



## Staff Report to the Zoning Administrator

Application Number: **08-0315**

**Applicant:** Shirley Reddick  
**Owner:** Shirley Reddick  
**APN:** 061-291-19

**Agenda Date:** December 19, 2008  
**Agenda Item #:** 1  
**Time:** After 10:00 a.m.

**Project Description:** Proposal to elevate an existing 2-story single-family dwelling by approximately 6 feet to elevate the structure out of the San Lorenzo River floodway. Requires a Variance to increase the Paradise Park maximum height limit of 18 feet to approximately 30 feet.

**Location:** The project is located on the east side of St. Bernard Street in Paradise Park in Santa Cruz at 163 St. Bernard Street.

**Supervisory District:** Fifth District (District Supervisor: Mark Stone)

**Permits Required:** Variance (to allow a 30 foot structural height where 18 feet is the maximum allowed).

**Technical Reviews:** Geotechnical report

**Staff Recommendation:**

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 08-0315, based on the attached findings and conditions.

**Exhibits**

- |   |  |
|---|--|
| A. Project plans                              | F. Location, Zoning and General Plan maps                      |
| B. Findings                                   | G. Geotechnical Investigation by Haro, Kasunich and Associates |
| C. Conditions                                 |  |
| D. Categorical Exemption (CEQA determination) |  |
| E. Assessor's parcel map                      |  |

**Parcel Information**

Parcel Size:	5,575 square feet
Existing Land Use - Parcel:	residential
Existing Land Use - Surrounding:	residential
Project Access:	From driveway off St. Bernard Street
Planning Area:	Carbonera

County of Santa Cruz Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor, Santa Cruz CA 95060

Land Use Designation: R-UL (Urban Low Residential)  
Zone District: R-1-6 (single-family residential, 6,000 square foot minimum site area)  
Coastal Zone: ☐ Inside ☒ Outside  
Appealable to Calif. Coastal Comm. ☐ Yes ☒ No

### **Environmental Information**

Geologic Hazards: Floodway of the San Lorenzo River  
Soils: See geotechnical report  
Fire Hazard: Not a mapped constraint  
Slopes: N/A  
Env. Sen. Habitat: no physical evidence on site  
Grading: No grading proposed  
Tree Removal: No trees proposed to be removed  
Scenic: Not a mapped resource  
Drainage: Existing drainage adequate  
Archeology: Not mapped/no physical evidence on site

### **Services Information**

Urban/Rural Services Line: ☒ Inside ☐ Outside  
Water Supply: City of Santa Cruz Water  
Sewage Disposal: Santa Cruz County Sanitation District  
Fire District: Central Fire Protection District  
Drainage District: Zone 5

### **Project Setting**

The project is located in Paradise Park, a rural residential park in Santa Cruz. The parcel is set among similar-sized parcels developed with similar sized residences. The subject lot is adjacent to the west side of the San Lorenzo River, with the rear of the parcel sloping gently downward toward the river.

### **Proposal**

The existing 2-story residence at 163 St. Bernard St. is located within the 100-year flood limits of the San Lorenzo River as delineated by FEMA. Historically, the lower level of the residence has flooded repeatedly during periods of high river levels, so it is proposed to replace the existing foundation and raise the habitable floors above the FEMA 100-year base flood elevation.

### **Zoning & General Plan Consistency**

The subject property is a 5,575 square foot lot, located in the R-1-6 zone district (single-family residential, 6,000 square foot minimum site area), a designation that allows residential uses. The project is also consistent with the site's (R-UL) Urban Low Density Residential General Plan designation.

The subject property is located in the Paradise Park subdivision, which has separate standards from the R-1-6 zoning district. The existing single-family dwelling is compliant with all site standards except for the required 18-foot height limit, as the existing dwelling is approximately 22.5 feet in height. After the proposed flood elevation of the structure, the residence will be

approximately 30 feet in height. The Paradise Park Board of Directors has reviewed the project plans, and signed their approval, dated 7/7/08, subject to County zoning and building approvals.

#### **Variance**

The findings to grant a variance for the proposed project can be made because the parcel is located within the floodway of the San Lorenzo River (see Exhibit G). To mitigate this hazard, and to meet FEMA regulations, the lowest floor must be elevated approximately 7 feet. This, unavoidably, raises the height above the 18-foot limit, which was assigned to this area in 1974, before the flood hazard was well described and before Federal regulations were in place. The slope of the roof is minimal and therefore does not exacerbate the need for the variance. Staff supports the variance because of the safety imperative of flood elevation.

