



**CITY OF SOLANA BEACH**  
**SOLANA BEACH CITY COUNCIL, SUCCESSOR AGENCY TO THE REDEVELOPMENT**  
**AGENCY, PUBLIC FINANCING AUTHORITY, & HOUSING AUTHORITY**

# AGENDA

## Joint REGULAR Meeting

**Wednesday, September 25, 2024 \* 6:00 p.m.**

City Hall / Council Chambers, 635 S. Highway 101, Solana Beach, California

- City Council meetings are video recorded and archived as a permanent record. The [video](#) recording captures the complete proceedings of the meeting and is available for viewing on the City's website.
- Posted Reports & Supplemental Docs contain records up to the cut off time prior to meetings for processing new submittals. Complete records containing meeting handouts, PowerPoints, etc. can be obtained through a [Records Request](#).



### **PUBLIC MEETING ACCESS**

The Regular Meetings of the City Council are scheduled for the 2nd and 4th Wednesdays and are broadcast live. The video taping of meetings are maintained as a permanent record and contain a detailed account of the proceedings. Council meeting tapings are archived and available for viewing on the City's [Public Meetings](#) webpage.

### **WATCH THE MEETING**

- Live web-streaming: Meetings web-stream live on the City's website on the City's [Public Meetings](#) webpage. Find the large Live Meeting button.
- Live Broadcast on Local Govt. Channel: Meetings are broadcast live on Cox Communications - Channel 19 / Spectrum (Time Warner)-Channel 24 / AT&T U-verse Channel 99.
- Archived videos online: The video taping of meetings are maintained as a permanent record and contain a detailed account of the proceedings. Council meeting tapings are archived and available for viewing on the City's [Public Meetings](#) webpage.

### **AGENDA MATERIALS**

A full City Council agenda packet including relative supporting documentation is available at City Hall, the Solana Beach Branch [Library](#) (157 Stevens Ave.), La Colonia Community Ctr., and online [www.cityofsolanabeach.org](http://www.cityofsolanabeach.org). Agendas are posted at least 72 hours prior to regular meetings and at least 24 hours prior to special meetings. Writings and documents regarding an agenda of an open session meeting, received after the official posting, and distributed to the Council for consideration, will be made available for public viewing at the same time. In addition, items received at least 1 hour 30 minutes prior to the meeting time will be uploaded online with the agenda posting. Materials submitted for consideration should be forwarded to the [City Clerk's department](#) 858-720-2400. The designated location for viewing of hard copies is the City Clerk's office at City Hall during normal business hours.

### **PUBLIC COMMENTS**

Written correspondence (supplemental items) regarding an agenda item at an open session meeting should be submitted to the City Clerk's Office at [clerkoffice@cosb.org](mailto:clerkoffice@cosb.org) with a) Subject line to include the meeting date b) Include the Agenda Item # as listed on the Agenda.

- Correspondence received after the official posting of the agenda, but two hours prior to the meeting start time, on the meeting day, will be distributed to Council and made available online along with the agenda posting. All submittals received before the start of the meeting will be made part of the record.
- Written submittals will be added to the record and not read out loud.

And/Or

Verbal Comment Participation:

Please submit a speaker slip to the City Clerk prior to the meeting, or the announcement of the Section/Item, to provide public comment. Allotted times for speaking are outlined on the speaker's slip for each agenda section: Oral Communications, Consent, Public Hearings and Staff Reports.

Public speakers have 3 minutes each to speak on each topic. Time may be donated by another individual who is present at the meeting to allow an individual up to 6 minutes to speak. Group: Time may be donated by two individuals who are present at the meeting allowing an individual up to 10 minutes to speak. Group Hearings: For public hearings only, time may be donated by two individuals who are present at the meeting allowing an individual up to 15 minutes to speak.

**SPECIAL ASSISTANCE NEEDED**

In compliance with the Americans with Disabilities Act of 1990, persons with a disability may request an agenda in appropriate alternative formats as required by Section 202. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the [City Clerk's office](#) (858) 720-2400 at least 72 hours prior to the meeting.

As a courtesy to all meeting attendees, please set all electronic devices to silent mode and engage in conversations outside the Council Chambers.

**CITY COUNCILMEMBERS**

**Lesa Heebner**  
Mayor

**Jewel Edson**  
Deputy Mayor / Councilmember District 3

**Kristi Becker**  
Councilmember District 2

**Jill MacDonald**  
Councilmember District 4

**David A. Zito**  
Councilmember District 1

Alyssa Muto  
City Manager

Johanna Canlas  
City Attorney

Angela Ivey  
City Clerk

**SPEAKERS:**

Please submit your speaker slip to the City Clerk prior to the meeting or the announcement of the Item. Allotted times for speaking are outlined on the speaker's slip for Oral Communications, Consent, Public Hearings and Staff Reports.

**READING OF ORDINANCES AND RESOLUTIONS:**

Pursuant to [Solana Beach Municipal Code](#) Section 2.04.460, at the time of introduction or adoption of an ordinance or adoption of a resolution, the same shall not be read in full unless after the reading of the title, further reading is requested by a member of the Council. If any Councilmember so requests, the ordinance or resolution shall be read in full. In the absence of such a request, this section shall constitute a waiver by the council of such reading.

**CALL TO ORDER AND ROLL CALL:**

**CLOSED SESSION REPORT:**

**FLAG SALUTE:**

**APPROVAL OF AGENDA:**

**PROCLAMATIONS/CERTIFICATES:** *Ceremonial*

None at the posting of this agenda

**PRESENTATIONS:** *Ceremonial items that do not contain in-depth discussion and no action/direction.*

None at the posting of this agenda

**ORAL COMMUNICATIONS:**

Comments relating to items on this evening's agenda are taken at the time the items are heard. This portion of the agenda provides an opportunity for members of the public to address the City

Council on items relating to City business and not appearing on today's agenda by submitting a speaker slip (located on the back table) to the City Clerk. Pursuant to the Brown Act, no action shall be taken by the City Council on public comment items. Council may refer items to the City Manager for placement on a future agenda. The maximum time allotted for each presentation is THREE MINUTES. No donations of time are permitted (SBMC 2.04.190). Please be aware of the timer light on the Council Dais.

**COUNCIL COMMUNITY ANNOUNCEMENTS / COMMENTARY:**

*An opportunity for City Council to make brief announcements or report on their activities. These items are not agendized for official City business with no action or substantive discussion.*

**A. CONSENT CALENDAR:** (Action Items) (A.1. - A.2.)

Items listed on the Consent Calendar are to be acted in a single action of the City Council unless pulled for discussion. Any member of the public may address the City Council on an item of concern by submitting to the City Clerk a speaker slip (located on the back table) before the Consent Calendar is addressed. Those items removed from the Consent Calendar by a member of the Council will be trailed to the end of the agenda, while Consent Calendar items removed by the public will be heard immediately after approval of the Consent Calendar to hear the public speaker.

*All speakers should refer to the public comment section at the beginning of the agenda for details. Please be aware of the timer light on the Council Dais.*

**A.1. Register Of Demands.** (File 0300-30)

Recommendation: That the City Council

1. Ratify the list of demands for August 17, 2024 – September 06, 2024.

**Item A.1. Report** ([click here](#))

*Posted Reports & Supplemental Docs contain records up to the cut off time, prior to the start of the meeting, for processing new submittals. The final official record containing handouts, PowerPoints, etc. can be obtained through a Records Request to the City Clerk's Office.*

**A.2. State Homeland Security Program (SHSP) Grant Funds for Firefighting Equipment.** (File 0260-40)

Recommendation: That the City Council

1. Approve **Resolution 2024-095**:
  - a. Accepting \$9,409 in federal funds from a 2023 State Homeland Security Program (SHSP) grant awarded to the City of Solana Beach for the purchase of firefighting hoods and gas monitors.
  - b. Authorizing the City Manager, or her designee, to sign and submit the required California Governor's Office of Emergency Services Standard Assurances for Cal OES Federal Non-Disaster Grant Programs.
  - c. Approving a budget amendment of \$9,409 to the Misc. Grant Fund - Federal Grants revenue account 246-46600 and the Minor Equipment expenditure account 2466120-64190.
  - d. Authorizing the City Treasurer to amend the FY 2024/25 Adopted Budget accordingly.

**Item A.2. Report** ([click here](#))

*Posted Reports & Supplemental Docs contain records up to the cut off time, prior to the start of the meeting, for processing new submittals. The final official record containing handouts, PowerPoints, etc. can be obtained through a Records Request to the City Clerk's Office.*

**NOTE: The City Council shall not begin a new agenda item after 10:30 p.m. unless approved by a unanimous vote of all members present. (SBMC 2.04.070)**

**B. PUBLIC HEARINGS:** (B.1.)

This portion of the agenda provides citizens an opportunity to express their views on a specific issue as required by law after proper noticing by submitting a speaker slip (located on the back table) to the City Clerk. After considering all of the evidence, including written materials and oral testimony, the City Council must make a decision supported by findings and the findings must be supported by substantial evidence in the record. An applicant or designee(s) for a private development/business project, for which the public hearing is being held, is allotted a total of fifteen minutes to speak, as per SBMC 2.04.210. A portion of the fifteen minutes may be saved to respond to those who speak in opposition. *All other speakers should refer to the public comment section at the beginning of the agenda for time allotment.* Please be aware of the timer light on the Council Dais.

**B.1. Public Hearing: 403 Pacific Ave., Applicant: Bates, Case No.: MOD24-001, APN: 263-051-07** (File 0600-40)

The proposed project meets the minimum objective requirements under the LUP, SBMC, is consistent with the General Plan and may be found, as conditioned, to meet the discretionary findings required as discussed in this report to approve a modification to a DRP. Therefore, Staff recommends that the City Council:

1. Conduct the Public Hearing: Open the Public Hearing, Report Council Disclosures, Receive Public Testimony, and Close the Public Hearing.
2. Find the project exempt from the California Environmental Quality Act pursuant to Section 15301 of the State CEQA Guidelines.
3. If the City Council makes the requisite findings and approves the project, adopt **Resolution 2024-088** conditionally approving a to a Development Review Permit (DRP) to remodel the interior of the residence and replace the windows, exterior doors, roofing, siding, and replace existing fireplace with a gas fireplace at the existing two-story residence at 403 Pacific Avenue.

**Item B.1. Report (click here)**

*Posted Reports & Supplemental Docs contain records up to the cut off time, prior to the start of the meeting, for processing new submittals. The final official record containing handouts, PowerPoints, etc. can be obtained through a Records Request to the City Clerk's Office.*

**C. STAFF REPORTS:** (C.1. – C.3.)

*Submit speaker slips to the City Clerk.*

*All speakers should refer to the public comment section at the beginning of the agenda for time allotments.* Please be aware of the timer light on the Council Dais.

**C.1. Wildcoast Petition to Change Swami's Marine Protected Area (MPA) Boundaries.** (File 0220-70)

Recommendation: That the City Council

1. Provide direction on next steps, if any, for community outreach and involvement.

[Item C.1. Report \(click here\)](#)

*Posted Reports & Supplemental Docs contain records up to the cut off time, prior to the start of the meeting, for processing new submittals. The final official record containing handouts, PowerPoints, etc. can be obtained through a Records Request to the City Clerk's Office.*

**C.2. Utility Underground Districts and Adopting District Boundary Maps for the Glenmont/Mar Vista/Marview UUD and the Nardo/Granados/Rios UUD.** (File 0820-48)

Recommendation: That the City Council

1. Adopt **Resolution 2024-006**:
  - a. Authorizing payment of \$18,647 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the Glenmont/Mar Vista/Marview Utility Underground District.
  - b. Approving the Revised District Boundary Map for the Glenmont/Mar Vista/Marview Utility Underground District subject to final voting approval from the District property owners as outlined in the "Steps to Forming a Private Residential Utility Underground District" brochure.
2. Adopt **Resolution 2024-007**:
  - a. Authorizing payment of \$24,979 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the of the Nardo/Granados/Rios Utility Underground District.
  - b. Approving the Revised District Boundary Map for the Nardo/Granados/Rios Utility Underground District subject to final voting approval from the District property owners as outlined in the "Steps to Forming a Private Residential Utility Underground District" brochure.

