County of Santa Cruz

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR
www.sccoplanning.com

NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD

Pursuant to the California Environmental Quality Act (CEQA), the following project has been reviewed by the County Environmental Coordinator to determine if it has a potential to create significant impacts to the environment and, if so, how such impacts may be avoided. A Negative Declaration is prepared in cases where the project is determined not to have any significant environmental impacts. Either a Mitigated Negative Declaration or Environmental Impact Report (EIR) is prepared for projects that may result in a significant impact to the environment.

Public review periods are provided for these Environmental Determinations according to the requirements of the CEQA Guidelines. The environmental document is available for review at the County Planning Department located at 701 Ocean Street, in Santa Cruz. You may also view the environmental document on the web at www.sccoplanning.com under the Planning Department menu. If you have questions or comments about this Notice of Intent, please contact Matt Johnston of the Environmental Review staff at (831) 454-3201

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs or activities. If you require special assistance in order to review this information, please contact Bernice Romero at (831) 454-3137 (TDD number (831) 454-2123 or (831) 763-8123) to make arrangements.

PROJECT: 1240 Chanticleer Ave. 2-lot Minor Land Division

APN(S): 029-191-13

PROJECT DESCRIPTION: The proposed project consists of a Minor Land Division (MLD) involving Parcel 029-191-13. The proposed project includes dividing Parcel 029-191-13 into two new parcels (Parcel A and Parcel B. Parcel A would be approximately 7,732-SF and would contain the existing single family dwelling with access from Chanticleer Avenue. Parcel B would be approximately 9,825-SF. The proposed 2,250-SF single family residence would be located on the new Parcel B. Parcel B would have access from Chanticleer Avenue, and be served by a 20-foot wide "flag-lot" driveway corridor located along the southern border of the project site. Water and sewer will-serve letters have been provided by the Santa Cruz County Sanitation District and City of Santa Cruz Water Department.

EXISTING ZONE DISTRICT: R-1-6
APPLICANT: Hamilton-Swift & Assoc., Inc.
OWNER: Dylan and Marda Reid
PROJECT PLANNER: Frank Barron
EMAIL: frank.barron@santacruzcounty.us
ACTION: This project will be considered at a public hearing by the Planning Commission. The date and time have not been set. When scheduling does occur, this item will be included in all public hearing notices for the project.
REVIEW PERIOD: December 28, 2015 through January 19, 2016.

COUNTY OF SANTA CRUZ

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NEGATIVE DECLARATION

Project: 1240 Chanticleer Ave. 2-lot Minor Land Division **APN(S): 029-191-13**

Application #: 151145

Project Description: The proposed project consists of a Minor Land Division (MLD) involving Parcel 029-191-13. The proposed project includes dividing Parcel 029-191-13 into two new parcels (Parcel A and Parcel B. Parcel A would be approximately 7,732-SF and would contain the existing single family dwelling with access from Chanticleer Avenue. Parcel B would be approximately 9,825-SF. The proposed 2,250-SF single family residence would be located on the new Parcel B. Parcel B would have access from Chanticleer Avenue, and be served by a 20-foot wide "flag-lot" driveway corridor located along the southern border of the project site. Water and sewer will-serve letters have been provided by the Santa Cruz County Sanitation District and City of Santa Cruz Water Department.

Project Location: The proposed project is located at 1240 Chanticleer Avenue, on the east side of Chanticleer Avenue within the community of "Live Oak" in the unincorporated County of Santa Cruz. The County of Santa Cruz is bound on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by Monterey Bay and the Pacific Ocean.

Owner: Dylan and Marda Reid

Applicant: Hamilton-Swift & Associates, Inc.

Staff Planner: email: frank.barron@santacruzcounty.us

This project will be considered at the Planning Commission. The date and time have not been set. When scheduling does occur, this item will be included in all public hearing notices for the project.

California Environmental Quality Act Negative Declaration Findings:

Find, that this Negative Declaration reflects the decision-making body's independent judgment and analysis, and; that the decision-making body has reviewed and considered the information contained in this Negative Declaration and the comments received during the public review period, and; on the basis of the whole record before the decision-making body (including this Negative Declaration) that there is no substantial evidence that the project will have a significant effect on the environment. The expected environmental impacts of the project are documented in the attached Initial Study on file with the County of Santa Cruz Planning Department located at 701 Ocean Street, 4th Floor, Santa Cruz, California. A digital copy of the document can be reviewed at the following web address:
http://www.santacruzcountyplanning.com/PlanningHome/Environmental/CEQAInitialStudiesEIRs/CEQADocumentsOpenforPublicReview.aspx

Review Period Ends: January 19, 2016

Date: _____

_____
Todd Sexauer, Environmental Coordinator
(831) 454-3511

County of Santa Cruz

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Date: December 7, 2015 **Application Number:** 151145

Project Name: 1240 Chanticleer Ave. 2–lot Minor Land Division **Staff Planner:** Frank Barron

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Hamilton-Swift & Assoc, Inc. APN(s): 029-191-13

OWNER: Dylan and Marda Reid SUPERVISORAL DISTRICT: District 1

PROJECT LOCATION: The proposed project is located at 1240 Chanticleer Avenue, on the East side of Chanticleer Ave. within the community of "Live Oak" in the unincorporated County of Santa Cruz (see Figure 1: Location Map). The County of Santa Cruz is bound on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

SUMMARY PROJECT DESCRIPTION:

The proposed project application consists of a Minor Land Division (MLD) involving Parcel 029-191-13. The proposed project includes dividing Parcel 029-191-13 into two new parcels (Parcel A and Parcel B; see Figure 2). Parcel A would be approximately 7,732-SF and would contain the existing single family dwelling with access from Chanticleer Avenue. Parcel B would be approximately 9,825-SF. The proposed 2,250-SF single family residence would be located on the new Parcel B. Parcel B would have access from Chanticleer Avenue, and be served by a 20-foot wide "flag-lot" driveway corridor located along the southern border of the project site. Water and sewer will-serve letters have been provided by the Santa Cruz County Sanitation District and City of Santa Cruz Water Department.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: *All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.*

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

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- ☐ General Plan Amendment
- ☒ Land Division
- ☐ Rezoning
- ☐ Development Permit
- ☐ Sewer Connection Permit
- ☐ Coastal Development Permit
- ☐ Grading Permit
- ☐ Riparian Exception
- ☐ LAFCO Annexation
- ☒ Other: Variance

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement):

Permit Type/Action	Agency
Not Applicable	Not Applicable

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 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.

TODD SEXAUER, Environmental Coordinator _____ Date

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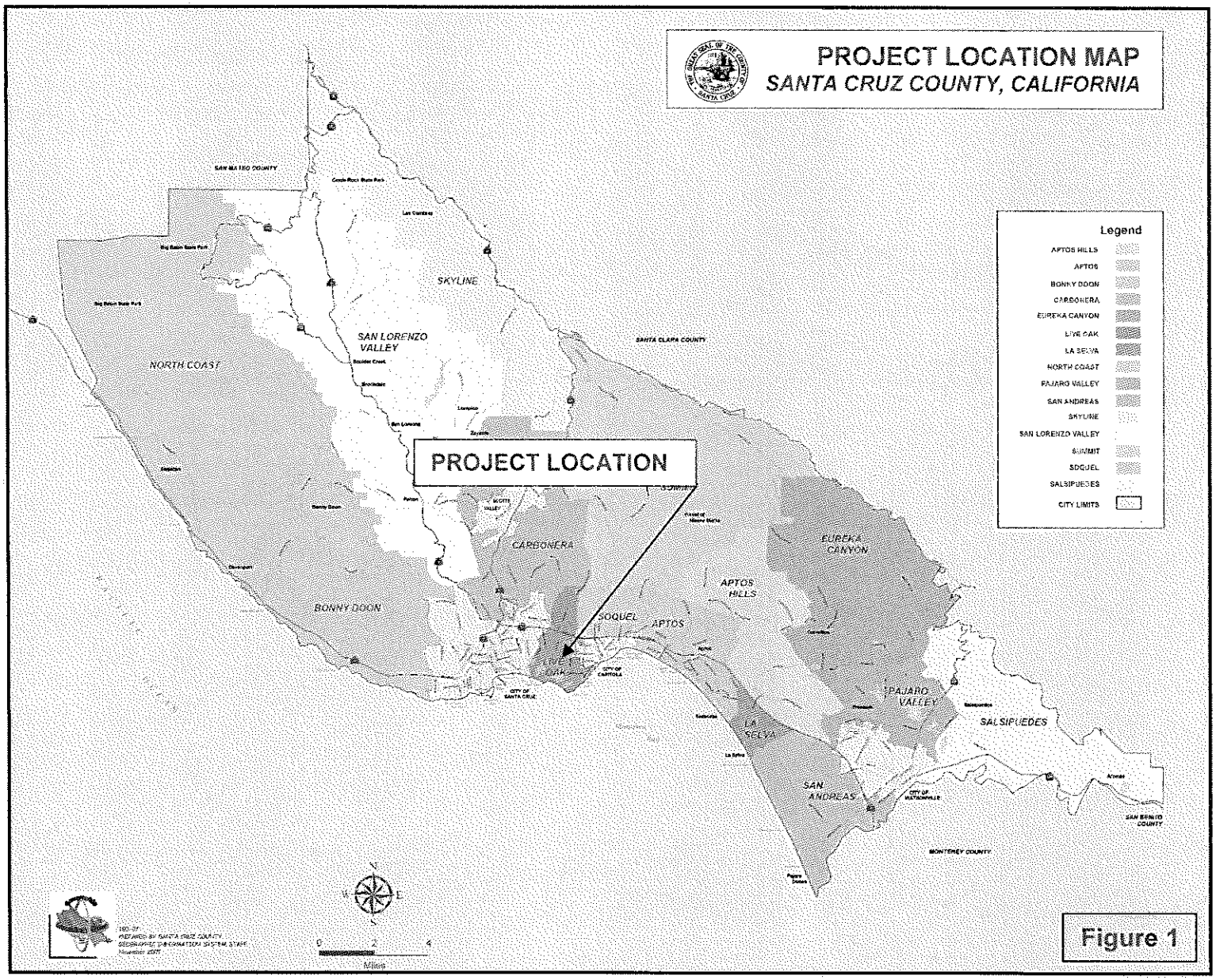
PROJECT LOCATION MAP
SANTA CRUZ COUNTY, CALIFORNIA
PROJECT LOCATION
Legend
APTOS HILLS
APTOS
BONNY DOON
CARBONERA
EUREKA CANYON
LIVE OAK
LA SELVA
NORTH COAST
PAJARO VALLEY
SAN ANDREAS
SKYLINE
SAN LORENZO VALLEY
SUMMIT
SOQUEL
SALSIPUEDES
CITY LIMITS
SKYLINE
SAN LORENZO VALLEY
NORTH COAST
SANTA CLARA COUNTY
CARBONERA
EUREKA CANYON
APTOS HILLS
BONNY DOON
SOQUEL
APTOS
LIVE OAK
PAJARO VALLEY
SALSIPUEDES
LA SELVA
SAN ANDREAS
MONTEREY COUNTY
Miles
Figure 1

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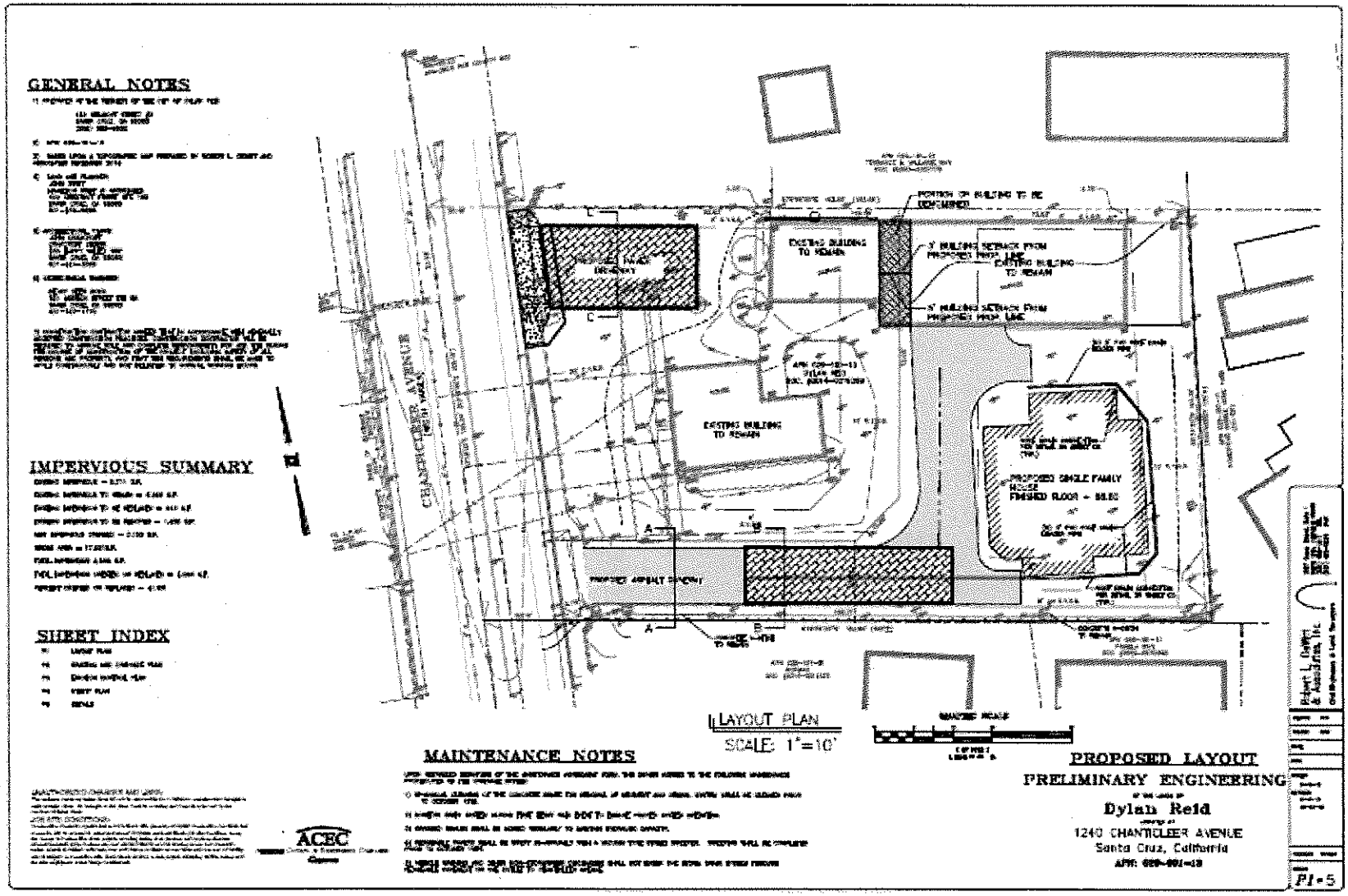

Figure 2 - Project Site Plan

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II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS:

Parcel Size (acres): 0.415 acres (18,072 square-feet)
Existing Land Use: Residential
Vegetation: Urban landscaping, mix of native & non-native vegetation
Slope in area affected by project: ☒ 0 - 30% ☐ 31 – 100% ☐ N/A
Nearby Watercourse: Rodeo Creek Gulch
Distance To: 1,200 feet

ENVIRONMENTAL RESOURCES AND CONSTRAINTS:

Water Supply Watershed:	Not Mapped	Fault Zone:	Not Mapped
Groundwater Recharge:	Not Mapped	Scenic Corridor:	Not Mapped
Timber or Mineral:	Not Mapped	Historic:	None
Agricultural Resource:	Not Mapped	Archaeology:	Not Mapped
Biologically Sensitive Habitat:	Mapped	Noise Constraint:	None
Fire Hazard:	None Identified	Electric Power Lines:	Yes
Floodplain:	Not Mapped	Solar Access:	Adequate
Erosion:	Not Mapped	Solar Orientation:	Adequate
Landslide:	Not Mapped	Hazardous Materials:	None
Liquefaction:	Mapped (Low)	Other:	

SERVICES:

Fire Protection:	Central	Drainage District:	Zone 5
School District:	Live Oak and Soquel	Project Access:	Chanticleer Avenue
Sewage Disposal:	SCC Sanitation	Water Supply:	City of Santa Cruz WD

PLANNING POLICIES:

Zone District:	R-1-6	Special Designation:	
General Plan:	R-UL		
Urban Services Line:	☒ Inside	☐ Outside	
Coastal Zone:	☐ Inside	☒ Outside	

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

Natural Environment

Santa Cruz County is uniquely situated along the northern end of Monterey Bay approximately 55 miles south of the City of San Francisco along the Central Coast. The Pacific Ocean and Monterey Bay to the west and south, the mountains inland, and the prime

agricultural lands along both the northern and southern coast of the county create limitations on the style and amount of building that can take place. Simultaneously, these natural features create an environment that attracts both visitors and new residents every year. The natural landscape provides the basic features that set Santa Cruz apart from the surrounding counties and require specific accommodations to ensure building is done in a safe, responsible and environmentally respectful manner.

The California Coastal Zone affects nearly one third of the land in the urbanized area of the unincorporated County with special restrictions, regulations, and processing procedures required for development within that area. Steep hillsides require extensive review and engineering to ensure that slopes remain stable, buildings are safe, and water quality is not impacted by increased erosion. The farmland in Santa Cruz County is among the best in the world, and the agriculture industry is a primary economic generator for the County. Preserving this industry in the face of population growth requires that soils best suited to commercial agriculture remain active in crop production rather than converting to other land uses.

PROJECT BACKGROUND:

The project site is currently developed with a single story single-family residence, approximately 848 square feet in size, featuring 1 bedroom and 1 bathroom. There are also detached accessory structures totaling approximately 2,000 square-feet in size, including an approximate 532 square foot second unit, a double car garage, carport and storage. The site features common residential landscaping, with no significant or sensitive trees, and paved vehicular right-of-way (R/W) access from Chanticleer Avenue.

The surrounding area of Chanticleer Avenue is mostly developed with low and medium density, urban residential development consisting of single-story and two-story single-family dwellings. The Antonelli Senior Living mobile home community is located directly to the east of the subject project. There is also the Little Acorns Montessori school approximately 75-feet to the southwest of the subject property.

DETAILED PROJECT DESCRIPTION:

The proposed project application consists of a Minor Land Division (MLD) involving Parcel 029-191-13. The proposed project includes dividing Parcel 029-191-13 into two new parcels (Parcel A and Parcel B). Parcel A would be approximately 7,862-SF and would contain the existing single family dwelling with access from Chanticleer Avenue. Parcel B would be approximately 11,057-SF. The proposed 2,250-SF single family residence would be located on the new Parcel B. Parcel B would be served by a "flag-lot" driveway accessed from Chanticleer Avenue, and would be 20-feet wide located along the southern border of the project site. No changes to the existing residential structures on the new Parcel A are

proposed, except for the partial demolition (approx. 90 sq. ft. of which is on Parcel A) of an existing accessory structure.

The project would require a variance from the County of Santa Cruz Planning Department. R-1-6 zoning requirements, for the front yard setbacks for the existing accessory garage structure (currently attached to the accessory dwelling structure on proposed parcel A, proposed setback of 3-feet to parcel line) and the side yard setback to maintain its current 2.75-foot, and for the existing setback of the approximately 532-SF accessory dwelling structure on Parcel A to be maintained at its current 3.23-foot side yard setback and proposed 5-foot rear yard setback.

Water and sewer will-serve letters have been provided by the Santa Cruz County Sanitation District and City of Santa Cruz Water Department. The proposed single family dwelling on Parcel B is estimated to be 2,250-SF, and would be two stories, approximately 24-ft in height. Access would be established from Chanticleer Avenue.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

III. ENVIRONMENTAL REVIEW CHECKLIST

A. AESTHETICS AND VISUAL RESOURCES

Would the project:

1. *Have a substantial adverse effect on a scenic vista?* ☐ ☐ ☐ ☒

Discussion: The project would not directly impact any public scenic resources, as designated in the County's General Plan (1994), or obstruct any public views of these visual resources. Furthermore, the project is infill urban development in a neighborhood with existing urban residential development. This project would be in conformance with the General Plan, and appropriate to the existing surrounding urban built environment.

2. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?* ☐ ☐ ☐ ☒

Discussion: The project site is not located along a County designated scenic road, public viewshed area, scenic corridor, within a designated scenic resource area, or within a state scenic highway. Therefore, no impact would occur.

3. *Substantially degrade the existing visual character or quality of the site and its surroundings?* ☐ ☐ ☐ ☒

Discussion: The existing visual setting is currently developed with an existing single family house, garage, accessory structures and supporting infrastructure. The proposed project is designed and landscaped so as to fit into this setting. The surrounding neighborhood includes similarly zoned properties with existing improvements and development.

4. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* ☐ ☐ ☐ ☒

Discussion: The project would create an incremental increase in night lighting. However, this increase would be small, and would be similar in character to the lighting associated with the surrounding existing uses.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

B. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: The project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the project does not contain Farmland of Local Importance. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a non-agricultural use. This is an infill development in an urban setting. There are no prime agricultural lands in the near vicinity. No impact would occur from project implementation.

2. *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*	☐	☐	☐	☒

Discussion: The project site is zoned Residential (R-1-6; single-family residential, 6,000 square foot minimum parcel size), which is not considered to be an agricultural zone. The surrounding area has similar zoning, and no agriculturally zoned property. Additionally, the project site's land is not under a Williamson Act Contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act Contract. No impact is anticipated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. *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))?*	☐	☐	☐	☒

Discussion: The project is not located near land designated as Timber Resource, nor does the property feature any Timber Resources. Therefore, the project would not affect the resource or access to harvest the resource in the future.

4. *Result in the loss of forest land or conversion of forest land to non-forest use?*	☐	☐	☐	☒

Discussion: No forest land occurs on the project site or in the immediate vicinity. See discussion under B-3 above. No impact is anticipated.

5. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*	☐	☐	☐	☒

Discussion: The project site and surrounding area does not contain any lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency or in the County General Plan (1994). Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide, or Farmland of Local Importance would be converted to a non-agricultural use. In addition, the project site contains no forest land, and no forest land occurs within the surrounding areas. Therefore, no impacts are anticipated.

C. AIR QUALITY

The significance criteria established by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) has been relied upon to make the following determinations. Would the project:

1. *Conflict with or obstruct implementation of the applicable air quality plan?*	☐	☐	☒	☐

Discussion: The project would not conflict with or obstruct any long-range air quality plans of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). The project

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

is consistent with the regional population growth numbers forecast by the Association of Monterey Bay Area Governments (AMBAG) (Attachment 7). AMBAG's regional forecasts for population and dwelling units are embedded in the emission inventory projections used in the regional Air Quality Management Plan (AQMP). Projects which are consistent with AMBAG's regional forecasts have been accommodated in the AQMP and are therefore consistent with the AQMP.

Because general construction activity related emissions (i.e., temporary sources) are accounted for in the emission inventories included in the plans, impacts to air quality plan objectives are less than significant. See C-2 below.

General estimated basin-wide construction-related emissions are included in the MBUAPCD emission inventory (which, in part, form the basis for the air quality plans cited below) and are not expected to prevent long-term attainment or maintenance of the ozone and particulate matter standards within the North Central Coast Air Basin (NCCAB). Therefore, temporary construction impacts related to air quality plans for these pollutants from the proposed project would be less than significant, and no mitigation would be required, since they are presently estimated and accounted for in the District's emission inventory, as described below. No stationary sources would be constructed that would be long-term permanent sources of emissions.

2.	*Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*	☐	☐	☒	☐

Discussion: Santa Cruz County is located within the North Central Coast Air Basin (NCCAB). The NCCAB does not meet state standards for ozone (reactive organic gases [ROGs] and nitrogen oxides [NOx]) and fine particulate matter (PM_{10}). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors and PM_{10}.

Ozone is the main pollutant of concern for the NCCAB. The primary sources of ROG within the air basin are on- and off-road motor vehicles, petroleum production and marketing, solvent evaporation, and prescribed burning. The primary sources of NOx are on- and off-road motor vehicles, stationary source fuel combustion, and industrial processes. In 2010, daily emissions of ROGs were estimated at 63 tons per day. Of this, area-wide sources represented 49 percent, mobile sources represented 36 percent, and stationary sources represented 15 percent. Daily emissions of NOx were estimated at 54 tons per day with 69 percent from mobile sources, 22 percent from stationary sources, and 9 percent from area-wide sources. In addition, the region is "NOx sensitive," meaning that ozone formation due to local emissions is more limited by the availability of NOx as opposed to the availability of ROGs (MBUAPCD, 2013b).

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

PM_{10} is the other major pollutant of concern for the NCCAB. In the NCCAB, highest particulate levels and most frequent violations occur in the coastal corridor. In this area, fugitive dust from various geological and man-made sources combines to exceed the standard. Nearly three quarters of all NCCAB exceedances occur at these coastal sites where sea salt is often the main factor causing exceedance (MBUAPCD, 2005). In 2005 daily emissions of PM_{10} were estimated at 102 tons per day. Of this, entrained road dust represented 35 percent of all PM_{10} emission, windblown dust 20 percent, agricultural tilling operations 15 percent, waste burning 17 percent, construction 4 percent, and mobile sources, industrial processes, and other sources made up 9 percent (MBUAPCD, 2008).