#### **Floodway and Geotechnical Issues**

The existing single family residence is located in the floodway of the San Lorenzo River. A Geotechnical Investigation has been prepared for the project by Haro, Kasunich and Associates (dated May 2007). Environmental Planning staff, and Staff Geologist Joseph Hanna has reviewed the proposal for Flood Hazard requirements and accepted the geotechnical investigation.

#### **Environmental Review**

Environmental review of the proposed project per the requirements of the California Environmental Quality Act (CEQA) has resulted in the determination that the proposed project is exempt per CEQA Section 15301 (Class 1- Existing Facilities).

#### **Conclusion**

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

#### **Staff Recommendation**

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **08-0315**, based on the attached findings and conditions.

**Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.**

**The County Code and General Plan, as well as hearing agendas and additional information are available online at: [www.co.santa-cruz.ca.us](http://www.co.santa-cruz.ca.us)**

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## **Development Permit Findings**

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The property is located in the flood zone, however the proposal calls for raising the structure above the base flood level and for including other mitigations to the hazard of flooding as well. The proposed elevation of an existing single-family residence will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks, for the R-1-6 zone district as well as for the Paradise Park subdivision standards, that ensure access to light, air, and open space in the neighborhood.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed flood elevation of an existing single-family residence and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the R-1-6 (single-family residential, 6,000 square foot minimum site area) zone district, with the approval of a Variance to the height standards. The design meets all current site standards for the Paradise Park subdivision, other than height. A Variance has been applied for with this application to exceed the height limit of the Paradise Park subdivision.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the Urban Low Density Residential (R-UL) land use designation in the County General Plan.

The proposed flood elevation of an existing single-family residence will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the flood elevated single-family residence will not adversely shade adjacent properties, and will meet current setbacks for the zone district that ensure access to light, air, and open space in the neighborhood.

The proposed elevation of an existing single-family residence will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed single family

residence will comply with the site standards for the Paradise Park subdivision (including setbacks and lot coverage) and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposal is on a developed lot, with no anticipated intensification of the current use.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed flood elevation of an existing single-family residence is located in a mixed neighborhood containing a variety of architectural styles, and the proposed flood elevation of the structure is consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed flood elevation of an existing single-family residence will be of an appropriate scale and type of design that will not detract from the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area.

## **Variance Findings**

1. That because of special circumstances applicable to the property, including size, shape topography, location and surrounding existing structures, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.

This finding can be made. The parcel is in the floodway of the San Lorenzo River. All new habitable areas are required to be built above the flood elevation, and this unavoidably raises the height. The Paradise Park subdivision height limit was enacted prior to the recognition of the flood hazard, and prior to federal requirements that require elevation. An existing two story home cannot be elevated per FEMA standards without varying from the 18 feet height limit.

2. That the granting of such variance will be in harmony with the general intent and purpose of zoning objectives and will not be materially detrimental to public health, safety or welfare or injurious to property or improvements in the vicinity.

This finding can be made. Raising the existing house poses no threat to health, safety or welfare and will increase the safety of the occupants during flooding conditions for a 100-year event.

3. That the granting of such a variance will not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such is situated.

Many of the parcels in this area have already raised the floor levels of the original cottages per current FEMA requirements. Granting a variance for this parcel will not constitute a grant of special privilege to this property, and it would not be possible to elevate this existing house without a variance.

## Conditions of Approval

Exhibit A: Project Plans, 9 sheets, by Ifland Engineers, dated 5/28/08.

- I. This permit authorizes the elevation of an existing 2-story single-family residence (from 22.5 ft. high to 30 ft. high, where 18 ft. is the maximum per Paradise Park subdivision standards) in order to elevate the structure above the minimum flood elevation, and to replace the existing foundation. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
  - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
  - B. Obtain a Demolition Permit from the Santa Cruz County Building Official.
  - C. Obtain a Building Permit from the Santa Cruz County Building Official.
    1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
  - D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way, if needed.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
  - A. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder).
  - B. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development.
  - C. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal.
  - D. Meet all requirements of and pay Zone 5 drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.