[Item C.2. Report \(click here\)](#)

*Posted Reports & Supplemental Docs contain records up to the cut off time, prior to the start of the meeting, for processing new submittals. The final official record containing handouts, PowerPoints, etc. can be obtained through a Records Request to the City Clerk's Office.*

### **C.3. General Fund Update (Unaudited) for Fiscal Year (FY) 2024.** (File 0330-30)

Recommendation: That the City Council

1. Accept and file the General Fund Update for FY24.
2. Provide direction to Staff regarding whether to use an amount of the projected General Fund surplus to fund the PARS Irrevocable Trust for Pensions as part of a budget appropriation to the General Fund Unreserved Fund Balance, and other funds as determined by the Finance Department, in FY24.
3. Provide direction to Staff regarding whether to use an amount of the projected General Fund surplus to add funding to the Asset Replacement Fund as part of a budget appropriation to the General Fund Unreserved Fund Balance in FY24.
4. Provide direction to Staff regarding whether to use an amount of the projected General Fund surplus to add funding to the Facilities Replacement Fund as part of a budget appropriation to the General Fund Unreserved Fund Balance in FY24.
5. Approve **Resolution 2024-100** revising appropriations in the FY24 budget.
6. Authorize the City Treasurer to amend the FY24 budget accordingly.

#### **Item C.3. Report ([click here](#))**

*Posted Reports & Supplemental Docs contain records up to the cut off time, prior to the start of the meeting, for processing new submittals. The final official record containing handouts, PowerPoints, etc. can be obtained through a Records Request to the City Clerk's Office.*

### **WORK PLAN COMMENTS:**

*Adopted June 26, 2024*

### **COMPENSATION & REIMBURSEMENT DISCLOSURE:**

GC: Article 2.3. Compensation: 53232.3. (a) Reimbursable expenses shall include, but not be limited to, meals, lodging, and travel. 53232.3 (d) Members of a legislative body shall provide brief reports on meetings attended at the expense of the local agency "City" at the next regular meeting of the legislative body.

### **COUNCIL COMMITTEE REPORTS: [Council Committees](#)**

#### **REGIONAL COMMITTEES: (outside agencies, appointed by this Council)**

- a. City Selection Committee (meets twice a year) Primary-Heebner, Alternate-Edson
- b. Clean Energy Alliance (CEA) JPA: Primary-Becker, Alternate-Zito
- c. County Service Area 17: Primary-MacDonald, Alternate-Edson
- d. Escondido Creek Watershed Authority: Becker / Staff (no alternate).
- e. League of Ca. Cities' San Diego County Executive Committee: Primary-MacDonald, Alternate-Becker. Subcommittees determined by its members.
- f. League of Ca. Cities' Local Legislative Committee: Primary-MacDonald, Alternate-Becker
- g. League of Ca. Cities' Coastal Cities Issues Group (CCIG): Primary-MacDonald, Alternate-Becker
- h. North County Dispatch JPA: Primary-MacDonald, Alternate-Becker
- i. North County Transit District: Primary-Edson, Alternate-MacDonald
- j. Regional Solid Waste Association (RSWA): Primary-Zito, Alternate-MacDonald
- k. SANDAG: Primary-Heebner, 1<sup>st</sup> Alternate-Zito, 2<sup>nd</sup> Alternate-Edson. Subcommittees determined by its members.
- l. SANDAG Shoreline Preservation Committee: Primary-Becker, Alternate-Zito
- m. San Dieguito River Valley JPA: Primary-MacDonald, Alternate-Becker

- n. San Elijo JPA: Primary-Zito, Primary-Becker, Alternate-City Manager
- o. 22<sup>nd</sup> Agricultural District Association Community Relations Committee: Primary-Edson, Primary-Heebner

**STANDING COMMITTEES: (All Primary Members) (Permanent Committees)**

- a. Business Liaison Committee – Zito, Edson
- b. Fire Dept. Management Governance & Organizational Evaluation – Edson, MacDonald
- c. Highway 101 / Cedros Ave. Development Committee – Heebner, Edson
- d. Parks and Recreation Committee – Zito, Edson
- e. Public Arts Committee – Edson, Heebner
- f. School Relations Committee – Becker, MacDonald
- g. Solana Beach-Del Mar Relations Committee – Heebner, Edson

**CITIZEN COMMISSION(S)**

- a. Climate Action Commission – Zito, Becker

**ADJOURN:**

**Next Regularly Scheduled Meeting is October 9, 2024**

Always refer to the City’s website Event Calendar for an updated schedule or contact City Hall. [www.cityofsolanabeach.org](http://www.cityofsolanabeach.org) 858-720-2400

**AFFIDAVIT OF POSTING**

STATE OF CALIFORNIA  
 COUNTY OF SAN DIEGO  
 CITY OF SOLANA BEACH } §

I, Angela Ivey, City Clerk of the City of Solana Beach, do hereby certify that this Agenda for the September 25, 2024 Council Meeting was called by City Council, Successor Agency to the Redevelopment Agency, Public Financing Authority, and the Housing Authority of the City of Solana Beach, California, was provided and posted on September 18, 2024 at 5:30 p.m. on the City Bulletin Board at the entrance to the City Council Chambers. Said meeting is held at 6:00 p.m., September 25, 2024, in the Council Chambers, at City Hall, 635 S. Highway 101, Solana Beach, California.

Angela Ivey, City Clerk  
 City of Solana Beach, CA

**UPCOMING CITIZEN CITY COMMISSION AND COMMITTEE MEETINGS:**

Regularly Scheduled, or Special Meetings that have been announced, are posted on each Citizen Commission’s Agenda webpage. See the [Citizen Commission’s Agenda webpages](#) or the City’s Events Calendar for updates.

- **Budget & Finance Commission**
- **Climate Action Commission**
- **Parks & Recreation Commission**
- **Public Arts Commission**
- **View Assessment Commission**



# STAFF REPORT CITY OF SOLANA BEACH

**TO:** Honorable Mayor and City Councilmembers  
**FROM:** Alyssa Muto, City Manager  
**MEETING DATE:** September 25, 2024  
**ORIGINATING DEPT:** Finance  
**SUBJECT:** Register of Demands

## **BACKGROUND:**

Section 3.04.020 of the Solana Beach Municipal Code requires that the City Council ratify a register of demands which represents all financial demands made upon the City for the applicable period.

### **Register of Demands: 08/17/2024 through 09/06/2024**

Check Register - Disbursement Fund (Attachment 1)		\$	896,984.89
Net Payroll Retiree Health	September 6, 2024		2,842.00
Net Payroll Staff P05	August 30, 2024		<u>296,207.73</u>
<b>TOTAL</b>		<b>\$</b>	<b><u>1,196,034.62</u></b>

## **DISCUSSION:**

Staff certifies that the register of demands has been reviewed for accuracy, that funds are available to pay the above demands, and that the demands comply with the adopted budget.

## **CEQA COMPLIANCE STATEMENT:**

Not a project as defined by CEQA.

## **FISCAL IMPACT:**

The register of demands for August 17, 2024, through September 6, 2024, reflects total expenditures of \$1,196,034.62 from various City sources.

## **WORK PLAN:** N/A

## **OPTIONS:**

- Ratify the register of demands.
- Do not ratify and provide direction.

CITY COUNCIL ACTION: \_\_\_\_\_  
 \_\_\_\_\_



**CITY STAFF RECOMMENDATION:**

Staff recommends that the City Council ratify the above register of demands.



Alyssa Muto, City Manager

Attachments:

1. Check Register – Disbursement Fund



# City of Solana Beach

## Register of Demands

8/17/2024 - 9/6/2024

Department Vendor	Description	Date	Check/EFT Number	Amount
<b>100 - GENERAL FUND</b>				
MISSION SQUARE PLAN 302817	Payroll Run 1 - Warrant P05	08/29/2024	9001652	\$13,991.26
CITY OF DEL MAR	REIMB: FALL 23 FIRE CLASS #71811-2 STUDENTS	09/06/2024	107214	\$567.00
CITY OF DEL MAR	REIMB: SPRING 24 FIRE CLASS #31879-2 STUDENTS	09/06/2024	107214	\$567.00
AFLAC	AUGUST 24	08/29/2024	107169	\$914.88
LESA HEEBNER	CANDIDATE STATEMENT REFUND	08/23/2024	107147	\$2,200.00
JEWEL EDSON	CANDIDATE STATEMENT REFUND	08/23/2024	107146	\$1,900.00
DAVID ZITO	CANDIDATE STATEMENT REFUND	08/23/2024	107168	\$1,900.00
PATRICIA SULLIVAN	FCCC SECURITY DEPOSIT REFUND - 08/04/24	08/23/2024	107153	\$500.00
CALPERS	P05 457 CONTRIBUTION	09/03/2024	990120317	\$3,715.53
CALPERS	P04 457 CONTRIBUTIONS	08/20/2024	990120320	\$3,783.61
STERLING HEALTH SERVICES, INC.	P04 FSA/DCA CONTRIBUTIONS	08/23/2024	9001645	\$2,106.98
STERLING HEALTH SERVICES, INC.	P04 FSA/DCA CONTRIBUTIONS	08/23/2024	9001645	\$1,825.04
STERLING HEALTH SERVICES, INC.	PC02 FSA CONTRIBUTIONS	08/23/2024	9001645	\$266.67
INSTATAX	P04 TAX PAYMENT	08/21/2024	990120322	\$32,773.73
INSTATAX	P04 TAX PAYMENT	08/21/2024	990120322	\$6,278.84
INSTATAX	P04 TAX PAYMENT	08/21/2024	990120322	\$9,399.48
INSTATAX	P04 TAX PAYMENT	08/21/2024	990120322	\$12,607.13
INSTATAX	P04 TAX PAYMENT	08/21/2024	990120322	\$2,990.38
INSTATAX	P05 TAX PAYMENT	08/30/2024	990120323	\$60,249.92
INSTATAX	P05 TAX PAYMENT	08/30/2024	990120323	\$3,473.18
INSTATAX	P05 TAX PAYMENT	08/30/2024	990120323	\$11,716.74
INSTATAX	P05 TAX PAYMENT	08/30/2024	990120323	\$23,170.91
INSTATAX	P05 TAX PAYMENT	08/30/2024	990120323	\$2,592.60
FIDELITY SECURITY LIFE INSURANCE COMPANY	SEP 24-VISION	09/06/2024	107220	\$512.74
PAYMENTUS CORPORATION	JULY 24 CC FEES	08/23/2024	107154	\$800.83
SELF INSURED SERVICES COMPANY	SEPTEMBER 24-DENTAL	09/06/2024	9001662	\$3,046.80
SELF INSURED SERVICES COMPANY	SEPTEMBER 24-LIFE&ADD	08/29/2024	9001649	\$1,276.28
SELF INSURED SERVICES COMPANY	SEPTEMBER 24-SUPP LIFE	08/29/2024	9001649	\$350.75
SELF INSURED SERVICES COMPANY	SEPTEMBER 24-LTD	08/29/2024	9001649	\$1,166.79
PRE-PAID LEGAL SERVICES, INC	JULY PPD LEGAL	08/23/2024	107157	\$25.90
PRE-PAID LEGAL SERVICES, INC	AUG 24 PPD LEGAL	08/23/2024	107157	\$25.90
CONSTRUCTION TESTING & ENGINEERING, INC.	JUL 24- INSPECTION/REVIEW	09/06/2024	9001670	\$3,205.00
CONSTRUCTION TESTING & ENGINEERING, INC.	AUG 24- INSPECTION/REVIEW	09/06/2024	9001670	\$1,390.00
ERIN HENSON	RFND: FCCC-08/03/24	08/29/2024	107185	\$500.00
SONYA PERL SURVIVORS TRUST	PROJECT FEE REFUND: APNs 298-010-31/32	08/29/2024	107197	\$27,000.00
<b>TOTAL GENERAL FUND</b>				<b>\$238,791.87</b>
<b>1005100 - CITY COUNCIL</b>				
SAN DIEGUITO RIVER PARK JPA	FY 24-25-SAN DIEGUITO RIVER PARK JPA	08/29/2024	107194	\$90,466.00
US BANK	CLOSED SESSION SUPPLIES	08/29/2024	107179	\$151.67
US BANK	CLOSED SESSION SUPPLIES	08/29/2024	107179	\$5.55
US BANK	CLOSED SESSION SUPPLIES	08/29/2024	107179	\$195.23
US BANK	CITY MANAGER SUPPLIES	08/29/2024	107179	\$5.55