Given the modest amount of new traffic that would be generated by the project there is no indication that new emissions of ROGs or NOx would exceed MBUAPCD thresholds for these pollutants; and therefore, there would not be a significant contribution to an existing air quality violation.

Project construction may result in a short term, localized decrease in air quality due to generation of PM_{10}. However, standard dust control best management practices, such as periodic watering, would be implemented during construction to avoid significant air quality impacts from the generation of PM_{10}. Impacts would be less than significant.

3. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*	☐	☐	☒	☐

Discussion: Project construction would have a limited and temporary potential to contribute to existing violations of California air quality standards for ozone and PM_{10} primarily through diesel engine exhaust and fugitive dust. However, the Santa Cruz monitoring station has not had any recent violations of federal or state air quality standards mainly through dispersion of construction-related emission sources. BMPs described above under C-2 would ensure emissions remain below a level of significance. Therefore, the proposed project would not result in a cumulatively considerable net increase in criteria pollutants. The impact on ambient air quality would be less than significant.

4. *Expose sensitive receptors to substantial pollutant concentrations?*	☐	☐	☒	☐

Discussion: The proposed project is urban infill development. The nearest sensitive receptors would be the neighboring residences to the north and south, the mobile home park to the south and the Montessori school to the southwest. The proposed residential infill development project would not generate substantial pollutant concentrations.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Emissions from construction activities represent temporary impacts that are typically short in duration. Impacts to sensitive receptors would be less than significant.

5.	*Create objectionable odors affecting a substantial number of people?*	☐	☐	☒	☐

Discussion: California ultralow sulfur diesel fuel with a maximum sulfur content of 15 ppm by weight would be used in all diesel-powered equipment, which minimizes emissions of sulfurous gases (sulfur dioxide, hydrogen sulfide, carbon disulfide, and carbonyl sulfide). Therefore, no objectionable odors are anticipated from construction activities associated with the proposed project, and no mitigation measures would be required. The proposed project would not create objectionable odors affecting a substantial number of people; therefore, impacts are expected to be less than significant.

D. BIOLOGICAL RESOURCES

Would the project:

1.	*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 Wildlife, or U.S. Fish and Wildlife Service?*	☐	☐	☐	☒

Discussion: Although the California Natural Diversity Data Base (CNDDB) shows that the white-rayed Pentachaeta, Santa Cruz tarplant, Zayante band-winged grasshopper, Townsend's big eared and Pollard bats, and the Monarch butterfly are in or have the potential of being within the vicinity, they are not known to occur in the project area. The lack of suitable habitat and the disturbed nature of the site make it unlikely that any special status plant or animal species occur in the area. This is an urban infill development project, on a previously developed site. No impact would occur.

2.	*Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*	☐	☐	☐	☒

Discussion: Due to the urban setting and development existing on the site and in the surrounding neighborhood, there are no mapped or designated sensitive biotic communities

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

on or adjacent to the project site. No impact would occur.

3.	*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?*	☐	☐	☐	☒

Discussion: There are no mapped or designated federally protected wetlands on or adjacent to the project site. Therefore, no impacts would occur from project implementation.

4	*Interfere substantially with the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*	☐	☐	☐	☒

Discussion: The project is in an urban and developed area. The proposed project does not involve any activities that would interfere with the movements or migrations of fish or wildlife, or impede use of a known wildlife nursery site.

5.	*Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?*	☐	☐	☐	☒

Discussion: The project would not conflict with any local policies or ordinances.

6.	*Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*	☐	☐	☐	☒

Discussion: The proposed project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
7. *Produce nighttime lighting that would substantially illuminate wildlife habitats?*	☐	☐	☐	☒

Discussion: The subject property is located in an urbanized area and is surrounded by existing residential development that currently generates nighttime lighting. There are no sensitive animal habitats within or adjacent to the project site. No impact would occur.

E. CULTURAL RESOURCES

Would the project:

1. *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?*	☐	☐	☒	☐

Discussion: The existing structures on the property are not designated as a historic resource on any federal, state or local inventory (see Attachment 8). Current County of Santa Cruz Assessor records indicate that the house and accessory structures estimated date of construction is 1935. The proposed project will not impact the house. The Assessor records indicate that the accessory structures have previously been used as; garage, guest house, "rumpus room", chicken coup, and carport. These structures and uses have little historic resource value. Nevertheless, the proposed project aims at preserving as much of these accessory structures as possible to retain site and neighborhood character (only approx. 180 sq. ft. of one of the structures is proposed to be demolished). The existing single-family residence will remain intact. As a result, no impacts to historical resources would occur from project implementation.

2. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*	☐	☐	☒	☐

Discussion: No archeological resources have been identified in the project area, or mapped by the Santa Cruz County General Plan (1994). However, pursuant to County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040. Impacts would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. *Disturb any human remains, including those interred outside of formal cemeteries?*	☐	☐	☒	☐

Discussion: Impacts are expected to be less than significant. However, pursuant to Section 16.40.040 of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archeological report shall be prepared and representatives of the local Native American Indian tribe shall be consulted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

4. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?*	☐	☐	☐	☒

Discussion: See discussion under E-2. Impacts would be less than significant.

5. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*	☐	☐	☐	☒

Discussion: No unique paleontological resources or unique geologic features are known to occur in the vicinity of the proposed project. No impacts are anticipated.

F. GEOLOGY AND SOILS

Would the project:

1. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*				
A. *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.*	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
B. *Strong seismic ground shaking?*	☐	☐	☒	☐
C. *Seismic-related ground failure, including liquefaction?*	☐	☐	☒	☐
D. *Landslides?*	☐	☐	☒	☐

Discussion (A through D): The project site is located outside of the limits of the State Alquist-Priolo Special Studies Zone (County of Santa Cruz GIS Mapping, California Division of Mines and Geology, 2001). However, the project site is located approximately 7 mile(s) northwest of the Zaynte Fault zone, and approximately 9 mile(s) north of the San Andreas fault zone. While the San Andreas fault is larger and considered more active, each fault is capable of generating moderate to severe ground shaking from a major earthquake. Consequently, large earthquakes can be expected in the future. The October 17, 1989 Loma Prieta earthquake (magnitude 7.1) was the second largest earthquake in central California history.

All of Santa Cruz County is subject to some hazard from earthquakes, and the site is a designated liquefaction hazard area. However, the project site is not located within or adjacent to a county or state mapped fault zone. A geotechnical investigation for the proposed project was performed by Dees & Associates, Inc., dated February 2015 (Attachment 3). The report concluded that the primary geotechnical concerns for the project included embedding foundations into firm native soil, controlling site drainage and designing structures to resist strong seismic shaking. The consulting geotechnical engineer recommended that the proposed structures be supported on conventional spread footings embedded into firm native soil or engineered fill. During the field exploration, firm native soil was encountered about 18 inches below the existing grade.

The geotechnical field exploration and report did identify a potential for perched groundwater to develop during and following the rainy season. To mitigate ponding below structures, the geotechnical engineer recommends crawlspaces to not be excavated lower than the exterior grade, unless gravel subdrains are placed around the perimeter of the building foundations.

The topography of the site is relatively flat and controlling drainage was identified as an important design feature. The geotechnical consultant recommends concentrated runoff be collected and discharged away from foundations and roof runoff to be discharged onto splash blocks provided the ground surface is sloped to prevent water from ponding or flowing adjacent to the home's foundation. Swales may be used to direct runoff away from structures. Additionally, the report recommends that concentrated runoff from the roof or

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

driveway would be collected and discharged on-site, retention trenches may be used to discharge runoff. The consulting geotechnical engineer states retention trenches should be located at least 10 feet away from foundations and have a safe overflow path for excess water.

2. *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?*	☐	☐	☒	☐

Discussion: The geotechnical report cited above (see Discussion under F-1) did not identify a significant potential for damage caused by any of these hazards. Therefore, impacts would be less than significant.

3. *Develop land with a slope exceeding 30%?*	☐	☐	☐	☒

Discussion: There are no slopes that exceed 30% on the property. No impact would occur.

4. *Result in substantial soil erosion or the loss of topsoil?*	☐	☐	☒	☐

Discussion: Some potential for erosion exists during the construction phase of the project, however, this potential is minimal because of the relatively flat project site and standard erosion controls are a required condition of the project. BMPs will be utilized and maintained throughout the project construction. Prior to approval of a grading or building permit, the project must have an approved Erosion Control Plan (*Section 16.22.060 of the County Code*), which would specify detailed erosion and sedimentation control measures. The plan would include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion. Impacts from soil erosion or loss of topsoil would be considered less than significant.

5. *Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?*	☐	☐	☐	☒

Discussion: The geotechnical report did report findings of expansive soils. However, with the inclusion of common mitigating construction practices (see discussion in F-1), the consulting engineer did not identify any elevated risk associated with expansive soils. Therefore, no impact is anticipated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
6. *Have soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*	☐	☐	☐	☒

Discussion: No septic systems are proposed. The project would connect to the Santa Cruz County Sanitation District, and the applicant would be required to pay standard sewer connection and service fees that fund sanitation improvements within the district as a Condition of Approval for the project. No impact would occur.

7. *Result in coastal cliff erosion?*	☐	☐	☐	☒

Discussion: The proposed project is not located in the vicinity of a coastal cliff or bluff; and therefore, would not contribute to coastal cliff erosion. No impact is anticipated.

G. GREENHOUSE GAS EMISSIONS

Would the project:

1. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*	☐	☐	☒	☐

Discussion: The proposed project, like all development, would be responsible for an incremental increase in greenhouse gas emissions by usage of fossil fuels during the site grading and construction and additional trip generation from the one proposed new single-family residence. Santa Cruz County has recently adopted a Climate Action Strategy (CAS) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under AB 32 legislation. The strategy intends to reduce greenhouse gas emissions and energy consumption by implementing measures such as reducing vehicle miles traveled through the County and regional long range planning efforts and increasing energy efficiency in new and existing buildings and facilities. All project construction equipment would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. As a result, impacts associated with the temporary increase in greenhouse gas emissions are expected to be less than significant. Additionally- the project site is infill development, in an urban location. There are multiple services within walking distance, and safe alternative

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

transportation options (such as bikes and bus), in close proximity. These factors would also help to reduce the incremental increase in greenhouse gas emissions from potential auto trips from residents of the proposed new single-family residence. Impacts would be less than significant.

2.	*Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*	☐	☐	☐	☒

Discussion: See the discussion under G-1 above. No significant impacts are anticipated.

H. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1.	*Create a significant hazard to the public or the environment as a result of the routine transport, use or disposal of hazardous materials?*	☐	☐	☒	☐

Discussion: The proposed project would not create a significant hazard to the public or the environment. No routine transport or disposal of hazardous materials is proposed. However, during construction, fuel would be used at the project site. Best management practices would be used to ensure that no impacts would occur. Impacts are expected to be less than significant.

2.	*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?*	☐	☐	☒	☐

Discussion: Please see discussion under H-1 above. Project impacts would be considered less than significant.

3.	*Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*	☐	☐	☐	☒

Discussion: The Little Acorns Montessori is located at 1215 Chanticleer Avenue, approximately 75 feet to the west of the project site; Live Oak Elementary School is located at 1916 Capitola Road, approximately 1,200 feet to the north of the project site; Shoreline Middle School is located at 855 17th Avenue, approximately 1,700 feet to the northwest of

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

the project site; and Green Acres Elementary School is located at 966 Bostwich Lane, approximately 1,800 feet to the south of the project site. Although fueling of equipment is likely to occur within the staging area, best management practices would be implemented. No impacts are anticipated.

4.	*Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*	☐	☐	☐	☒

Discussion: The project site is not included on the August 10, 2015, list of hazardous sites in Santa Cruz County compiled pursuant to Government Code Section 65962.5. No impacts are anticipated from project implementation.

5.	*For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*	☐	☐	☐	☒

Discussion: The proposed project is not located within two miles of a public airport or public use airport. No impact is anticipated.

6.	*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?*	☐	☐	☐	☒

Discussion: The proposed project is not located in the vicinity of a private airstrip. No impact is anticipated.

7.	*Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*	☐	☐	☐	☒

Discussion: The proposed project would not conflict with implementation of the County of Santa Cruz Local Hazard Mitigation Plan 2010-2015 (County of Santa Cruz, 2010). Therefore, no impacts to an adopted emergency response plan or evacuation Plan would occur from project implementation.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
8. *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?*	☐	☐	☐	☒

Discussion: The proposed project is not located in a Fire Hazard Area. However, the project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency. No impact would occur.

I. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

1. *Violate any water quality standards or waste discharge requirements?*	☐	☐	☒	☐

Discussion: The project would maintain the concrete swale along the southwest property line, channeling runoff from the neighboring mobile home park to the south directing it to Chanticleer Avenue. This is an existing drainage improvement. An engineered drainage plan has been developed for the project (see Attachment 1). In this plan, discharge runoff from new impervious surface would occur after the proposed 25-year storm storage has reached capacity, and would release storm water at a mitigated flow rate of a 2-year release rate. However, runoff from this project may contain small amounts of chemicals and other household contaminants. No commercial or industrial activities are proposed that would contribute contaminants. Potential siltation from the proposed project would be addressed through implementation of erosion control best management practices (BMPs). No water quality standards or waste discharge requirements would be violated. Impacts would be less than significant.

2. *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)?*	☐	☐	☒	☐

Discussion: The project would obtain water from the City of Santa Cruz Water Dept. and would not rely on private well water. Although the project would incrementally increase water demand, the City of Santa Cruz Water Department has indicated that adequate

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

supplies are available to serve the project (Attachment 5). The project is not located in a mapped groundwater recharge area. Impacts would be less than significant.

3.	*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?*	☐	☐	☐	☒

Discussion: The proposed project is not located near any watercourses, and would not alter the existing overall drainage pattern of the site. Department of Public Works Drainage Section staff has reviewed and approved the proposed drainage plan, concluding that no erosion or siltation would occur. No impact would occur from project implementation.

4.	*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 which would result in flooding, on- or off-site?*	☐	☐	☒	☐

Discussion: The proposed project is not located near any watercourses, and would not alter the existing overall drainage pattern of the site. Department of Public Works Drainage Section staff has reviewed and approved the proposed drainage plan. Impacts from project construction would be less than significant.

5.	*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?*	☐	☐	☒	☐

Discussion: Drainage Calculations prepared by Robert DeWitt, P.E. dated Aug. 14, 2015 and Oct. 21, 2015 (Attachment 4), have been reviewed for potential drainage impacts and accepted by the Department of Public Works (DPW) Drainage Section staff. According to the Drainage Calculations, there is a concrete channel along the southern boundary of the site which appears to have limited slope and which currently retains water before outletting to a 4" plastic storm drain pipe which runs along the back on the Chanticleer Avenue sidewalk to the south. On the upstream side of the channel is a 4" plastic pipe from the neighboring mobile home park. Additionally, the property to the north of the subject site is situated at a slightly higher elevation, creating run-on issues near the existing accessory structure. According to the consulting engineer, an automated sump pump was installed

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

with the intention of discharging roof drainage from buildings on the site as well as the property to the north. It is believed that this pump outlets to a through curb drain to Chanticleer.

An engineered drainage plan has been designed for this project, which includes 25-year storm water storage with a 2-year release rate. The County of Santa Cruz Department of Public Works Drainage Section has indicated that there are undersized drainage facilities downstream along Brommer Street. This project's engineered drainage plan is designed to alleviate additional impacts on the undersized downstream system, caused by the proposed development. According to the Drainage Calculations, the net increase of impervious surface for the site is approximately 1,725 square feet.

As mitigating solutions to these concerns, the project applicant has submitted engineered plans showing a porous pavement covering an approximate 1,000 square foot by 12 inches deep permeable retention basin located in the proposed access corridor along the southern side of the parcel. This would catch and retain all new impervious surface runoff, to meet the 25-year storm storage with a 2-year release rate. The existing concrete drainage ditch would remain in effect, directing runoff from the adjacent property to Chanticleer Avenue. Furthermore, the applicant is also proposing a vegetated swale catching and diverting runoff from the neighboring northern parcels and existing impervious service (including the existing accessory dwelling unit roof) and terminating in a porous driveway along the north property line. According to the consulting engineer, this system is sufficient to deal with the inadequacies of the existing drainage system to the north, including allowing for the removal of the automated pump.

In addition, DPW staff has determined that existing storm water facilities are adequate to handle the increase in drainage associated with the project. Refer to response I-1 for discussion of urban contaminants and/or other polluting runoff. Impacts would be considered less than significant.

6. *Otherwise substantially degrade water quality?*	☐	☐	☒	☐

Discussion: Please see discussion under I-1 above. Impacts would be considered less than significant with the implementation of BMPs.

7. *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?*	☐	☐	☐	☒

Discussion: According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated May 16, 2012, no housing or any other development lies

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

within a 100-year flood hazard area. No impacts are expected to occur.

8.	*Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*	☐	☐	☐	☒

Discussion: According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated May 16, 2012, no portion of the project site lies within a 100-year flood hazard area. Therefore, the proposed project would not impede or redirect flood flows. No impact would occur.

9.	*Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*	☐	☐	☐	☒

Discussion: The proposed project would not increase the risk of flooding and would not lead to the failure of a levee or dam. No impact would occur.

10.	*Inundation by seiche, tsunami, or mudflow?*	☐	☐	☐	☒

Discussion: There are two primary types of tsunami vulnerability in Santa Cruz County. The first is a teletsunami or distant source tsunami from elsewhere in the Pacific Ocean. This type of tsunami is capable of causing significant destruction in Santa Cruz County. However, this type of tsunami would usually allow time for the Tsunami Warning System for the Pacific Ocean to warn threatened coastal areas in time for evacuation (County of Santa Cruz 2010).

The more vulnerable risk to the County of Santa Cruz is a tsunami generated as the result of an earthquake along one of the many earthquake faults in the region. Even a moderate earthquake could cause a local source tsunami from submarine landsliding in Monterey Bay. A local source tsunami generated by an earthquake on any of the faults affecting Santa Cruz County would arrive just minutes after the initial shock. The lack of warning time from such a nearby event would result in higher causalities than if it were a distant tsunami (County of Santa Cruz 2010).

The project site is located approximately 1 mile inland. According to the Live Oak Community Tsunami Coastal Inundation Map, no impact would occur (County of Santa Cruz, March 2011).

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

J. LAND USE AND PLANNING

Would the project:

1. *Physically divide an established community?*	☐	☐	☐	☒

Discussion: The proposed project does not include any element that would physically divide an established community. No impact would occur.

2. *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?*	☐	☐	☒	☐

Discussion:

The proposed project does not conflict with any regulations or policies adopted for the purpose of avoiding or mitigating an environmental effect. However, the proposed project applicant is requesting variances to the R-1-6 zoning requirements to accommodate less than standard setbacks for existing accessory structures on both Parcels A and B. On parcel A, the existing approximately 532-SF accessory dwelling structure has an existing 3.23 foot side yard setback. The R-1-6 zoning requires a 5 foot side and 15 foot rear setback for accessory structures over 120 square feet in size. It is proposed that the accessory dwelling structure retain its 3.23 foot side yard setback and provide a 5 foot rear yard setback. On parcel B, the existing accessory garage structure is proposed to be located within the 20 foot required front yard setback. Currently, the garage structure is encroaching on the proposed property line. A portion of the structure would be demolished to provide a 3 foot front yard setback. The existing 2.75 side yard setback would remain unchanged. Findings to support granting this variance include; the preservation of existing land use patterns, minimize demolition waste (minimizing greenhouse gases and landfill expansion), reuse of existing structures (minimizing inherent impacts from construction, minimizing use of limited-resource materials). Impacts on potential conflicts with land use plan policy would be considered less than significant.

3. *Conflict with any applicable habitat conservation plan or natural community conservation plan?*	☐	☐	☐	☒

Discussion: The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

K. MINERAL RESOURCES

Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: The site does not contain any known mineral resources that would be of value to the region and the residents of the state. Therefore, no impact is anticipated from project implementation.

2. *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?*	☐	☐	☐	☒

Discussion: The project site is zoned single family Residential (R-1-6), which is not considered to be an Extractive Use Zone (M-3) nor does it have a Land Use Designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan or other land use plan would occur as a result of this project. No impact would occur.

L. NOISE

Would the project result in:

1. *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*	☐	☐	☒	☐

Discussion: Per County policy, average hourly noise levels shall not exceed the General Plan threshold of 50 dB Leq during the day and 45 dB Leq during the nighttime. Impulsive noise levels shall not exceed 65 dB during the day or 60 dB at night. Sounds from construction activities would be limited daytime hours, and may be audible to nearby residents. However, periods of audible noise would vary considerably on a day-to-day basis and exposure would be temporary.

The permanent site activities as a result of the implementation of the project would slightly increase traffic volumes within the property through the periodic movement of vehicles. However, the incremental increase in the existing noise environment, as a permanent result of this project, would be small and similar in character to the ambient noise characteristics generated by surrounding existing uses. Impacts would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*	☐	☐	☒	☐

Discussion: Ground vibration may be noticeable during construction or jacking and boring operations. However, these vibrations will be short-term, lasting only as long as needed for construction on the various project locations. All equipment will be operated during normal daytime business hours. Therefore, Impacts would be considered less than significant.

3. *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*	☐	☐	☐	☒

Discussion: The proposed project would not result in a permanent increase in the ambient noise level. The main source of ambient noise in the project area is traffic noise along Chanticleer Avenue. However, no substantial increase in traffic trips is anticipated as a result of the proposed project. No impact is anticipated.

4. *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*	☐	☐	☒	☐

Discussion: See discussion under L-1 above. Noise generated during project construction would increase the ambient noise levels in adjacent areas. Construction would be temporary, however, and given the limited duration of this impact it is considered to be less than significant.

5. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*	☐	☐	☐	☒

Discussion: The proposed project is not within two miles of a public airport. Therefore, the proposed project would not expose people residing or working in the project area. No impact is anticipated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
6. *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?*	☐	☐	☐	☒

Discussion: The proposed project is not within two miles of a private airstrip. Therefore, the proposed project would not expose people residing or working in the project area. No impact is anticipated.

M. POPULATION AND HOUSING

Would the project:

1. *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*	☐	☐	☐	☒

Discussion: The proposed project is designed at the density and intensity of development allowed by the General Plan and zoning designations for the parcel. Additionally, the project does not involve extensions of utilities (e.g., water, sewer, or new road systems) into areas previously not served. Consequently, it is not expected to have a significant growth-inducing effect. No impact would occur.

2. *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒

Discussion: The proposed project would not displace any existing housing. No impact would occur.

3. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒

Discussion: The proposed project would not displace a substantial number of people since the project is intended to divide one parcel into two, while retaining the existing single-family dwelling and accessory structures. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

N. PUBLIC SERVICES

Would the project:

1. *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 public services:*

a. *Fire protection?*	☐	☐	☐	☒
b. *Police protection?*	☐	☐	☐	☒
c. *Schools?*	☐	☐	☐	☒
d. *Parks?*	☐	☐	☐	☒
e. *Other public facilities; including the maintenance of roads?*	☐	☐	☐	☒

Discussion (a through e): While the project represents an incremental contribution to the need for services, the increase would be minimal. Moreover, the project meets all of the standards and requirements identified by the local fire agency or California Department of Forestry, as applicable, and school, park, and transportation fees to be paid by the applicant would be used to offset the incremental increase in demand for school and recreational facilities and public roads. No impact would occur.

O. RECREATION

Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: The proposed project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities. No impact would occur.

2. *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?*	☐	☐	☐	☒

Discussion: The proposed project does not propose the expansion or construction of additional recreational facilities. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

P. TRANSPORTATION/TRAFFIC

Would the project:

1. *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?*	☐	☐	☒	☐

Discussion: The project would create a small incremental increase in traffic on nearby roads and intersections. However, given the small number of new trips created by the project, this increase would be less than significant. Further, the increase would not cause the Level of Service at any nearby intersection to drop below Level of Service D, consistent with General Plan Policy 3.12.1.

2. *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 congestion management agency for designated roads or highways?*	☐	☐	☐	☒

Discussion: In 2000, at the request of the Santa Cruz County Regional Transportation Commission (SCCRTC), the County of Santa Cruz and other local jurisdictions exercised the option to be exempt from preparation and implementation of a Congestion Management Plan (CMP) per Assembly Bill 2419. As a result, the County of Santa Cruz no longer has a Congestion Management Agency or CMP. The CMP statutes were initially established to create a tool for managing and reducing congestion; however, revisions to those statutes progressively eroded the effectiveness of the CMP. There is also duplication between the CMP and other transportation documents such as the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP). In addition, the goals of the CMP may be carried out through the Regional Transportation Improvement Program and the Regional Transportation Plan. Any functions of the CMP which are useful, desirable and do not already exist in other documents may be incorporated into those documents.

The proposed project would not conflict with either the goals and/or policies of the RTP or with monitoring the delivery of state and federally-funded projects outlined in the RTIP. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. *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?*	☐	☐	☐	☒

Discussion: No change in air traffic patterns would result from project implementation. Therefore, no impact is anticipated.

4. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*	☐	☐	☐	☒

Discussion: The proposed development would result in the splitting of one parcel into two, and the eventual construction of one additional single-family dwelling in a residential neighborhood. The project would take access from Chanticleer Avenue, which meets all County standards. No impacts would occur with project implementation.

5. *Result in inadequate emergency access?*	☐	☐	☐	☒

Discussion: The project's road access meets County standards and has been approved by the local fire agency or California Department of Forestry, as appropriate. No impact would occur.

6. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*	☐	☐	☐	☒

Discussion: The proposed project design would comply with current road requirements to prevent potential hazards to motorists, bicyclists, and/or pedestrians. No impact would occur.

Q. UTILITIES AND SERVICE SYSTEMS

Would the project:

1. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*	☐	☐	☐	☒

Discussion: The proposed project's wastewater flows would not violate any wastewater treatment standards. No impact would occur from project implementation.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *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?*	☐	☐	☐	☒

Discussion: The project would connect to an existing municipal water supply. Santa Cruz Municipal Utilities has determined that adequate supplies are available to serve the project (Attachment 5). No impact would occur from project implementation.

3. *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?*	☐	☐	☒	☐

Discussion: The project proposes an engineered drainage improvement to retain up to the 25-year storm (see discussion in section I-5), with a runoff rate no greater than a 2-year release rate. Therefore, it would not result in the need for new or expanded drainage facilities. Impacts would be less than significant.

4. *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*	☐	☐	☒	☐

Discussion: The City of Santa Cruz Water Department has indicated that adequate water supplies are available to serve the project and has issued a will-serve letter for the proposed project, subject to the payment of fees and charges in effect at the time of service (Attachment 5). The development would also be subject to the water conservation requirements. Therefore, existing water supplies would be sufficient to serve the proposed project, and no new entitlements or expanded entitlements would be required. Impacts would be less than significant.

5. *Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*	☐	☐	☐	☒

Discussion: The Santa Cruz County Sanitation District has indicated that adequate capacity is available to serve the project and has issued a will-serve letter for the proposed project, subject to the payment of fees and charges in effect at the time of service (Attachment 6). Therefore, existing wastewater treatment capacity would be sufficient to

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

serve the proposed project. Please see discussion under Q-2 above. No impact would occur from project implementation.

6. *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*	☐	☐	☒	☐

Discussion: The proposed project would not generate substantial solid waste during the operational phase of the project. However, construction debris would be generated during demolition and construction, much of which would be recycled. Impacts would be less than significant.

7. *Comply with federal, state, and local statutes and regulations related to solid waste?*	☐	☐	☐	☒

Discussion: The project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. No impact would occur.

R. MANDATORY FINDINGS OF SIGNIFICANCE

1. *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 wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*	☐	☐	☐	☒

Discussion: The potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory were considered in the response to each question in Section III (A through Q) of this Initial Study. No resources that have been evaluated as significant would be potentially impacted by the project. As a result of this evaluation, there is no substantial evidence that significant effects associated with this project would result. Therefore, this project has been determined not to meet this

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Mandatory Finding of Significance.

2. *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)?*	☐	☐	☒	☐

Discussion: In addition to project specific impacts, this evaluation considered the projects potential for incremental effects that are cumulatively considerable. As a result of this evaluation, there were determined to be potentially significant cumulative effects related to drainage and stormwater runoff. However, the proposed project has been designed to reduce these cumulative effects to a level below significance. As a result of this evaluation, there is no substantial evidence that there are cumulative effects associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

3. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*	☐	☐	☒	☐

Discussion: In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in Section III (A through Q). As a result of this evaluation, there were determined to be no potentially significant effects to human beings related to the project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

IV. REFERENCES USED IN THE COMPLETION OF THIS INITIAL STUDY

California Department of Conservation. 1980

Farmland Mapping and Monitoring Program Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance Santa Cruz County U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Santa Cruz County, California, August 1980.

County of Santa Cruz, 2013

County of Santa Cruz Climate Action Strategy. Approved by the Board of Supervisors on February 26, 2013.

County of Santa Cruz, 2011

Live Oak Community Tsunami Coastal Inundation Map. Prepared by the Santa Cruz Co. GIS.

County of Santa Cruz, 2010

County of Santa Cruz Local Hazard Mitigation Plan 2010-2015. Prepared by the County of Santa Cruz Office of Emergency Services.

County of Santa Cruz, 1994

1994 General Plan and Local Coastal Program for the County of Santa Cruz, California. Adopted by the Board of Supervisors on May 24, 1994, and certified by the California Coastal Commission on December 15, 1994.

MBUAPCD, 2008

Monterey Bay Unified Air Pollution Control District (MBUAPCD), CEQA Air Quality Guidelines. Prepared by the MBUAPCD, Adopted October 1995, Revised: February 1997, August 1998, December 1999, September 2000, September 2002, June 2004 and February 2008.

MBUAPCD, 2013a

Monterey Bay Unified Air Pollution Control District, NCCAB (NCCAB) Area Designations and Attainment Status – January 2013. Available online at http://www.mbuapcd.org/mbuapcd/pdf/Planning/Attainment_Status_January_2013_2.pdf

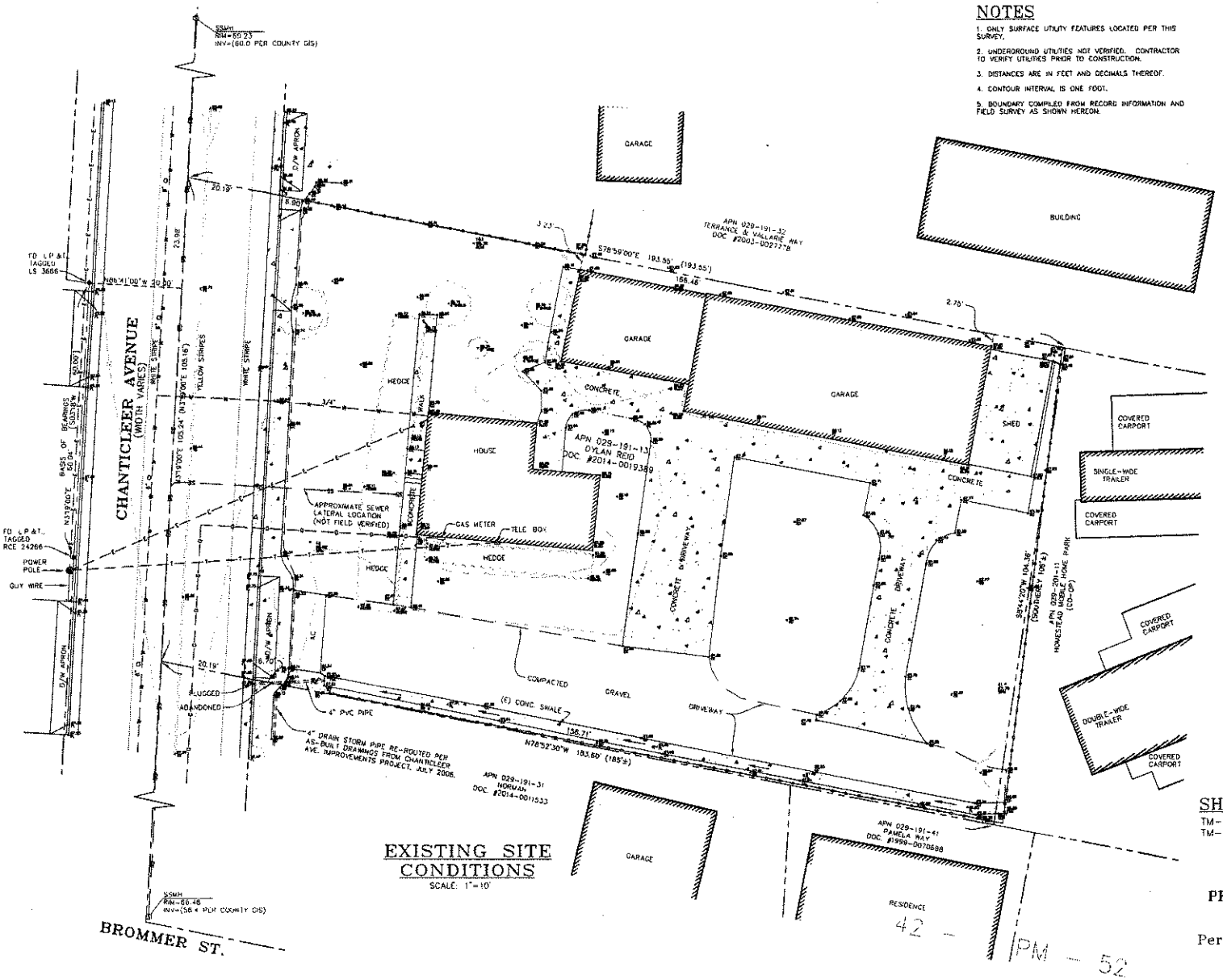
MBUAPCD, 2013b

Triennial Plan Revision 2009-2011. Monterey Bay Air Pollution Control District. Adopted April 17, 2013.

V. SUPPORTING MATERIAL & ATTACHMENTS

1. Tentative Map and Preliminary Improvement Plans, Robert Dewitt Civil Engineer, 8/14/15. Architectural Floor Plans, and Site Elevations, Craycroft Design, 3/31/15.
2. County of Santa Cruz Assessors records for 029-191-13
3. Geotechnical Investigation, Dees & Associates, Febuary 5, 2015
4. Drainage Calculations, DeWitt & Associates, Aug. 14, 2015 and Oct. 21, 2015
5. Water Service Will-Serve Letter, City of Santa Cruz Water Department
6. Sewer Will-Serve Letter, Santa Cruz County Sanitation District
7. MBUAPCD Consistency Determination Spreadsheet
8. Historical Review Comments Memo by Annie Murphy, County Historical Resources Planner

ATTACHMENT 1



EXISTING SITE CONDITIONS

SCALE: 1"=10'

NOTES

1. ONLY SURFACE UTILITY FEATURES LOCATED PER THIS SURVEY.
2. UNDERGROUND UTILITIES NOT VERIFIED. CONTRACTOR TO VERIFY UTILITIES PRIOR TO CONSTRUCTION.
3. DISTANCES ARE IN FEET AND DECIMALS THEREOF.
4. CONTOUR INTERVAL IS ONE FOOT.
5. BOUNDARY COMPILED FROM RECORD INFORMATION AND FIELD SURVEY AS SHOWN HEREON.

LEGEND

BLDG	BUILDING
CC	CONCRETE
FNC	FENCE
DI	DRAIN INVERT
EP	EDGE OF PAVEMENT
FF	FINISH FLOOR
FL	FLOWLINE
GD	GROUND
PN	PAVENT NAIL
PP	POWER POLE
SPK	SPIKE
TC	TOP OF GRATE
YS	YELLOW STRIPE
WM	WATER METER
SSMH	SANITARY SEWER MANHOLE

LINETYPES USED

- SUBJECT PROPERTY LINES
- ADJOINING PROPERTY LINES
- CONTOURS
- OLD LOT LINE
- EASEMENT LINE
- DOUBLE YELLOW STRIPES
- FOG STRIPE
- OVERHEAD ELECTRIC WIRES
- UNDERGROUND GAS LINE
- UNDERGROUND WATER LINE
- OVERHEAD TELEPHONE WIRES
- UNDERGROUND SEWER LINE

ELEVATION DATUM

SANTA CRUZ COUNTY BENCHMARK No. 18, A 1.5" I.P. WITH STD. COUNTY SURVEYORS BRASS CAP SET IN CONCRETE 5' NORTH OF CYCLONE FENCE AT FRONT OF COUNTY MAINTENANCE YARD AT 2700 BROMMER STREET. ELEVATION = 59.99' NGVD 29.

BASIS OF BEARINGS

N 3°19'00" E, ALONG THE EAST SIDELINE OF CHANTICLEER AVENUE AS SHOWN ON THAT CERTAIN MAP OF WILSON BROTHERS, TRACT No. 6,, RECORDED IN VOLUME 18 OF MAPS, PAGE 51, SANTA CRUZ COUNTY RECORDS, AND PER MONUMENTS FOUND AS SHOWN HEREON.

SHEET INDEX

TM-1 = EXISTING SITE CONDITIONS
TM-2 = PROPOSED MINOR LAND DIVISION

PROPOSED DEVELOPMENT

SHOWING THE LANDS OF
Dylan Reid
Per Doc. No. 2014-0019389
BEING
APN 029-191-13
LOCATED AT
1240 Chanticleer Ave.
County of Santa Cruz, California

Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors
807 Cedar Street, Suite 1
Santa Cruz, CA 95060
(831) 425-1849
(831) 425-0274 FAX

DESIGN:
DRAWN: DFH
DATE: 4/09/15
DWG:R14057-Topo
REVISED: 8/14/15
PROJECT: R14057
SHEET: 1 OF 2

ATTACHMENT 1

VICINITY MAP

NOT TO SCALE

MINOR LAND DIVISION GENERAL NOTES

APN 029-191-13
(Reference: County Code Section 14.01.205, Form and Content for Tentative Maps)

A. Tract name: Not applicable for minor land division
B. Survey of the parcel: See survey information by R.L. DeWitt & Assoc. below.
C. Record owner and subdivider:
Dylan Reid
142 Belmont St., #3
Santa Cruz, CA 95060   408-688-0602

Engineer and surveyor:
Robert L. DeWitt & Assoc., Inc.
1607 Ocean St., Suite 1
Santa Cruz, CA 95060   831-425-1617

Robert L. DeWitt, P.E.   RCE 20,918

D. Location, names and present widths of adjacent streets: Width varies.
E. Location, proposed name, width and grades of streets within the subdivision: None
F. Location and widths of easements for drainage and utilities: None
G. Approx. radii of all curves: None
H. Approx. dimensions of all lots: See site plan on this sheet.
I. Approx. boundaries of areas subject to inundation: None
J. Existing use of the property: Single family residence.
K. Proposed use of the property: Single family residences.
L. Water supply: Future service from the Santa Cruz Water Department.
M. Sanitation: Parcel "A" has existing sewer service, and Parcel "B" will connect future service from the Santa Cruz Sanitation District.
N. Proposed public areas: None
O. Contours and slope designation: 1' contour interval.
P. Statement of improvements to be installed: None.
Q. Typical street cross section: See Section A-A on this sheet.
R. Date, north point and scale: Shown hereon.
S. Site location sketch: Shown hereon.
T. Soil percolation data for septic: N/A (in the sanitation district)
U. Approx. known soil or geologic hazard areas: None known.
V. Preliminary soils report: Soil tests not performed at this time.
W. Preliminary engineered improvement plans: N/A (land only subdivision.)
X. Information deemed necessary to evaluate entire access: None.
Y. Designated remainder parcel: None proposed.

General Plan designation: R-UL (Urban Low Density Residential).
Zoning: R-1-6

NOTES

1) TREES DIAMETERS ARE MEASURED IN INCHES AT CHEST HEIGHT.

2) TENTATIVE MAP IS BASED UPON A SURVEY BY ROBERT L. DEWITT & ASSOCIATES, INC., CIVIL ENGINEERS AND LAND SURVEYORS, DATED MAY, 2014.

3) CONTOURS INTERVAL IS ONE FOOT.

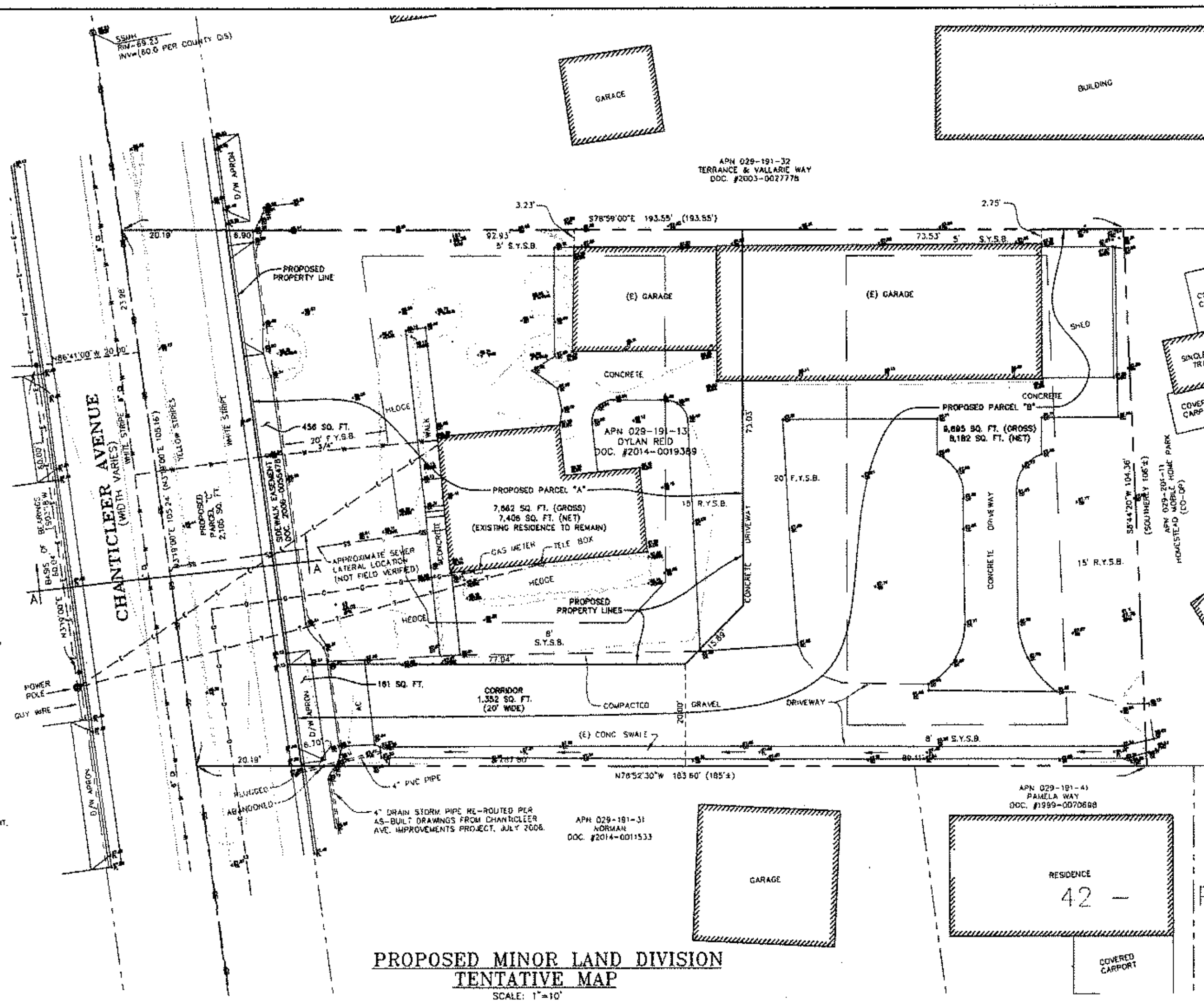
4) BOUNDARY COMPILED FROM RECORD INFORMATION AND FIELD SURVEY AS SHOWN HEREON.

ELEVATION DATUM

BM #18, 1.5" I.P. WITH STD. COUNTY SURVEYORS BRASS CAP SET IN CONCRETE AT COUNTY YARD 5' N OF CYCLONE FENCE AT FRONT OF YARD. ELEVATION = 59.89' NGVD 29.

BASIS OF BEARINGS

N. 03°19'00" E. BETWEEN MONUMENTS AS SHOWN ON THE RECORD OF SURVEY, RECORDED IN VOLUME 84 OF MAPS, PAGE 18, SANTA CRUZ COUNTY RECORDS.

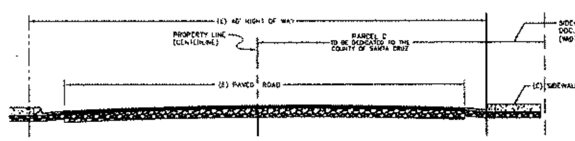


PROPOSED MINOR LAND DIVISION TENTATIVE MAP

SCALE: 1"=10'

LOT AREA SUMMARY

ASSESSOR'S PARCEL No.	LOT	GROSS AREA	DEDUCTIONS		PROPOSED NET AREA	PROPOSED NET ACRES
			SIDEWALK ESMT.	CORRIDOR		
029-191-13	PARCEL "A"	7,862 SQ. FT.	456 SQ. FT.	N/A	7,406 S.F. NET	0.170 AC. NET
029-191-13	PARCEL "B"	9,695 SQ. FT.	161 SQ. FT.	1,352 SQ. FT.	8,182 S.F. NET	0.188 AC. NET
029-191-13	PARCEL "C"	2,105 SQ. FT.	N/A	N/A	2,105 S.F. NET	0.048 AC. NET
	TOTALS	19,662 SQ. FT.	617 SQ. FT.	1,352 SQ. FT.	17,693 SQ. FT. NET	0.406 AC. NET



CHANTICLEER AVE. - SECTION A-A

SCALE: 1"=5'

LEGEND

AC	ASPHALTIC CONCRETE
BLDG	BUILDING
CC	CONCRETE OR CONCRETE CURB
CONC	CONCRETE
(E)	(EXISTING)
ELEC	ELECTRICAL
EP	EDGE OF PAVING
EV	ELECTRICAL VAULT
FD IP	FOUND IRON PIPE
FL	FLOWLINE
HYD	FIRE HYDRANT
MON	CENTERLINE STREET MONUMENT
OHE	OVERHEAD ELECTRIC
PN	PAVEMENT NAIL
PNS	PAVEMENT NAIL & SHINER
PP	POWER POLE
S.F.	SQUARE FEET
SS	SANITARY SEWER LINE
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC LINE
UG	UNDERGROUND GAS LINE
W	WATER LINE
WM	WATER METER
WV	WATER VALVE
•	INDICATES FOUND SURVEY MONUMENT AS NOTED
( )	INDICATES RECORD DEED DATA
R&M	INDICATES RECORD AND MEASURED
FYSB	FRONT YARD SETBACK
SYSB	SIDE YARD SETBACK
RYSB	REAR YARD SETBACK

LINETYPES USED

———	EXISTING PROPERTY LINE
— — —	ADJOINER PROPERTY LINE
———	PROPOSED PROPERTY LINE
- - - -	CONTOURS
— — —	SETBACK LINE
=======	DOUBLE YELLOW STRIPES
....	WHITE STRIPE
—E—E—E—	OVERHEAD ELECTRIC WIRES
—G—G—G—	UNDERGROUND GAS LINE
—W—W—W—	UNDERGROUND WATER LINE
—T—T—T—	OVERHEAD TELEPHONE WIRES
—SS—SS—SS—	UNDERGROUND SEWER LINE

SCALE: 1"=10'

0 10 20 30

PROPOSED DEVELOPMENT
SHOWING THE LANDS OF
Dylan Reid
Per Doc. No. 2014-0019389
BEING
APN 029-191-13
LOCATED AT
1240 Chanticleer Ave.
County of Santa Cruz, California

Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors
1607 Ocean St., Suite 1
Santa Cruz, CA 95060
(831) 425-1617 TEL
(831) 425-0224 FAX

DESIGN: ---
DRAWN: DFH
DATE: 6/08/15
DWG: #14057-Tops
REVISION: 8/14/15
PROJECT: #14057
SHEET: 2 of 2

ATTACHMENT 4

GENERAL NOTES

1) PREPARED AT THE REQUEST OF THE CITY OF DYLAN REID

142 BELMONT STREET #3
SANTA CRUZ, CA 95060
(508) 688-9602

2) APN: 029-191-13

3) BASED UPON A TOPOGRAPHIC MAP PREPARED BY ROBERT L. DEWITT AND ASSOCIATES DECEMBER 2014

4) LAND USE PLANNER:
JOHN SWIFT
HAMILTON SWIFT & ASSOCIATES
500 CHESTNUT STREET STE 100
SANTA CRUZ, CA 95060
831-459-9990

5) ARCHITECTURAL PLANS:
JOHN CRAYCROFT
CRAYCROFT DESIGN
455 HAPPY VALLEY WAY
SANTA CRUZ, CA 95065
831-427-3058

6) GEOTECHNICAL ENGINEER

BECKY DEES BOYD
501 MISSION STREET STE 8A
SANTA CRUZ, CA 95060
831-427-1770

7) CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENTS SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

IMPERVIOUS SUMMARY

EXISTING IMPERVIOUS = 9,711 S.F.

EXISTING IMPERVIOUS TO REMAIN = 4,049 S.F.

EXISTING IMPERVIOUS TO BE REPLACED = 9,135 S.F.

EXISTING IMPERVIOUS TO BE REMOVED = 16,625 S.F.