- E. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services.
  - F. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.
  - G. A letter from a licensed civil engineer shall be required prior to approval of the building permit, which states that the plans are in conformance with FEMA flood hazard requirements such as flood resistant materials, vents, etc.
- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
- A. All site improvements shown on the final approved Building Permit plans shall be installed.
  - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
  - C. The project must comply with all recommendations of the approved soils reports.
  - D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.
- IV. Operational Conditions
- A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
- V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
  - B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
    - 1. COUNTY bears its own attorney's fees and costs; and
    - 2. COUNTY defends the action in good faith.
  - C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.
  - D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.
-

Application #: 08-0315  
APN: 061-291-19  
Owner: Shirley Reddick

Minor variations to this permit that do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

**Please note: This permit expires two years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.**

Approval Date: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Don Bussey  
Deputy Zoning Administrator

\_\_\_\_\_  
Alice Daly  
Project Planner

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Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

# CALIFORNIA ENVIRONMENTAL QUALITY ACT

## NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 08-0315

Assessor Parcel Number: 061-291-19

Project Location: 163 St. Bernard St. Paradise Park, Santa Cruz, CA 95060

**Project Description:** proposal to elevate an existing 2-story single-family dwelling approximately 6 feet to elevate out of the floodway.

**Person or Agency Proposing Project:** Shirley Reddick

**Contact Phone Number:** 831-252-9099

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.  
B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).  
C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.  
D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:

E. ☒ **Categorical Exemption**

Specify type: Section 15301: Existing Facilities

**F. Reasons why the project is exempt:**

Restoration and elevation of an existing structure to meet current standards of health and safety, specifically to remedy flood damage hazards.

In addition, none of the conditions described in Section 15300.2 apply to this project.

\_\_\_\_\_  
Alice Daly, Project Planner

Date: \_\_\_\_\_

# FOR TAX PURPOSES ONLY

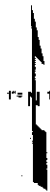
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POR. RINCON RANCHO  
SEC. 1, T.11S., R.2W., M.D.B. & M.

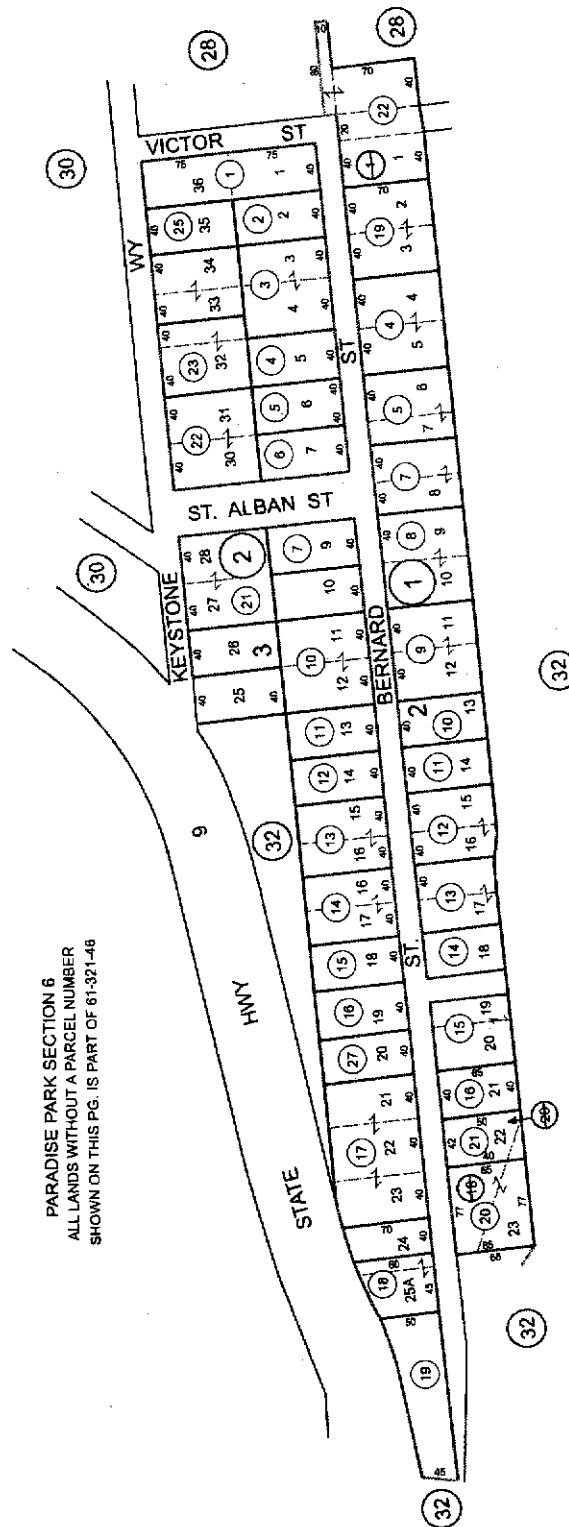
Tax Area Code  
92-003

61-29

1" = 100'



