new fire protection facilities need to be provided. The Alameda County Fire Department has approved the alignment, turning radii, slopes (road grades and road design) of the proposed access road on Project property, including the hammerhead and cul-de-sac as providing adequate access for firefighting and emergency medical vehicles and equipment.

In addition, the following requirements were required to be included due to the Project location within the Local Response Area Very High Fire Severity Zone:

1. A Fire Sprinkler system meeting NFPA 13D for all residential homes and three fire hydrants, the latter to be installed prior to vertical construction.
2. A 30 foot setback to all property lines.
3. Wildland Urban Interface standards of Chapter 47 of the California Fire Code and Chapter 7A of the California Building Code.

All requirements noted per communications with the ACFD have been incorporated into the Project design drawings. Thus, the Project would have ***less than significant*** impact on fire protection resources.

For a discussion of the potential impact of the project on fire protection and exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, refer to the discussion in section VIIIh), Hazards and Hazardous Materials.

Mitigation Measure

Implementation of mitigation measures **MM Haz-1** would ensure that the proposed project would have a ***less-than-significant*** impact on fire protection and exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

b) Police Protection

The Alameda County Sheriff is responsible for police services on all unincorporated lands within the County, including the Project site, which is located in Castro Valley. Castro Valley is patrolled and served by deputies stationed at the Eden Township Substation (ETS). The station is located at 15001 Foothill Boulevard, San Leandro, CA. ETS is 3.65 miles from the Project site and along with the Tri-Valley substation in Dublin, provides patrol services for nearly 150,000+ citizens within unincorporated Alameda County – Ashland, Castro Valley, Cherryland, San Lorenzo, Sunol and Livermore Valley. Patrol services are provided on a 24 hour basis and the current Patrol Deputy ration is 0.92 per 1,000 population (Soares 2012). Average response times for the ACSO are 13:30 minutes for priority one calls and 21.18 minutes for non-priority calls for service.

The Project would add approximately 62 new residents that would require police protection from the Sheriff. The addition of such a small number of residences would not affect police department service ratios or response times, nor would any new police facilities need to be provided. Property taxes to be generated by the Project, when complete, would support the provision of police services by the County Sheriff. The impact to police protection resources would be ***less-than-significant***.

c) Schools

The Project site is located within the Castro Valley Unified School District. The proposed Project would not generate enough students to adversely affect the service ratios of the School District, nor would it result in the need for additional schools to be built. Response to a service request letter from CVUSD stated that the impact from 23 [sic] additional residential lots will be adequately mitigated by the payment of the statutorily required impact mitigation fee or "developer" fee at rates implemented and applicable to the proposed project at time of building permit." The current "developer" fee is $2.97 per square foot habitable space less garages. The impact of the Project on schools would be **less than significant**.

d) Parks

Public park facilities in the Project vicinity area are provided primarily by the Hayward Area Recreation and Park District (HARD) and also by the East Bay Regional Park District. Nearby parks include Parsons Park at Almond and Walnut Roads, Castro Valley Park/Community Center at 18988 Lake Chabot Road, and Proctor School Park, located at 17520 Redwood Road. The closest facility for active recreation is the Cull Canyon Recreation Area located on Cull Canyon Road, approximately two (2) miles east of the Project site. Staff from EBRPD noted that there would be ***no impacts*** anticipated to regional park services from the proposed project.

Pursuant to the County's Open Space and Park Dedication Fee, the Project would be required to pay fees to the HARD as its contribution to funding sufficient park and recreational facilities and services to meet demand arising from new development. Payment of the fee would assure that potential impacts on existing recreational facilities and services would be ***less than significant***.

e) Other Public Facilities.

The Alameda County Public Works Agency provides for roadway maintenance and design, management of flood control projects, and a variety of other facilities and services in the unincorporated areas of the County. The cost of providing roadway maintenance, flood control and other services would be provided through property taxes and the Project would generate more property tax revenue to the County than the vacant, undeveloped Project site currently provides. As a result, impacts on roadway, flood control or other facilities and services, or the County's levels of service for these facilities and services would be considered ***less than significant***.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION.				
a) Would the project 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) Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

SETTING

As stated in the previous section, there are several parks and recreational facilities located within close proximity to the Project site. Castro Valley Park/Community Center is located approximately four-fifths (4/5) of a mile southwest of the Project site and features a Group Picnic Area, barbecues, play area, Parking Lot, tennis courts, ball fields, basketball courts, soccer fields, Horseshoe Courts, Community Center Building, snack bar, meeting rooms, rest rooms, open lawn area, Chanticleer's Little Theatre. Proctor School Park is located approximately three-quarter (¾) mile east of the Project Site and features ball fields, soccer fields, rest rooms and an open lawn area. Parsons Park is located about a one-quarter (¼) mile west of the Project site at Almond and Walnut Roads and

includes a picnic area, play area and open lawn. The Willow Park Golf Course is located approximately 1 mile northeast of the Project site on Redwood Road where there is an 18-hole course and driving range. Another active recreation facility close by is the Anthony Chabot Regional Park which is approximately one-quarter (¼) mile north, along Lake Chabot Road. Additionally, the Project is near the Cull Canyon Regional Recreation Area. This regional park features a swimming lagoon, fishing, and picnicking.