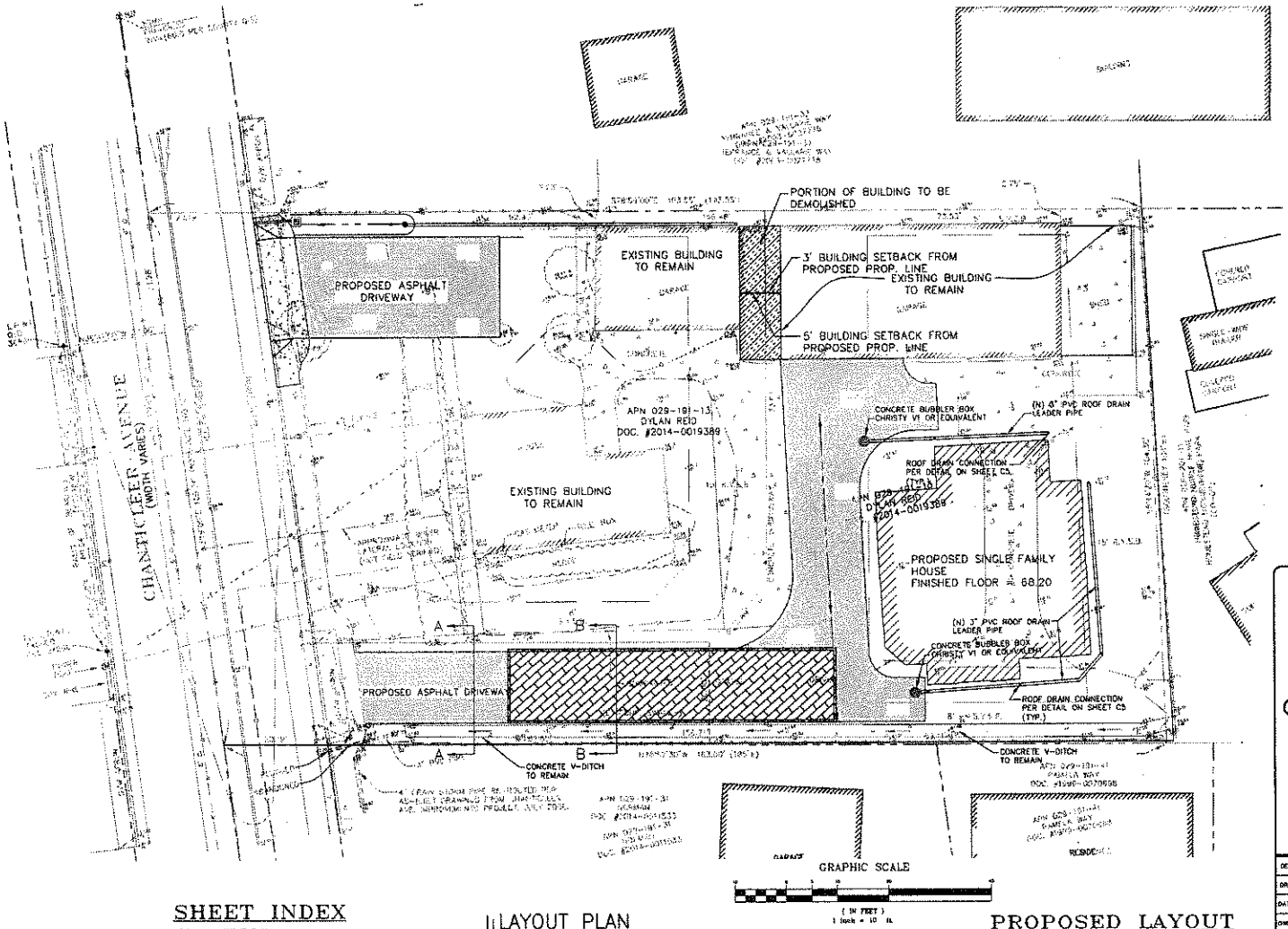
NEW IMPERVIOUS CREATED = 3,926 S.F.

GROSS AREA = 17,8215 S.F.

TOTAL IMPERVIOUS 8,726 S.F.

TOTAL IMPERVIOUS CREATED OR REPLACED = 4,631 S.F.

PERCENT CREATED OR REPLACED = 49.8%



SHEET INDEX

LAYOUT PLAN
SCALE: 1"=10'

UNAUTHORIZED CHANGES AND USES:
The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

JOB SITE CONDITIONS:
Construction contractor agrees that in accordance with generally accepted construction practices, the contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and contractor further agrees to defend, indemnify, and hold design professional harmless from any and all liability, real or alleged, in connection with performance of work on this project, excepting liability arising from the sole negligence of the design professional.

ACEC
American Council of Engineering Companies
California

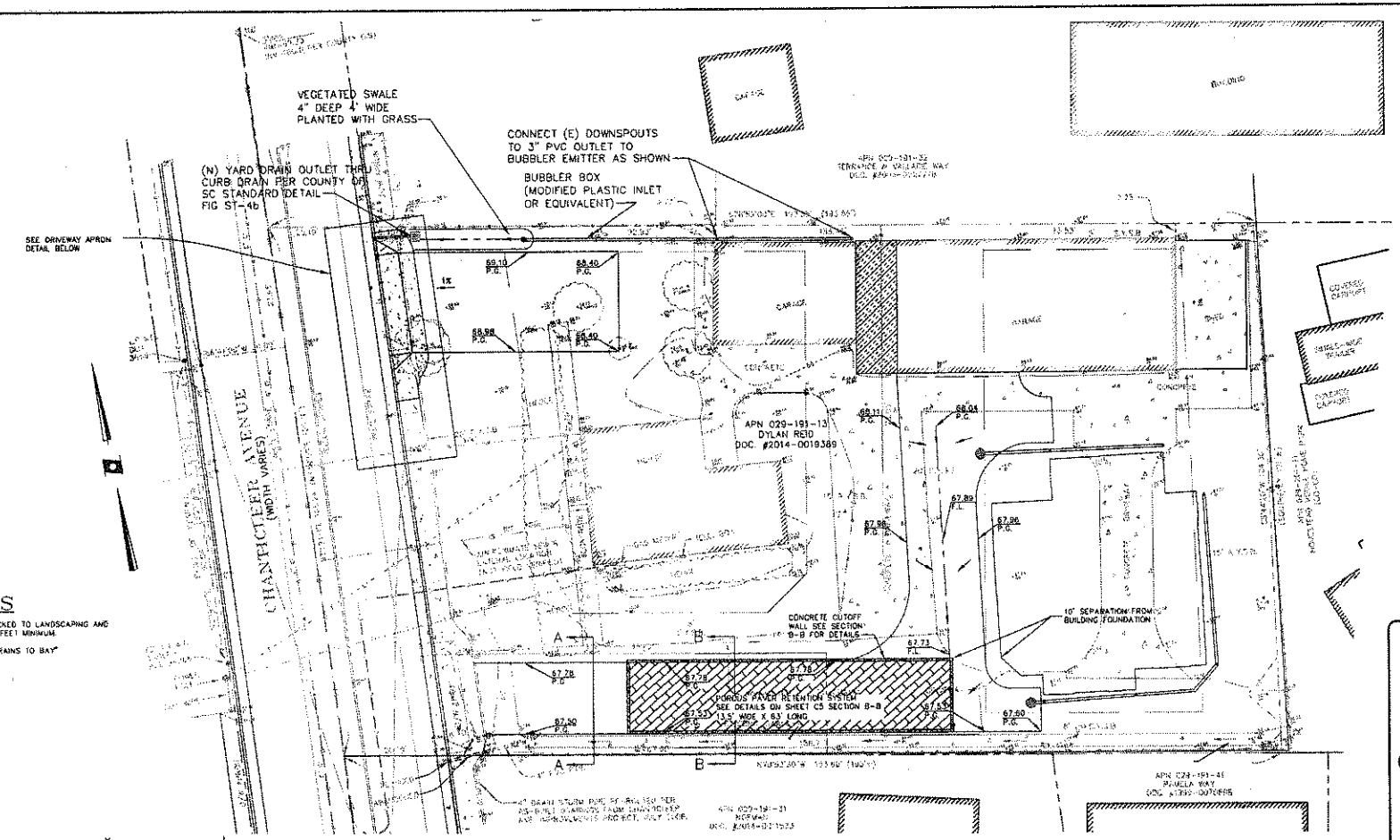
PROPOSED LAYOUT
PRELIMINARY ENGINEERING

OF THE LANDS OF
Dylan Reid
LOCATED AT
1240 CHANTICLEER AVENUE
Santa Cruz, California
APN: 029-091-13

Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors
1601 Ocean Street, Suite 1
Santa Cruz, CA 95060
(831) 425-1157 TEL
(831) 425-1824 FAX

DESIGN: RLD
DRAWN: RPH
DATE:
CHKD:
ISSUED: 5-16-15
REVISED: 8-14-15
PROJECT: R14057
SHEET: P1 of 5

ATTACHMENT 1



DRAINAGE NOTES

1) ALL NEW DOWNSPOUTS SHALL BE SPLASH BLOCKED TO LANDSCAPING AND GRADED AWAY FROM THE STRUCTURE 5% FOR 10 FEET MINIMUM.

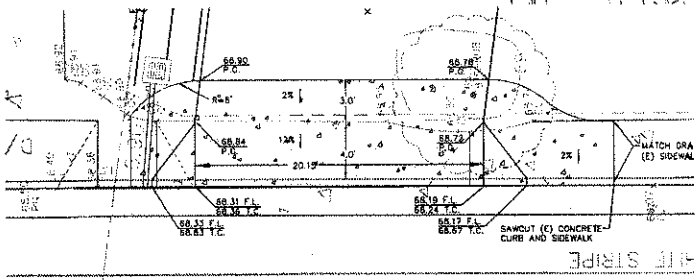
2) NEW INLET SHALL BE MARKED "NO DUMPING DRAINS TO BAY"

GRADING AND DRAINAGE PLAN

SCALE: 1"=10'

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft



DRIVEWAY APRON DETAIL

SCALE: 1"=10'

GRADING AND DRAINAGE
PRELIMINARY ENGINEERING

OF THE LANDS OF

Dylan Reid

LOCATED AT

1240 CHANTICLEER AVENUE
Santa Cruz, California
APN: 029-091-13

Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors
1657 Ocean Street, Suite 1
Santa Cruz, CA 95060
(831) 425-1647
(831) 425-0224 FAX

DESIGN: RLD
DRAWN: RPH
DATE:
CHKD:
ISSUED: 5-19-15
REVISED: 9-14-15
PROJECT: R14057
SHEET: P2 of 5

ATTACHMENT 4

Erosion Control Notes

1. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. HAY BALES, FILTER BERMS, OR OTHER MEANS SHALL BE EMPLOYED TO PREVENT TURBID RUNOFF TO ADJOINING PROPERTIES.

2. UNNECESSARY GRADING AND DISTURBING OF SOIL SHALL BE AVOIDED.

3. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR STOCKPILED IN A MANNER TO AVOID RUNOFF ONTO ADJOINING PROPERTIES.

4. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED AREAS SHALL BE PERMANENTLY REVEGETATED.

5. ANY MATERIAL STOCKPILED DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.

6. DURING CONSTRUCTION, NO TURBID SITE WATER SHALL BE PERMITTED TO ENTER THE CHANNEL OR STORM DRAIN SYSTEM. USE OF SILT AND GREASE TRAPS, FILTER BERMS, OR HAY BALES MAY BE USED TO PREVENT SUCH DISCHARGE.

7. CONTRACTOR SHALL NOTIFY THE COUNTY OF SANTA CRUZ AT LEAST 48 HOURS BEFORE ANY EARTHWORK IS BEGUN.

8. ALL CONSTRUCTION SHALL CONFORM TO REQUIREMENTS OF THE COUNTY OF SANTA CRUZ. NO CLEARING, GRADING, OR EXCAVATION SHALL TAKE PLACE BETWEEN OCTOBER 15 AND APRIL 15 UNLESS THERE IS AN APPROVED WINTER EROSION CONTROL PLAN. ALL DISTURBED SOIL SHALL BE SEEDED, MULCHED, OR OTHERWISE PROTECTED BY OCTOBER 15.

9. CONTRACTOR SHALL INSTALL UNDERGROUND STORM DRAIN SYSTEM AND STRAW BALE DIKE BARRIERS PRIOR TO OCTOBER 15.

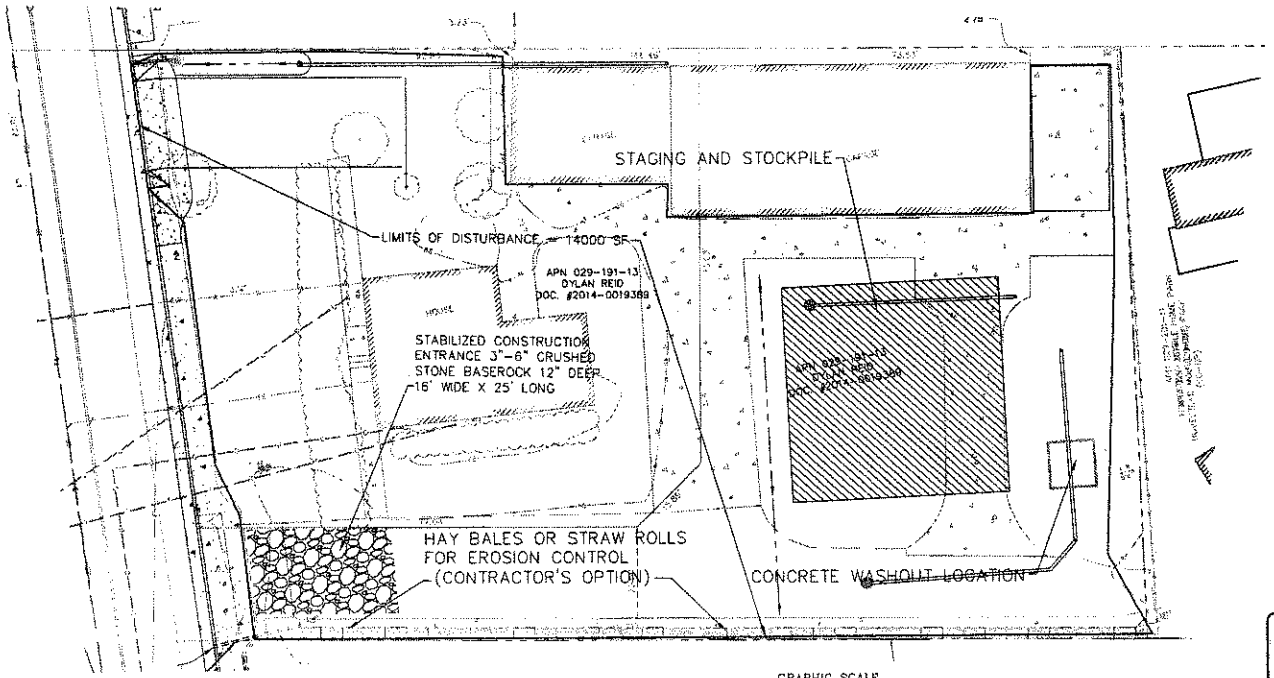
10. BARE SOIL SHALL BE COVERED WITH SEED AND STRAW MULCH AT AN APPLICATION RATE OF 5 LB./1000 S.F.

PROJECT INFORMATION

OWNER/REPRESENTATIVE:
DYLAN REID
142 BELMONT STREET, #3
SANTA CRUZ, CA
PHONE: (505) 888-9802

S.W.P.C.P. PRACTITIONER
ROBERT DEWITT/ ROBERT L. DEWITT & ASSOC.
1807 OCEAN STREET
SANTA CRUZ, CA 95060
(831) 425-1817
rldewitt@rldewitt.com

TOTAL AREA OF DISTURBANCE = 0.32 ACRES (14000 S.F.)



SITE HOUSEKEEPING REQUIREMENTS

CONSTRUCTION MATERIALS

1. ALL LOOSE STOCKPILED CONSTRUCTION MATERIALS THAT ARE NOT ACTIVELY BEING USED (I.E. SOIL, SPOILS, AGGREGATE, FLY-ASH, STUCCO, HYDRATED LIME, ETC.) SHALL BE COVERED AND BERMED.

2. ALL CHEMICALS SHALL BE STORED IN WATERTIGHT CONTAINERS (WITH APPROPRIATE SECONDARY CONTAINMENT TO PREVENT ANY SPILLAGE OR LEAKAGE) OR IN A STORAGE SHED (COMPLETELY ENCLOSED).

3. EXPOSURE OF CONSTRUCTION MATERIALS TO PRECIPITATION SHALL BE MINIMIZED. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNATED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS (I.E. POLES, EQUIPMENT PADS, CABINETS, CONDUCTORS, INSULATORS, BRICKS, ETC.).

4. BEST MANAGEMENT PRACTICES TO PREVENT THE OFF-SITE TRACKING OF LOOSE CONSTRUCTION AND LANDSCAPE MATERIALS SHALL BE IMPLEMENTED.

WASTE MANAGEMENT

1. DISPOSAL OF AND RINSE OR WASH WATERS OR MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO THE STORM DRAIN SYSTEM SHALL BE PREVENTED.

2. SANITATION FACILITIES SHALL BE CONTAINED (E.G. PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER, AND SHALL BE LOCATED A MINIMUM OF 20 FEET AWAY FROM AN INLET, STREET OR DRIVEWAY, STREAM, RIPARIAN AREA OR OTHER DRAINAGE FACILITY.

3. SANITATION FACILITIES SHALL BE INSPECTED REGULARLY FOR LEAKS AND SPILLS AND CLEANED OR REPLACED AS NECESSARY.

4. COVER WASTE DISPOSAL CONTAINERS AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT.

5. DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATERS SHALL BE PREVENTED.

6. STOCKPILED WASTE MATERIALS SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED.

7. PROCEDURES THAT EFFECTIVELY ADDRESS HAZARDOUS AND NON-HAZARDOUS SPILLS SHALL BE IMPLEMENTED.

8. EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE AND THAT SPILLS AND LEAKS SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY; AND

9. CONCRETE WASHOUT AREAS AND OTHER WASHOUT AREAS THAT MAY CONTAIN ADDITIONAL POLLUTANTS SHALL BE CONTAINED SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.

VEHICLE STORAGE AND MAINTENANCE

1. MEASURES SHALL BE TAKEN TO PREVENT OIL, GREASE, OR FUEL TO LEAK IN TO THE GROUND, STORM DRAINS OR SURFACE WATERS.

2. ALL EQUIPMENT OR VEHICLES, WHICH ARE TO BE FUELED, MAINTAINED AND STORED ONSITE SHALL BE IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMPs.

3. LEAKS SHALL BE IMMEDIATELY CLEANED AND LEAKED MATERIALS SHALL BE DISPOSED OF PROPERLY.

LANDSCAPE MATERIALS

1. CONTAIN STOCKPILED MATERIALS SUCH AS MULCHES AND TOPSOIL WHEN THEY ARE NOT ACTIVELY BEING USED.

2. CONTAIN FERTILIZERS AND OTHER LANDSCAPE MATERIALS WHEN THEY ARE NOT ACTIVELY BEING USED.

3. DISCONTINUE THE APPLICATION OF ANY ERODIBLE LANDSCAPE MATERIAL WITHIN 2 DAYS BEFORE A FORECASTER RAIN EVENT OR DURING PERIODS OF PRECIPITATION.

4. APPLY ERODIBLE LANDSCAPE MATERIAL AT QUANTITIES AND APPLICATION RATES ACCORDING TO MANUFACTURE RECOMMENDATIONS OR BASED ON WRITTEN SPECIFICATIONS BY KNOWLEDGEABLE AND EXPERIENCED FIELD PERSONNEL.

5. STACK ERODIBLE LANDSCAPE MATERIAL ON PALLETS AND COVERING OR STORING SUCH MATERIALS WHEN NOT BEING USED OR APPLIED.

STORMWATER POLLUTION CONTROL PLAN

PRELIMINARY ENGINEERING

OF THE LANDS OF

Dylan Reid

LOCATED AT

1240 CHANTICLEER AVENUE
Santa Cruz, California
APN: 029-091-13

1807 Ocean Street, Suite 1
Santa Cruz, CA 95060
(831) 425-1817
(831) 425-1224 FAX
TEL

Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors

DESIGN: RLD
DRAWN: RMH
DATE:
CHKD:
ISSUED: 6-19-15
REVISED: 9-14-15
PROJECT: #14057
SHEET: P3 OF 5

ATTACHMENT 5

SANTA CRUZ COUNTY SEWER NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE REQUIREMENTS IN THE CURRENT EDITION OF THE "COUNTY OF SANTA CRUZ DESIGN CRITERIA".

2. ALL FIGURE (FIG.) REFERENCES, UNLESS OTHERWISE SPECIFIED, REFER TO STANDARD DRAWINGS IN THE CURRENT EDITION OF THE "COUNTY OF SANTA CRUZ DESIGN CRITERIA".

3. NO CHANGES IN THE APPROVED IMPROVEMENT PLANS SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS.

4. THE DIRECTOR OF PUBLIC WORKS OR HIS AUTHORIZED REPRESENTATIVE SHALL HAVE THE AUTHORITY TO "STOP WORK" IF THE WORK IS NOT BEING DONE IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS.

5. THE CONTRACTOR SHALL NOTIFY THE COUNTY CONSTRUCTION ENGINEER (831-454-2160) 24 HOURS PRIOR TO START OF CONSTRUCTION.

6. THE CONTRACTOR SHALL NOTIFY THE SANITATION DISTRICT INSPECTOR (831-454-2160 OR LEAVE MESSAGE AT 831-454-2895) BEFORE 9:00 A.M. AT LEAST 24 HOURS PRIOR TO THE CONNECTION OF ANY BUILDING SEWER TO THE SEWER LATERAL, OR TO THE ABANDONMENT THEREOF (IN THE CASE OF ABANDONMENTS, NO DEMOLITION PERMITS WILL BE ISSUED UNTIL SAID SEWER LINE HAS BEEN ABANDONED).

7. EACH NEW SANITARY SEWER LATERAL NOT IMMEDIATELY CONNECTED TO A DWELLING UNIT SHALL BE MARKED WITH A 2" X 4" X 5' REDWOOD STAKE MARKER, TO 12" ABOVE FINISH GRADE, AT THE END OF EACH NEW LATERAL STUB-OUT. AN "S" SHALL BE PAINTED ON THE MARKER AND THE END OF EACH LATERAL SHALL BE PROPERLY CAPPED. ALL LATERALS INSTALLED IN NEW DEVELOPMENTS SHALL ALSO BE MARKED BY STAMPING AN "S" IN THE CURB JUST ABOVE THE LATERAL.

8. INSULATED COPPER WIRE" (NO. 10) SHALL BE PLACED ALONG TOP OF ALL GRAVITY AND FORCE MAINS. THE WIRE SHALL RUN BETWEEN MANHOLES, CLEANOUTS, OR OTHER APPROPRIATE FACILITIES, BROUGHT TO THE SURFACE AND BOLTED OR OTHERWISE SECURELY AFFIXED TO THE MANHOLE OR CLEANOUT COVER OR OTHER APPROPRIATE METAL STRUCTURE.

9. FOLLOWING THE SUCCESSFUL COMPLETION OF CLEANING AND TESTING, ALL SANITARY SEWER MAINS WHICH ARE TO BE COUNTY MAINTAINED, OR PRIVATE LINES AT THE DISCRETION OF THE PUBLIC WORKS INSPECTOR, SHALL FIRST BE FLUSHED, THEN VIDEO-RECORDED AT THE DEVELOPER'S EXPENSE ON DVD IN A MICROSOFT WINDOWS MEDIA PLAYER COMPATIBLE FORMAT. SAID VIDEO-RECORDING AND ACCOMPANYING REPORT SHALL BE SUBMITTED TO THE SANITATION DISTRICT FOR REVIEW AND APPROVAL PRIOR TO THE ACCEPTANCE OF THE PROJECT AND ANY ASSOCIATED SIGN_OFFS FOR BUILDING OCCUPANCY. THE CONTRACTOR SHALL REFER TO PART 4, "SANITARY SEWER DESIGN" OF THE DESIGN CRITERIA FOR SPECIFICATIONS ON PIPE LAYING, PIPELINE TESTING AND ALLOWABLE DESIGN TOLERANCES.

10. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ON ALL LATERALS WHERE THE FINISHED FLOOR ELEVATION IS LESS THAN ONE FOOT ABOVE THE RIM ELEVATION OF THE NEAREST UPSTREAM MANHOLE OR CLEANOUT. THE VALVES SHALL BE LOCATED IN SUCH A WAY AS TO PREVENT ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF SEWAGE RELEASED FROM THE DEVICE (FIGURE SS-14).

11. UNDERGROUND UTILITY LOCATIONS SHOWN ARE COMPILED FROM INFORMATION SUPPLIED BY THE APPROPRIATE UTILITY AGENCY. CONTRACTOR SHALL VERIFY LOCATION OF AFFECTED UTILITY LINES AND POTHOLE THOSE AREAS WHERE POTENTIAL CONFLICTS ARE LIKELY OR DATA IS OTHERWISE INCOMPLETE.

12. ANY EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED AS A PART OF THIS CONSTRUCTION SHALL BE RELOCATED AT THE DEVELOPER'S EXPENSE.

13. ALL SANITARY SEWERS WITHIN THE ROADWAY OR UNDER CURB, CUTTER OR SIDEWALK SHALL BE IN PLACE, VIDEOTAPED AND APPROVED FOR ACCEPTANCE PRIOR TO PLACING THE PERMANENT PAVING ON SAID ROADWAY OR PLACING ANY CURB, CUTTER OR SIDEWALK THEREON.