**TOTAL CITY COUNCIL****\$90,824.00****1005150 - CITY CLERK**

BEST BEST & KRIEGER LLP	JUL 24-ELECTION SERVICES	09/06/2024	107210	\$595.00
US BANK	TRANSCRIPTION SERVICES	08/29/2024	107179	\$36.75
US BANK	IIMC MEMBERSHIP	08/29/2024	107179	\$60.00
US BANK	IIMC TRAINING ""MIND EDGE""	08/29/2024	107179	\$95.00
US BANK	OFFICE SUPPLIES	08/29/2024	107179	\$166.88
US BANK	NOTICE OF ELECTION TRANSLATION (4)	08/29/2024	107179	\$907.56
US BANK	SIGNATURE STAMP	08/29/2024	107179	\$34.32
US BANK	OFFICE SUPPLIES	08/29/2024	107179	\$57.62
US BANK	EMAIL ENCRYPTION SERVICE	08/29/2024	107179	\$22.50
US BANK	PRIME CHARGE	08/29/2024	107179	\$9.99
US BANK	TRANSCRIPTION SERVICE	08/29/2024	107179	\$48.25
US BANK	PACKING SUPPLIES	08/29/2024	107179	\$107.75
US BANK	CCA MEMBERSHIP	08/29/2024	107179	\$250.00
FEDEX	MAILING-08/07/24	09/06/2024	107219	\$29.36
GRANICUS INC	GRANICUS - RECORDS REQUEST SOFTWARE	08/23/2024	107143	\$5,205.23
CORODATA RECORDS MANAGEMENT, INC	JUL 24 - STORAGE	09/06/2024	107216	\$1,227.45
EL LATINO NEWSPAPER	ELECTION NOTICE AD	09/06/2024	107218	\$660.00
STAPLES CONTRACT & COMMERCIAL	SHIPPING TAPE/AIR DUSTERS/PAPER/BINDER CLIPS	09/06/2024	107225	\$357.89
STAPLES CONTRACT & COMMERCIAL	PENS	09/06/2024	107225	\$42.17
STAPLES CONTRACT & COMMERCIAL	BATTERIES/FILE FOLDERS	09/06/2024	107225	\$85.77
STAPLES CONTRACT & COMMERCIAL	SCISSORS/DESK PAD	09/06/2024	107225	\$63.68
STAPLES CONTRACT & COMMERCIAL	ANT KILLER/NOTEBOOK/BINDERS	09/06/2024	107225	\$72.90
KFORCE INC.	TEMP SERVICE-07/04/24	09/06/2024	9001666	\$600.00
KFORCE INC.	TEMP SERVICE-07/11/24	09/06/2024	9001666	\$1,280.00
KFORCE INC.	TEMP SERVICE-07/18/24	09/06/2024	9001666	\$320.00
KFORCE INC.	TEMP SERVICE-07/25/24	09/06/2024	9001666	\$760.00
KFORCE INC.	TEMP SERVICE-08/08/24	09/06/2024	9001666	\$646.80
KFORCE INC.	TEMP SERVICE-08/15/24	09/06/2024	9001666	\$520.00
KFORCE INC.	TEMP SERVICE-08/22/24	09/06/2024	9001666	\$800.00

**TOTAL CITY CLERK****\$15,062.87****1005200 - CITY MANAGER**

US BANK	COUCH	08/29/2024	107179	\$761.23
US BANK	PENS	08/29/2024	107179	\$18.38
US BANK	WALL ART HANGING SUPPLIES	08/29/2024	107179	\$10.76
US BANK	LUNCH WITH CARLSBAD CM	08/29/2024	107179	\$48.31
US BANK	GCC 2024 ANNUAL MEETING	08/29/2024	107179	\$75.00
US BANK	CCEC CONVENTION	08/29/2024	107179	\$451.84

**TOTAL CITY MANAGER****\$1,365.52****1005250 - LEGAL SERVICES**

HOGAN LAW APC	JUNE 24 LEGAL SERVICES	08/29/2024	107189	\$3,022.50
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**TOTAL LEGAL SERVICES****\$3,022.50****1005300 - FINANCE**

US BANK	TRAINING MATERIALS	08/29/2024	107179	\$2,501.63
WILLDAN	USER FEE STUDY & COST ALLOCATION PLAN	08/23/2024	9001648	\$9,341.00
HDL COREN & CONE	FY24 ACFR STAT PACKAGE	08/29/2024	9001651	\$695.00
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-DESK FOOTREST	09/06/2024	9001661	\$32.29
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-OFFICE CHAIR	09/06/2024	9001661	\$217.49
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-GLOVES/HEADPHONES	09/06/2024	9001661	\$42.50
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-HIGHLIGHTER/DESKPAD	09/06/2024	9001661	\$54.03

AMAZON.COM SALES, INC	16ML-6YT6-6RCP-RECEIPT BOOK	09/06/2024	9001661	\$33.00
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-CUSTOM STAMP	09/06/2024	9001661	\$16.14
STAPLES CONTRACT & COMMERCIAL	MAY 24 OFFICE CHAIR	09/06/2024	107225	(\$311.88)
<b>TOTAL FINANCE</b>				<b>\$12,621.20</b>
<b>1005350 - SUPPORT SERVICES</b>				
XEROX CORPORATION	JUL 24-XEROX -UPSTAIRS	08/23/2024	107167	\$255.11
XEROX CORPORATION	JUL 24-XEROX -UPSTAIRS	08/23/2024	107167	\$298.25
XEROX CORPORATION	JUL 24-XEROX -PLN	08/23/2024	107167	\$75.60
XEROX CORPORATION	JUL 24-XEROX -PLN	08/23/2024	107167	\$546.78
XEROX CORPORATION	JUL 24-XEROX -CLK	08/23/2024	107167	\$370.48
XEROX CORPORATION	JUL 24-XEROX -CLK	08/23/2024	107167	\$271.68
XEROX CORPORATION	JUL 24 XEROX FIERY -CLK	08/23/2024	107167	\$122.84
XEROX CORPORATION	JUL 24 -XEROX FIERY - UPSTAIRS	08/23/2024	107167	\$132.61
XEROX CORPORATION	JUL 24-XEROX FIERY - PLN	08/23/2024	107167	\$132.61
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-COFFEE PODS/SPOONS	09/06/2024	9001661	\$110.80
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-COFFEE CREAMER/FORKS	09/06/2024	9001661	\$78.76
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-LABEL MAKER/LABEL TAPE	09/06/2024	9001661	\$76.43
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-BOWLS/PLATES	09/06/2024	9001661	\$85.90
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-FOLDERS	09/06/2024	9001661	\$33.76
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-COFFEE PODS	09/06/2024	9001661	\$78.27
<b>TOTAL SUPPORT SERVICES</b>				<b>\$2,669.88</b>
<b>1005400 - HUMAN RESOURCES</b>				
US BANK	APPRECIATION GIFT	08/29/2024	107179	\$163.11
US BANK	SECURE FAX SUBSCRIPTION	08/29/2024	107179	\$49.99
US BANK	SYMPATHY FLOWERS	08/29/2024	107179	\$106.09
DEPARTMENT OF JUSTICE	JUL 24-FINGERPRINT APP	08/29/2024	107182	\$64.00
ROBERT MCPHEE	TUITION REIMBURSE	08/23/2024	107159	\$2,000.00
<b>TOTAL HUMAN RESOURCES</b>				<b>\$2,383.19</b>
<b>1005450 - INFORMATION SERVICES</b>				
COX COMMUNICATIONS INC	0013410039730701-08/19/24-09/18/24	08/29/2024	107180	\$321.77
CDW GOVERNMENT INC	KEYBOARD	08/29/2024	9001650	\$167.05
US BANK	CONSTANT CONTACT	08/29/2024	107179	\$105.26
US BANK	DOMAIN RENEWAL	08/29/2024	107179	\$52.38
US BANK	MISAC CONFERENCE REGISTRATION	08/29/2024	107179	\$675.00
US BANK	MISAC MEMBERSHIP	08/29/2024	107179	\$130.00
VERIZON WIRELESS-SD	670601022-00001-06/24/24-07/23/24	08/29/2024	107200	\$128.05
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-PHONE CORD DETANGLER	09/06/2024	9001661	\$21.72
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-PHONE CORDS	09/06/2024	9001661	\$45.63
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-PHONE CORD	09/06/2024	9001661	\$27.56
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-JACKS/PASS THROUGH/PANELS/CORDS	09/06/2024	9001661	\$774.76
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-TV WALL MOUNT	09/06/2024	9001661	\$59.37
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-SMART TV	09/06/2024	9001661	\$321.36
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-CABLES	09/06/2024	9001661	\$108.70
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-MOUNTING KIT	09/06/2024	9001661	\$289.14
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-ETHERNET PATCH CABLE	09/06/2024	9001661	\$20.51
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-ETHERNET CABLES	09/06/2024	9001661	\$39.99
<b>TOTAL INFORMATION SERVICES</b>				<b>\$3,288.25</b>
<b>1005550 - PLANNING</b>				
US BANK	SIDE TABLE	08/29/2024	107179	\$130.49
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-PENS/AIR VENT DEFLECTOR	09/06/2024	9001661	\$16.45

<b>TOTAL PLANNING</b>					<b>\$146.94</b>
<b>1005560 - BUILDING SERVICES</b>					
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-OFFICE CHAIR	09/06/2024	9001661		\$292.54
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-PENS/AIR VENT DEFLECTOR	09/06/2024	9001661		\$25.69
<b>TOTAL BUILDING SERVICES</b>					<b>\$318.23</b>
<b>1005590 - CODE ENFORCEMENT</b>					
US BANK	CAR WASHES (3)	08/29/2024	107179		\$30.00
US BANK	MISC SUPPLIES	08/29/2024	107179		\$14.00
US BANK	CODE DEPART FRIDGE	08/29/2024	107179		\$303.08
VERIZON WIRELESS-SD	442224168-0001-06/24/24-07/23/24	08/29/2024	107200		\$141.29
<b>TOTAL CODE ENFORCEMENT</b>					<b>\$488.37</b>
<b>1006120 - FIRE DEPARTMENT</b>					
US BANK	BOLTS	08/29/2024	107179		\$12.31
US BANK	FIRE STATION SUPPLIES	08/29/2024	107179		\$457.51
US BANK	SMALL EQUIPMENT	08/29/2024	107179		\$1,503.62
US BANK	AIR PRESSURE ATTACHMENTS	08/29/2024	107179		\$133.24
US BANK	FIRE SPARKY COSTUME	08/29/2024	107179		\$494.04
CULLIGAN OF SAN DIEGO	08/01-09/30 CULLIGAN REVERSE OSMOSIS	08/23/2024	107138		\$99.07
ACE UNIFORMS LLC	UNIFORM	08/23/2024	9001638		\$378.86
VERIZON WIRELESS-SD	962428212-00001-06/29/24-07/28/24	08/29/2024	107200		\$729.00
CITY OF ENCINITAS	FY24 FIRE RESOURCE SHARE OF COST-TECH SUP/TRAINING	08/23/2024	107136		\$4,237.38
CITY OF ENCINITAS	FY24 FIRE RESOURCE SHARE OF COST-TECH SUP/TRAINING	08/23/2024	107136		\$59.99
PARKHOUSE TIRE INC	T#237-TIRES	08/23/2024	107152		\$2,217.46
REGIONAL COMMS SYS, MS 056 - RCS	JUL 24-FIRE RADIOS	08/29/2024	107192		\$1,298.00
REGIONAL COMMS SYS, MS 056 - RCS	JUL 24-SHERIFF RADIOS	08/29/2024	107192		\$796.50
REGIONAL COMMS SYS, MS 056 - RCS	JUL 24-CAP CODE	08/29/2024	107192		\$32.50
FIRE STATS, LLC	JUL 24-MAINT & OPERATION	08/29/2024	107187		\$212.50
WEX BANK	JUL 24-FUEL & CR TAX	08/29/2024	107202		\$1,728.90
SPOT ON STITCHING EMBROIDERY	EMBROIDERED LOGO HAT	08/29/2024	107198		\$53.00
NORTH COUNTY DISPATCH (JPA)	FY24 CAD LICENSE AND MAINTENCE	08/29/2024	107191		\$1,398.96
NORTH COUNTY DISPATCH (JPA)	FY25 QTR 1 NORTH COUNTY DISPATCH	08/23/2024	107150		\$45,535.80
LINEGEAR FIRE & RESCUE EQUIPMENT	STRUCTURE FIRE GLOVES	08/23/2024	107148		\$4,456.57
<b>TOTAL FIRE DEPARTMENT</b>					<b>\$65,835.21</b>
<b>1006130 - ANIMAL CONTROL</b>					
HABITAT PROTECTION, INC	AUG 24 - DEAD ANIMAL REMOVAL	08/23/2024	9001642		\$160.00
<b>TOTAL ANIMAL CONTROL</b>					<b>\$160.00</b>
<b>1006170 - MARINE SAFETY</b>					
CAMEO PAPER & JANITORIAL SUPPLY INC	PAPER TOWELS	08/23/2024	107134		\$78.74
US BANK	SCHEDULING SOFTWARE	08/29/2024	107179		\$242.20
US BANK	LAPEL MICS (2)	08/29/2024	107179		\$38.93
US BANK	BINOCULARS (2)	08/29/2024	107179		\$280.13
US BANK	SWIFTWATER HELMETS	08/29/2024	107179		\$1,002.15
US BANK	SENIOR STAFF POLOS	08/29/2024	107179		\$1,056.52
US BANK	SUNGLASSES	08/29/2024	107179		\$80.81
US BANK	OFFICE SUPPLIES	08/29/2024	107179		\$137.53
US BANK	SPRAY PAINT/SMALL TOOLS	08/29/2024	107179		\$72.99
US BANK	WATER TEMP THERMOMETER	08/29/2024	107179		\$33.55
US BANK	REGIONAL MEETING SUPPLIES	08/29/2024	107179		\$95.42
US BANK	MISC DEPT SUPPLIES	08/29/2024	107179		\$29.81