IMPACTS

a, b) Recreational Facilities

> *Significance Criteria*: The Project would have a significant environmental effect if it would 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The Project would increase the use of neighborhood parks by increasing the population of park users in the area by approximately 62 persons. The corresponding increase in park deterioration as a result of 62 additional park patrons would not result in substantially accelerated deterioration of park facilities, nor would it require the expansion or construction of new park facilities elsewhere. An increase of 62 additional park patrons could potentially contribute to the cumulative demand for more park and recreation facilities. However, the Project would be subject to and would be required to pay the appropriate amount pursuant to the County Park Dedication Fee applicable to new residential development in Alameda County. The ordinance requires residential developers to dedicate or improve land or facilities or pay in-lieu fees based on the amount of land needed to provide five acres per 1,000 persons or 218 square feet per person (Kahn/Mortimer/Associates 2007). The in-lieu fee for single family units is $11,550 or $265,650 for 23 homes. Payment of the fee would ensure that the Project would fund its incremental share of improvements to accommodate the cumulative demand for park and recreation facilities resulting from the increase in population. Payment of the above County Park Dedication Fee would result in a ***less than significant*** impact on recreational facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

SETTING

The discussion below regarding potential transportation or traffic impacts is based on a report prepared by TJKM Transportation Consultants in 2010 for the current Project site and is included as **Appendix I** (TJKM 2010). The Project is located in a low density suburban area of Alameda County within Castro Valley. Access to the Project site is provided by Proctor Road, a two-lane roadway generally aligned east – west in the vicinity of the Project. The Alameda County Public Works Agency classifies Proctor Road as a local or residential street; road classification is based on the amount of access provided by connecting streets and how the road is used to link residents to destinations. Proctor Road serves as one of the hillside access routes through the Castro Valley Hills area, connecting northbound traffic on Redwood Road in the central business district in Castro Valley with the residential enclaves in the northerly hills of the community.

Other routes to central Castro Valley include Walnut Road to Seven Hills Road, to Castro Valley Boulevard via Lake Chabot Road. The nearest regional freeway is I-580 in Castro Valley, approximately 1.9 miles southwest of the Project site. Another important local roadway is Somerset Avenue which intersects with Lake Chabot Road and Redwood Road approximately 1.1 miles south of the Project site.

Proctor Road has two 16-foot travel lanes, five speed bumps, and a posted speed limit of 15 miles per hour (mph) while passing the Project site. The Project would connect to Proctor Road via a proposed private road to be constructed as Street A. The nearest AC Transit bus route for future Project residents would be Route 91 which extends up Redwood Road to the intersection of Proctor Road, one-half mile east of the Project site. Route 91 provides bus service to downtown Hayward where it connects with various other AC Transit lines as well as BART. Another alternative would be AC Transit Route 87 which connects to Castro Valley BART via Seven Hills Road and the NX4, which provides transbay service to San Francisco also via Seven Hills Road. The closest stop would be at Redwood Road and Proctor Road, approximately 0.5 mile from the Project site.

The TJKM report indicates that Proctor Road carries an average of approximately 2,339 cars over a typical 24-hour weekday period in the Project vicinity, with morning and evening peak hour volumes of 811 (AM) and 851 (PM) in both directions. The intersection of Proctor and Redwood Road and Proctor Road and Walnut/Ewing Road was found to operate with minimal delay and at an acceptable level of service (TJKM 2010). The proposed residential development is expected to generate 18 trips (4 inbound and 14 outbound) during the AM peak hour and 25 trips (16 inbound and 9 outbound) during the PM peak hour.

IMPACTS

a) Conflict with applicable plans, ordinances or policies regarding the performance of the circulation system.

Significance Criteria: The Project would have a significant effect on the environment if it were to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Traffic operations at intersections are typically described in terms of "Level of Service" (LOS). LOS measures the effect of several factors on traffic operating conditions, including speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort, and convenience. LOS is generally measured quantitatively in terms of vehicular delay and is described using a scale that ranges from LOS A to LOS F, with LOS A representing essentially free-flow conditions and LOS F indicating over-capacity conditions with substantial congestion and delay. A complete description of the meaning of level of service can be found in the *Highway Research Board Special Report 209, Highway Capacity Manual*. Brief descriptions of the six levels of service are shown in **Table XV-1**.

The Project site is located in a hilly portion of the Castro Valley and surrounded by residential uses. A private street design has been included for the proposed project as most feasible. One of the considerations in this determination was that development of a fifty (50) foot wide public entrance at the curved area along Proctor Road would not be feasible presenting several health and safety concerns for both vehicles and pedestrians. The primary local access routes to the project site are Redwood Road and Walnut/Ewing Roads. Regional access to the project site is provided via Highway 580. The following two intersections serve as major access points to and from the Project site:

- Proctor Road/Redwood Road
- Proctor Road/Walnut Road/Ewing Road

The proposed project would have a less than significant impact on causing an increase in traffic that would be substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips or congestion at intersections).

Analysis Methodology

The *SYNCHRO* level of service software package was used to determine the project's impacts on intersection delay using the *2000 Highway Capacity Manual* (HCM 2000). Potential parking capacity impacts were evaluated following standards and methodologies set forth by the County of Alameda. The aforementioned study intersections are included in the traffic analysis and are shown on **Figure 1 of Appendix I.**

Existing traffic volumes were obtained from turning movement counts conducted for TJKM by National Data and Surveying (NDS) during October 2010. Please refer to **Appendix I** for more information, including traffic count reports.