14. IF SIDEWALK IS NOT PLACED MONOLITHICALLY WITH CURB AND GUTTER, PLACE #4 DOWELS 18" LONG AT 4' O.C. IN BACK OF CURB 3" BELOW TOP OF CURB, 6" INTO CONCRETE.

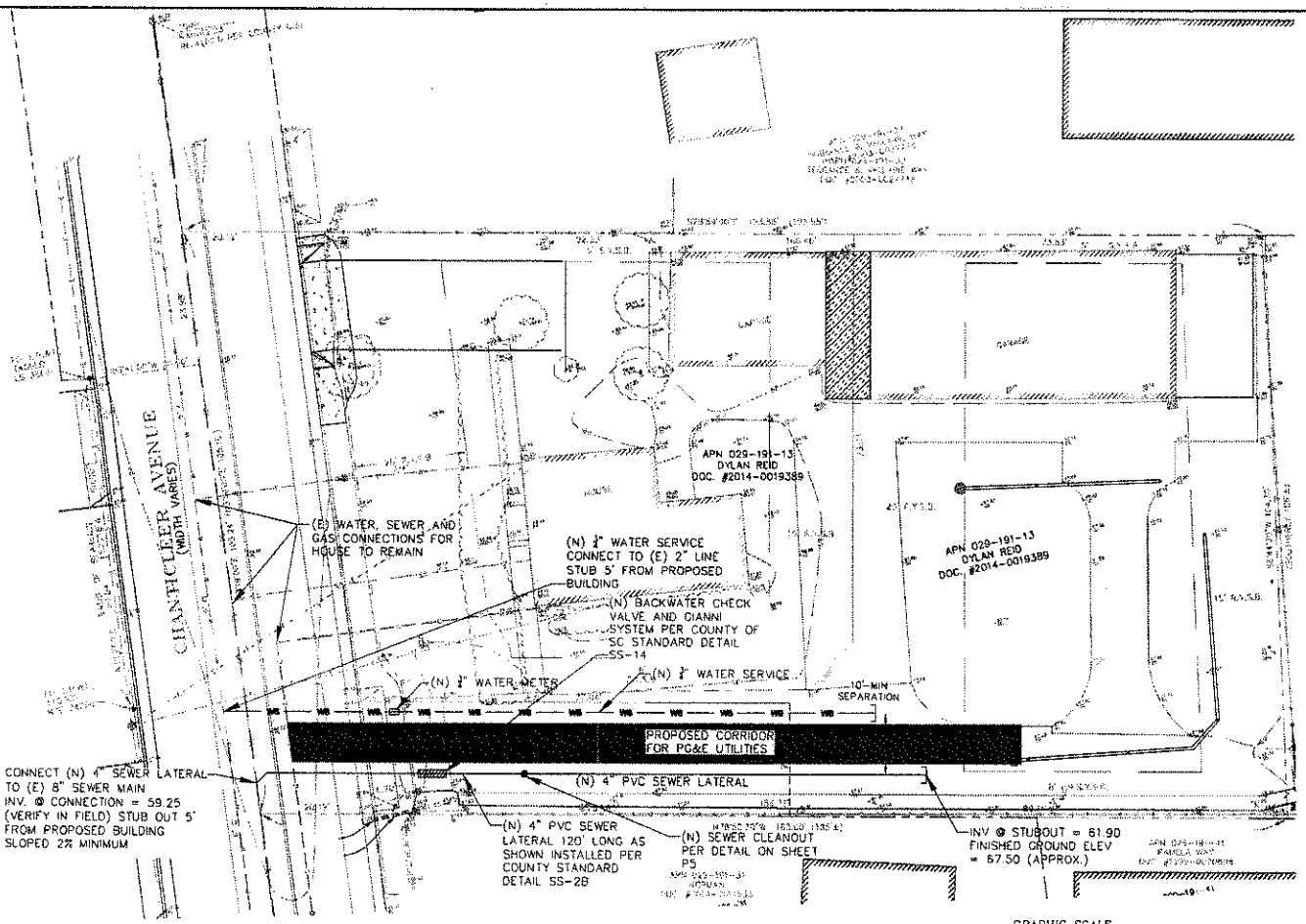
15. REFER TO FIGURES SS-2A & -2B AND EP-1 & -2 FOR BACKFILL REQUIREMENTS REFER TO SS-11 FOR CONCRETE CAP AND ENCASEMENT REQUIREMENTS.

16. WATER SERVICE FOR THE SITE SHALL BE INSTALLED BY THE CONTRACTOR ACCORDING TO CITY OF SANTA CRUZ/SOQUEL CREEK WATER DISTRICT/CITY OF WATSONVILLE REQUIREMENTS PER DETAILS BY ARCHITECT/ENGINEER.

17. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. DURING CONSTRUCTION SUCH PROTECTION MAY CONSIST OF MULCHING AND/OR PLANTING OF NATIVE VEGETATION OF ADEQUATE DENSITY. BEFORE COMPLETION OF THE PROJECT, ANY EXPOSED SOIL ON DISTURBED SLOPES SHALL BE PERMANENTLY PROTECTED FROM EROSION.

18. PRIOR TO CONSIDERATION FOR FORMAL COUNTY ACCEPTANCE OF THE IMPROVEMENTS, AS_BUILT PLANS WILL BE PREPARED BY COUNTY STAFF. ANY CHANGES FROM THE IMPROVEMENT PLANS NOT PREVIOUSLY APPROVED BY THE DEPARTMENT OF PUBLIC WORKS WILL REQUIRE NEGOTIATION AND ADJUSTMENT TO THE SATISFACTION OF THE COUNTY.

19. SANITARY SEWER MANHOLES, SUBJECT TO SURFACE OR STORM WATER, SHALL HAVE WATER-TIGHT LIDS.



UTILITY PLAN

SCALE: 1"=10'

SANTA CRUZ WATER DEPARTMENT STANDARD NOTES

1) ALL WORK ON THE WATER SYSTEM MUST BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST VERSION OF CITY OF SANTA CRUZ WATER DEPT (SCWD) STANDARD SPECIFICATIONS.

2) A MINIMUM OF 2 WORKING DAYS NOTICE SHALL BE GIVEN TO THE SCWD BEFORE CONSTRUCTION ON ANY PORTION OF THE WATER SYSTEM. OBTAIN ALL APPLICABLE WATER SYSTEM PERMITS AT THE SCWD. CALL 831-420-5210 FOR INFORMATION AND TO SCHEDULE WATER SERVICE, FIRE HYDRANT AND BACKFLOW ASSEMBLY INSPECTIONS.

3) MINIMUM SEPARATION FROM OTHER PARALLEL AND CROSSING UTILITIES MUST BE MAINTAINED PER CURRENT STANDARD TECHNICAL SPECIFICATIONS.

4) UTILITY LOCATIONS ARE APPROXIMATE. VERIFICATION OF ACTUAL UTILITIES AND LOCATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR. CALL UNDERGROUND SERVICE ALERT AT LEAST TWO WORKING DAYS BEFORE DIGGING AT 800-227-2600.

5) CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO WORKING DAYS NOTICE TO SCWD FOR INSPECTION OF SERVICES THAT ARE TO BE RETIRED, MODIFIED OR RELOCATED. CONTRACTOR SHALL EXPOSE CORPORATION STOPS FOR SCWD STAFF TO OPERATE. AN ACTIVE WATER METER MAY BE RELOCATED UP TO 8' HORIZONTALLY USING THE PIPE FREEZE METHOD OR BY TEMPORARILY CLOSING THE CORPORATION STOP. RETIRED METER BOXES ARE TO BE REMOVED BY CONTRACTOR AND ALL SIDEWALK AND PAVING RESTORED. SERVICE LINES SHALL NOT BE CRIMPED AS A METHOD OF RETIREMENT OR SERVICE LINE MODIFICATION OR RELOCATION.

6) APPROVAL BY THE SCWD FOR THE FIRE SERVICE INSTALLATION SHALL BE FOR THE SERVICE LINE LOCATION AND THE CONNECTION TO THE CITY WATER SYSTEM. THE FIRE SERVICE SIZE AND DESIGN APPROVAL ARE THE RESPONSIBILITY OF THE LOCAL FIRE PROTECTION AGENCY.

7) TEMPORARY REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY INSTALLATION(S) PER SCWD STANDARDS ARE REQUIRED FOR ALL CONSTRUCTION WATER USE.

UTILITY NOTES

1) EXISTING WATER AND SEWER SERVICE CONNECTION FOR UNCHANGED BUILDING TO BE REUSED.

2) ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY ASSOCIATED WITH THE INSTALLATION OF THE CONNECTION TO THE SEWER MAIN IN CHANTICLEER IS NOT PERMITTED AS A PART OF THE LAND DIVISION. CONNECTION TO THE MAIN (INCLUDING INSTALLATION OF THE LATERAL WITHIN THE PUBLIC RIGHT-OF-WAY) MAY ONLY BE ALLOWED THROUGH A SEPARATE SEWER CONNECTION PERMIT, OBTAINED THROUGH THE SANITATION DISTRICT OFFICE, COINCIDING WITH THE SEPARATE BUILDING PERMIT SUBMITTAL AND PAYMENT OF CONNECTION FEES. ANY CONNECTION DONE WITHOUT SUCH PERMIT IS SUBJECT TO PENALTY AND REMOVAL AT THE OWNER'S EXPENSE.

UTILITY PLAN

PRELIMINARY ENGINEERING

OF THE LANDS OF

Dylan Reid

LOCATED AT

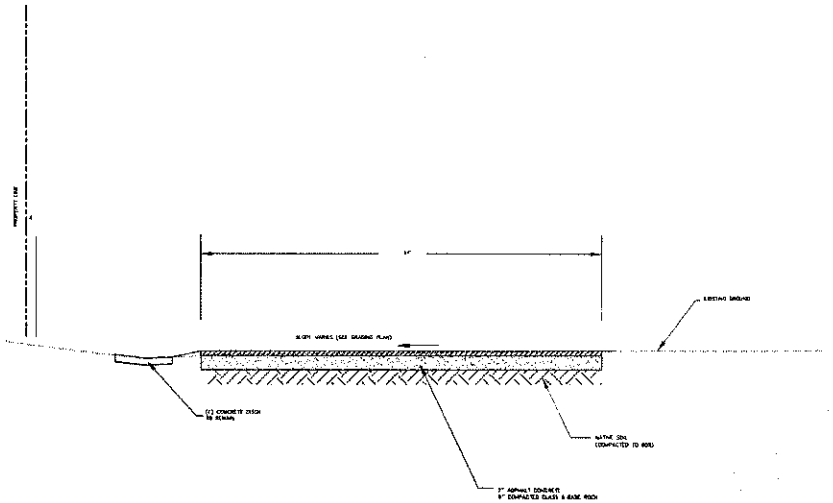
1240 CHANTICLEER AVENUE

Santa Cruz, California

APN: 029-091-13

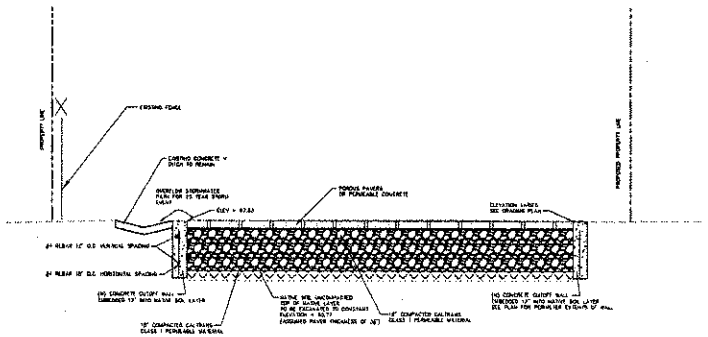
Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors
1807 Ocean Street, Suite J
Santa Cruz, CA 95060
(831) 425-1037 TEL
(831) 425-0324 FAX

DESIGN: RLD
DRAWN: RMV
DATE:
CHKD:
ISSUED: 5-12-15
REVISED: 9-14-15
PROJECT: R14037
SHEET: P4 of 5



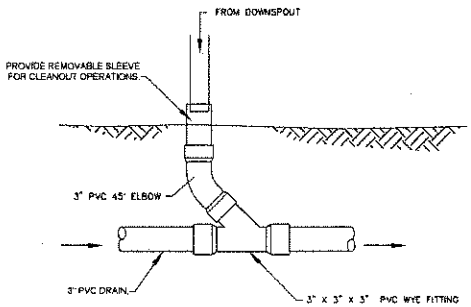
TYPICAL DRIVEWAY SECTION A–A

SCALE: 1"=2'



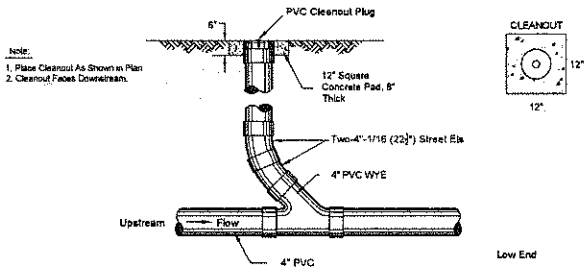
TYPICAL DRIVEWAY SECTION B–B

SCALE: 1"=2'



ROOF DRAIN CONNECTION DETAIL

NOT TO SCALE



SEWER CLEANOUT DETAIL

NOT TO SCALE

DETAILS

PRELIMINARY ENGINEERING

OF THE LANDS OF

Dylan Reid

LOCATED AT

1240 CHANTICLEER AVENUE

Santa Cruz, California

APN: 028-091-13

Robert L. DeWitt & Associates, Inc.
Civil Engineers & Land Surveyors
1502 Ocean Street, Suite 1
Santa Cruz, California 95060
(831) 425-0221 TEL
(831) 425-0221 FAX

DESIGN: RLD

DRAWN: RPM

DATE:

CHK'D:

ISSUED: 6-19-13

REVISED: 8-14-13

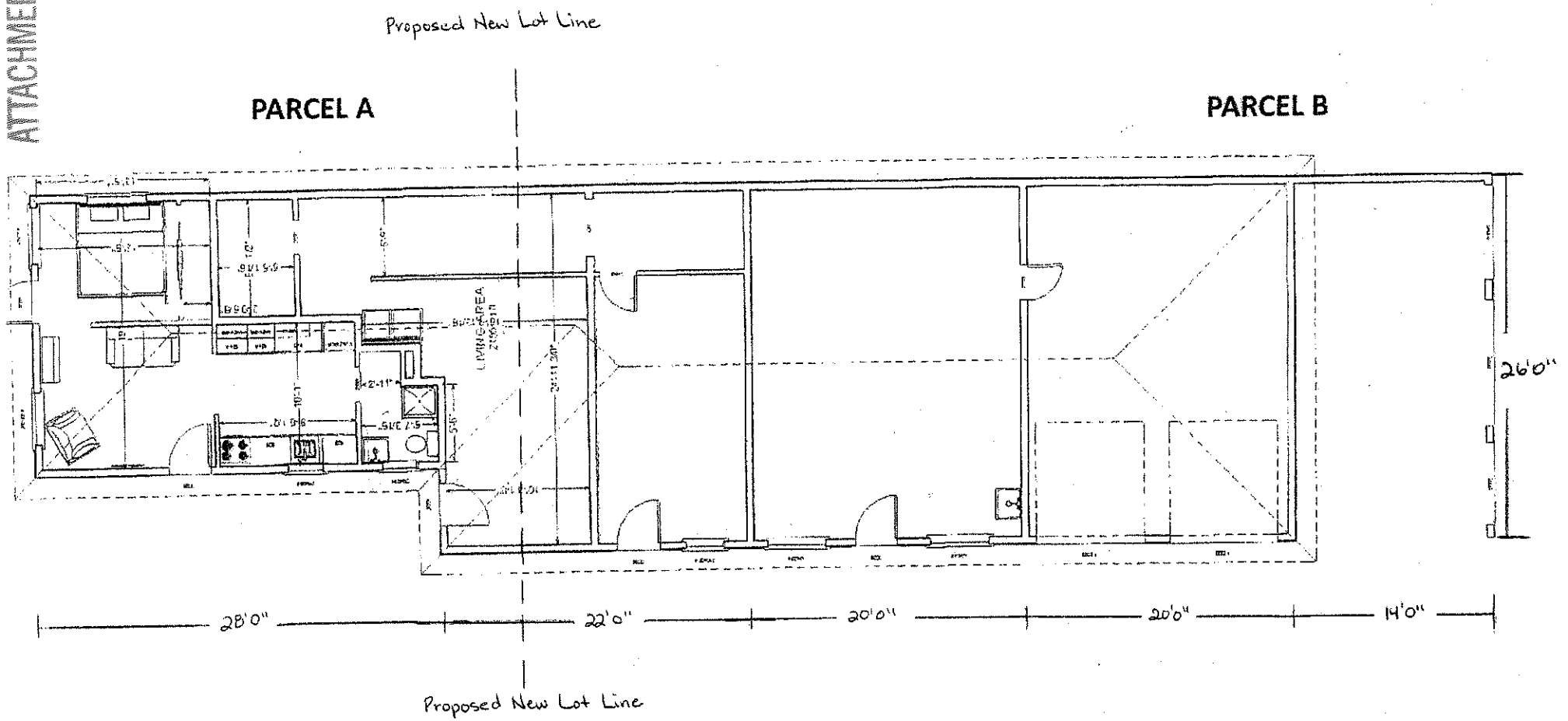
PROJECT: R14057

SHEET: P5 of 5

ATTACHMENT 1

HAMILTON SWIFT & ASSOCIATES, INC.

EXISTING DETACHED GARAGE FLOOR PLAN



GENERAL NOTES:

PLANS NOT BASED ON SURVEY.
NOT TO BE USED FOR CONSTUCTION.
FOR PLANNING PURPOSES ONLY.

ROUGH DIMENSIONS FROM ACCESSOR RECORDS.

PROJECT ADDRESS:
1240 CHANTICLEER AVE
SANTA CRUZ, CA 95062

APN:
029-191-13

PROPERTY OWNER:
DYLAN REID
1240 CHANTICLEER AVE
SANTA CRUZ, CA 95062

CONSULTANT:
HAMILTON SWIFT & ASSOC
500 CHESTNUT STREET, STE 100
SANTA CRUZ, CA 95060
(831) 459-9992

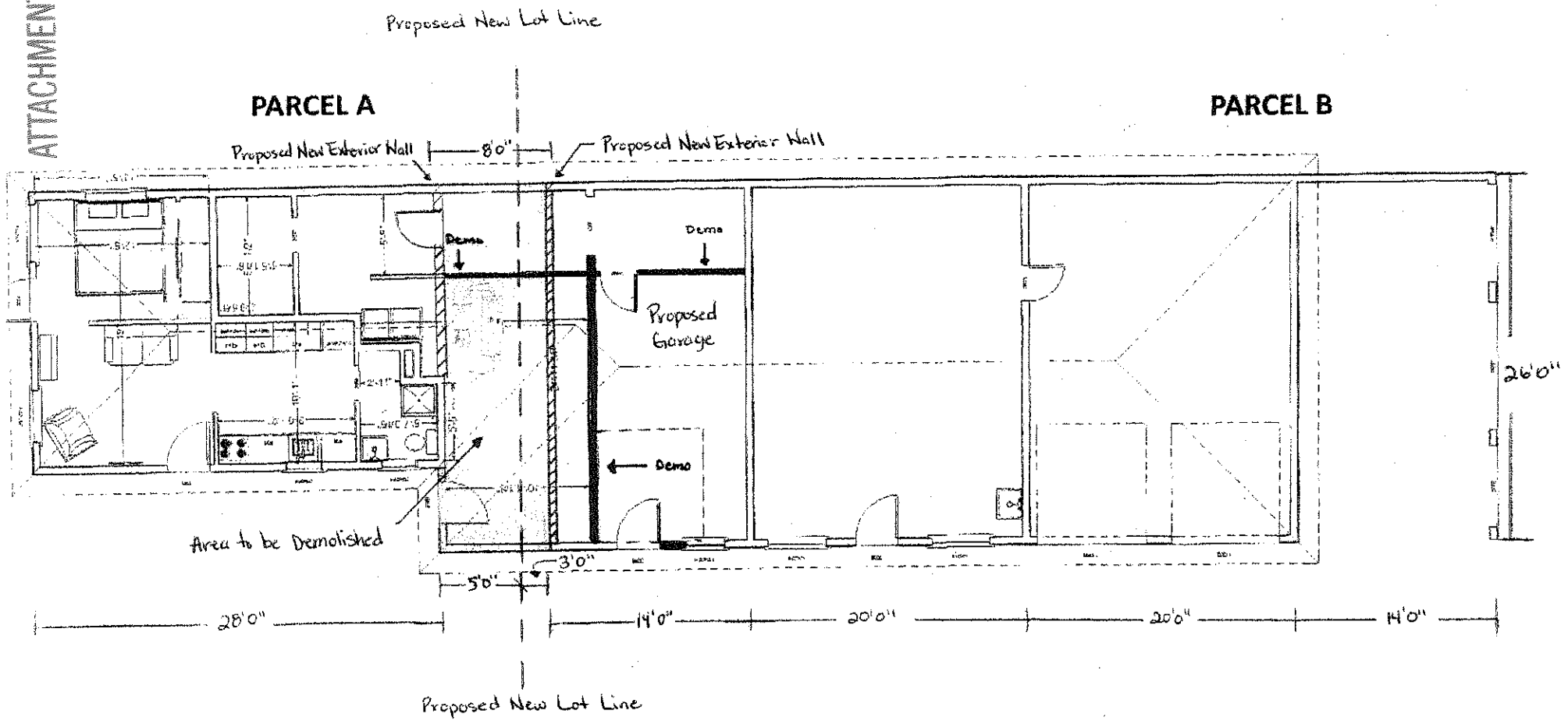
N

DATE: 8-20-15
SCALE: SEE DRAWING
SHEET: 1

ATTACHMENT 1

PROPOSED DETACHED GARAGE FLOOR PLAN

HAMILTON SWIFT & ASSOCIATES, INC.



GENERAL NOTES:

PLANS NOT BASED ON SURVEY.
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ROUGH DIMENSIONS FROM ACCESSOR RECORDS.

PROJECT ADDRESS:
1240 CHANTICLEER AVE
SANTA CRUZ, CA 95062

APN:
029-191-13

PROPERTY OWNER:
DYLAN REID
1240 CHANTICLEER AVE
SANTA CRUZ, CA 95062

CONSULTANT:
HAMILTON SWIFT & ASSOC
500 CHESTNUT STREET, STE 100
SANTA CRUZ, CA 95060
(831) 459-9992

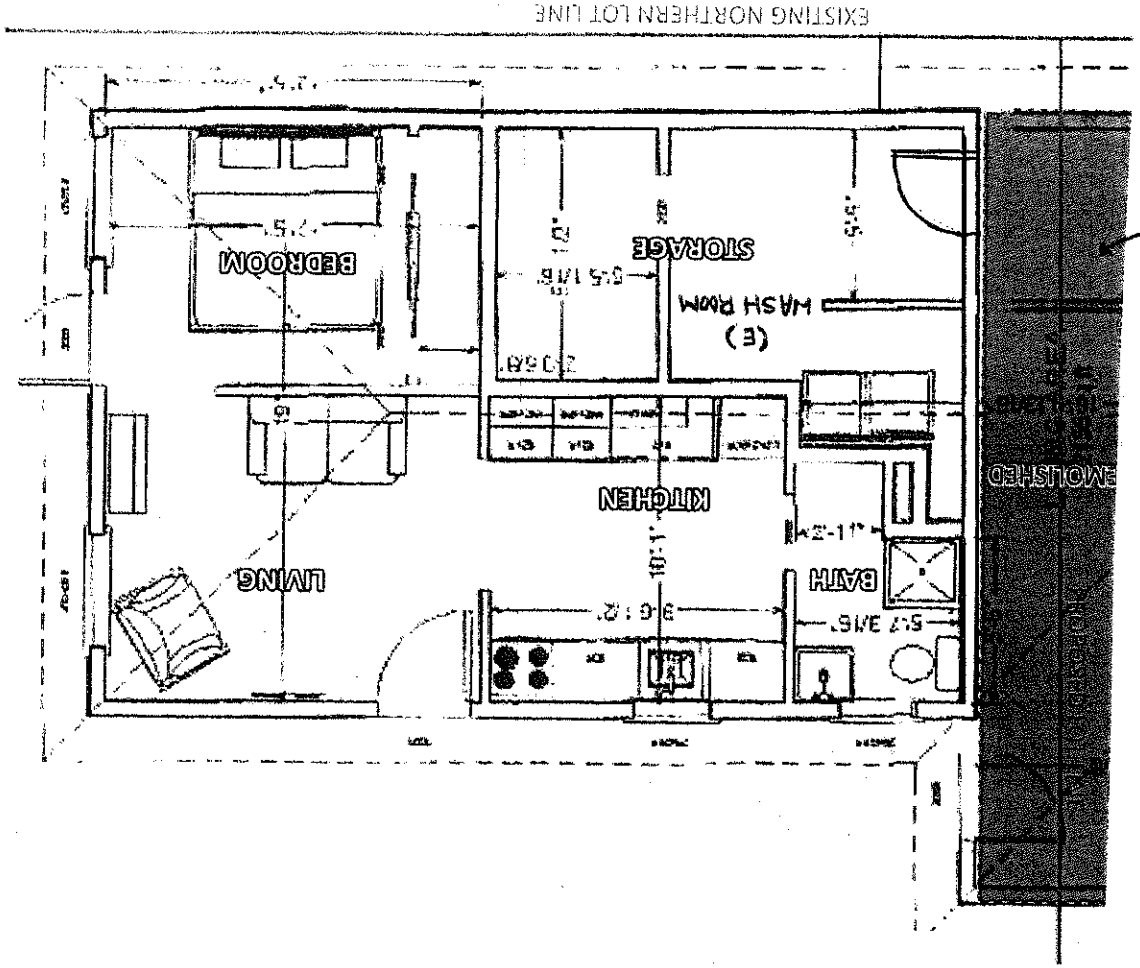
N

DATE: 8-20-15
SCALE: SEE DRAWING
SHEET: 2

ADU
RESIDENCE:
532-SF

ATTACHMENT 1

PARCEL A



PARCEL B

GENERAL NOTES:

PLANS NOT BASED ON SURVEY.
NOT TO BE USED FOR CONSTRUCTION.