US BANK	MEDICAL SUPPLIES	08/29/2024	107179	\$291.99
US BANK	MEDICAL SUPPLIES	08/29/2024	107179	\$65.00
US BANK	WETSUIT	08/29/2024	107179	\$353.44
US BANK	POWERSTRIP	08/29/2024	107179	\$34.25
CULLIGAN OF SAN DIEGO	AUG 24- EQUIPMENT-MS	08/29/2024	107181	\$56.89
VERIZON WIRELESS-SD	962428212-00001-06/29/24-07/28/24	08/29/2024	107200	\$152.04
GLOBE AIRCRAFT COMPANY	REFLECTIVE LIFEGUARD GRAPHIC APPLICATION	08/29/2024	107188	\$247.83
AT&T CALNET 3	9391019469-06/20/24-07/19/24	08/29/2024	107170	\$33.59
AT&T CALNET 3	9391019469-07/20/24-08/19/24	08/29/2024	107171	\$37.05
AT&T CALNET 3	2022 PAST DUE INVOICE	08/29/2024	107172	\$108.85
AT&T CALNET 3	9391012281-06/25/21-07/24/21	08/29/2024	107173	\$95.60
AT&T CALNET 3	9391012281-07/25/21-08/24/21	08/29/2024	107174	\$87.48
AT&T CALNET 3	9391012281-01/25/22-02/24/22	08/29/2024	107175	\$65.99
AT&T CALNET 3	9391012281-02/25/22-03/24/22	08/29/2024	107176	\$66.01

**TOTAL MARINE SAFETY****\$4,844.79****1006510 - ENGINEERING**

US BANK	APWA PWX	08/29/2024	107179	\$569.00
US BANK	APWA PWX	08/29/2024	107179	\$1,118.00
US BANK	APWA FLIGHT	08/29/2024	107179	\$408.95
US BANK	APWA FLIGHT	08/29/2024	107179	\$347.96
US BANK	APWA LUNCHEON	08/29/2024	107179	\$30.00
US BANK	PLAN STORAGE TUBES	08/29/2024	107179	\$192.36
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$53.07
BUSINESS PRINTING COMPANY INC	BUSINESS CARDS	08/29/2024	107178	\$127.00
BUSINESS PRINTING COMPANY INC	BUSINESS CARDS	08/29/2024	107178	\$2.32
WEST COAST CIVIL, INC	JUL 24-CIVIL ENGINEERING SERVICES	08/29/2024	107201	\$3,800.00
5 ELEMENTS FIRE & WATERSCAPES, INC.	HWY 101 FOUNTAIN REPAIRS- LIGHT CORD SEAL	08/23/2024	107129	\$3,865.00
5 ELEMENTS FIRE & WATERSCAPES, INC.	HWY 101 FOUNTAIN REPAIRS - TILE PREP	08/23/2024	107129	\$16,300.00
ENVIRONMENTAL SYSTEMS RESEARCH	FY 25-SUBSCRIPTION	08/29/2024	107186	\$2,090.00

**TOTAL ENGINEERING****\$28,903.66****1006520 - ENVIRONMENTAL SERVICES**

MISSION LINEN & UNIFORM INC	FY25 UNIFORM SERVICES FOR PUBLIC WORKS	09/06/2024	107222	\$14.80
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$15.14
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$18.43
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$15.14
SANTA FE IRRIGATION DISTRICT	MOVEABLE 07/02/24-08/01/24	08/23/2024	107161	\$217.19
MIKHAIL OGAWA ENGINEERING, INC.	JUL 24- STORMWATER PROGRAM	08/29/2024	9001654	\$8,275.96
BOOT WORLD, INC.	FY25 PROTECTIVE FOOTWEAR	08/23/2024	107133	\$198.73
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$53.06
CLEAN EARTH ENVIROMENTAL SOLUTIONS	JUL 24- HHW COLLECTION	09/06/2024	107215	\$2,492.00
IDRAINS LLC	STORM DRAIN MAINTENCE / O-STORM	08/23/2024	107130	\$1,340.00

**TOTAL ENVIRONMENTAL SERVICES****\$12,640.45****1006530 - STREET MAINTENANCE**

MISSION LINEN & UNIFORM INC	FY25 UNIFORM SERVICES FOR PUBLIC WORKS	09/06/2024	107222	\$24.07
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$24.60
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$29.95
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$24.60
DIXIELINE LUMBER CO INC	EAR PROTECTORS/GLOVES/SAFETY VEST/BOLT SWIVEL	09/06/2024	107217	\$155.78
DIXIELINE LUMBER CO INC	FLY TRAPS	09/06/2024	107217	\$17.61
DIXIELINE LUMBER CO INC	CHLORINE DISPENSER/CHLORINE TABS	08/23/2024	107141	\$75.02
DIXIELINE LUMBER CO INC	WIRE CONNECTOR/SCREWDRIVER SLOT/VELCRO	08/29/2024	107183	\$14.45

	STRIPS			
SANTA FE IRRIGATION DISTRICT	VIA DE LA VALLE 07/02/24-08/01/24	08/23/2024	107161	\$91.05
SDG&E CO INC	UTILITIES-07/01/24-08/06/24	08/29/2024	107195	\$467.15
SDG&E CO INC	UTILITIES-07/06/24-08/06/24	08/29/2024	107195	\$1,002.03
US BANK	PAINT	08/29/2024	107179	\$414.29
US BANK	TIRES	08/29/2024	107179	\$681.16
BOOT WORLD, INC.	FY25 PROTECTIVE FOOTWEAR	08/23/2024	107133	\$14.84
BOOT WORLD, INC.	BOOTS	09/06/2024	107212	\$169.66
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$53.06
NISSHO OF CALIFORNIA	JUL 24 MONTHLY MAINTENANCE SERVICES	08/23/2024	9001643	\$1,504.95
<b>TOTAL STREET MAINTENANCE</b>				<b>\$4,764.27</b>

**1006540 - TRAFFIC SAFETY**

SDG&E CO INC	UTILITIES-07/01/24-08/06/24	08/29/2024	107195	\$562.43
SDG&E CO INC	UTILITIES-07/06/24-08/06/24	08/29/2024	107195	\$1,260.62
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$37.90
AT&T CALNET 3	9391012279-07/24/24-08/23/24	09/06/2024	107207	\$66.86
AT&T CALNET 3	9391012277-12/24/23-01/23/24-PO 224-39	09/06/2024	107208	\$18.48
AT&T CALNET 3	9391012279-12/24/23-01/23/24- PO 224-39	09/06/2024	107209	\$62.98
YUNEX LLC	JUL 24-TRAFFIC SIGNAL MAINT/REPAI	08/29/2024	9001659	\$1,120.00
<b>TOTAL TRAFFIC SAFETY</b>				<b>\$3,129.27</b>

**1006550 - STREET CLEANING**

SANTA FE IRRIGATION DISTRICT	VIA DE LA VALLE 07/02/24-08/01/24	08/23/2024	107161	\$53.48
<b>TOTAL STREET CLEANING</b>				<b>\$53.48</b>

**1006560 - PARK MAINTENANCE**

MISSION LINEN & UNIFORM INC	FY25 UNIFORM SERVICES FOR PUBLIC WORKS	09/06/2024	107222	\$17.59
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$17.98
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$21.88
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$17.98
RANCHO SANTA FE SECURITY SYS INC	SEP 24-ALARM MONITORING	09/06/2024	107223	\$331.20
DIXIELINE LUMBER CO INC	ANT KILLER/SUPER GLUE/THREAD LOCKER	09/06/2024	107217	\$35.96
DIXIELINE LUMBER CO INC	GLOVES	09/06/2024	107217	\$21.52
DIXIELINE LUMBER CO INC	NITRILE GLOVES	08/23/2024	107141	\$21.52
DIXIELINE LUMBER CO INC	PUTTY/SHEET METAL SCREWS	08/23/2024	107141	\$46.95
DIXIELINE LUMBER CO INC	LOCK PLIERS/ STEEL PIPE WRENCH	08/23/2024	107141	\$57.24
DIXIELINE LUMBER CO INC	DIA .25IN POLYETHYLENE PIPE	08/23/2024	107141	\$3.10
DIXIELINE LUMBER CO INC	HEX BOLTS/NUTS/LOCK WASHERS	08/29/2024	107183	\$1.51
DIXIELINE LUMBER CO INC	ROCK SALT	08/29/2024	107183	\$39.12
SANTA FE IRRIGATION DISTRICT	005506-018 07/02/24-08/01/24	08/23/2024	107161	\$317.55
SANTA FE IRRIGATION DISTRICT	005506-019 07/02/24-08/01/24	08/23/2024	107161	\$144.53
SANTA FE IRRIGATION DISTRICT	005506-021 07/02/24-08/01/24	08/23/2024	107161	\$2,896.50
SANTA FE IRRIGATION DISTRICT	005979-005-06/04/24-08/01/24	08/23/2024	107161	\$449.26
W.W. GRAINGER, INC	SCREWS	09/06/2024	9001664	\$5.80
W.W. GRAINGER, INC	SPRINKLER VALVES/HOSE SWIVEL	08/23/2024	9001641	\$54.20
NAPA AUTO PARTS INC	BATTERY/FEES	08/29/2024	107190	\$233.65
US BANK	JULY 4TH RESTROOM RENTALS	08/29/2024	107179	\$450.66
US BANK	JULY 4TH RESTROOM RENTALS	08/29/2024	107179	\$1,032.64
US BANK	TRASH CAN LINERS	08/29/2024	107179	\$161.43
US BANK	BOLTS	08/29/2024	107179	\$14.45
BOOT WORLD, INC.	FY25 PROTECTIVE FOOTWEAR	08/23/2024	107133	\$550.00
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$75.81
NISSHO OF CALIFORNIA	JUL 24- MAINTENANCE PEST	08/23/2024	9001643	\$2,772.00