For signalized intersections, the Critical Movement Analysis (also known as Circular-212) methodology was used. This methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements, summarizes these critical conflicting v/c ratios for each intersection approach, and determines the overall v/c ratios. However, no signalized intersections were analyzed as there are none within one mile of the Project site.

For stop-controlled intersections without signals, the *Highway Capacity Manual* (HCM) unsignalized methodology was used for two reasons. First, it presents the approach delay of the major and minor

streets (in seconds per vehicle) and second, the Circular-212 methodology does not calculate LOS at stop-controlled intersections.

Significance criteria are used to define the severity of an impact. For this analysis, criteria for impacts on intersections are based on LOS standards for Castro Valley. The project would result in a significant impact to intersection levels of service under cumulative conditions if, for the peak hour, the level of service at an intersection degrades from an acceptable mid-level LOS D or better under cumulative conditions without the project to an unacceptable high LOS D, LOS E, or LOS F under cumulative conditions with the project and the project's contribution to the impact was found to be cumulatively considerable. For intersections projected to operate at mid-level LOS D or worse under cumulative conditions without the project, the project would have a significant impact under cumulative conditions if it would cause the a delay of 25.0 – 35.0 seconds or more.

Project trip distribution patterns took into account such factors as the location of housing and jobs within the Castro Valley area, transportation facility characteristics that impact travel demand (e.g., locations of arterials, freeways, interchanges), and the existing roadway network in the study area.

The proposed project is expected to be operational by Spring 2014. The future (2015) near-term condition was analyzed to assess baseline and project-specific traffic impacts for a near-term condition. Future (2015) near-term traffic volumes were obtained by adding a five-year incremental traffic growth at an average estimated two percent growth rate to existing traffic volumes to reflect regional and ambient growth within the study area.

In addition, the traffic generated by approved and/or pending projects in the vicinity of the project study area were also added to near-term base traffic volume. A list of approved and pending development projects in the Castro Valley area was provided by the county. Trip generation estimates for the related projects were developed using trip rates provided in the Institute of Transportation Engineers (ITE) *Trip Generation*, 7th Edition, which is provided in **Appendix I**. Related project thresholds of 5 or more residential units and 3,000 square feet or more for non-residential land uses were applied. This analysis does not factor in existing trip-generating land uses that may be demolished as part of the development of these related projects; as such, this analysis assumes a worst-case scenario for the trip generation characteristics of those related projects.

TABLE XV-1
LEVEL OF SERVICE DESCRIPTIONS

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.

F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

TABLE XV-2
LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

	HCM Methodology
Level of Service	**Unsignalized Intersection Delay per Vehicle (in seconds)**
A	≤ 10.0
B	> 10.0 – 15.0
C	> 15.0 – 25.0
D	> 25.0 – 35.0
E	> 35.0 – 50.0
F	> 50.0

Analysis Results

Existing Conditions

The results of the level of service analysis under existing conditions are shown in **Table XV-3**. All of the study intersections currently operate at an acceptable LOS under existing conditions, according to the County's LOS standards. Existing LOS worksheets are available in **Appendix I.**

Additionally, it is important to analyze traffic volumes Proctor Road, which is a residential street that provides access to the Project site. **Table XV-4** summarizes the existing daily traffic counts on Proctor Road during a 24-hour period west of Sweetbriar Place, near the proposed Project site. The peak hour and 24-hour traffic volume data were collected on Thursday, October 14, 2010**.**

TABLE XV-3
|EXISTING INTERSECTION LOS SUMMARY

Study Intersections		AM Peak Hour		PM Peak Hour	
		Delay	**LOS**	**Delay**	**LOS**
1	Proctor Road/ Redwood Road – minor street approach stop	12.2	B	11.3	B
2	Proctor Road/Walnut Road/Ewing Road – minor street approach stop	11.0	B	9.8	A

TABLE XV-4
EXISTING ROADWAY SEGMENT VOLUMES
(OCTOBER 14, 2010 – 24 HOURS)

Roadway Segment	Existing Daily Weekday Traffic Volumes
Proctor Road between Redwood Road W/o Sweetbriar Place	2,339

Project Trip Generation

The Project site is currently vacant land. Project related trips were calculated based upon current and projected AM and PM trips. With the implementation of the proposed project, the existing increases and decreases in traffic to and from the Project site would be moderated due increase of 23 new homes.

Future Near-term Conditions

As illustrated in **Table XV-5**, all study intersections are expected to operate at acceptable LOS in the PM peak hour for the future (2015) near-term condition**.** It should be noted that for future scenarios none of the study area geometrics are expected to change in the near future. Future near-term LOS calculation worksheets are provided in **Appendix I.**

Future near-term plus project weekday PM peak hour volumes were determined by adding the project trip assignment to the future (2012) near-term volumes. **Table XV-5** also presents the results of the future near-term (2015) plus project intersection LOS analysis. Cumulative plus project LOS calculation sheets are provided in **Appendix I**. All three of the study's intersections are forecast to operate at satisfactory LOS with no resulting cumulative impacts according to the Alameda County traffic analysis guidelines.

As illustrated in **Table XV-5**, the proposed project would not degrade level of service at study intersections to unacceptable levels of service. As a result, the proposed project's impact on local congestion would be considered less than significant.