FOR PLANNING PURPOSES ONLY.

ACCESSORY DWELLING UNIT - FLOOR PLAN SCALE: 1/4" = 1'

N

HAMILTON SWIFT & ASSOCIATES, INC.

CONSULTANT:
HAMILTON SWIFT & ASSOC
500 CHESTNUT STREET, STE 100
SANTA CRUZ, CA 95060
(831) 459-9992

PROPERTY OWNER:
DYLAN REID
1240 CHANTICLEER AVE
SANTA CRUZ, CA 95062

PROJECT ADDRESS:
1240 CHANTICLEER AVE
SANTA CRUZ, CA 95062

APN:
029-191-13

DATE: 5/19/15

SCALE: SEE DRAWING

SHEET: 3

RESIDENTIAL BUILDING RECORD

Frank Schwartz

ADDRESS 1240 - CHANTICLEER AVE

PARCEL 24 - 19 1 - A 13

SHEET 1 OF 2 SHEETS

DESCRIPTION OF BUILDING

CLASS & SHAPE	CONSTRUCTION	STRUCTURAL	EXTERIOR	ROOF	LIGHTING	AIR CONDITION
D 5 B	Light	X Frame	Stucco on	Flat 1/4 Pitch	Wiring	X Heating / Cooling
	Sub-Standard	2 x 4 - 16		X Gable 1/4 L	Y X.T. / Conduit	Forced / Cleaning
ARCHITECTURE	X Standard	Sheathing	X Siding B LAP	Hip 1/4	B.X. / Cable	Gravity / Humid.
	Above-Standard	Concrete Block		Shed 1/4	Fixtures	X Wall Unit 1
1 Stories	Special	B.&B. / T.&G.		Cut Up	X Few / X Cheap	12 DUAL
USE TYPE		Brick	Shingles	Dormers	Avg. / Medium	Floor Unit
Single	FOUNDATION	Adobe	Shakes		Many / Special	Zone Unit
Double	X Concrete	Floor Joist:	B.&B. / T.&G.	Gutters		Central
Duplex	Reinforced	X 1st: 2"x 6"-16"			PLUMBING	
Apartment	Brick	2nd: "x "- "	Brick	Shingle	Poor / X Good	
Flat	Wood	Sub Floor	Stone	Shake		Oil Burner
Court	Piers		WINDOWS	Tile	Fixtures	
Motel			X D.H. / Casement	Tile Trim	X Water Heater	20-20 M-B.T.U.
		Insulated Ceilings	Steel Sash	X Composition	X Automatic	0 Fireplace
Units	Light / Heavy	Insulated Walls	X Screens	Compo. Shingle	Gas / Elect.	

ROOM AND FINISH DETAIL

ROOMS	FLOORS B	1	2	FLOOR FINISH Material	Grade	TRIM	INTERIOR FINISH Walls	Ceilings
All				OP		OP	STCO PL	STCO PL
Ent. Hall								
Living		1		W-W				
Dining		1						
Bed		2						
Bed		1		W-W				
Kitchen		1		LIN				
Drain Bd.	Material: TI			Lgth: 8 Ft.		Splash: 4" FULL		

INSIDE INFO. CHECKED

APPR. CHW DATE 10-24-46

CONSTRUCTION RECORD

Permit No.	Permit For	Amount	Date	EFFEC. YEAR	APPR. YEAR	NORMAL % GOOD Age	Remain'g Life	Table	%
			1935		1950	15		R50	76
			1935		1955	20		R55	73
					1957	21		R57	71
					1958	22		R58	69
					1960	25		R55	64

RATING (E,G,A,F,P)

Cond.	Arch. Attr.	Func. Plan	Con-form.	Storage Cupb'd	Space Closet	Work-m'ship
A	A	A	A	A	A	A

A 3-16-57

BATH DETAIL

Fl.	No.	FINISH Floors	Walls	FIXTURES Wc.	Lo.	Tub.	Type	Grade	SHOWER St.	D.T.	G.D.	Finish
	1	LINO	PL	1	1		MOD	A	1			PL

SPECIAL FEATURES

Book Cases	0	Built-in Beds		Venetian Blinds	
Shutters					

COMPUTATION

MC 50 | 1946 INDEX | 1950 INDEX | 1956 INDEX | 1956 INDEX | (105) | 1958 INDEX

Unit	Area	Appraiser & Date: FSM 8-8-49 Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	1956 INDEX Unit Cost	Cost	GW 8-27-57 Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost
MAIN UNIT	848	.4.90	4155		4155												
DOR 1/3	32	1.65	53		53												
HEATING			80		80												
GAR	200	1.70	340		340												
PATIO	320	2.50	800		800												
POULTRY	2080	1.20	2496		2496												
CONC	600	.25	150		150												
TOTAL			8074		8074				12,469		8755					7004	7354
NORMAL % GOOD			76		73						69					69	64
R.C.L.N.D.			6136		5894				9953		6070		6020			4837	4706

AH 530-A 10-'47 CARLISLE, S. F.

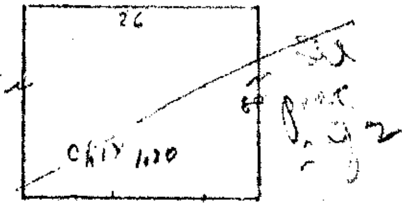
ATTACHMENT 2

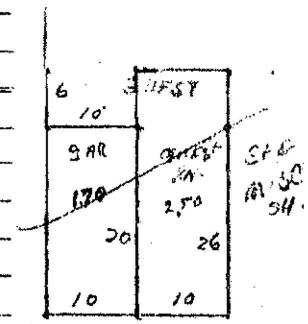
ATTACHMENT 2

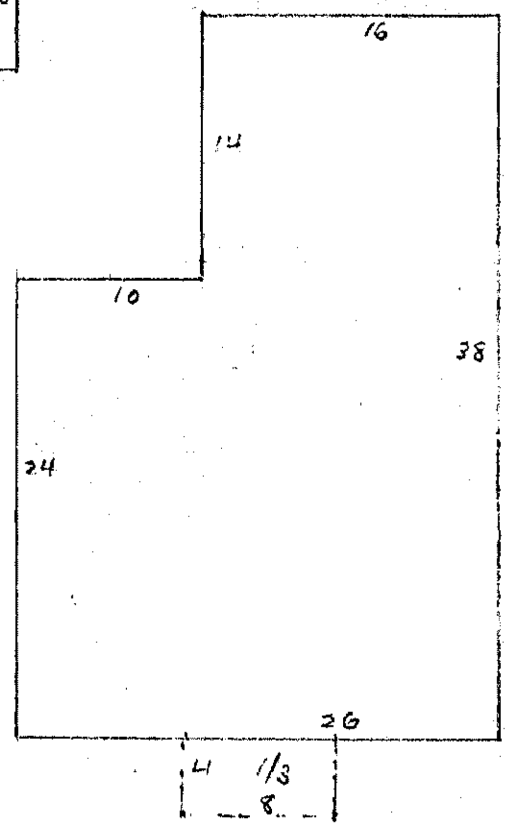
Structure	Found.	Cons.	Ext.	Roof	Floor	Int.	Size, etc.
GAR	CONC	FR	BLAP	CCMA	CONC	1.70	10X20
G. HSE	"	"	"	"	" W	2.50	10X26 / 10X6
POULTRY	"	"	BD	"	"	1.20	26X80
CONC						.35	600

COMPUTATIONS

MAIN UNIT	26X24	624
	16X14	224
		848
PCR	8X4	32
GAR	10X20	200
GUEST	10X26	260
	10X6	60
		320
CHIX	26X80	2080







Remarks: [illegible] CONC. [illegible] + ADDITIONAL
SO [illegible] BLDGS. [illegible] 10-24-66

[illegible] * UP to Date Class,
Index & Depreciation
[illegible] MARKT
* Fair Mkt Value

MISCELLANEOUS BUILDING RECORD

ADDRESS [illegible]

PARCEL 27-191 X 13

SHEET 2 OF 2 SHEETS

ATTACHMENT 2

DESCRIPTION OF BUILDINGS

Bldg. No.	Structure	Size	Found.	Wall & Exterior	Roof Type	Roof Cover	Floor & Interior Detail	Second Story or Loft	Year Built	Est. Tot. Life Yrs.
1A	[illegible]	~~6 x 10~~ CDD	C	2x4 [illegible]	G	comp	Conc - unf ceil - [illegible]	walls & masonry [illegible]	1946	R45
1B	[illegible] HSE.	79 x 20	C	[illegible]	G	"	Conc - [illegible] - 2	[illegible]	1946	R45
2A	Gar [illegible]	10 x 20	"	[illegible]	G	[illegible]	[illegible]	[illegible]	1935	R50
2B	G. Hse	10 x 2~~0~~ 28	C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1935	R50
3	Heater in	office (suspended space heater				gas fired	(wall unit)		1966	R20
4	Carport	26 x 14	conc	[illegible]	[illegible]	C Sh	Conc		1966	R50
5	Conc	CDD		8 x 62 + 8 x 40	+ 15 x 50 +		28 x 8 + odds = 2000 sq		1949	R50

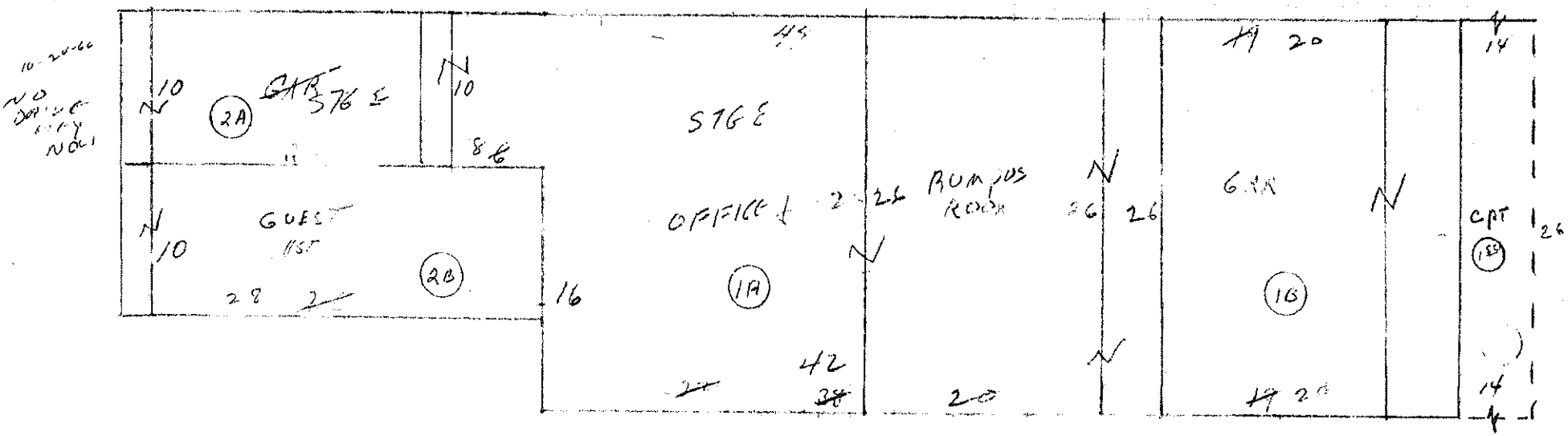
COMPUTATION

Bldg. No.	Area	1956 INDEX Unit Cost	Cost	% Good	R.C.N. L.N.D.	1958 INDEX Unit Cost	Cost	% Good	R.C.N. L.N.D.	1961 INDEX Unit Cost	Cost	% Good	R.C.N. L.N.D.	1964 INDEX Unit Cost	Cost	% Good	R.C.N. L.N.D.
Appraiser-Date		[illegible] 11-1-[illegible]				[illegible] 1961				[illegible] 1962				(106) 17			
1A	1048	1.75	1834	75	1375										2109	62	1307
1B	~~[illegible]~~	[illegible]	1086	[illegible]	868										1248	67	836
2A	[illegible]	2.00	400	[illegible]	780										460	57	262
2B	[illegible]	[illegible]	1040	[illegible]	624										1176	47	[illegible]
Total			4360		3147		4578		3304		4761		3436		5013		2767

Bldg. No.	Area	1964 INDEX Unit Cost	Cost	% Good	R.C.N. L.N.D.	1971 INDEX Unit Cost	Cost	% Good	R.C.N. L.N.D.	Unit Cost	Cost	% Good	R.C.N. L.N.D.	Unit Cost	Cost	% Good	R.C.N. L.N.D.
Appraiser-Date		[illegible] 10-24-66				2-8-72 [illegible]				[illegible] 2/4/10							
1A	1172 ~~1248~~	2.00	2344	59	1383						40,000						
1B	520 ~~[illegible]~~	1.70	988	59	583						13,000						
2A	200	2.70	540	53	286						5,000						
	280 ~~240~~	4.50	1260	53	668						3,000						
3	HEAT		250	100	250						Included						
4	364	1.50	546	100	546						6,500						
5	2000	.35	760	70	532						[illegible]						
Total			6688		4248				5600		67,500						

AH 530E 3-'54

OFFICE + RUMPUS ROOM
42 X 16 = 672
50 X 10 = 500
1172



ATTACHMENT 2

ATTACHMENT 2

ATTACHMENT 3

GEOTECHNICAL INVESTIGATION
For
PROPOSED SINGLE FAMILY RESIDENCE
1240 Chanticleer Avenue
APN 029-191-13
Santa Cruz, California

Prepared
For
DILLON REED
Santa Cruz, California

Prepared By
DEES & ASSOCIATES, INC.
Geotechnical Engineers
Project No. SCR-0862
FEBRUARY 2015

ATTACHMENT 3

Dees & Associates, Inc.
Geotechnical Engineers
501 Mission Street, Suite 8A, Santa Cruz, CA 95060
Phone: 831 427-1770
Fax: 831 427-1794

February 5, 2015 Project No. SCR-0862

DILLON REED
1240 Chanticleer Avenue
Santa Cruz, California 95062

Subject: Geotechnical Investigation

Reference: Proposed Single Family Residence
1240 Chanticleer Avenue
APN 029-191-13
Santa Cruz County, California

Dear Mr. Reed:

As requested, we have completed a Geotechnical Investigation for the new single family residence proposed at the above referenced site. The purpose of our investigation was to evaluate the soil conditions in the vicinity of the proposed improvements and provide geotechnical recommendations and criteria for design and construction.

This report presents the results, conclusions and recommendations of our investigation. If you have any questions regarding this report, please call our office.

Very truly yours,

DEES & ASSOCIATES, INC.

Rebecca L. (Dees) Boyd
Geotechnical Engineer
G.E. 2623

Copies: 4 to Addressee

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Geotechnical Engineers
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Dees & Associates, Inc.
Geotechnical Engineers
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GEOTECHNICAL INVESTIGATION

Introduction

This report presents the results of our Geotechnical Investigation for the new single family residence proposed at 1240 Chanticleer Avenue in Santa Cruz, California, Figure 1.

Purpose and Scope

The purpose of our investigation was to explore and evaluate surface and near surface soil conditions in the vicinity of the proposed residence and provide geotechnical recommendations for design and construction of the proposed improvements.

The specific scope of our services was as follows:

1. Site reconnaissance and review of available data in our files pertinent to the site and vicinity.

2. Exploration of subsurface conditions consisting of logging and sampling of two (2) exploratory test borings drilled to depths of 21 and 13.5 feet beneath the surface.

3. Laboratory testing to evaluate the engineering properties of the subsoils.

4. Engineering analysis and evaluation of the resulting field and laboratory test data. Based on our findings, we have developed geotechnical design criteria for general site grading, building foundations, concrete slabs-on-grade, and general site drainage.

5. Preparation of this report presenting the results of our investigation.

Project Location and Description

The 0.4-acre site is located at 1240 Chanticleer Avenue is Santa Cruz County, California, Figure 1. The relatively level property is bordered by Chanticleer Avenue to the west, single family residences to the north and south and a mobile home park to the east. The relatively level property is developed with a single family residence and detached garage in the front portion of the site and a second residence in the back portion of the site.

The residence at the back of the site will be removed and a new single family residence will be built on the parcel in the back. The parcel will be split into two parcels with the existing residence remaining on the front parcel and the new residence occupying the back parcel. See Figure 2.

Field Investigation

Subsurface conditions at the site were explored on December 17, 2014 with two (2)

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exploratory borings drilled with 6-inch diameter continuous flight auger equipment advanced with tractor mounted drilling equipment. Our borings were drilled to depths of 21.0 and 13.5 feet. The approximate locations of our borings are indicated on our Site Plan, Figure 2.

The soils observed in the test borings were logged in the field and described in accordance with the Unified Soil Classification System (D2487 and D2488), Figure 3. The Test Boring Logs, Figures 3 and 4, denote subsurface conditions at the locations and times observed, and it is not warranted they are representative of subsurface conditions at other locations or times.

Representative soil samples were obtained from the exploratory borings at selected depths, or at major strata changes. These samples were recovered using the 3.0-inch O.D. Modified California Sampler (L) or the Standard Terzaghi Sampler (T). The penetration resistance blow counts for the (L) and (T) noted on the boring logs were obtained as the sampler was dynamically driven into the in situ soil. The process was performed by dropping a 140-pound hammer a 30-inch free fall distance and driving the sampler 6 to 18 inches and recording the number of blows for each 6-inch penetration interval. The blows recorded on the boring logs present the accumulated number of blows that were required to drive the last 12 inches. The blow counts for the large samples indicated on the logs have been converted to equivalent standard field penetration test (STP) values.

Laboratory Testing

The laboratory testing program was directed toward a determination of the physical and engineering properties of the soils underlying the site. Moisture content and dry densities were performed on representative soil samples to determine the consistency of the soil and the moisture variation throughout the explored soil profile. An Atterberg Limit test was performed to aid in soil classification and to evaluate the shrink/swell potential of the foundation zone soil. The results of our field and laboratory testing appear on the "Logs of Test Borings", opposite the sample tested.

Subsurface Soil Conditions

The Santa Cruz County Geologic Map indicates the site is underlain by Lowest Emergent Coastal Terrace Deposits (Pleistocene), which is described as "semiconsolidated, generally well-sorted sand with a few thin, relatively continuous layers of gravel. Deposited in nearshore high-energy marine environment. Grades upward into eolian deposits of Manresa Beach in southern part of the county. Thickness variable; maximum approximately 40 ft. Unit thins to north where it ranges from 5 to 20 ft thick. Weathered zone ranges from 5 to 20 ft thick. As mapped, locally includes many small areas of fluvial and colluvial silt, sand and gravel, especially at or near old wave-cut cliffs."

Our borings encountered about 2.5 feet of lean sandy clay at the ground surface over a 6.5 feet thick layer of clayey sand with sandstone gravels that went from 2.5 feet below

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grade to 9 feet below grade. Silty clay and silt were encountered from 9 to 15 feet. Approximately 15 feet below grade we encountered thin lenses of fine sand to coarse sand with gravel to the depth of our boring. The soils were medium stiff and medium dense to a depth of our borings. The coarse sand with gravel encountered 20 feet below grade was dense.

The soils below the site are classified as a Site Class "D" for analysis using the 2013 California Building Code.

Groundwater

Perched groundwater was encountered 8 to 9 feet below grade. The water is perching on top of the silt and clay layer located about 9 feet below grade. The groundwater level rose to 5 feet in our boring after drilling. Groundwater levels denote groundwater conditions at the location and time observed, and it is not warranted they are representative of groundwater conditions at other locations or times. Groundwater levels can vary due to seasonal variations and other factors not evident at the time of our investigation.

Seismicity

The following is a general discussion of seismicity in the project area. A more detailed study of seismicity and faulting is beyond the scope of our investigation.

The site is located in a seismically active region with several faults in the vicinity. The faults located closest to the site are listed in the table below.

	Zayante-Vergeles Fault	San Andreas Fault	Sargent Fault	Monterey Bay-Tularcitos Fault	San Gregorio Fault
Distance in Miles and Direction from site	6.4	9.2	12.1	8.3	12.0

The San Andreas Fault is the largest and most active of the faults in the site vicinity, however, each fault is considered capable of generating moderate to severe ground shaking. It is reasonable to assume that the proposed development will be subject to at least one moderate to severe earthquake from one of the faults during the next fifty years.

The following ground motion parameters may be used in seismic design and were determined using the USGS Seismic Design Map and ASCE 7-10.

Ss	S1	SDs	SD1
1.500 g	0.600 g	1.000 g	0.600 g

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PGAm	0.5 g
Seismic Design Category (SDC) Occupancy Categories I and II	D

Liquefaction

Liquefaction occurs when saturated fine grained sands, silts and sensitive clays are subject to shaking during an earthquake and the water pressure within the pores builds up leading to loss of strength.

There is a low potential for liquefaction to develop below the site due to density and consistency of the soils in the perched water zone.

Landsliding

The site is relatively level and there are no slopes near the project site; therefore, there is a very low potential for landslides to affect the proposed improvements.

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GEOTECHNICAL INVESTIGATION

Based on the results of our investigation, the proposed single family residence is feasible provided the recommendations presented in this report are incorporated into the design and properly followed during construction of the project.

Primary geotechnical concerns for the project include embedding foundations into firm native soil, controlling site drainage and designing structures to resist strong seismic shaking.

The proposed structures may be supported on conventional spread footings embedded into firm native soil or engineered fill. Firm native soil was encountered about 18 inches below the existing grade.

There is a potential for perched groundwater to develop during and following the rainy season. To mitigate ponding below structures, crawlspaces should not be excavated lower than the exterior grade unless gravel subdrains are placed around the perimeter of building foundations.

The site is nearly level and controlling drainage will be an important part of the project. Concentrated runoff should be collected and discharged away from foundations. Roof runoff can be discharged onto splash blocks provided the ground surface is sloped to prevent water from ponding or flowing adjacent to the home's foundation. Swales may be used to direct runoff away from structures. If concentrated runoff from the roof or driveway will be collected and discharged on-site, retention trenches may be used to discharge runoff. Retention trenches should be located at least 10 feet away from foundations and have a safe overflow path for excess water.

The proposed structures will most likely experience strong seismic shaking during the design lifetime. The structure and foundations should be designed utilizing current seismic design standards.

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RECOMMENDATIONS

The following recommendations should be used as guidelines for preparing project plans and specifications:

General Site Grading

1. The soil engineer should be notified **at least four (4) working days** prior to any site clearing or grading so that the work in the field can be coordinated with the grading contractor and arrangements for testing and observation can be made. The recommendations of this report are based on the assumption that the soil engineer will perform the required testing and observation during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.

2. Areas to receive foundations or to be graded should be cleared of obstructions, vegetation, and other unsuitable material.

3. Voids created during site clearing should be backfilled with engineered fill. Our firm should observe the voids left from demolition of the existing improvements and be present during backfilling operations.

4. Where fill is planned to raise grade, the area to receive engineered fill should be scarified 6 inches, moisture conditioned to 2 to 3 percent over optimum moisture content and compacted to at least 90 percent relative compaction.

5. Engineered fill should be placed in thin lifts not exceeding 8 inches in loose thickness; moisture conditioned to 2 to 3 percent over optimum moisture content and compacted to at least 90 percent relative compaction.

6. 4. The relationship between moisture content and dry unit weight shall be based on ASTM Test Designation D1557. The relative density and moisture content of the compacted soil shall be based on ASTM D2922.

7. The on-site soils are suitable for use as engineered fill. Soils used for engineered fill should be non-expansive (Plasticity Index less than 15), be free of organic material, and contain no rocks or clods greater than 6 inches in diameter, with no more than 15 percent larger than 4 inches. Soils with more than 3 percent organic matter by weight should be considered organic and not suitable as engineered fill.

8. The subgrade surface below concrete slabs-on-grade should be moisture conditioned and compacted prior to placing concrete.