NISSHO OF CALIFORNIA	JUL 24 MONTHLY MAINTENANCE SERVICES	08/23/2024	9001643	\$9,871.53
HD SUPPLY, INC.	CLOROX/TRASH LINERS	08/23/2024	107144	\$1,329.07
<b>TOTAL PARK MAINTENANCE</b>				<b>\$20,992.63</b>
<b>1006570 - PUBLIC FACILITIES</b>				
DIXIELINE LUMBER CO INC	TAPE/SCREWS/PIPE ELBOW	09/06/2024	107217	\$41.69
DIXIELINE LUMBER CO INC	P-TRAP/THREADED TUBE/SAW BLADE	09/06/2024	107217	\$54.78
DIXIELINE LUMBER CO INC	PAINT BRUSHES/LYSOL WIPES	08/29/2024	107183	\$24.64
SDG&E CO INC	UTILITIES-07/01/24-08/06/24	08/29/2024	107195	\$3,356.20
SDG&E CO INC	UTILITIES-07/06/24-08/06/24	08/29/2024	107195	\$9,428.95
LEE'S LOCK & SAFE INC	KEYS/PIN #	09/06/2024	107221	\$60.73
US BANK	PRINTER TONER	08/29/2024	107179	\$167.46
NISSHO OF CALIFORNIA	JUL 24 MONTHLY MAINTENANCE SERVICES	08/23/2024	9001643	\$3,338.00
CINTAS CORPORATION NO. 2	FIRST AID SUPPLIES-CH	09/06/2024	107213	\$555.38
STANDARD PLUMBING SUPPLY COMPANY	SINK DRAIN/ELBOW JOINTS/PIPE WRAP	08/29/2024	107199	\$79.15
STANDARD PLUMBING SUPPLY COMPANY	M-PACT SYSTEM VALVE	08/23/2024	107162	\$153.01
CALIFORNIA OFFICE CLEANING, INC	JUL 24-JANITORIAL/CUSTODIAL SV	08/23/2024	9001639	\$300.00
24 HOUR ELEVATOR, INC	ELEVATOR PREVENTATIVE MAINT/REPAIR	08/23/2024	107128	\$204.20
REAL ESTATE CONSULTING & SERVICES INC	FY25 ON-CALL AS-NEEDED HANDYMAN	09/06/2024	107226	\$690.00
<b>TOTAL PUBLIC FACILITIES</b>				<b>\$18,454.19</b>
<b>1007100 - COMMUNITY SERVICES</b>				
US BANK	SOCIAL MEDIA FILMING EQUIPMENT	08/29/2024	107179	\$220.75
US BANK	SOCIAL MEDIA MICROPHONE	08/29/2024	107179	\$20.46
KAYLA MOSHKI	REIMB - CAPIO CONF 05/2024	09/06/2024	9001665	\$224.70
<b>TOTAL COMMUNITY SERVICES</b>				<b>\$465.91</b>
<b>1007110 - GF-RECREATION</b>				
ABLE PATROL & GUARD, INC	AUG 24-FCCC GAURD SRVC	09/06/2024	107204	\$297.00
ALIANAS PARTY RENTALS	DIA DE LOS MUERTOS RENTALS	08/23/2024	107131	\$1,075.00
CALIFORNIA OFFICE CLEANING, INC	AUG 24-FC CLEANING	09/06/2024	9001663	\$300.00
CALIFORNIA OFFICE CLEANING, INC	FCCC CLEANING- REMAINING BAL INV#4825	09/06/2024	9001663	\$60.00
<b>TOTAL GF-RECREATION</b>				<b>\$1,732.00</b>
<b>1205460 - SELF INSURANCE RETENTION</b>				
GEORGE HILLS COMPANY, INC.	GL CLAIMS SERVICES - JULY 24	08/23/2024	9001640	\$224.40
BICKMORE ACTUARIAL	FY 25-ACTUARIAL REVIEW	09/06/2024	107211	\$2,600.00
DEAN GAZZO ROISTACHER LLP	2308.MACDONALD PROF SVC - JULY 24	08/23/2024	107139	\$1,336.32
<b>TOTAL SELF INSURANCE RETENTION</b>				<b>\$4,160.72</b>
<b>1255465 - WORKERS COMPENSATION</b>				
CORVEL ENTERPRISE COMP INC.	FY25 CLAIMS SERVICES - MEDICARE AGENT REPORTING	08/23/2024	107137	\$250.00
CORVEL ENTERPRISE COMP INC.	FY25 CLAIMS SERVICES - FNOL FEES	08/23/2024	107137	\$74.00
CORVEL ENTERPRISE COMP INC.	FY25 CLAIMS SERVICES - ANNUAL ADMIN FEE	08/23/2024	107137	\$10,350.00
CORVEL ENTERPRISE COMP INC.	FY25 CLAIMS SERVICES - JULY	08/23/2024	107137	\$229.00
PINNACOL ASSURANCE	FY25 WORKERS COMP INS/CO	08/23/2024	107155	\$945.00
<b>TOTAL WORKERS COMPENSATION</b>				<b>\$11,848.00</b>
<b>1356170 - ASSET REPLACEMENT-MARN SFTY</b>				
US BANK	TRUCK TOOLBOX	08/29/2024	107179	\$1,105.46
<b>TOTAL ASSET REPLACEMENT-MARN SFTY</b>				<b>\$1,105.46</b>
<b>1356510 - ASSET REPLACEMENT-ENGINEER</b>				
SHULTZ AUDIO VIDEO	MARINE SAFETY AUDIO REPLACEMENT	08/29/2024	107196	\$4,979.37
<b>TOTAL ASSET REPLACEMENT-ENGINEER</b>				<b>\$4,979.37</b>
<b>1605360 - OPEB OBLIGATION</b>				



MIDAMERICA	SEPTEMBER 24	09/06/2024	9001668	\$9,095.00
<b>TOTAL OPEB OBLIGATION</b>				<b>\$9,095.00</b>
<b>2026510 - GAS TAX-ENGINEERING</b>				
YUNEX LLC	9330.01 TRAFFIC SIGNAL IMPROVE	08/29/2024	9001659	\$2,883.29
<b>TOTAL GAS TAX-ENGINEERING</b>				<b>\$2,883.29</b>
<b>2037510 - HIGHWAY 101 LANDSC #33</b>				
SDG&E CO INC	UTILITIES-07/06/24-08/06/24	08/29/2024	107195	\$2,897.95
NISSHO OF CALIFORNIA	JUL 24 MONTHLY MAINTENANCE SERVICES	08/23/2024	9001643	\$1,803.79
<b>TOTAL HIGHWAY 101 LANDSC #33</b>				<b>\$4,701.74</b>
<b>2047520 - MID 9C SANTA FE HILLS</b>				
SANTA FE IRRIGATION DISTRICT	005979-014 07/02/24-08/01/24	08/23/2024	107161	\$1,072.93
SANTA FE IRRIGATION DISTRICT	005979-015 07/02/24-08/01/24	08/23/2024	107161	\$621.39
SANTA FE IRRIGATION DISTRICT	005979-016 07/02/24-08/01/24	08/23/2024	107161	\$718.45
SANTA FE IRRIGATION DISTRICT	005979-017 07/02/24-08/01/24	08/23/2024	107161	\$48.81
SANTA FE IRRIGATION DISTRICT	005979-018 07/02/24-08/01/24	08/23/2024	107161	\$150.09
SANTA FE IRRIGATION DISTRICT	005979-019 07/02/24-08/01/24	08/23/2024	107161	\$538.33
SANTA FE IRRIGATION DISTRICT	005979-020 07/02/24-08/01/24	08/23/2024	107161	\$946.33
SANTA FE IRRIGATION DISTRICT	005979-021 07/02/24-08/01/24	08/23/2024	107161	\$1,752.35
SANTA FE IRRIGATION DISTRICT	005979-022 07/02/24-08/01/24	08/23/2024	107161	\$1,465.39
SANTA FE IRRIGATION DISTRICT	005979-023 07/02/23-08/01/23	08/23/2024	107161	\$1,347.23
SANTA FE IRRIGATION DISTRICT	005979-024 07/02/24-08/01/24	08/23/2024	107161	\$1,161.55
SANTA FE IRRIGATION DISTRICT	005979-025 07/02/24-08/01/24	08/23/2024	107161	\$874.59
SANTA FE IRRIGATION DISTRICT	005979-026 07/02/24-08/01/24	08/23/2024	107161	\$1,013.85
SANTA FE IRRIGATION DISTRICT	005979-006-06/04/24-08/01/24	08/23/2024	107161	\$1,852.22
SANTA FE IRRIGATION DISTRICT	005979-007-06/04/24-08/01/24	08/23/2024	107161	\$1,747.82
SANTA FE IRRIGATION DISTRICT	005979-009-06/04/24-08/01/24	08/23/2024	107161	\$1,121.42
SANTA FE IRRIGATION DISTRICT	005979-010-06/04/24-08/01/24	08/23/2024	107161	\$632.71
SANTA FE IRRIGATION DISTRICT	005979-011-06/04/24-08/01/24	08/23/2024	107161	\$708.11
SANTA FE IRRIGATION DISTRICT	005979-012-06/04/24-08/01/24	08/23/2024	107161	\$157.11
SANTA FE IRRIGATION DISTRICT	005979-029-06/15/24-08/15/24	09/06/2024	107224	\$1,063.42
SANTA FE HILLS HOA	JUL 24-FY25 SANTA FE HILLS HOA MID	08/23/2024	9001644	\$18,625.00
<b>TOTAL MID 9C SANTA FE HILLS</b>				<b>\$37,619.10</b>
<b>2057530 - MID 9E ISLA VERDE</b>				
ISLA VERDE HOA	JUL 24-FY25 ISLA VERDE HOA MID	08/23/2024	107145	\$433.33
<b>TOTAL MID 9E ISLA VERDE</b>				<b>\$433.33</b>
<b>2077550 - MID 9H SAN ELIJO #2</b>				
SAN ELIJO HILLS II HOA	JULY-FY25 SAN ELIJO HOA MID	08/23/2024	107160	\$11,100.00
<b>TOTAL MID 9H SAN ELIJO #2</b>				<b>\$11,100.00</b>
<b>2087580 - COASTAL RAIL TRAIL MAINT</b>				
SANTA FE IRRIGATION DISTRICT	005506-020 07/02/24-08/01/24	08/23/2024	107161	\$2,377.66
NISSHO OF CALIFORNIA	JUL 24 MONTHLY MAINTENANCE SERVICES	08/23/2024	9001643	\$7,240.55
<b>TOTAL COASTAL RAIL TRAIL MAINT</b>				<b>\$9,618.21</b>
<b>2117600 - STREET LIGHTING DISTRICT</b>				
SDG&E CO INC	UTILITIES-07/01/24-08/06/24	08/29/2024	107195	\$9,147.03
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$15.16
<b>TOTAL STREET LIGHTING DISTRICT</b>				<b>\$9,162.19</b>
<b>2135550 - DEVELOPER PASS-THRU- PLANNING</b>				
LAURIE LEVINE	JULY 24	09/06/2024	9001667	\$262.50
LAURIE LEVINE	JULY 24	09/06/2024	9001667	\$350.00
LAURIE LEVINE	JULY 24	09/06/2024	9001667	\$481.25