TABLE XV-5
FUTURE NEAR-TERM AND FUTURE NEAR-TERM PLUS PROJECT COMPARISON

Study Intersections		Future Near-Term Baseline		Future Near-Term Plus Project		Change in LOS	Cumulative Impact?
		AM/PM Peak		AM/PM Peak		AM/PM Peak	
		Delay	LOS	Delay	LOS		
1	Proctor Road/ Redwood Road	13.1/12.0	B/B	13.4/12.2	B/B	None	No
2	Proctor Road / Walnut Road/ Ewing Road	11.5/10.0	B/B	11.7/10.1	B/B	None	No
3	Proctor Road/ Project Driveway	--	--	9.8/9.6	A		

Future Near-term Plus Proposed Project Conditions

To analyze the proposed project's affect on average daily traffic volumes on Proctor Road, the projected increase in weekday trips was added to the project daily traffic volume in 2010. The proposed project would increase average daily trips on Proctor Road by 1.8 percent, as illustrated in **Table XV-6**. As a result, the proposed project's impact on neighborhood traffic would be considered ***less-than-significant***.

TABLE XV-6
FUTURE NEAR-TERM PLUS PROJECT DAILY TRAFFIC VOLUMES

Roadway Segment	Cumulative Daily Traffic Volumes	Cumulative Plus Project Daily Traffic Volumes	Project Related Increase in ADT
Proctor Road between W/o Sweetbriar Place	2339	2382	1.8%

The Castro Valley General Plan and Alameda County Zoning Ordinance (to be modified by the new CVGP) includes policies regarding traffic and circulation. The following are Action items that pertain to the proposed Project. The excerpted language from the General Plan is shown in plain font; the discussion or analysis that follows is presented in *italic font.*

A. Residential Development Policies and Actions

Policy 4.3-3 **Neighborhood Facilities and Infrastructure.** Ensure that adequate public facilities, including parks and open space, and infrastructure improvements are provided to support new residential development.

Action 4.3-9 **Streets in New Subdivisions**. Streets in new subdivisions shall provide adequate access for residents, emergency vehicles, and service vehicles.

- Public streets shall be provided for subdivisions with greater than 10 lots.

- In subdivisions with 10 or fewer lots, particularly in hillside areas, private streets may be permitted, provided that they meet established standards.

Comment/Discussion:

The proposed new street does not meet public street standards. However, the engineering design and standards for the proposed private street do provide adequate access for residents, emergency vehicles, and service vehicles as called for in Policy 4.3-9. It was determined that a public street would not be feasible or practical on the hillside location due to a combination of factors and considerations, including:

a) Space constraints at the project entrance. The proposed entrance and roadway is narrower than public street standards but provides adequate and safe access for residents, large service and emergency vehicles. Further, there is insufficient width at the project entrance to accommodate a public street.

b) Conservation considerations. The private street allowed for a significant reduction in the footprint of the roadway, which is important particularly in light of the site's steep and varied topography. Moreover, less grading, reduced impervious surfaces and fewer retaining walls will help to reduce storm water impacts to the San Francisco Bay.

c) Preservation of the rural neighborhood character. The narrower but adequate private street, having less concrete and asphalt, will lessen the visual impact of the subdivision.

The proposed Project entrance (Proctor Court) is proposed to be a non-signalized intersection with three approaches. The minor street approach, or the northbound approaching Project private street will have a stop sign control and consist of one lane in each direction. The east- and westbound approaches will continue to be uncontrolled and consist of one lane in each direction. The 20 foot private street will be flared out at Proctor Road to 27 feet with an accessible curb ramp at each side. The main private street within the project (Proctor Court) will be 20 feet wide, curb-to-curb with one 5' sidewalk, and end in a 100-ft fire truck turnaround with four parking spaces and a 40-foot radius cul-de-sac. These dimensions have been approved by the Alameda County Fire Department and the Department of Public Works. Due to the slope, grading and limited access, Proctor Court will be private and not public as recommended in Action 4.3-9; however, the street configurations meet the intent of Policy 4.3-3 to provide infrastructure improvements to support the residential development and have been deemed adequate by the County Public Works Department and Fire Department.

Action 4.3-12 **Gated Streets**. Revise zoning regulations and subdivision regulations for Castro Valley to prohibit gates across public and private streets.

The Proposed project would not construct a gate across the main private street leading from Proctor Road.

Action 10.1-12 **Standard Requirements for Private Streets**. Establish consistent standards for private streets depending on the number of units that the street will serve the number of required parking spaces per unit, and reasonable access requirements and operational needs of emergency access vehicles and garbage. Standards should include:

- Minimum paved roadway width requirements (i.e., 20 feet for roads serving five or more units or when part of required fire apparatus access, and 12 feet for roads serving between two and five units that is not part of required fire apparatus access).
- Turnarounds
- Landscaping
- Red curbs and signage for no parking zones
- Sidewalks, and
- Parking standards.

See discussion above regarding roadway width and turnarounds. The Project plans include new landscaping and tree replacement, new sidewalk along Proctor Road and proposed neighbor garage and driveway improvements (4659 Proctor Road). The Alameda County Zoning Ordinance states that two parking spaces must be provided for every single-family residential dwelling. The proposed Project will provide two off-street parking spaces and approximately one on-street guest parking space for each single-family home for a total of 23 parking stalls.