9. The upper 8 inches of subgrade below driveway pavements should be moisture conditioned to 2 to 3 percent over optimum moisture content and compacted to at least 95 percent relative compaction. The aggregate base below pavements should be compacted to at least 95 percent relative compaction.

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10. Engineered fill should be observed and tested by our firm. In-place density tests should be performed as follows: one test for every 12 inches of material placed for fill slopes, in trenches or around structures; one test for every 2,000 square feet for relatively thin fill sections and one test whenever there is a definite suspicion of a change in the quality of moisture control or effectiveness in compaction. The actual testing schedule should be determined by a representative from our firm at the time of grading.

11. After the earthwork operations have been completed and the soil engineer has finished their observation of the work, no further earthwork operations shall be performed except with the approval of and under the observation of the soil engineer.

Conventional Spread Footing Foundations

12. Conventional spread footings embedded into firm native soil may be used to support the proposed improvements. Firm native soil was encountered about 18 inches below existing grade. Footings should be deepened where footing excavations encounter fill from the demolition of the existing improvements.

13. Footings should be a minimum of 18 inches deep and 12 inches wide for one story structures and 18 inches deep and 15 inches wide for two story structures. Footing depths should be measured from the lowest adjacent grade.

14. Foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 1,500 psf for native soil. The allowable bearing capacity may be increased by 1/3 for short term seismic and wind loads.

15. Lateral load resistance for structures supported on footings may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 130 psf multiplied by the contact area between the base of footings and the underlying subgrade may be used for footings bearing on native soils. A coefficient of friction of 0.30 may be used for footings bearing on engineered fill.

16. Where footings are poured neat against firm subgrade, a passive lateral earth pressure of 150 pcf, equivalent fluid weight, may be used for native soils. The top 12 inches of soil should be neglected in passive design.

17. Total and differential settlements under the proposed light building loads are anticipated to be less than 1 inch and 1/2 inch respectively.

18. Footings located adjacent to other footings or utility trenches should have their bearing surfaces founded below an imaginary 2:1 plane projected upward from the bottom edge of the adjacent footings or utility trenches.

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19. Footing excavations should be kept moist from the time of excavation and prior to placing concrete.

20. Prior to placing concrete, foundation excavations should be observed by the soils engineer.

Concrete Slabs-on-Grade

21. The subgrade soil below concrete slabs-on-grade should be moisture conditioned and compacted in a good workmanship manner prior to placing concrete.

22. All slabs-on-grade can be expected to suffer some cracking and movement. However, thickened exterior edges, a well prepared subgrade, adequately spaced expansion joints and good workmanship should reduce cracking and movement.

23. Dees & Associates, Inc. are not experts in the field of moisture proofing and vapor barriers. In areas where floor wetness would be undesirable, an expert, experienced with moisture transmission and vapor barriers should be consulted. At a minimum, a blanket of 4 inches of free-draining gravel should be placed beneath the floor slab to act as a capillary break. In order to minimize vapor transmission, an impermeable membrane should be placed over the gravel.

Utility Trenches

24. Utility trenches placed parallel to structures should not extend within an imaginary 2:1 (horizontal to vertical) plane projected downward from the bottom edge of the adjacent footing.

25. Trenches may be backfilled with compacted engineered fill placed in accordance with the grading section of this report. The backfill material should not be jetted in place.

26. The portion of utility trenches that extend foundations should be sealed with 2-sack sand slurry (or equivalent) to prevent subsurface seepage from flowing under buildings

Surface Drainage

27. Controlling surface runoff is important to the performance of the project. The site is nearly level and the surface soils have a slow percolation rate so water may tend to pond during heavy or prolonged rainfall.

28. Surface drainage should include provisions for positive gradients so that surface runoff is not permitted to pond adjacent to foundations or other improvements. Where bare soil or pervious surfaces are located next to the foundation, the ground surface within 10 feet of the structure should be sloped at least 5 percent away from the foundation. Where impervious surfaces are used within 10 feet of the foundation, the impervious surface within 10 feet of the structure should be sloped at least 2 percent away from the foundation. Swales should be used to collect and remove surface runoff

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where the ground cannot be sloped the full 10 foot width away from the structure. Swales should be sloped at least 2 percent towards the discharge point.

29. Full roof gutters should be placed around the eves of the structure. Discharge from the roof gutters should be collected and discharged in a controlled manner.

30. Roof runoff can be discharged onto splash blocks provided the ground surface is sloped to prevent water from ponding or flowing adjacent to the home's foundation.

31. If concentrated runoff from the roof or driveway will be collected and discharged on-site, retention trenches may be used to discharge runoff.

32. Retention trenches should be located at least 10 feet from foundations.

33. Retention trenches should include an overflow outlet to drain excess runoff. The overflow outlet should be directed towards a suitable discharge location.

34. The location of all drainage outlets should be reviewed and approved in the field prior to installation.

35. To mitigate ponding below structures, crawlspaces should not be excavated lower than the exterior grade unless a foundation drain is installed around the perimeter of the foundation. Foundation drains without gravity flow should include a sump pump to discharge collected water.

36. Foundation drains used to drain crawlspaces excavated lower than the exterior grade should be at least 8 inches wide and extend at least 4 inches below the interior crawlspace floor elevation. A 3 inch or larger diameter perforated pipe should be placed near the base of the base of the drain and be tied to a solid discharge pipe that drains to a suitable location. The subdrain should be backfilled with Caltrans Class 2 permeable material, covered with non-woven filter fabric, and capped with at least 4 inches of clayey soil.

Plan Review, Construction Observation, and Testing

37. Dees & Associates, Inc. should be provided the opportunity for a general review of the final project plans prior to construction to evaluate if our geotechnical recommendations have been properly interpreted and implemented. If our firm is not accorded the opportunity of making the recommended review, we can assume no responsibility for misinterpretation of our recommendations. We recommend that our office review the project plans prior to submittal to public agencies, to expedite project review. Dees & Associates, Inc. also requests the opportunity to observe and test grading operations and foundation excavations at the site. Observation of grading and foundation excavations allows anticipated soil conditions to be correlated to those actually encountered in the field during construction.

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LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be given.

2. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field. The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. No other warranty expressed or implied is made.

3. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon after a period of three years without being reviewed by a soil engineer.

APPENDIX A

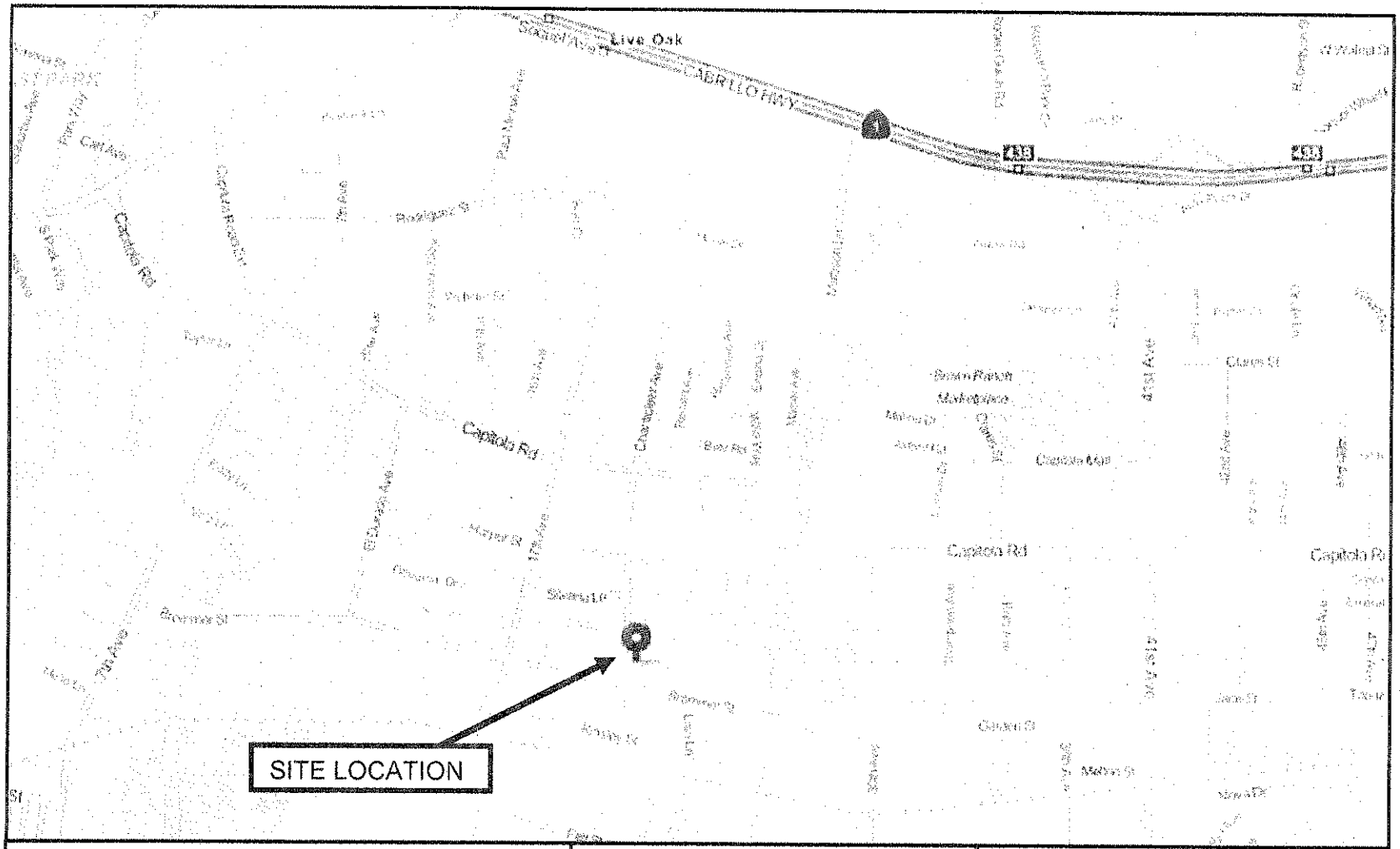
Site Vicinity Map

Boring Site Plan

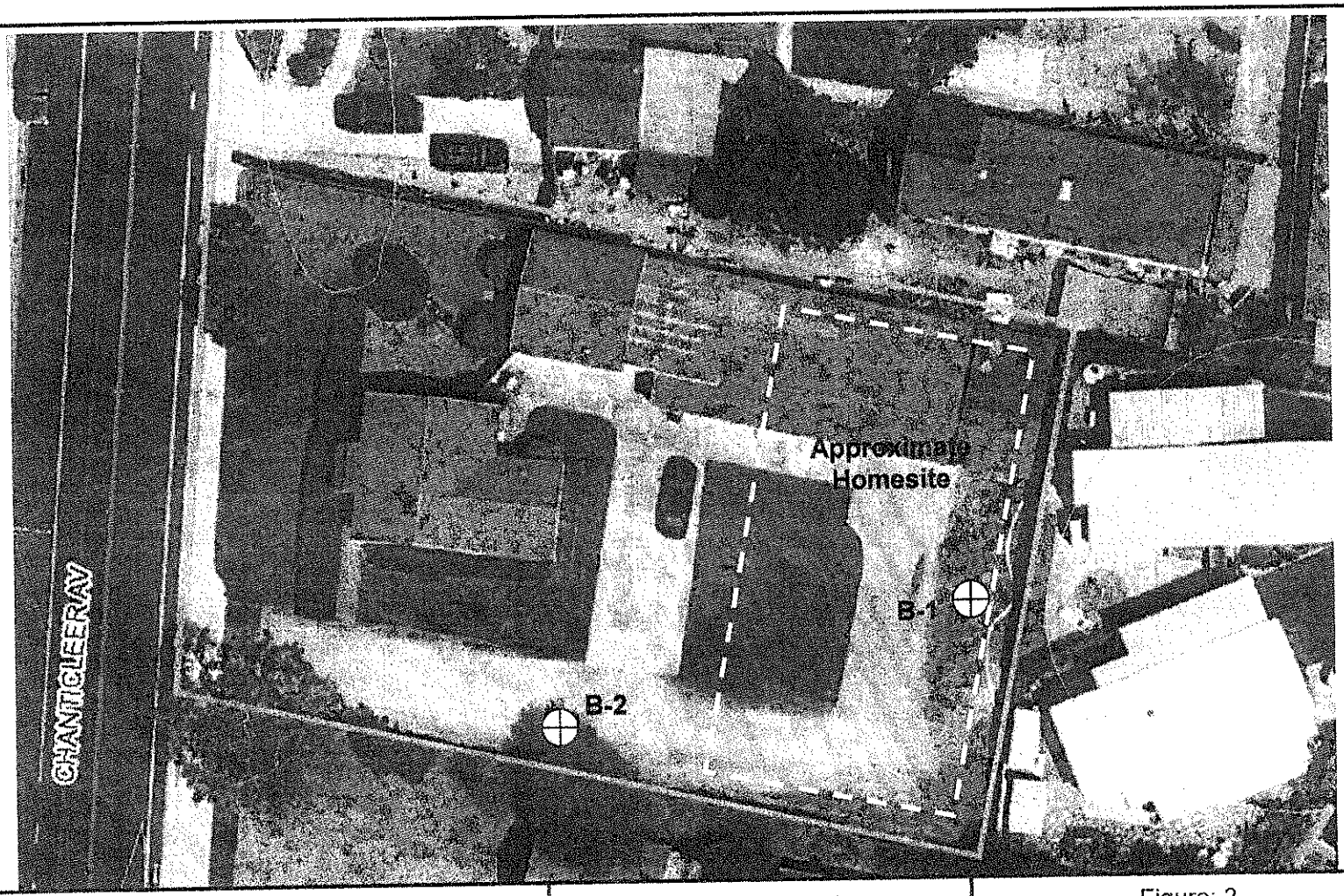
Unified Soil Classification System

Logs of Test Borings

Atterberg Limit Test Results



Dees & Associates, Inc. Geotechnical Engineers	**SITE VICINITY MAP**	Figure: 1
	1240 Chanticleer Avenue Santa Cruz County, California	Project Number: SCR-0862
		Scale: N.T.S. / January 2015



Dees & Associates, Inc. *Geotechnical Engineers*	**SITE PLAN** 1240 Chanticleer Avenue Santa Cruz County, California	Figure: 2 Project Number: SCR-0862 Scale: N.T.S. | January 2015

THE UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES	CLASSIFICATION CRITERIA	
COARSE-GRAINED SOILS** MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE (THE NO. 200 SIEVE SIZE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE)	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS (< 5% FINES)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	Wide range in grain sizes and substantial amounts of all intermediate particle sizes	
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Predominantly one size or a range of sizes with some intermediate sizes missing Not meeting all gradation requirements for GW	
		GRAVELS WITH FINES (>12% FINES)	GM	Silty gravels, gravel-sand-silt mixtures	Non plastic fines or fines with low plasticity Atterberg limits below "A" line or PI < 4	Above "A" line with 4 < PI < 7 are borderline cases requiring use of dual symbols
			GC	Clayey gravels, gravel-sand-clay mixtures	Plastic fines Atterburg limits above "A" line with PI > 7	
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS (<5% FINES)	SW	Well-graded sands, gravelly sands, little or no fines	Wide range in grain sizes and substantial amounts of all intermediate sizes missing	
			SP	Poorly graded sands, gravelly sands, little or no fines	Predominantly one size or a range of sizes with some intermediate sizes missing Not meeting all gradation requirements for SW	
		SANDS WITH FINES (>12% FINES)	SM	Silty sands, sand-silt mixtures	Non plastic fines or fines with low plasticity Atterburg limits below "A" line or PI < 4	Limits plotting in hatched zone with 4 < PI < 7 are borderline cases requiring use of dual symbols
			SC	Clayey sands, sand-clay mixtures	Plastic fines Atterburg limits above "A" line with PI > 7	
FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE (THE NO. 200 SIEVE SIZE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE)	SILTS AND CLAYS (LIQUID LIMIT < 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
			OL	Organic silts and organic silty clays of low plasticity		
	SILTS AND CLAYS (LIQUID LIMIT > 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
			CH	Inorganic clays of medium to high plasticity, organic silts		
			OH	Organic clays of medium to high plasticity, organic silts		

**Gravels and sands with 5% to 12 % fines are borderline cases requiring use of dual symbols.

RELATIVE DENSITY OF SANDS AND GRAVELS

DESCRIPTION	BLOW / FT*
VERY LOOSE	0 – 4
LOOSE	4 – 10
MEDIUM DENSE	10 – 30
DENSE	30 – 50
VERY DENSE	OVER 50

CONSISTENCY OF SILTS AND CLAYS

DESCRIPTION	BLOWS / FT*
VERY SOFT	0 – 2
SOFT	2 – 4
FIRM	4 – 8
STIFF	8 – 16
VERY STIFF	16 – 32
HARD	OVER 32

*Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. 12 vertical inches.

L M T B

SAMPLE TYPES REFERENCED ON BORING LOGS

TEST BORING LOGS

LOGGED BY: CL DATE DRILLED: 12-17-14 BORING TYPE: 6" Solid Stem BORING NO: 1

DEPTH (FEET)	SAMPLE NO.	SOIL DESCRIPTION	USC SOIL TYPE	FIELD BLOW COUNT	SPT BLOW COUNT*	DRY DENSITY (PCF)	MOISTURE IN-SITU	MOISTURE SATURATED	COHESION (PSF)	PHI ANGLE	% PASSING 200 SIEVE	PLASTICITY INDEX
1	1-1-1	Dark brown lean Sandy SILT/CLAY, moist, firm	ML CL	3 3 3	6							
2		Lens with sandstone gravels at 2.25 feet		3		112.9	15.6					9.7
3	1-2	Dark yellow brown fine to medium grained Clayey SAND with sandstone Gravels, moist, medium dense, low plasticity	SC	4 6 10	16		20.3					
4												
5	1-3	Dark yellow brown Clayey fine grained SAND with a 1 inch lens of white cemented SAND in middle of sample, moist, medium dense Increase in gravels from 6 to 9 feet		9 13 12	22		15.0					
6												
7												
8		▼ Groundwater at approximately 8 feet										
9												
10		Light grayish brown mottled red brown CLAY, moist, stiff	CL	4								
11	1-4	Gray mottled orange Clayey SILT, moist, stiff	ML	4 6	10		34.7					
12												
13												
14												
15												
16	1-5	Grayish brown Silty fine to medium grained SAND, moist, medium dense	SW	6 9 9	18		19.3					
17												
18												
19			SP									
20												
21	1-6	Dark yellowish brown coarse SAND with Gravel, wet, very dense		16 50.0"	50/6"		16.0					
22		Boring terminated at 21.5 feet Groundwater encountered at 8 feet, rose to 5 feet and stabilized at 5 feet.										
23												
24												
25												
26												

DEES & ASSOCIATES, INC
501 MISSION ST. STE. 3A
SANTA CRUZ, CA 95060
Ph: (831) 427-1770 Fax: (831) 427-1794

Project No. SCR-0862

* Blow count converted
L = Field Blow Count2

TEST BORING LOGS

LOGGED BY: CL DATE DRILLED: 12-17-14 BORING TYPE: 6" Solid Stem BORING NO: 2

DEPTH (FEET)	SAMPLE NO.	SOIL DESCRIPTION	USC SOIL TYPE	FIELD BLOW COUNT	SPT BLOW COUNT*	DRY DENSITY (PCF)	MOISTURE IN-SITU	MOISTURE SATURATED	COHESION (PSF)	PHI ANGLE	% PASSING #200 SIEVE	PLASTICITY INDEX
1	2-1-1	Dark brown lean Sandy CLAY, moist, firm	CL									
2						110.6	15.6					
3	2-2	Dark yellow brown Clayey fine grained SAND with sandstone Gravels, moist, medium dense, low plasticity	SC		13							
4							19.7					
5	2-3	Dark yellow brown Clayey fine to coarse grained SAND with Gravels, moist, medium dense										
6							16.3					
7		Increase in gravels from 6 to 8 feet										
8												
9		▼ Groundwater at approximately 9 feet.										
10		Approximate contact of Clayey SILT	ML									
11			ML									
12	2-4	Light brown/tan gray mottled red Clayey SILT, moist, stiff			19							
13							32.5					
14		Boring terminated at 13.5 feet Groundwater encountered at 9 feet.										
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												

DEES & ASSOCIATES, INC
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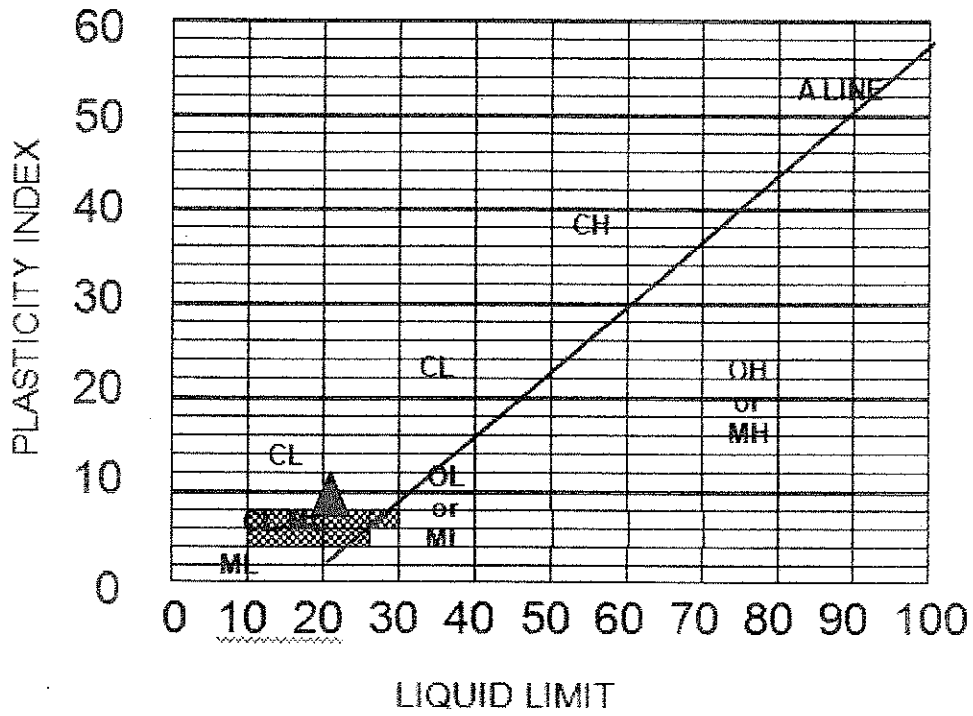
Project No. SCR-0862

* Blow count converted
L = Field Blow Count2
-Blow count disturbed and not recorded



MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
CH	Inorganic clays of medium to high plasticity, organic silts, fat clays	CL	Inorganic clays of low to medium plasticity, gravelly clay, sandy clays, silty clays, lean clays
OH	Organic clays of medium to high plasticity, organic silts	OL	Organic silts and organic silty clays of low plasticity
Pt	Peat and other highly organic soils		

PLASTICITY DATA

SYMBOL	SAMPLE NO.	DEPTH (FEET)	IN-SITU MOISTURE CONTENT (%)	LIQUID LIMIT (%	PLASTIC LIMIT (%	PLASTICITY INDEX (%)	LIQUIDITY INDEX (W-PL)/ (LL-PL)	UNIFIED SOIL CLASSIFICATION SYMBOL
▲	1-1-1	2.0	15.6	22.5	13.4	9.1	-	CL

HOGAN LAND SERVICES
A CALIFORNIA CORPORATION

Robert L. DeWitt
and Associates, Inc.
Civil Engineers & Land Surveyors

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Santa Cruz, CA 95060
Telephone 831 425-1617
Fax Number 831 425-0224
www.rldewitt.com

ATTACHMENT 4

October 21, 2015
Job No. R14057

Hamilton Swift Associates
500 Chestnut Street
Santa Cruz, CA 95060

Attn: John Swift

Re: Plan check comment response from Department of Public Works Drainage 1240 Chanticleer Av., Santa Cruz, CA APN: 029-191-13

Dear Mr. Swift,
You have asked our firm to respond to plan check comments made by Alyson Tom of the Department of Public Work Drainage. We are pleased to present herewith our responses to the areas within our scope of services, and detailing the modifications made on the Civil Engineering plan sheets in response to these comments. We have addressed completeness comments only.

Along with this letter is an update to the drainage calculations submitted on the last routing. The previous report written by this office dated July 17, 2015 has been incorporated into the drainage calculation set.

The following are a list of comments and our responses:

Drainage Department:

1) Previous comment not fully addressed. Provide both existing and proposed watershed maps and analysis/description that describes how all on-site areas currently/propose to drain through the project site. If the existing impervious areas will drain to the proposed mitigation facility/ies, these facilities must be sized to accommodate all areas actually draining to them.

Response: See revised drainage calculations. The 7-17-15 report has been included in the drainage calculations which includes expanded watershed maps which show existing and proposed drainage patterns along with tributary areas.

The mitigation facility design has been revised to accommodate all area draining to it. These areas total approximately 7500 SF and include existing impervious which flows to the facility

2) Given the flat site, in order to evaluate the feasibility of the proposed drainage design and watershed boundaries, please update sheet P2 to clearly show:

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- all proposed impervious surfaces and their extents,

Response: C2 Updated as requested. Both C1 and C2 now showing extents fo new impervious with hatching.