LAURIE LEVINE	JULY 24	09/06/2024	9001667	\$262.50
<b>TOTAL DEVELOPER PASS-THRU- PLANNING</b>				<b>\$1,356.25</b>
<b>2256510 - RTCIP</b>				
YUNEX LLC	9330.01 TRAFFIC SIGNAL IMPROVE	08/29/2024	9001659	\$2,151.71
<b>TOTAL RTCIP</b>				<b>\$2,151.71</b>
<b>2465200 - MISC GRANTS - CM</b>				
US BANK	RSWA-EEP MISC SUPPLIES	08/29/2024	107179	\$9.01
SOLANA CENTER FOR ENVIRONMENTAL	SB1383 FOOD RECOVERY TA & OUTREACH/PO224-168	08/29/2024	9001656	\$1,260.96
SOLANA CENTER FOR ENVIRONMENTAL	SB1383 FOOD RECOVERY TA & OUTREACH/PO224-168	08/29/2024	9001656	\$146.04
REAL ESTATE CONSULTING & SERVICES INC	FY25 ON-CALL AS-NEEDED HANDYMAN	09/06/2024	107226	\$2,845.00
REAL ESTATE CONSULTING & SERVICES INC	FY25 ON-CALL AS-NEEDED HANDYMAN	09/06/2024	107226	\$2,155.00
<b>TOTAL MISC GRANTS - CM</b>				<b>\$6,416.01</b>
<b>2505570 - COASTAL BUSINESS/VISITORS</b>				
DEL MAR BLUE PRINT COMPANY, INC.	SPONSER BOARD FOR MOVIE NIGHT	08/23/2024	107140	\$70.25
US BANK	MOVIE NIGHT LICENSE	08/29/2024	107179	\$415.00
EMBROIDERY IMAGE	COMMISSIONER EVENT SHIRTS	08/23/2024	107142	\$289.14
CHRISTINE ANTONELLI	MOVIE NIGHT SUPPLIES	08/23/2024	107132	\$72.44
SAM CASTELLANO	SOUND EQUIP/TECH - 10.19.2024 DIAS DE LOS MUERTOS	08/23/2024	107135	\$750.00
PLATINUM EVENTS INC	MOVIE NIGHT RENTAL EQUIP-08/10/24	08/23/2024	107156	\$2,030.27
<b>TOTAL COASTAL BUSINESS/VISITORS</b>				<b>\$3,627.10</b>
<b>2556180 - CAMP PROGRAMS</b>				
US BANK	DEPARTMENT SUPPLIES	08/29/2024	107179	\$19.74
US BANK	JG OFFICE TRAILER RENT	08/29/2024	107179	\$446.29
US BANK	COLORED PAPER	08/29/2024	107179	\$14.34
US BANK	JG BOARD FINS	08/29/2024	107179	\$50.75
US BANK	BUOYS	08/29/2024	107179	\$204.00
US BANK	JG CALENDAR SERVICE	08/29/2024	107179	\$12.00
US BANK	DAY CAMP ADMISSIONS	08/29/2024	107179	\$931.00
US BANK	DAY CAMP ADMISSIONS	08/29/2024	107179	\$731.00
US BANK	DAY CAMP ADMISSIONS	08/29/2024	107179	\$665.48
US BANK	JG WOMENS SUITS	08/29/2024	107179	\$221.87
US BANK	JG SUNBLOCK	08/29/2024	107179	\$147.90
US BANK	JG PADLOCKS	08/29/2024	107179	\$68.48
US BANK	JG STORAGE CONTAINER	08/29/2024	107179	\$645.42
US BANK	JG BOARDS	08/29/2024	107179	\$347.96
US BANK	JG BOUYS	08/29/2024	107179	\$245.50
US BANK	BUOYS	08/29/2024	107179	\$1,395.00
US BANK	DAY CAMP ADMISSIONS	08/29/2024	107179	\$1,588.00
WESS TRANSPORTATION SERVICES	CAMP TRANSPORTATION - 07/31/24	08/23/2024	107166	\$691.88
WESS TRANSPORTATION SERVICES	CAMP TRANSPORTATION - 07/24/24	08/23/2024	107166	\$691.88
WESS TRANSPORTATION SERVICES	CAMP TRANSPORTATION - 07/17/24	08/23/2024	107166	\$691.88
WESS TRANSPORTATION SERVICES	CAMP TRANSPORTATION - 07/10/24	08/23/2024	107166	\$691.88
<b>TOTAL CAMP PROGRAMS</b>				<b>\$10,502.25</b>
<b>2706120 - PUBLIC SAFETY- FIRE</b>				
US BANK	UPS RETURN CHARGE MDC MOUNTS	08/29/2024	107179	\$30.79
US BANK	MDC SP RAM MOUNTS REFUND	08/29/2024	107179	(\$135.92)
US BANK	CEILING TILES	08/29/2024	107179	\$949.33
ENTERPRISE RENT A CAR	STRIKETM-VISTA FIRE-07/10/24-07/21/24	08/29/2024	107184	\$804.12
VERIZON WIRELESS-SD	962428212-00001-06/29/24-07/28/24	08/29/2024	107200	\$114.03
RYAN PESTER	STRIKETM-REIMB:PARK FIRE CFAA-07/30/24-08/17/24	08/29/2024	107193	\$479.59

ZACHARY TOTH	VISTA FIRE CFAA REIMBURSABLE	08/23/2024	107163	\$243.42
RANCHO SANTA FE FIRE PROTECTION DISTRICT	CSA-17 PROTOCOL UPDATE CLASSES	08/23/2024	107158	\$213.28
RANCHO SANTA FE FIRE PROTECTION DISTRICT	CSA-17 PROTOCOL UPDATE CLASSES	08/23/2024	107158	\$426.56
BLACK BOX SAFETY, INC	CSA17 BODY ARMOR	08/29/2024	107177	\$13,734.69
<b>TOTAL PUBLIC SAFETY- FIRE</b>				<b>\$16,859.99</b>
<b>4506190 - SAND REPLNSHMNT/RETENTION</b>				
WARWICK GROUP CONSULTANTS, LLC	JUL 24- CONSULTING SERVICES	08/29/2024	9001658	\$5,833.00
SUMMIT ENVIROMENTAL GROUP, INC.	SPECIALTY PLANNING SERVICES SAND/SCOUP/LCP	08/23/2024	9001646	\$3,920.00
<b>TOTAL SAND REPLNSHMNT/RETENTION</b>				<b>\$9,753.00</b>
<b>4595450 - MISC.CAPITALPROJECTS-IS</b>				
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-MICROPHONE	09/06/2024	9001661	\$75.04
AMAZON.COM SALES, INC	16ML-6YT6-6RCP-MINI CONVERTER HD	09/06/2024	9001661	\$677.80
<b>TOTAL MISC.CAPITALPROJECTS-IS</b>				<b>\$752.84</b>
<b>4595550 - MISC. CAPITAL PROJECTS</b>				
KIMLEY-HORN AND ASSOCIATES, INC.	MAY 24 HOUSING/SAFETY ELEMENT UPDATE	08/29/2024	9001653	\$639.18
A PREMAN ROOFING INC	FCCC ROOF REPLACEMENT CONTINGE	09/06/2024	107203	(\$504.24)
SONYA PERL SURVIVORS TRUST	PROJECT FEE REFUND: APNs 298-010-31/32	08/29/2024	107197	\$13,722.00
<b>TOTAL MISC. CAPITAL PROJECTS</b>				<b>\$13,856.94</b>
<b>4596510 - MISC.CAPITALPROJECTS-ENG</b>				
VAN DYKE LANDSCAPE ARCHITECTS	JUL 24 LA COLONIA MASTER PLAN UPDATE	08/23/2024	107164	\$520.33
A PREMAN ROOFING INC	FCCC ROOF REPLACEMENT CONTINGE	09/06/2024	107203	\$10,084.73
<b>TOTAL MISC.CAPITALPROJECTS-ENG</b>				<b>\$10,605.06</b>
<b>4596520 - MISC CAPITAL PROJ - ENVIR</b>				
UNIVERSITY OF SAN DIEGO	AUG 23 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$2,159.31
UNIVERSITY OF SAN DIEGO	SEP 23 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$2,801.82
UNIVERSITY OF SAN DIEGO	OCT 23 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$1,420.35
UNIVERSITY OF SAN DIEGO	NOV 23 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$1,670.90
UNIVERSITY OF SAN DIEGO	DEC 23 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$933.71
UNIVERSITY OF SAN DIEGO	JAN 24 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$4,951.10
UNIVERSITY OF SAN DIEGO	FEB 24 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$1,732.63
UNIVERSITY OF SAN DIEGO	MAR 24 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$933.02
UNIVERSITY OF SAN DIEGO	APR 24 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$6,752.54
UNIVERSITY OF SAN DIEGO	MAY 24 CLIMATE ACTION PLAN UPDATE	08/29/2024	9001657	\$4,850.96
<b>TOTAL MISC CAPITAL PROJ - ENVIR</b>				<b>\$28,206.34</b>
<b>4728520 - PACIFIC UNDERGROUNDNG-CIP</b>				
NV5, INC.	PROF SVC - PACIFIC AVENUE-PHASE 13	08/23/2024	107151	\$3,062.50
<b>TOTAL PACIFIC UNDERGROUNDNG-CIP</b>				<b>\$3,062.50</b>
<b>5097700 - SANITATION</b>				
MISSION LINEN & UNIFORM INC	FY25 UNIFORM SERVICES FOR PUBLIC WORKS	09/06/2024	107222	\$9.26
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$9.46
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$11.52
MISSION LINEN & UNIFORM INC	UNIFORM SERVICES FOR PUBLIC WORKS	08/23/2024	107149	\$9.46
SANTA FE IRRIGATION DISTRICT	005979-008-06/04/24-08/01/24	08/23/2024	107161	\$98.51
SANTA FE IRRIGATION DISTRICT	MOVEABLE 07/02/24-08/01/24	08/23/2024	107161	\$651.59
VERIZON WIRELESS-SD	362455526-00001 - 07/02/24-08/01/24	08/23/2024	107165	\$15.16
AT&T CALNET 3	9391012277-07/24/24-08/23/24	09/06/2024	107206	\$20.13
US BANK	ADMIN FEE - SEPJA 2017 REV BOND	08/23/2024	9001647	\$1,302.50
IDRAINS LLC	PREVENTIVE JETTER SERVICE	08/23/2024	107130	\$525.00
IDRAINS LLC	PREVENTIVE DRAIN SERVICE - FIRE DEPT	08/23/2024	107130	\$525.00
IDRAINS LLC	PREVENTIVE JETTER SV - LC CMTY CTR	08/23/2024	107130	\$525.00

IDRAINS LLC	PREVENTIVE JETTER SERVICE - LIFEGUARD STN	08/23/2024	107130	\$525.00
IDRAINS LLC	FY25-R LINE DRAIN CLEANING	09/06/2024	107205	\$525.00
IDRAINS LLC	O- VIDEO INSPECTIONS	09/06/2024	107205	\$2,030.00
IDRAINS LLC	E- SEWER CLEANING	09/06/2024	107205	\$6,434.19
SONYA PERL SURVIVORS TRUST	PROJECT FEE REFUND: APNs 298-010-31/32	08/29/2024	107197	\$24,975.00
SONYA PERL SURVIVORS TRUST	PROJECT FEE REFUND: APNs 298-010-31/32	08/29/2024	107197	\$13,486.00
SONYA PERL SURVIVORS TRUST	PROJECT FEE REFUND: APNs 298-010-31/32	08/29/2024	107197	\$11,489.00
US BANK	WW REF 2017 INTEREST DUE 09/01	09/03/2024	9001660	\$87,003.13

**TOTAL SANITATION****\$150,169.91****REPORT TOTAL:****\$896,984.89**



# STAFF REPORT CITY OF SOLANA BEACH

**TO:** Honorable Mayor and City Councilmembers  
**FROM:** Alyssa Muto, City Manager  
**MEETING DATE:** September 25, 2024  
**ORIGINATING DEPT:** Fire Department – Josh Gordon, Fire Chief  
**SUBJECT:** **City Council Consideration of Resolution 2024-095  
Accepting 2023 State Homeland Security Program Grant  
Funds for Firefighting Equipment**

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## **BACKGROUND:**

Activities implemented under State Homeland Security Program (SHSP) grants must support terrorism preparedness by building or enhancing capabilities that relate to the prevention of, protection from, response to, and recovery from, terrorism in order to be considered eligible. Many capabilities which support terrorism preparedness simultaneously support preparedness for other hazards and catastrophic incidents. The activities must also align with the national, state, and urban area strategic objectives.

Firefighting hoods are a type of personal protective equipment used by firefighters to protect the parts of the head not covered by the helmet and face mask. The hoods are made from fire and heat resistant materials, which allows for protection against radiant and intense heat. Gas monitors are used for inert gas operations to detect combustible gases in oxygen-free environments, including natural gas leaks.

This item is before the City Council to request approval of Resolution 2024-095 (Attachment 1) accepting \$9,409 in 2023 State Homeland Security Program grant funds for the purchase of firefighting hoods and gas monitors.

## **DISCUSSION:**

The City is directly receiving a total of \$9,409 awarded through the County of San Diego under SHSP for Federal Fiscal Year 2023 (Attachment 2). The funding allocated to the City will enhance its preparedness, prevention, and response capabilities. The SHSP grant funds can only be expended on equipment authorized for purchase by the

COUNCIL ACTION:

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Department of Homeland Security. The City will apply the \$9,409 of the funds from the 2023 program to purchase firefighting hoods and gas monitors.

This Federal grant is a reimbursement grant and requires the City to expend funds prior to requesting reimbursement. Under SHSP, expenditures must be made by the grant recipient and the reimbursement requested from the County of San Diego Office of Emergency Services. The deadline to expend funds and request reimbursement is May 31, 2025. The City anticipates purchasing the equipment by December and submitting for reimbursement to the County of San Diego OES before the May 2025 deadline.

The State of California administers the grant and requires all grant recipients to adhere to the California Governor's Office of Emergency Services Standard Assurances for Cal OES Federal Non-Disaster Grant Programs, which outlines policies and regulations pertaining to the use of federal grant funds (Attachment 3).

**CEQA COMPLIANCE STATEMENT:** N/A.

**FISCAL IMPACT:**

The City is not required to provide any matching funds or cost share for grants under SHSP; nor is it required to fund the replacement of grant funded equipment in the future (at the end of its useful life). Staff does not anticipate incurring any significant increase in costs for maintaining the equipment during its lifespan.

A budget amendment is needed in the Misc. Grants Fund to record the expected grant revenue and related expenditure amount of \$9,409.