Action 10.1-13 **Emergency Access Requirements for Hillside Areas**. In hillside areas where street widths are substantially below the minimum 20-foot width standard required for emergency access, such as Upper Madison Avenue/ Common Road and Hillcrest Knolls, one or more of the following requirements should be imposed to ensure adequate emergency access:

- Sprinklers;
- Turnouts along the paved roadway;
- Additional on-site parking;
- Increased roadway width along the front of the property; or
- Parking Restrictions.

All the above requirements have been agreed to by the Project proponent as requested by the Alameda County Fire Department and Alameda County Public Works Department. There is no impact to this action item.

b) Conflict with the Congestion Management Plan LOS Standards

Significance Criteria: The Project would have a significant effect on the environment if it were to conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestions management agency for designated roads or highways.

The Alameda County Congestion Management Agency (ACCMA)[11] is an information and funding conduit for Alameda County and its cities. The ACCMA also operates numerous programs to address traffic congestion through planning and the use of federal and state transportation funds. Among the ACCMA's programs is the designation of a network of roadways on which Level of Service (LOS) E or better must be maintained, and providing land use review to ensure that new projects do not cause the LOS for the network to be degraded. The ACCMA considers projects that generate more than 100 PM peak hour trips to have the potential to adversely impact the LOS on the CMA network. Since the Project would generate only 25 PM peak hour trips, the impact on ACCMA LOS standards would ***less than significant***.

The construction and site work for the proposed project would be completed in one phase. Mass grading for the 23 home sites would occur in one phase between May and mid-October of 2013. Home building would commence in August 2013 and be completed in the first quarter of 2014.

The equipment required for demolition and grading activities may include bulldozers, backhoes, cranes, jackhammers, a rotodrill, a ripper, scrapers, and loaders. The debris would be removed by trucks. Grading and site improvements would take approximately five months.

The construction staging area would be located within the Project site and would utilize those parking spaces that are available along the street. Hours of construction would be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday and 8:00 AM to 3:00 PM on Saturday, with no work on Sundays or holidays. All grading would be limited to the hours of 8:00 AM to 5:30 PM. Construction traffic may at times interfere with the normal flow of traffic along Proctor Road.

[11] In 2010, the ACCMA merged with the Alameda County Transportation Improvement Authority (ACTIA) and the combined agency is now known as the Alameda County Transportation Commission, ACTC.

However, in order to ensure that the proposed project would have a ***less than significant impact*** upon LOS standards for Proctor Road, emergency response, or evacuation plans during construction activities, the following mitigation is proposed.

Impact Tra-1: **Conflict with Congestion Management LOS Standards.** Increase in traffic due to construction activities would be a **potentially significant impact.**

Mitigation Tra-1: **Traffic Control During Construction.** Prior to completion and approval of project plans, the location of the construction staging area shall be identified, as well as provisions incorporated that specify construction debris removal and construction vehicle staging and storage in order to ensure that roads in the vicinity of the Project site will be clear of debris and construction vehicles.

Prior to completion and approval of project plans, the contractor and County shall incorporate provisions for traffic control and direction by flagmen if at some point Project construction activities interfere with smooth flow and safety of motorists and pedestrians.

RESULTING LEVEL OF SIGNIFICANCE

Implementation of mitigation measure **MM Tra-1** is would reduce the potential for construction activities to impact circulation on local streets and within the Project site to ***less than significant***.

c) Air Traffic Patterns

Significance criteria: The Project would have a significant effect on the environment if it were to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

The increment of a population of 62 persons in the region of over six million persons would not induce any change in air traffic patterns or air travel safety hazards. As discussed in sections VII e) and f), Hazards and Hazardous Materials, the project site is not located within an airport land use plan area or within two miles of a public use airport or private airport strip. The Project would have ***no impact*** with regard to air traffic patterns.

d) Inadequate Emergency Access

Significance criteria: The Project would have a significant effect on the environment if it were to result in inadequate emergency access.

As described above in section a), the Project proponent had consulted with the Alameda County Fire Department regarding requirements for emergency access and has provided the requested modifications to the subdivision driveway entrance, fire truck hammerhead turnaround and cul-de-sac. On the basis of the Fire Department's acceptance, the Project would have ***no impact*** with regard to inadequate emergency access.

g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities

Significance criteria: The Project would have a significant effect on the environment if it were to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The project study area is served by AC Transit route 91 with a stop at the intersection of Proctor Road and Redwood Road. Route 91 provides bus service from the Castro Valley area to the Hayward BART station. Existing bicycle and pedestrian facilities, pedestrian and bicycle access to the project site is supplied via paved roadways and sidewalks. The Project would result in the development of an existing undeveloped 5.85-acre parcel with 23 new residences. Future residents would rely primarily on automobiles for their transportation needs, due in part to the distance from the Project site to the nearest transit stop, which is located approximately one-half mile to the east. The Project would enable pedestrian use by construction of the sidewalk along Proctor Road. Despite the limited access to transit, and lack of a sidewalk along most of Proctor Road, the Project would not be in conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, and consequently, there would be ***no impact*** in this regard.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS. Would the Project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☒	☐	☐
g) Comply with federal, state and local statutes and regulations related to solid waste?	☐	☒	☐	☐

EXISTING SETTING

WASTEWATER

The Castro Valley Sanitary District provides wastewater service for this portion of unincorporated County residents and businesses. Wastewater collected within Castro Valley is by the East Bay Dischargers Authority (EBDA), a consortium of public wastewater agencies who participate jointly in a common discharge system that conveys treated wastewater to the outfall in the San Francisco Bay under appropriate discharge permits issued by the Regional Water Quality Control Board (RWQCB). The collection and conveyance of wastewater produced within the District goes to the Oro Loma/Castro Valley Wastewater Treatment Plant in San Lorenzo.