PARADISE PARK SECTION 6  
ALL LANDS WITHOUT A PARCEL NUMBER  
SHOWN ON THIS PG. IS PART OF 61-321-48



Electronically Redrawn 6/1/96 KSA  
Rev. 7/8/01 mm (changed page refs.)  
Rev. 8/15/02 mm (changed pg ref.)  
Rev. 3/15/03 mm (changed ref.)  
Rev. 3/15/03 LLO (Spatial Adjustment)  
Rev. 6/15/03 CB (for 61-29)  
Rev. 6/15/03 CB (Comb Form, Comb 1-22)

Note - Assessor's Parcel & Block  
Numbers Shown in Circles.

Assessor's Map No. 61-29  
County of Santa Cruz, Calif.  
June, 1996







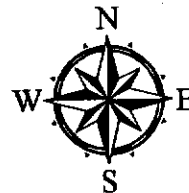
# Location Map



0 150 300 600 900 1,200 Feet

## LEGEND

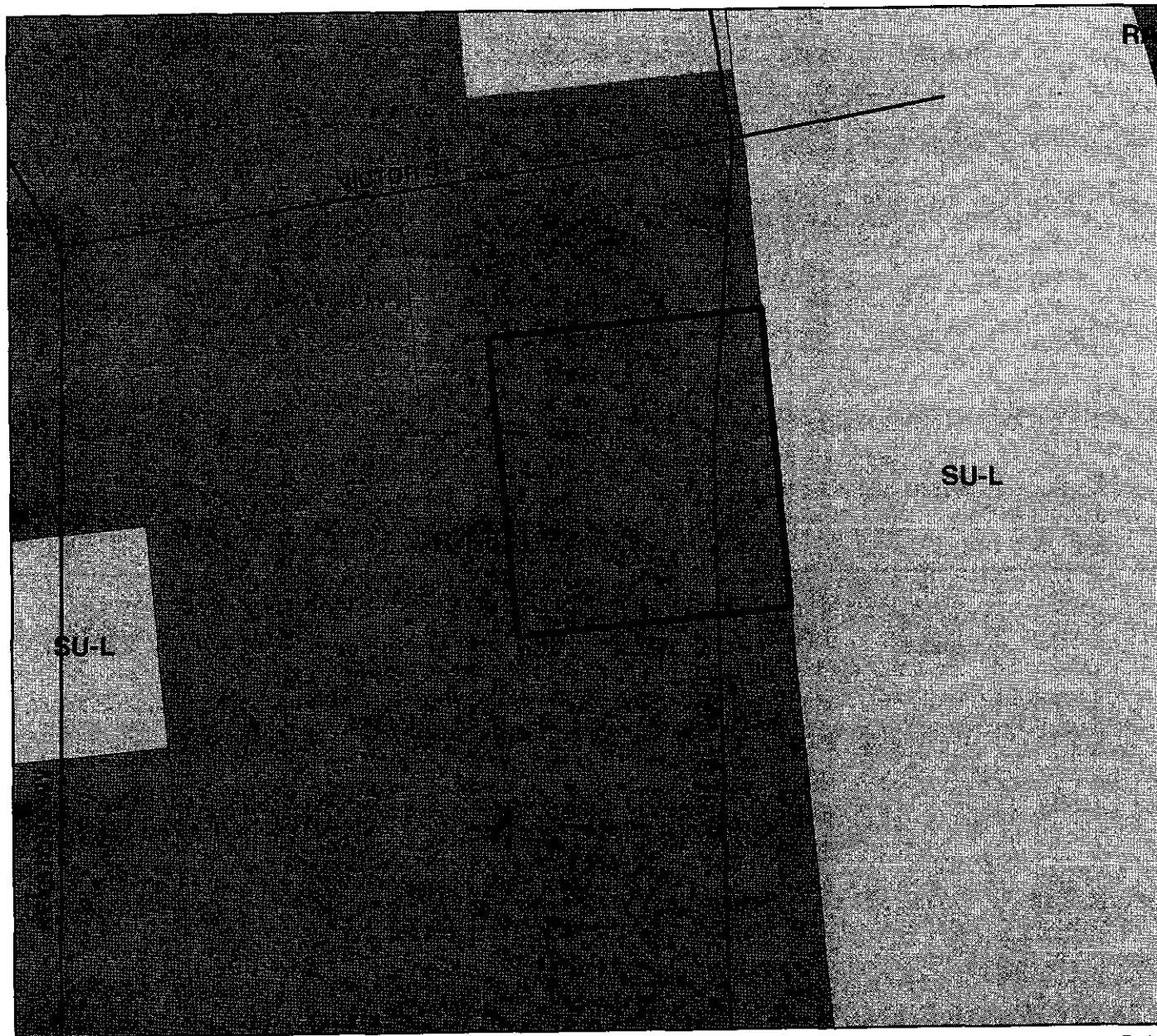
-  APN: 061-291-19
-  Assessors Parcels
-  Streets
-  State Highways