**WORK PLAN:** N/A

**OPTIONS:**

- Approve Staff recommendation.
- Approve Staff recommendation with alternative amendments / modifications.
- Deny Staff recommendation and provide further direction to Staff.

**CITY STAFF RECOMMENDATION:**

Staff recommends that the City Council approve Resolution 2024-095:

1. Accepting \$9,409 in federal funds from a 2023 State Homeland Security Program (SHSP) grant awarded to the City of Solana Beach for the purchase of firefighting hoods and gas monitors.
2. Authorizing the City Manager, or her designee, to sign and submit the required California Governor's Office of Emergency Services Standard Assurances for Cal OES Federal Non-Disaster Grant Programs.

3. Approving a budget amendment of \$9,409 to the Misc. Grant Fund - Federal Grants revenue account 246-46600 and the Minor Equipment expenditure account 2466120-64190.
4. Authorizing the City Treasurer to amend the FY 2024/25 Adopted Budget accordingly.



Alyssa Muto, City Manager

Attachments:

1. Resolution 2024-095
2. FY 2023 San Diego County Office of Emergency Services Award Letter to Jurisdictions
3. California Governor's Office of Emergency Services Standard Assurances for Cal OES Federal Non-Disaster Grant Programs
4. FY 2023 State Homeland Security Program (SHSP) Grant Approved Allocation

## RESOLUTION 2024-095

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, APPROVING THE PURCHASE OF FIREFIGHTING HOODS AND GAS MONITORS AND AUTHORIZING THE CITY MANAGER OR HER DESIGNEE TO EXECUTE THE CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES STANDARD ASSURANCES FOR CAL OES FEDERAL NON-DISASTER GRANT PROGRAM DOCUMENT

**WHEREAS**, Fire Department personnel wear firefighting hoods as personal protective equipment during fire emergencies; and

**WHEREAS**, Fire Department personnel use gas monitors for inert gas operations to detect combustible gases in oxygen-free environments, including natural gas leaks; and

**WHEREAS**, the Solana Beach Fire Department received a grant through the State Homeland Security Program (SHSP) in the amount of \$9,409 for the purchase of firefighting hoods and gas monitors; and

**WHEREAS**, the California Governor's Office of Emergency Services Standard Assurances for Cal OES Federal Non-Disaster Grant Program document needs to be executed in order to receive these grant funds.

**NOW, THEREFORE**, the City Council of the City of Solana Beach, California, does resolve as follows:

1. That the above recitations are true and correct.
2. That the City Council accepts \$9,409 in federal funds from a 2023 State Homeland Security Program grant awarded to the City of Solana Beach for the purchase of firefighting hoods and gas monitors.
3. That the City Council authorizes the City Manager, or her designee, to sign and submit the required California Governor's Office of Emergency Services Standard Assurances for Cal OES Federal Non-Disaster Grant Program document and any other documents necessary to receive the grant funds.
4. That the City Council authorizes the budget amendment of \$9,409 to the Misc. Grant Fund - Federal Grants revenue account 246-46600 and the Minor Equipment expenditure account 2466120-64190.
5. That the City Council authorizes the City Treasurer to amend the FY 2024/25 Adopted Budget accordingly.



**PASSED AND ADOPTED** this 25<sup>th</sup> day of September, 2024 at a regularly scheduled meeting of the City Council of the City of Solana Beach, California by the following vote:

AYES: Councilmembers -  
NOES: Councilmembers -  
ABSTAIN: Councilmembers -  
ABESENT: Councilmembers -

\_\_\_\_\_  
LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

\_\_\_\_\_  
JOHANNA N. CANLAS, City Attorney

\_\_\_\_\_  
ANGELA IVEY, City Clerk



**County of San Diego Office of Emergency Services**  
5580 Overland Ave., Suite 100  
San Diego, CA 92123 -1251  
Phone: (858) 565-3490 Fax: (858) 565-3499  
Email: [oes@sdcounty.ca.gov](mailto:oes@sdcounty.ca.gov)



June 10, 2024

City of Solana Beach  
505 S Vulcan Ave  
Encinitas, CA 92024

**SUBJECT: NOTIFICATION OF FEDERAL FUNDING AWARD**  
FY 2023 Homeland Security Grant Program (HSGP)  
Subaward #2023-0042, Cal OES ID #073-00000

The purpose of this letter is to notify you that the County of San Diego Office of Emergency Services has approved your **FY2023 SHSP** award in the amount of **\$9,409** as listed below:

<b>Subrecipient Name:</b>	<b>City of Solana Beach</b>
<b>Subrecipient UEI:</b>	<b>EMJQMZFR49P9</b>
<b>Federal Award ID (FAIN)</b>	EMW-2023-SS-00042
<b>Subaward Period of Performance:</b>	09/01/23 to 05/31/25
<b>Subrecipient Award Amount:</b>	\$9,409
<b>Federal Award Project Description:</b>	Implementation of homeland security management grant to support state, local, tribal and territorial efforts to prevent terrorism and other catastrophic events.
<b>Federal Awarding Agency:</b>	US Department of Homeland Security
<b>CFDA Number:</b>	97.067/Homeland Security Grant Program
<b>Research &amp; Development Award (Y/N):</b>	No
<b>Indirect Cost Rate:</b>	N/A
<b>Match Requirement:</b>	N/A

This grant award is subject to all provisions of Uniform Guidance (2 CFR Part 200), which can be accessed at [www.ecfr.gov](http://www.ecfr.gov). Non-federal entities that expend \$750,000 or more annually in Federal Awards must have a Single Audit performed each year. Please forward a copy of your most current Single Audit report to the contact below.

Subrecipients are to comply with all applicable federal, state, and local Environmental Planning and Historic Preservation (EHP) requirements. Additionally, Aviation/Watercraft requests, Establish/Enhance Emergency Operations Center projects, projects requiring EHP review, and Noncompetitive Procurement requests require additional approvals. Subrecipients must obtain written approval for these activities prior to incurring any costs, in order to be reimbursed for any related costs under this Grant Subaward. Subrecipients are also required to obtain a Performance Bond prior to the purchase of any equipment item over \$250,000, including any Aviation or Watercraft financed with Homeland Security dollars. Performance Bonds must be submitted to the contact below no later than the time of reimbursement.

Please complete and return the attached OES Grant Management Assessment Questionnaire, 2023 Grant Assurances and Signature Authorization Form, current Procurement Policies and Salvage Guidelines. A hard copy of the Grant Assurances and Signature Authorization Forms must be mailed.



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**Email: [oes@sdcounty.ca.gov](mailto:oes@sdcounty.ca.gov)**



Your performance period ends May 31, 2025. Please submit your reimbursement requests no later than June 30, 2025.

For further assistance, please contact Stephanie Han at (619) 708-1824, [Stephanie.Han@sdcounty.ca.gov](mailto:Stephanie.Han@sdcounty.ca.gov) or Nancy Lopez at (619) 508-2013, [Nancy.Lopez1@sdcounty.ca.gov](mailto:Nancy.Lopez1@sdcounty.ca.gov).

Sincerely,

**Martin.Kurian@s**  
**dcounty.ca.gov**

Digitally signed by  
Martin.Kurian@sdcounty.ca.gov  
Date: 2024.06.10 11:42:52  
-07'00'

Martin Kurian, Departmental Budget Manager  
County of San Diego, Office of Emergency Services

Attachments: OES Grant Management Assessment Questionnaire  
2023 Grant Assurances  
SHSP 2023 Approved FMFW



## **Standard Assurances For Cal OES Federal Non-Disaster Grant Programs**

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**As the duly authorized representative of the Applicant, I hereby certify** that the Applicant has the legal authority to apply for federal assistance and the institutional, managerial, and financial capability (including funds sufficient to pay any non-federal share of project cost) to ensure proper planning, management, and completion of the project described in this application, within prescribed timelines.

**The requirements outlined in these assurances apply to Applicant and any of its subrecipients.**

**I further acknowledge that the Applicant is responsible for reviewing and adhering to all requirements within the:**

- (a) Applicable Federal Regulations (see below);
- (b) Federal Program Notice of Funding Opportunity (NOFO);
- (c) Federal Preparedness Grants Manual;
- (d) California Supplement to the NOFO; and
- (e) Federal and State Grant Program Guidelines.

### **Federal Regulations**

Government cost principles, uniform administrative requirements, and audit requirements for federal grant programs are set forth in Title 2, Part 200 of the Code of Federal Regulations (C.F.R.). Updates are issued by the [Office of Management and Budget \(OMB\)](http://www.whitehouse.gov/omb/) and can be found at <http://www.whitehouse.gov/omb/>.

In the event Cal OES determines that changes are necessary to the subaward after a subaward has been made, including changes to period of performance or terms and conditions, Applicants will be notified of the changes in writing. Once notification has been made, any subsequent request for funds will indicate Applicant acceptance of the changes to the subaward.

**State and federal grant award requirements are set forth below. The Applicant hereby agrees to comply with the following:**

### **1. Proof of Authority**

The Applicant will obtain proof of authority from the city council, governing board, or authorized body in support of this project. This written authorization must specify that the Applicant and the city council, governing board, or authorized body agree:



## **Standard Assurances**

### **For Cal OES Federal Non-Disaster Grant Programs**

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- (a) To provide all matching funds required for the grant project and that any cash match will be appropriated as required;
- (b) Any liability arising out of the performance of this agreement shall be the responsibility of the Applicant and the city council, governing board, or authorized body;
- (c) Grant funds shall not be used to supplant expenditures controlled by the city council, governing board, or authorized body;
- (d) The Applicant is authorized by the city council, governing board, or authorized body to apply for federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-federal share of project cost, if any) to ensure proper planning, management and completion of the project described in this application; and
- (e) The official executing this agreement is authorized by the Applicant.

This Proof of Authority must be maintained on file and readily available upon request.

#### **2. Period of Performance**

The period of performance is specified in the Award. The Applicant is only authorized to perform allowable activities approved under the award, within the period of performance.

#### **3. Lobbying and Political Activities**

As required by Section 1352, Title 31 of the United States Code (U.S.C.), for persons entering into a contract, grant, loan, or cooperative agreement from an agency or requests or receives from an agency a commitment providing for the United States to insure or guarantee a loan, the Applicant certifies that:

- (a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.



## **Standard Assurances For Cal OES Federal Non-Disaster Grant Programs**

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- (b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (c) The Applicant shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The Applicant will also comply with provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and §§ 7324-7328) which limit the political activities of employees whose principle employment activities are funded in whole or in part with federal funds.

Finally, the Applicant agrees that federal funds will not be used, directly or indirectly, to support the enactment, repeal, modification or adoption of any law, regulation or policy without the express written approval from the California Governor's Office of Emergency Services (Cal OES) or the federal awarding agency.

#### **4. Debarment and Suspension**

As required by Executive Orders 12549 and 12689, and 2 C.F.R. § 200.214 and codified in 2 C.F.R. Part 180, Debarment and Suspension, the Applicant will provide protection against waste, fraud, and abuse by debarring or suspending those persons deemed irresponsible in their dealings with the federal government. The Applicant certifies that it and its subrecipients:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;



## **Standard Assurances**

### **For Cal OES Federal Non-Disaster Grant Programs**

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- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (4)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transaction (federal, state, or local) terminated for cause or default.