The CVSD wastewater service area includes the unincorporated area of Castro Valley. The CVSD serves a population of approximately 55,000, with more than 22,000 single and multi-family residences and businesses (CVSD 2012). The District owns and maintains approximately 161 miles of sewer lines; average daily wastewater flows are 3.23 million gallons per day (mgd). The District recently revised their Sanitary Sewer Management Plan in December 2011 (CVSD 2012). The goal of the plan is to help in the prevention and reduction of sanitary sewer overflows and provide for mitigation of any SSOs that occur within the District boundaries. CVSD projects population growth in the area will increase average flows to 3.39 mgd over a 10-year projection period (i.e., to 2020).

In conjunction with the expected increase in use of the Project site, the proposed project would also result in some increase in wastewater flows.

STORMWATER

Stormwater collection and conveyance services are provided by the Alameda County Flood Control and Water Conservation District (ACFCD). The ACFCD's flood control system is an integrated part of local stormwater systems, which are built and managed by the cities, and functions as an expansion of the local cities' stormwater systems. Stormwater systems drain in various fashions, in some cases, directly into ACFCD channels and in other cases through local creeks. Stormwater facilities near the Project site drain into south into a storm drain, which is presumed to flow eventually into San Lorenzo Creek, which is a tributary to the San Francisco Bay (ECORPS 2012). The ACFCD is the main flood control service provider in the County, including the Castro Valley area.

WATER SUPPLY

The East Bay Municipal Utilities District (EBMUD) provides comprehensive water services, including production, conveyance, treatment and retail services, as well as water recycling. The District's water service area includes the unincorporated Castro Valley area of Alameda County. EBMUD's primary water sources is Mokelumne River runoff, which is collected in Calaveras and Amador counties and conveyed through an aqueduct 90 miles into Alameda County. EBMUD treats water from the Mokelumne River watershed and distributes it directly to customers throughout the service area. The primary EBMUD treatment facility serving Alameda County is the Orinda water treatment plant. The plant is the largest in the area with a capacity of 175 million gallons per day (mgd), and was most recently rebuilt in 1998.

EBMUD provides potable water to approximately 1,300,000 people throughout portions of Alameda and Contra Costa counties. In 2009, EBMUD adopted a long-term Water Supply Management Programs (WSMP) that serves as a water supply planning guide through the year 2040. The WSMP is a complex planning document that EBMUD uses to assess supplies and analyze demands over a 30-year planning horizon. On June 28, 2011, EBMUD adopted the Urban Water Management Plan (UWMP) 2010, which contains the 2010 Water Shortage Contingency Plan. This document was prepared in conformance with the requirements of the Urban Water Management Planning Act under the California Water Code and the Water Conservation Act of 2009 (EBMUD 2012).

The applicant has contacted EBMUD's Water Service Planning Section. A main extension at the Project sponsor's expense will be required to serve the proposed development. The applicant will contact EBMUD's New Business Office when development plans are finalized to request a water service estimate to determine the costs and conditions of providing water service to the development (Rehnstrom, EBMUD 2010). No water meters will be constructed in driveways and water conservation strategies have been incorporated into preliminary engineering plans.

SOLID WASTE

The Castro Valley Sanitary District (CVSD) provides solid waste collection services to the unincorporated area of Castro Valley. CVSD carries out its responsibilities through a franchise agreement with Waste Management, Inc. of Alameda County whose personnel provide solid waste collection services. Solid waste is disposed of at the Altamont Landfill. The District Solid Waste Department ensures compliance with Federal, State and local regulations including a mandate to reduce refuse sent to landfills by 75% in 2010, along with a requirement to appropriately discard hazardous materials.

DISCUSSION OF IMPACTS

a, b) Regional Wastewater Treatment Standards and Waste and Wastewater Treatment Facilities

> *Significance Criteria:* The Project would have a significant effect if it were to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board or if it were to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The San Francisco Regional Water Quality Control Board (RWQCB) establishes standards for the generation of wastewater to and from wastewater treatment facilities, and regulates the discharge of industrial pollutants into treatment facilities. The RWQCB requires such facilities to meet specific standards for water discharged into San Francisco Bay and the Pacific Ocean.

The Project Area is within the boundaries of, and would be provided with sanitary sewer services by the Castro Valley Sanitary District. The District has indicated that there would be adequate capacity in its collection and treatment plant to serve the Project contingent on review and approval of the final detailed plan and profile drawings along with a required non-exclusive perpetual sanitary sewer easement dedicated to the CVSD.[12] Therefore, the proposed project would not result in an increase in wastewater flows beyond the existing permitted capacity of the existing wastewater collection and treatment system, would not require any new or expansion of existing facilities, would not cause any violation of any waste discharge requirements, and would not cause any applicable San Francisco Regional Water Quality Board wastewater treatment requirements to be exceeded. The impact of the Project on wastewater treatment facilities is considered to be ***less than significant***. Additionally, all wastewater generated by the Project would be directed into the Castro Valley Sanitary District's sanitary sewer system and would be routed to their treatment plant, which has adequate capacity to serve the Project, where it would be treated to meet all applicable RWQCB wastewater treatment standards. Therefore, the Project would have ***no impact*** on wastewater treatment standards.

c) Stormwater Drainage Facilities

> *Significance Criteria:* The Project would have a significant effect if it were to require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

As discussed in the Hydrology/Water Quality section of this Initial Study, the existing topography of the Project site results in stormwater draining to the south, where it drains at the low end of the site by an 18-inch storm drain pipe that runs underneath Joseph Drive to the southeast into San Lorenzo Creek. Due to the steepness of the terrain, there are few opportunities for stormwater control for the site. Since the site has a natural low spot at the southern end, a retention pond would be constructed for stormwater control and treatment.