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July 2008



# Zoning Map



## LEGEND



APN: 061-291-19



Assessors Parcels



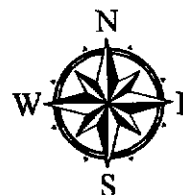
Streets



RESIDENTIAL-SINGLE FAMILY



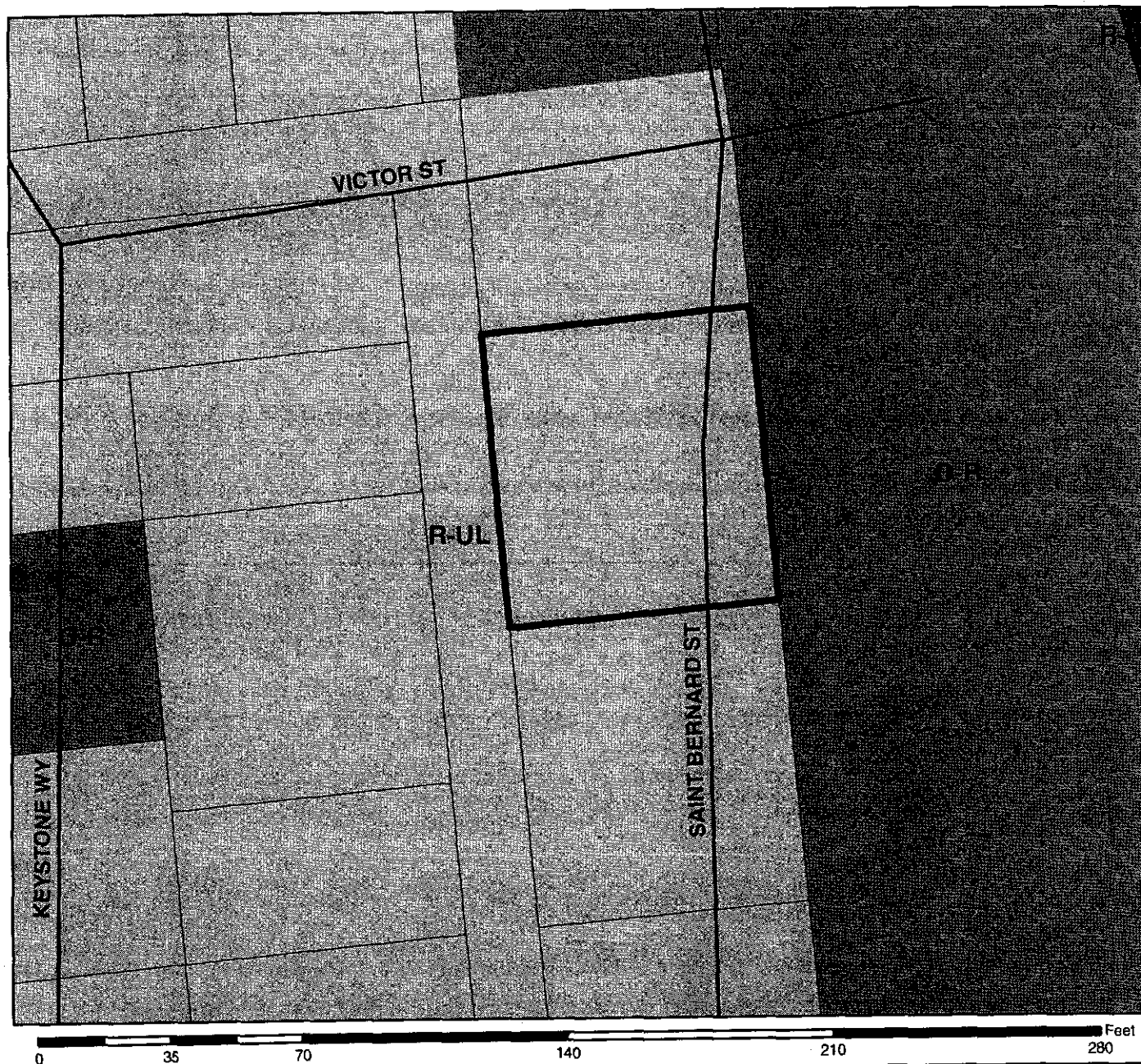
SPECIAL USE



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County of Santa Cruz  
Planning Department  
July 2008



# General Plan Designation Map



## LEGEND



APN: 061-291-19



Assessors Parcels



Streets



Residential - Urban Low Density



Parks and Recreation



Map Created by  
County of Santa Cruz  
Planning Department  
July 2008



**GEOTECHNICAL INVESTIGATION  
FOR  
PROPOSED RESIDENTIAL REMODEL & FOUNDATION REPLACEMENT  
PARADISE PARK  
163 ST. BERNARD STREET  
SANTA CRUZ, CALIFORNIA**

**PREPARED FOR  
SHIRLEY REDDICK**

**Prepared By  
HARO, KASUNICH AND ASSOCIATES, INC.  
Geotechnical & Coastal Engineers  
Project No. SC9350  
May 2007**

Project No. SC9350  
18 May 2007

MS. SHIRLEY REDDICK  
836 Paradise Park  
Santa Cruz, California 95060-7011

Subject: **GEOTECHNICAL INVESTIGATION- DESIGN PHASE**

Reference: Proposed Residential Remodel & Foundation Replacement  
Paradise Park  
163 St. Bernard Street  
APN 061-291-19  
Santa Cruz, California

Dear Ms. Reddick:

In accordance with your authorization, we have performed a Geotechnical Investigation for the referenced project in Santa Cruz County, California.

Primary geotechnical concerns at the site include strong seismic shaking, adequate foundation support, settlement and lateral spreading due to liquefaction, scour, flooding and appropriate control of surface runoff around the residence.

The accompanying report presents our conclusions and recommendations, as well as the results of the geotechnical investigation on which they are based.

If you have any questions concerning the data or conclusions presented in this report, please call our office.