-spot flowline elevations for proposed swales, bubbler boxes, undersidewalk drains, and the flowline elevation of the existing 4-inch pipe near the southwest corner at the end of the existing concrete ditch.

Response: Bubbler boxes have been removed from the project. The proposed undersidewalk drain has inverts shown. The flowline elevation of the existing concrete ditch and outlet PVC pipe are shown in topo points and have been clarified on this drawing. Proposed swale flowline elevations have been shown.

3) It is unclear how runoff from the proposed driveway at the NW of the property will route to the mitigation facility on the southern driveway. Please redesign the proposed northern driveway to be built as pervious with underground storage and retention (similar to the other retention facility) so that it can be "self-mitigating". This area can also accommodate runoff from the existing roof drains and offsite upstream areas eliminating the need for the pump.

If possible, provide a box and undersidewalk drain to provide a safe overflow path from this retention system to Chanticleer Avenue. Alternatively, the proposed swale can be built as a retention trench at least 3 feet deep to reach the more pervious soil layer.

Response: All requested items are shown. The upper parking area is now a 3' deep section of porous pavers over drain rock. This value has been omitted from the drain calculations as impervious since it is now self-mitigating.

An undersidewalk drain has been added to be connected to the perforated sub drain of the porous system.

4) The retention system/s should be redesigned to be at least 3 feet deep in order utilize the design percolation rate of 0.5 in/hr as detailed in the February 5, 2015 letter from Dees and Associates. Otherwise expand the extent of the retention system consistent with the utilization of a percolation rate of 0.014 in/hr as specified by Dees and Associates.

Response: C2 Updated as requested. Both porous systems have a depth of 3' which is filled with drain rock to promote infiltration.

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5) Please update the plans so that the finished floor elevation of the proposed residence is at least 12 inches above the expected water surface elevation on the site prior to overflow (at least 67.53 feet).

Response: Finished floor elevation revised as requested.

6) Based on the revised proposal and response to comments, additional comments may be provided.

Please contact Stormwater Management staff to discuss the proposal, potential mitigations, and existing conditions on the site.

Response: Acknowledged.

This concludes our review and preparation of responses and revisions to the plans and the drainage calculations. We include herewith our revised plans along with drainage calculations and report for your use in resubmitting to the County.

Thank you for your attention in this matter.

Sincerely,
Robert L. DeWitt & Assoc.

Ryan Haley, P.E.
Encl.

R14057 Response letter 10-21-15

ATTACHMENT 4

DRAINAGE CALCULATIONS

for the lands of

Dylan Reid

Located at:
1240 Chanticleer Avenue
Santa Cruz, CA

A.P.N. 029-191-13

Prepared at the request of

Prepared by:
Robert L. DeWitt and Associates
Ryan Haley, P.E.

August 14 2015
R14057

OGAN LAND SERVICES
Robert L. DeWitt
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Civil Engineers & Land Surveyors
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EXISTING DRAINAGE PATTERN NARRATIVE

Background:

The project is located on the east side of Chanticleer Avenue near the intersection of Brommer St. Existing on-site drainage appears to be problematic from site observations. There is a concrete channel along the southern boundary of the site which appears to have limited slope and which currently retains water before outletting to a 4" plastic storm drain pipe which runs along the back on the Chanticleer Ave sidewalk to the south. On the upstream side of the channel is a 4" plastic pipe from the neighboring mobile home park. It is unknown at this time the extent of watershed draining to this plastic pipe.

Previous Drainage Patterns:

In 2006 there was a street improvement project for Chanticleer Avenue which constructed an asphalt widening strip and new concrete sidewalk along the frontage of this property. As-built plans dated 4-17-07 for this project suggest that the runoff from a portion of Chanticleer Avenue was taken onto this private property. This is depicted with two flow arrows and text which reads "EX V-GUTTER". The As-Built plans show that a 4" under sidewalk drain was added as an addendum to the approved plans. This 4" drain flows along the back of the sidewalk towards Brommer St. for approximately 80' and to a concrete junction box which flows through the sidewalk out to the street. A site visit has confirmed that there was once a through curb drain at the location in question which has been plugged. It is unknown what the history of this drain and plug is.

The As-Built plans show a centerline profile of existing and proposed grades at the center of Chanticleer Avenue and also at an offset of 19.5' which is the location of

the flowline of the curb and gutter created by this project. The profile shows a slight dip in the existing grades at this 19.5' offset. This dip either suggests a previous point of ponding or that this site did historically accept run-on from Chanticleer Avenue. The plans have mapped contours at 0.25' intervals. The 87.25' contour is shown as a closed loop which indicates a low point.

Robert L. DeWitt and Associates performed a topographic survey of this property in 2015. The existing concrete gutter has been mapped for slope and it was determined flows towards Chanticleer in contradiction to the suggested flow arrows on the as-built plans. On Exhibit A You can see the flowline elevations as surveyed by this firm. On the east side of the site (mobile home park run-on) the elevation of the flowline is 67.65 and on the west is it 67.31 for a slope of approximately 0.3% westerly. This is evidence that the low point in question is in fact a low point and not a drainage path onto our property. We can conclude from this information that this area previous to the construction in 2006 ponded and eventually flowed towards Brommer St.

The north side of the existing garage building all concentrates to one centralized downspout location at the northeast corner of the building. The water flows from there to the south along the eastern boundary of the property and eventually to the concrete swale on the south of the property. The proposed conditions do not change this pattern for the majority of the building. There is a section of the building to be demolished at the proposed lot line split. The small remaining portion of the building will be diverted along the east side of the property to flow to the same outlet point of the concrete swale.

Adjacent Runoff:

North:

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and Associates, Inc.
Civil Engineering & Land Surveying
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Santa Cruz, CA 95060
831.425.1617

The property to the north of this site is situated at a slightly higher elevation and as such is subject to creating run-on issues for our property. The area between the existing ADU building on our site and the neighboring residence, while higher than this property, is lower than the flowline of Chanticleer Avenue. An automated sump pump has been installed at the northwest corner of the building on the site. This pump was installed with the intention of discharging roof drainage from buildings on the site as well as the property to the north. It is believed that this pump outlets to a through curb drain to Chanticleer. The County has requested this pump be removed and replaced with a positive drainage solution. This design specifies the removal of the pump and a vegetated swale constructed to convey drainage along the west boundary of the property to the south.

East:

The Homestead Mobile Home Park is located directly to the east of the site. There are two coaches and a cul-de-sac adjacent to the east boundary of the site. In the middle of this cu-de-sac is a small drain which appears to be constructed of plastic piping and a small metal grate. It is unknown what the watershed is for this inlet and it has not been confirmed where is drains to. It is a distinct possibility that this drain outlets directly to the concrete channel on the site.

A phone call to the president of the mobile home park, David Schwartz, revealed that during heavy rainstorms this cul-de-sac is inadequate in its drainage capacity and ponding is a regular occurrence. It is most likely that the ponding issue on this site is related to the limited capacity, because of the very flat nature, of the concrete channel and 4" plastic outlet pipe to Chanticleer Avenue.

On-Site Detention:

It has been required by the County Public Works Drainage Department that this site detains a 25 year storm with a 2 year release because of undersized drainage

facilities on Brommer Street. Public Works has requested this of all new or replaced impervious areas resulting from this project.

Because the existing site is lower than the flowline to which we are attempting to discharge, the concept of detaining stormwater with a metered release rate is infeasible. A detention system would require a significant amount of vertical drop from the storage facility to the outlet. Because the outlet of the site is essentially higher than the site itself, this option has been ruled out.

On-Site Retention:

Because detention is infeasible for this site due to grades, a retention system has been designed to accommodate peak flow runoff requirements because of the undersized Brommer Street drainage. There is a portion of the driveway that will be constructed of porous pavers and a 3' thick layer of drain rock to be used as stormwater storage. This system has been sized to accommodate the runoff from a 25-year storm event with a tributary area of approximately 7500 SF. This volume is significantly larger than the calculated volume of the 4839 SF of impervious created or replaced by this project.

ATTACHMENT 4

IMPERVIOUS SUMMARY

Site Description

The site is bound on the North, East and South by the Property lines
The gutterpan on the adjacent sidewalk is the west boundary

Existing Impervious	9711	S.F.
Existing Impervious to Remain	4392	S.F.
Existing Impervious to be Replaced	913	S.F.
Existing Impervious to be Removed	1428	S.F.
New Impervious Created	3153	S.F.
Gross Area	17621	S.F.
Total Impervious	8458	**S.F.**
Total Impervious created or replaced	4066	**S.F.**
Percent Created or Replaced	41.9%	

**Note: New porous paver have been included in the impervious summary per CDC requirement part 3 Section C

ATTACHMENT 4

Retention Storage

RETENTION VOLUME REQUIRED

2 Year Retention Storage Volume 447 CF From SWM-24

Multiply by 25 Yr Factor

Factors

2 yr	0.64
10 yr	1
25 yr	1.2

$$\frac{25\ Yr}{2\ Yr} = \frac{1.2}{0.64} = 1.875$$

25 Year Retention Storage Volume

= 447 * 1.875
= 838.1 CF Storage

RETENTION VOLUME CALCULATION

Calculate for length
Void Factor 40%

Gravel Storage Volume 2095.3 CF

Storage Depth = 36 Inches
Storage Width = 13.5 Ft

Calculated Length 51.74 Ft.

Use 52.00

ATTACHMENT 4

Percolation Rates

NOTE: PERCOLATION RATES CALCULATED HERE ARE BASED ON TESTING PERFORMED BY DEES AND ASSOCIATES. THE RESULTS OF WHICH ARE ATTACHED TO THESE CALCULATIONS IN A LETTER DATED FEBRUARY 5, 2015

POROUS PAVERS

WIDTH	13.5	ft.
LENGTH	66	ft.
SAT SOIL CONDUCTIVITY	0.513	in./hr.
PERCOLATION RATE	0.6348	CFM

48 Hr Drain

Total Storage Volume	838.13	CF (From retention Calc)	
Total Minutes to drain	1320.22	Min	
	22.00	Hrs	< 48 Reqd.

ATTACHMENT 4

RUNOFF TOTALS

Q = CiA

C (pre) =	0.491	(see table on next page)
C (post) =	0.229	(see table on next page)
i=	1.5	(in/hr) (20 Min. Tc 10 Yr storm)
A (pre)=	17621	SF
A (pre)=	0.404522	Acres
A (post)=	10121	
A (post)=	0.232346	

**Note: These totals are an estimate of existing and proposed runoff rates for the current proposed design. These totals assume the following

- _Existing onsite retention is unaffected by run-on from the trailer park
- _Use total site area and composite 'c' value
- _The only totals for post development are that which bypass the retention system
- _the upper parking lot is 100% self-mitigating
- _The upstream pump is excluded from this calculation.

10 year Storm

Q(Pre) =	0.30	CFS
Q(Post)=	0.08	CFS
Delta (decrease)	-0.22	CFS

2 Year Storm

2 Year Factor =	0.64	
Q(Pre) =	0.19	CFS
Q(Post)=	0.05	CFS
Delta (decrease)	-0.14	CFS

5 Year Storm

5 Year Factor =	0.85	
Q(Pre) =	0.25	CFS
Q(Post)=	0.07	CFS
Delta (decrease)	-0.19	CFS

25 Year Storm

10 Year Factor =	1.09	
Q(Pre) =	0.32	CFS
Q(Post)=	0.09	CFS
Delta (decrease)	-0.24	CFS

ATTACHMENT 4

Pre-Development Conditions

Total		17621
Existing impervious		
	C=0.9	6286
	C=0.5	2404
	C=0.2	8931
	Composite C	0.491

Post-Development Conditions

Flowing to retention system

	Total	7500 SF
	C=0.9	4734
	C=0.5	0
	C=0.2	2766
	Composite C	0.642

Bypassing the retention system

	Total	10121 SF
	C=0.9	2574
	C=0.5	
	C=0.2	10121
	Composite C	0.229

PROJECT: Dylan Reid **Calc by:** RPH **Date:** 8/14/2015

RUNOFF RETENTION BY THE STORAGE PERCOLATION METHOD

Data Entry: PRESS TAB KEY & ENTER DESIGN VALUES

Site Location P60 Isopleth:	1.40	Fig. SWM-2
Rational Coefficients Cpre:	0.25	
Cpost:	0.90	
Impervious Area:	7500	ft²
Saturated Soil Permeability:	0.50	in/hr

Notes & Limitations on Use:

SS Ver:1.0

- Saturated soil permeability values may be used conservatively from the USDA-NRCS soil survey, or use actual test values.
- Site selection and design shall give proper consideration to the path for excess flows downstream of the designated retention area.
- Retention site location on, or immediately above, slopes exceeding 15% will require consulting a geotechnical engineer.
- Gravel packed structures shall use washed, angular, uniformly graded aggregate providing not less than 35% void space.
- Refer to the County of Santa Cruz Design Criteria, Stormwater Management - Section H, for complete method criteria.

2 - YEAR DESIGN STORM				RETENTION @ 120 MIN.		DETENTION @ 60 MIN.	
Storm Duration (min)	2 - Year Intensity (in/hr)	Qpre (cfs)	Qpost (cfs)	Retention Rate To Storage (cfs)	Specified Retained Volume (cf)	Detention Rate To Storage (cfs)	Specified Detained Volume (cf)
1440	0.15	0.007	0.023	0.004	1	-0.002	-211
1200	0.16	0.007	0.025	0.006	149	-0.001	-37
960	0.18	0.008	0.028	0.009	278	0.002	119
720	0.20	0.009	0.032	0.012	381	0.006	250
480	0.24	0.010	0.038	0.019	441	0.012	342
360	0.27	0.012	0.043	0.024	**447**	0.017	365
240	0.33	0.014	0.051	0.032	425	0.025	362
180	0.37	0.016	0.058	0.039	397	0.032	345
120	0.44	**0.019**	0.069	0.050	350	0.043	310
90	0.50	0.022	0.078	0.059	316	0.052	282
60	0.60	**0.026**	0.093	0.074	268	0.067	242
45	0.67	0.029	0.105	0.086	237	0.080	215
30	0.80	0.035	0.126	0.107	197	0.100	180
20	0.96	0.042	0.150	0.131	163	0.124	149
15	1.09	0.047	0.170	0.151	141	0.144	130
10	1.30	0.056	0.203	0.183	115	0.177	106
5	1.75	0.076	**0.274**	0.255	80	0.248	74

STRUCTURE DIMENSIONS FOR RETENTION

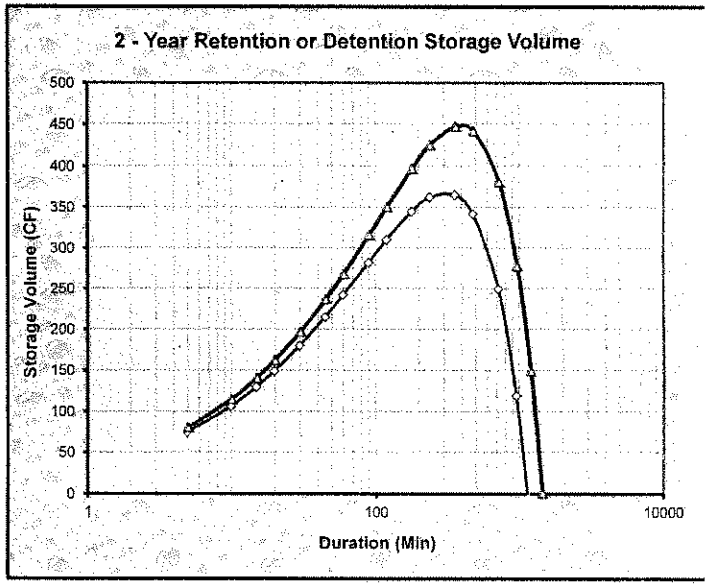
447	ft³ storage volume calculated			
40	% void space assumed			
1118	ft³ excavated volume needed			
Structure Ratios	Length	Width*	Depth*#	
	55.00	**14.00**	**3.00**	
Dimen. (ft)	**43.18**	**10.99**	**2.36**	
730	ft² internal surface area			
511	ft² effective surface area			
21.0	hrs estimated structure drainage time			

* For pipe, use the square root of the sectional area.

If cell values displayed are corrupted, enter zero for depth, then re-enter a positive numeric value within allowed range.

STRUCTURE DIMENSIONS FOR DETENTION

365	ft³ storage volume calculated		
100	% void space assumed		
365	ft³ excavated volume needed		
Structure Ratios	Length	Width*	Depth*
	125.00	7.00	1.00
Dimen. (ft)	**93.38**	**5.23**	**0.75**



This method is available from the County Public Works web site in a computerized Excel spreadsheet format to simplify usage. http://www.dpw.co.santa-cruz.ca.us/drainage.htm

The spreadsheet formulas and format are copy protected to prevent alteration.
Any modified submittals may be rejected, unless the changes made and the author are clearly identified, and the format is recognizably different.

Correct calculations require that the 'iteration' option be checked on. From the drop-down menus click on: Tools, Options, Calculations, Iteration

ATTACHMENT 4

ATTACHMENT 5

CITY OF SANTA CRUZ

WATER DEPARTMENT

212 Locust Street, Suite C, Santa Cruz CA 95060 Phone (831) 420-5210 Fax (831) 420-5201

October 16, 2014

John Swift
500 Chestnut Street, Suite 100
Santa Cruz, CA 95060

Re: **PROPOSED LOT SPLIT AND CONSTRUCTION OF ONE SINGLE-FAMILY HOME ON A NEWLY CREATED LOT AT 1240 CHANTICLEER AVENUE; APN 029-191-13**

Dear Mr. Swift:

This letter is to advise you that the subject parcel is located within the service area of the Santa Cruz Water Department and potable water is currently available for normal domestic use and fire protection. Service will be provided to each and every lot upon payment of the fees and charges in effect at the time of service application and upon completion of the installation, at developer expense, of any water mains, service connections, fire hydrants and other facilities required for the development under the rules and regulations of the Santa Cruz Water Department. The development will also be subject to the City's Landscape Water Conservation requirements.

At the present time:

the required water system improvements are not complete; and
financial arrangements have not been made to the satisfaction of the City to guarantee payment of all unpaid claims.

This letter will remain in effect for a period of two years from the above date. It should be noted, however, that City Council may elect to declare a moratorium on new service connections due to drought conditions or other water emergency. Such a declaration would supersede this statement of water availability.

If you have any questions regarding service requirements, please call the Engineering Division at (831) 420-5210. If you have questions regarding landscape water conservation requirements, please contact the Water Conservation Office at (831) 420-5230.

Sincerely,

Rosemary Menard

Rosemary Menard
Water Director

ATTACHMENT 6

Santa Cruz County Sanitation District

701 OCEAN STREET, SUITE 410, SANTA CRUZ, CA 95060-4073
(831) 454-2160 FAX (831) 454-2089 TDD: (831) 454-2123

JOHN J. PRESLEIGH, DISTRICT ENGINEER

NOVEMBER 19, 2014

JARED SAMMET
HAMILTON SWIFT & ASSOCIATES
500 CHESTNUT STREET
SANTA CRUZ, CA 95060

SUBJECT: SEWER AVAILABILITY AND DISTRICT'S CONDITIONS OF SERVICE FOR THE FOLLOWING PROPOSED DEVELOPMENT:

APN: 029-191-13
PARCEL ADDRESS: 1240 CHANTICLEER AVENUE
PROJECT DESCRIPTION: MINOR LAND DIVISION AND ONE NEW RESIDENCE

Sewer service is available for the subject development upon completion of the following conditions. This notice is effective for one year from the issuance date to allow the applicant the time to receive a *tentative map*, development or other discretionary permit approval. If, after this time frame, this project has not received approval from the Planning Department, then a new sewer service availability letter must be obtained by the applicant. If, for whatever reason, any approval by the Planning Department of a *tentative map* for this project is withdrawn, is revoked, or has expired, then this determination of availability will be considered to have expired and will be invalid.

A sewer connection permit can be issued once the Department of Public Works and District approves the engineered sewer improvement plan, showing on-site and off-site sewers needed to provide service to each lot or unit proposed. The improvement plan shall conform to the County's "Design Criteria" and shall also show any roads and easements. Existing and proposed easements shall be shown on any required Final Map. If a Final Map is not required, proof of recordation of any existing or proposed easement will be required.

Proposed location of on-site sewer lateral(s), clean-out(s), and connection(s) to existing public sewer must be shown on the plot plan of the building permit application.

It appears as if the existing lateral for this parcel will have to be moved northward, to be located entirely within the proposed small boundaries to be created, and that an additional/separate sewer connection may be required.

Show all existing and proposed plumbing fixures on floor plans of building application.

Yours truly,

JOHN J. PRESLEIGH
District Engineer

By: RLather

Rachél Lather
Sanitation Engineer

BH:tlp/159

c: Applicant/Property Owner:
Dylan Reid
1240 Chanticleer Ave.
Santa Cruz, CA 95062

10/1/2015

MBUAPCD CONSISTENCY DETERMINATION PROCEDURE Ver. 4.0

Data entry — *Data entered by user.*

Consistency Finding — NO / YES

6	Jurisdiction:	County of Santa Cruz Unincorp			*Lead Agency selects from pull down*
7	Project Name:	1240 Chanticleer Ave. 2-lot MLD No. 151145			*Lead Agency enters*
8	Base Year for this determination:	2010	Project Buildout/ Occupancy Year	2017	*Lead Agency enters*
9			Proposed Project Occupied DU	1	*Total buildout of Project. Sum of all years, row 26.*

JURISDICTION DATA FROM AQMP & DOF (no data entry)

		Base Year	Period ending January 1st of:					
		2010	2015	2020	2025	2030	2035	Notes
14	DOF Population	137,873	*From Calif. Dept of Finance. Est. for Jan 1 -- released in June of each year.*					
15	AMBAG DU Forecast for Jurisdiction	57,498	58,075	59,321	59,808	60,257	60,802	*DUs from AMBAG Travel Model, current version.*
16	AMBAG Pop Forecast for Jurisdiction	135,173	134,797	137,681	138,822	139,690	141,162	*Latest AMBAG Pop. & Employment forecasts.*
17	AMBAG Forecast Population/ DU	2.35	2.32	2.32	2.32	2.32	2.32	*Row 16/ row 15*
18	Estimated Built DUs	57,244	*Entry for 2010 is the DOF 1/2010 Housing Unit Estimate. Lead agency may overwrite if they have better data.*					

JURISDICTION DUs w/o PROJECT

		2010	2015	2020	2025	2030	2035	
21	Housing Stock (Built DUs, Total)	56,863	56,927	57,247	57,567	57,887	58,207	*Lead Agency estimates value at period end.*
22	Approved but not Built DUs	64	353	353	353	353	353	*Lead Agency estimates value at period end.*
23	Total Built & Approved DUs	56,927	57,280	57,600	57,920	58,240	58,560	*Sum of Row 21 + 22*

PROPOSED NEW PROJECT DUs

		2015	2020	2025	2030	2035	
26	Proposed New Project DUs	1					*Data entry by Lead Agency.*
27	TOTAL, New Project + Built & Approved DUs	57,281	57,600	57,920	58,240	58,560	*Sum of Row 23 + 26*

NEW PROJECT CONSISTENCY DETERMINATION

29	Over (Under) AQMP DUs	(794)	(1,721)	(1,888)	(2,017)	(2,242)	*Row 27 - Row 15*
30	Is the project consistent in this Period?	YES	YES	YES	YES	YES	*If Row 30 is (negative) = YES, if positive = NO.*

OPTIONS IF INCONSISTENT (Choose one):

	Year:	2015	2020	2025	2030	2035	
38	**A. Mitigate the impact by reducing project DUs by this amount:**						*Preferred option. Reduce project DUs by this amount for the inconsistent period, or redistribute project DUs between periods until all are consistent.*
	B. Obtain commitment from AMBAG to add this number of dwelling units to it's next forecast for this Jurisdiction.						*Commitmet from AMBAG would enable consistency with the next AQMP.*
40	**C. OR For EIRs, declare overriding benefit, AND request AMBAG to add the above number of persons and dwelling units to it's next forecast for this Jurisdiction.**						

Historic Review Comments: 1240 Chanticleer Avenue

The property located at 1240 Chanticleer Avenue in Santa Cruz, APN 029-191-13, was evaluated by Annie Murphy, historic resources planner for Santa Cruz County, to determine whether the proposed project would cause a substantial adverse change in the significance of a historic resource.

The property is not listed as a historical resource in the California Register of Historical Resources or the Santa Cruz County Historic Resources Inventory. Furthermore, a review of information and records currently available for the property and a site visit conducted on September 30th did not identify any information to indicate that the property may qualify as a historical resource as defined in Public Resources Code Section 5024.1. The accessory structure at the rear of the existing parcel that would be altered by the proposed project appears to have been altered extensively since its construction in 1935. Alterations visible from the exterior include replacement metal and vinyl windows, and T-111 siding on the rear portion of the accessory structure. Due to the extensive alterations, the accessory structure has not retained its architectural integrity and would therefore not appear to be eligible for designation as a historic resource in the Santa Cruz Inventory of Historic Resources or the California Register of Historical Resources.