The retention pond has been designed using the Bay Area Hydrology Model software (BAHM) and would served the dual purpose of both treatment for contaminants and for use as hydro-modification (see Appendix J). Using the BAHM software, a 40 foot by 160 foot pond is sufficient to retain and treat runoff from the site. The preliminary calculation used the entire roadway and

[12] Castro Valley Sanitary District, letter to Howard Lee of Alameda County CDA, August 24, 2010.

sidewalk surface with an assumed 50 percent lot coverage for a conservative runoff estimate. Runoff from storm events would be collected into traditional storm drain pipes and inlets and directed to a treatment pond at the low end of the property (**see Figure IX.2**). Runoff would flow into this pond that is lined with several inches of sandy loam soil with a percolation rate of less than 5 inches per hour, per C.3 standards. Once runoff is filtered through this soil matrix and treated, it would be gathered into subdrain pipes that collect the treated runoff and convey it to a metering device that functions as the ponds second purpose, hydromodification. The runoff was calculated in the BAHM software to be released at a predevelopment rate, once the runoff has been both treated and metered in its rate of release, it would be directed to the existing storm drain system at the terminus of Joseph Road.

Construction of the homes and roads would increase the amount of impervious surface area on the site. To reduce the amount of impervious surface area, sidewalks would be provided on one side of the road only, minimizing hardscape around the homes. The use of pervious pavements would be utilized in the design of the subdivision hardscape features. Any site retaining walls would have subdrainage, which would be directed to the stormwater control features. All impervious areas within the right-of-way would be directed to stormwater control features to provide maximum infiltration and treatment. In addition, landscape design would follow the sustainable practices of the *Bay-Friendly Landscape Guidelines* as recommended by Alameda County Waste Management and Source Reduction and Recycling boards (Stopwaste.org) .Therefore, the Project would not require the expansion of downstream stormwater drainage facilities for the Project's stormwater runoff and there would be ***no impact*** on such facilities.

d) Water Supply

> *Significance Criteria:* The Project would have a significant effect if it would be unable to secure sufficient water supplies available to serve the Project from existing entitlements and resources, necessitating new or expanded entitlements.

As indicated in the Setting section above, the Castro Valley area is served with potable water by EBMUD. EBMUD is responsible for service connections and water deliveries to most of Alameda and Contra Costa Counties. EBMUD has confirmed that the utility has sufficient water supplies available to provide the Project with water.[13] Therefore, the Project would have ***no impact*** on water supply.

e) Wastewater Treatment Facility Capacity

> *Significance Criteria:* The Project would have a significant effect if it were to result in a determination by the wastewater treatment provider, which serves or may serve the Project that it would not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.

As discussed above in Section a-b, the Castro Valley Sanitary District has indicated that the District would have adequate capacity to serve the Project's projected wastewater treatment demand. This impact is considered to be ***less than significant,***

f, g) Solid Waste

> *Significance Criteria:* The Project would have a significant effect if it were unable to be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste

[13] "Will Serve" letter from David J Rehnstrom, EBMUD, dated August 12, 2010.

disposal needs or if it did not comply with federal, state, and local statutes and regulations related to solid waste.

Currently, Alameda County is served by three active permitted landfills: the Altamont Sanitary Landfill, the Vasco Road Sanitary Landfill and the Tri-Cities Recycling and Disposal Facility in Fremont. Data obtained from the California Integrated Waste Management Board (CIWMB) website indicates that the total remaining permitted capacity for all three landfills is over 47.6 million cubic yards.[14]

When the 23 proposed single family homes are built and occupied, the Project would add approximately 62 new residents to the Castro Valley area. The CIWMB states that the average annual per capita residential solid waste disposal rate in Alameda County is 0.42 tons. Given a typical waste density of 80 pounds per cubic yard, the per capita disposal rate is 10.5 cubic yards per year, or approximately 651 cubic yards of solid waste per year for the Project as a whole. The impact of the Project's production of 651 cubic yards of solid waste per year, in relation to the total remaining permitted capacity of Alameda County landfills, is considered to be ***less than significant***. Additionally, the Project would comply with all federal, State and local statues and regulations related to solid waste and recycling requirements during construction activities as well as during implementation of the subdivision, resulting in ***no impact*** on waste disposal requirements.

[14] http://www.calrecycle.ca.gov/SWFacilities/Directory/SearchList/List?COUNTY=Alameda

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wild-life population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, 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 that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

DISCUSSION OF IMPACTS

a) Less than Significant Impact with Mitigation Incorporated. Implementation of the proposed project, as mitigated, would have a less than significant impact upon the quality of the environment, habitat of a fish or wildlife species, fish or wildlife populations, plant or animal communities, rare or endangered plants or animals, or examples of the major periods of California history or prehistory.

b) Less than Significant Impact with Mitigation Incorporated. The impacts of the proposed project are individually limited and not considered "cumulatively considerable". Although incremental changes certain areas can be expected as a result of the proposed project, all environmental impacts that could occur as a result of the proposed project would be considered less than significant or would be reduced to a less than significant level through implementation of the mitigation measures recommended in this Initial Study for the following resource areas: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise and Transportation/Traffic.