Very truly yours,

**HARO, KASUNICH AND ASSOCIATES, INC.**



William E. St. Clair  
Staff Engineer

Reviewed By:

John E. Kasunich  
G.E. 455



WSC/jm  
Copies:

2 to Addressee  
1 to Central Coast Construction; Attn: Ladona  
1 to Ifland Engineers, Inc.; Attn: Jeff Martin

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## GEOTECHNICAL INVESTIGATION

### Introduction

This report summarizes the findings, conclusions and recommendations from our geotechnical investigation for the residential remodel and foundation replacement proposed at the referenced site in Paradise Park, Santa Cruz County California. The purpose of our investigation was to explore and evaluate the subsurface conditions at the site and provide geotechnical recommendations pertaining to earthwork, foundation design and general site drainage for the proposed construction.

Our firm should be provided the opportunity for a geotechnical review of the project plans prior to construction, so that our recommendations may be properly interpreted and implemented, and to determine if this report is adequate and complete for the final planned construction. It is not intended the geotechnical engineer approve or disapprove the plans, but to provide an opportunity to update the preliminary report and include additions or qualifications as necessary.

This investigation was performed to evaluate subsurface soil conditions and to provide geotechnical engineering information to be used in the design and construction for the buildings. As data presented in this report was developed from the design standpoint, it may not contain sufficient detail to address specific construction issues or other needs

required by the contractor. Therefore, it is recommended prospective bidders obtain additional subsurface information as they deem necessary.

### **Purpose and Scope**

The purpose of our investigation was to explore the subsurface conditions at the site, in order to assess the subsoil characteristics, evaluate the soil-structure interaction from a static (dead plus live) loading condition and develop geotechnical recommendations pertaining to earthwork and foundation design for the proposed construction. It is presumed the latest California Building Code (CBC) edition design considerations, specifically the seismic factors and coefficients from Chapter 16A, Volume 2, will be followed in the design of the structures.

The specific scope of our services was limited to the following tasks:

1. Site reconnaissance and review of available data in our files regarding the site and region. Data reviewed consisted of the following:
  - California Geological Survey – Probabilistic Seismic Hazards Assessment  
web site <http://www.consrv.ca.gov/CGS/rghm/pshamap/pshamap.asp>.
  - FEMA DFIRM viewer web site <https://hazards.fema.gov>
  - Geology and Liquefaction Potential of Quaternary Deposits in Santa Cruz County, California by William R. Dupre, Dated 1975.

### Site and Project Description

The project site is located on the west side of the San Lorenzo River, east of St. Bernard Street in Paradise Park, Santa Cruz California (see Vicinity Map, Figure No. 1). The existing two story residence at 163 St. Bernard Street is located within the 100 year flood limits of the San Lorenzo River as delineated by FEMA (see FEMA flood map, Figure No. 2). A foundation upgrade was constructed to support the street side of the residence roughly 20 years ago. The foundation upgrade consisted of a CMU retaining wall supported by vertical and diagonal helix anchors designed by Ifland Engineers. Slope gradients between the existing residence and river range from level to 5 percent immediately behind the residence up to 28 percent nearing the San Lorenzo River (See Section A, Figure 6, Appendix A). Historically, the lower level of the residence floods during periods of high river levels during intense winter rain seasons. In addition, the existing residence is located in a zone of high potential for liquefaction as delineated on the liquefaction potential map by Dupre' (see liquefaction potential map, Figures 3 and 4).

We understand you wish to raise the living floors of your residence above the 100 year base flood elevation as defined by FEMA and replace the existing foundation with a new foundation. In addition, we understand interior re-model is proposed. We understand grading will be minimal and will be limited to foundation excavations and landscaping.

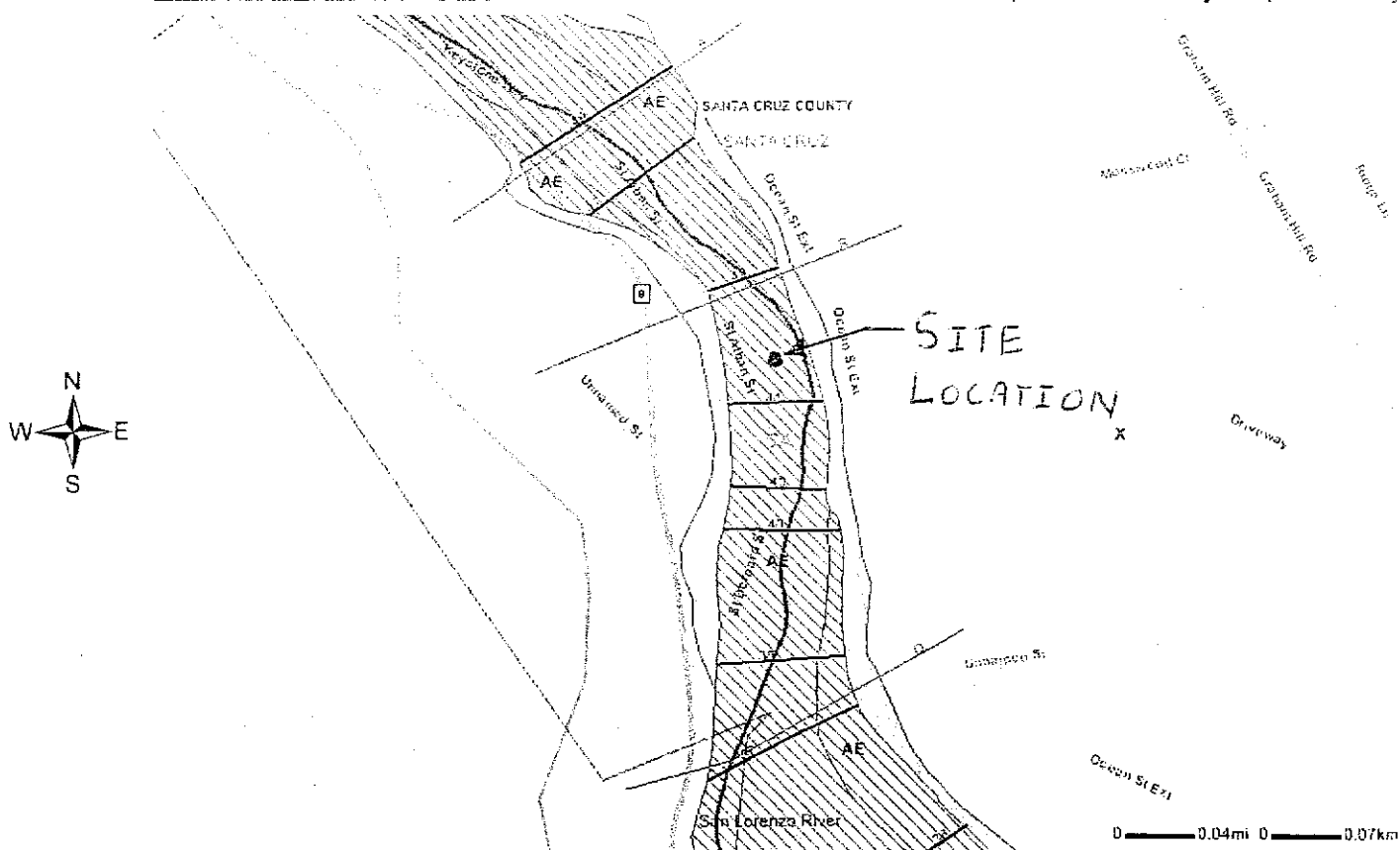
Plan Review, Construction Observation and Testing