Regarding the analysis of the potential for the project to have a cumulative impact on global climate change, no air district in California, including the Bay Area Air Quality Management District (BAAQMD), has identified a significance threshold for GHG emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions. The state has identified 1990 emission levels as a goal through adoption of AB 32. To meet this goal, California would need to generate lower levels of GHG emissions than current levels. However, no standards have yet been adopted quantifying 1990 emission targets. It is recognized that for most projects there is no simple metric available to determine if a single project would help or hinder meeting the AB 32 emission goals. In addition, at this time AB 32 only applies to stationary source emissions. Consumption of fossil fuels in the transportation sector accounted for over 40 percent of the total GHG emissions in California in 2004. Current standards for reducing vehicle emissions considered under AB 1493 call

for "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles," and do not provide a quantified target for GHG emissions reductions for vehicles.

Emitting CO_2 into the atmosphere is not itself an adverse environmental effect. It is the increased concentration of CO_2 in the atmosphere resulting in global climate change and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although it is possible to generally estimate a project's incremental contribution of CO_2 into the atmosphere, it is typically not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment. Given the complex interactions between various global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems that result in the physical expressions of global climate change, it is impossible to discern whether the presence or absence of CO_2 emitted by the project would result in any altered conditions.

Given the challenges associated with determining project-specific significance criteria for GHG emissions, quantitative criteria are not proposed for the Proctor Road project. For this analysis, the project's incremental contribution to global climate change would be considered significant if it would:

- Result in substantial net increases in greenhouse gases and CO_2 emissions. For purposes of this analysis, a substantial net increase occurs if the proposed project exceeds any threshold of significance for criteria pollutants set by the BAAQMD,[15]
- Expose persons to significant risks associated with the effects of global climate change,
- Conflict with or obstruct implementation of the goals or strategies of Executive Order S-3-05,
- Be inconsistent with the Air Resources Board's 44 Early Action Measures for AB 32 compliance,
- Be subject to CARB's mandatory reporting requirements (generally required for projects producing more than 25,000 annual metric tons of CO_2e), or
- Be inconsistent with the recommended global warming mitigation measures from the Attorney General, CAPCOA, Office of Planning and Research, or other appropriate sources.

URBEMIS version 9.2.4 was utilized to estimate the project's CO_2 emissions from mobile (vehicle) sources. The increase in approximately 46 vehicle trips each daily is expected to increase GHG emissions by 2,006 pounds during an average winter season. In addition, the project:

- Would not expose persons to significant risk associated with the effects of global climate change (e.g., increased risk of flooding from accelerated runoff from reduced Sierra snowpack, coastal subsidence from sea level rise).

[15] This approach is consistent with guidance from the California Air Pollution Control Officers' Association (CAPCOA), which notes that implementing CEQA without an explicit threshold prior to formal guidance from the State of California's Office of Planning and Research is appropriate. This approach is also consistent with CAPCOA's assertion that by defining substantial emissions of GHGs to performance standards (e.g., criteria pollutant emission thresholds), lead agencies would amass information and experience with specific project categories that would support establishing explicit thresholds in the future.

- Would not conflict with or obstruct implementation of the goals or strategies of Executive Order S-3-05.

- Would be consistent with the Air Resources Board's 44 Early Action Measures for AB 32 compliance.

- Would not be subject to CARB's mandatory reporting requirements (generally required for stationary sources producing more than 25,000 annual metric tons of CO2e).

- Would be consistent with the recommended global warming mitigation measures from the Attorney General, CAPCOA, and the Office of Planning and Research.

Therefore, the project's cumulative impact on global climate change is considered less than significant.

c) Less than Significant Impact with Mitigation Incorporated. Implementation of the proposed project would result in no environmental effects that would cause substantial direct or indirect adverse effects on human beings with incorporation of the mitigation measures recommended in this Initial Study.

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Agreement by Project Sponsor:

Applicant, whose name is undersigned understands that the Mitigation Measures included in this Initial Study/Mitigated Negative Declaration would become conditions of approval and agree to be bound by them if the project is approved.

Applicant's Signature

Jan 20/2013
Date

HUE TRAN
Applicant's Printed Name

APPENDICES

A. The EDR Project Site: Aerial Photos and Historical Maps

B. The Biological Reconnaissance Survey Report by ECORP Consulting, Inc. and the Wetland Delineation report by ECORP Consulting Inc.

C. The Combined Annual Emission Reports

D. California Historical Resource Information System, Northwest Information Center letter

E. The Project Geotechnical Investigation Report by Henry Justiniano & Associates

F. The EDR Environmental Records Search Report

G. Native American Heritage Commission

H. Various agency letters:

   i. Alameda County Fire Department
   ii. Alameda County Sheriff's Office
   iii. Castro Valley Sanitary District
   iv. East Bay Municipal Utility District
   v. Castro Valley Unified School District
   vi. Hayward Area Recreational District

I. The Project Traffic Impact Study report by TJKM Transportation Consultants

J. The Project Stormwater Control Plan by Lea & Braze Engineering, Inc.