30. Our firm should be provided the opportunity for a general review of the project plans prior to construction so that our geotechnical recommendations may be properly interpreted and implemented. The purpose is to determine if this preliminary report is adequate and complete for the final planned grading and construction. It is not intended that the geotechnical engineer approve or disapprove the plans, but to provide an opportunity to update the preliminary report and include additions or qualifications as necessary. If our firm is not accorded the opportunity of making the recommended review, we can assume no responsibility for misinterpretation of our recommendations.

31. We recommend that our office review the project plans prior to submittal to public agencies, to expedite project review. The recommendations presented in this report require our review of final plans and specifications prior to construction and upon our observation and, where necessary, testing of the earthwork and foundation excavations. Observation of grading and foundation excavations allows us to compare subsurface conditions exposed during construction with those inferred from this investigation

# Mapping Information Platform

This Map Is For Advisory Purposes Only



## Legend

County Boundary	Zone A99	Cities
LOMR's	Zone V	Other Places 1,250
Bench Marks	Zone VE	Small Towns 2,500, 10,000
Base Flood Elevation	Zone D	Small Cities 25,000, 100,000
Cross Section Lines	0.2% Annual Chance Flood	State Largest Cities 100,000, 250,000
General Structures	Hazard Zone	Major Cities > 1,000,000
Culverts	Floodways	Parks
Foot Bridges	Streams	National Parks and Forests
Dams	Political Jurisdictions	State Parks and Forests
Levees	National Communities	Local Parks
Wing Walls	Streets	Minor Rivers
Flood Hazard Zones	Major Highways	Lakes, Major Rivers
Zone A	Highways	Land Areas
Zone AE	Water Roads	US
Zone AH	Streets	Other Countries
Zone AO	Waterways	
Zone AR	Railroads	
(cont.)	States	



FEMA

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EXHIBIT G

FEMA FLOOD INSURANCE RATE MAP (FIRM)	
163 SAINT BERNARD STREET SANTA CRUZ COUNTY, CALIFORNIA	
SCALE NTS	HARO, KASUNICH & ASSOCIATES, INC. GEOTECHNICAL AND COASTAL ENGINEERS 116 E. LAKE AVENUE, WATSONVILLE, CA 95076 (831) 722-4175
DRAWN BY MH	
DATE APRIL 2007	
REVISION SC9350	
FIGURE NO. 2	