Where the Applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

#### **5. Non-Discrimination and Equal Employment Opportunity**

The Applicant will comply with all state and federal statutes relating to non-discrimination, including:

- (a) Title VI of the Civil Rights Act of 1964 (Public Law (P.L.) 88-352 and 42 U.S.C. § 2000d et. seq.) which prohibits discrimination on the basis of race, color, or national origin and requires that recipients of federal financial assistance take reasonable steps to provide meaningful access to persons with limited English proficiency (LEP) to their programs and services;
- (b) Title IX of the Education Amendments of 1972, (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex in any federally funded educational program or activity;
- (c) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794), which prohibits discrimination against those with disabilities or access and functional needs;
- (d) Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. § 12101 et seq.), which prohibits discrimination on the basis of disability and requires buildings and structures be accessible to those with disabilities and access and functional needs;
- (e) Age Discrimination Act of 1975, (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age;
- (f) Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd—2), relating to confidentiality of patient records regarding substance abuse treatment;
- (g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), relating to nondiscrimination in the sale, rental or financing of housing as implemented by the Department of Housing and Urban Development at 24 C.F.R. Part 100. The prohibition on disability discrimination includes the requirement that new multifamily housing with four or more dwelling units—i.e., the public and common use areas and individual apartment units (all units in buildings with elevators and ground-floor units in buildings without elevators)—



## Standard Assurances For Cal OES Federal Non-Disaster Grant Programs

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- be designed and constructed with certain accessible features (See 24 C.F.R. § 100.201);
- (h) Executive Order 11246, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identification or national origin;
  - (i) Executive Order 11375, which bans discrimination on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin in hiring and employment in both the United States federal workforce and on the part of government contractors;
  - (j) California Public Contract Code § 10295.3, which prohibits discrimination based on domestic partnerships and those in same sex marriages;
  - (k) Department of Homeland Security (DHS) policy to ensure the equal treatment of faith-based organizations, under which the Applicant must comply with equal treatment policies and requirements contained in 6 C.F.R. Part 19;
  - (l) The Applicant will comply with California's Fair Employment and Housing Act (FEHA) (California Government Code §§ 12940-12957), as applicable. FEHA prohibits harassment and discrimination in employment because of ancestry, familial status, race, color, religious creed (including religious dress and grooming practices), sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, mental and physical disability, genetic information, medical condition, age, pregnancy, denial of medical and family care leave, or pregnancy disability leave, military and veteran status, and/or retaliation for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions;
  - (m) Any other nondiscrimination provisions in the specific statute(s) under which application for federal assistance is being made; and
  - (n) The requirements of any other nondiscrimination statute(s) that may apply to this application.

### 6. Drug-Free Workplace

As required by the Drug-Free Workplace Act of 1988 (41 U.S.C. § 701 et seq.), the Applicant certifies that it will maintain a drug-free workplace and a drug-free awareness program as outlined in the Act.





## Standard Assurances For Cal OES Federal Non-Disaster Grant Programs

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### 7. Environmental Standards

The Applicant will comply with state and federal environmental standards, including:

- (a) California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000-21177), to include coordination with the city or county planning agency;
- (b) CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387);
- (c) Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters;
- (d) Federal Clean Air Act of 1955 (42 U.S.C. § 7401) which regulates air emissions from stationary and mobile sources;
- (e) Institution of environmental quality control measures under the National Environmental Policy Act (NEPA) of 1969 (P.L. 91-190); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA; and Executive Order 12898 which focuses on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities;
- (f) Evaluation of flood hazards in floodplains in accordance with Executive Order 11988;
- (g) Executive Order 11514 which sets forth national environmental standards;
- (h) Executive Order 11738 instituted to assure that each federal agency empowered to enter into contracts for the procurement of goods, materials, or services and each federal agency empowered to extend federal assistance by way of grant, loan, or contract shall undertake such procurement and assistance activities in a manner that will result in effective enforcement of the Clean Air Act and the Federal Water Pollution Control Act Executive Order 11990 which requires preservation of wetlands;
- (i) The Safe Drinking Water Act of 1974, (P.L. 93-523);
- (j) The Endangered Species Act of 1973, (P.L. 93-205);
- (k) Assurance of project consistency with the approved state management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.);
- (l) Conformity of Federal Actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); and



## **Standard Assurances**

### **For Cal OES Federal Non-Disaster Grant Programs**

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(m) Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

The Applicant shall not be: (1) in violation of any order or resolution promulgated by the State Air Resources Board or an air pollution district; (2) subject to a cease-and-desist order pursuant to section 13301 of the California Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) determined to be in violation of federal law relating to air or water pollution.

#### **8. Audits**

For subrecipients expending \$750,000 or more in federal grant funds annually, the Applicant will perform the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and 2 C.F.R., Part 200, Subpart F Audit Requirements.

#### **9. Cooperation and Access to Records**

The Applicant must cooperate with any compliance reviews or investigations conducted by DHS. In accordance with 2 C.F.R. § 200.337, the Applicant will give the awarding agency, the Comptroller General of the United States and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award. The Applicant will require any subrecipients, contractors, successors, transferees and assignees to acknowledge and agree to comply with this provision.

#### **10. Conflict of Interest**

The Applicant will establish safeguards to prohibit the Applicant's employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

#### **11. Financial Management**

False Claims for Payment - The Applicant will comply with 31 U.S.C §§ 3729-3733 which provides that Applicant shall not submit a false claim for payment, reimbursement, or advance.

#### **12. Reporting - Accountability**

The Applicant agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (P.L. 109-282), including but not limited to (a) the reporting of subawards obligating \$30,000 or more in federal funds,



## **Standard Assurances For Cal OES Federal Non-Disaster Grant Programs**

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and (b) executive compensation data for first-tier subawards as set forth in 2 C.F.R. Part 170, Appendix A. The Applicant also agrees to comply with the requirements set forth in the government-wide financial assistance award term regarding the System for Award Management and Universal Identifier Requirements located at 2 C.F.R. Part 25, Appendix A.

### **13. Whistleblower Protections**

The Applicant must comply with statutory requirements for whistleblower protections at 10 U.S.C. § 2409, 41 U.S.C. § 4712, and 10 U.S.C. § 2324, 41 U.S.C. § 4304 and § 4310.

### **14. Human Trafficking**

The Applicant will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act of 2000, as amended (22 U.S.C. § 7104) which prohibits the Applicant or its subrecipients from: (1) engaging in trafficking in persons during the period of time that the award is in effect; (2) procuring a commercial sex act during the period of time that the award is in effect; or (3) using forced labor in the performance of the award or subawards under the award.

### **15. Labor Standards**

The Applicant will comply with the following federal labor standards:

- (a) The Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), as applicable, and the Copeland Act (40 U.S.C. § 3145 and 18 U.S.C. § 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally-assisted construction contracts or subcontracts, and
- (b) The Federal Fair Labor Standards Act (29 U.S.C. § 201 et seq.) as they apply to employees of institutes of higher learning (IHE), hospitals and other non-profit organizations.

### **16. Worker's Compensation**

The Applicant must comply with provisions which require every employer to be insured to protect workers who may be injured on the job at all times during the performance of the work of this Agreement, as per the workers compensation laws set forth in California Labor Code §§ 3700 et seq.



## Standard Assurances For Cal OES Federal Non-Disaster Grant Programs

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### 17. Property-Related

If applicable to the type of project funded by this federal award, the Applicant will:

- (a) Comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of federal participation in purchase;
- (b) Comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires federal award subrecipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more;
- (c) Assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. § 469a-1 et seq.); and
- (d) Comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. § 4831 and 24 CFR Part 35) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

### 18. Certifications Applicable Only to Federally-Funded Construction Projects

For all construction projects, the Applicant will:

- (a) Not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with federal assistance funds to assure nondiscrimination during the useful life of the project;
- (b) Comply with the requirements of the awarding agency with regard to the drafting, review and approval of construction plans and specifications; and
- (c) Provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.



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### **19. Use of Cellular Device While Driving is Prohibited**

The Applicant is required to comply with California Vehicle Code sections 23123 and 23123.5. These laws prohibit driving motor vehicle while using an electronic wireless communications device to write, send, or read a text-based communication. Drivers are also prohibited from the use of a wireless telephone without hands-free listening and talking, unless to make an emergency call to 911, law enforcement, or similar services.

### **20. California Public Records Act and Freedom of Information Act**

The Applicant acknowledges that all information submitted in the course of applying for funding under this program, or provided in the course of an entity's grant management activities that are under federal control, is subject to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and the California Public Records Act, California Government Code §7920.000 et seq. The Applicant should consider these laws and consult its own State and local laws and regulations regarding the release of information when reporting sensitive matters in the grant application, needs assessment, and strategic planning process.

### **EMERGENCY MANAGEMENT PERFORMANCE GRANT PROGRAM (EMPG) – PROGRAM SPECIFIC ASSURANCES / CERTIFICATIONS**

### **21. Acknowledgment of Federal Funding from DHS**

The Applicant must acknowledge its use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with federal funds.

### **22. Activities Conducted Abroad**

The Applicant must ensure that project activities carried on outside the United States are coordinated as necessary with appropriate government authorities and that appropriate licenses, permits, or approvals are obtained.

### **23. Best Practices for Collection and Use of Personally Identifiable Information (PII)**

DHS defines personally identifiable information (PII) as any information that permits the identity of an individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual. If the Applicant collects PII, the Applicant is required to have a publicly-available privacy policy that describes standards on the usage and maintenance of PII they collect. The Applicant may refer to the DHS Privacy Impact Assessments: Privacy Guidance and Privacy template as a useful resource.



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### **For Cal OES Federal Non-Disaster Grant Programs**

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#### **24. Copyright**

The Applicant must affix the applicable copyright notices of 17 U.S.C. §§ 401 or 402 and an acknowledgement of United States Government sponsorship (including the award number) to any work first produced under federal financial assistance awards.

#### **25. Duplication of Benefits**

Any cost allocable to a particular federal financial assistance award provided for in 2 C.F.R. Part 200, Subpart E may not be charged to other federal financial assistance awards to overcome fund deficiencies, to avoid restrictions imposed by federal statutes, regulations, or federal financial assistance award terms and conditions, or for other reasons. However, these prohibitions would not preclude the Applicant from shifting costs that are allowable under two or more awards in accordance with existing federal statutes, regulations, or the federal financial assistance award terms and conditions.

#### **26. Energy Policy and Conservation Act**

The Applicant must comply with the requirements of 42 U.S.C. § 6201 which contain policies relating to energy efficiency that are defined in the state energy conservation plan issued in compliance with this Act.

#### **27. Federal Debt Status**

The Applicant is required to be non-delinquent in its repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowances, and benefit overpayments. See OMB Circular A-129.

#### **28. Fly America Act of 1974**

The Applicant must comply with Preference for United States Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942.

#### **29. Hotel and Motel Fire Safety Act of 1990**

In accordance with Section 6 of the Hotel and Motel Fire Safety Act of 1990, the Applicant must ensure that all conference, meeting, convention, or training space funded in whole or in part with federal funds complies with the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2225a.



## **Standard Assurances**

### **For Cal OES Federal Non-Disaster Grant Programs**

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#### **30. Non-supplanting Requirement**

If the Applicant receives federal financial assistance awards made under programs that prohibit supplanting by law, the Applicant must ensure that federal funds do not replace (supplant) funds that have been budgeted for the same purpose through non- federal sources.

#### **31. Patents and Intellectual Property Rights**

Unless otherwise provided by law, the Applicant is subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. The Applicant is subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from financial assistance awards located at 37 C.F.R. Part 401 and the standard patent rights clause located at 37 C.F.R. § 401.14.

#### **32. SAFECOM**

If the Applicant receives federal financial assistance awards made under programs that provide emergency communication equipment and its related activities, the Applicant must comply with the SAFECOM Guidance for Emergency Communication Grants, including provisions on technical standards that ensure and enhance interoperable communications.

#### **33. Terrorist Financing**

The Applicant must comply with Executive Order 13224 and United States law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism. The Applicant is legally responsible for ensuring compliance with the Order and laws.

#### **34. Reporting of Matters Related to Recipient Integrity and Performance**

If the total value of the Applicant's currently active grants, cooperative agreements, and procurement contracts from all federal assistance offices exceeds \$10,000,000 for any period of time during the period of performance of this federal financial assistance award, the Applicant must comply with the requirements set forth in the government-wide Award Term and Condition for Recipient Integrity and Performance Matters located at 2 C.F.R. Part 200, Appendix XII, the full text of which is incorporated here by reference in the award terms and conditions.



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### **For Cal OES Federal Non-Disaster Grant Programs**

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#### **35. USA Patriot Act of 2001**

The Applicant must comply with requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act), which amends 18 U.S.C. §§ 175-175c.

#### **36. Use of DHS Seal, Logo, and Flags**

The Applicant must obtain permission from their DHS Financial Assistance Office, prior to using the DHS seal(s), logos, crests or reproductions of flags or likenesses of DHS agency officials, including use of the United States Coast Guard seal, logo, crests or reproductions of flags or likenesses of Coast Guard officials.

#### **37. Applicability of DHS Standard Terms and Conditions to Tribes**

The DHS Standard Terms and Conditions are a restatement of general requirements imposed upon the Applicant and flow down to any of its subrecipients as a matter of law, regulation, or executive order. If the requirement does not apply to Indian tribes or there is a federal law or regulation exempting its application to Indian tribes, then the acceptance by Tribes of, or acquiescence to, DHS Standard Terms and Conditions does not change or alter its inapplicability to an Indian tribe. The execution of grant documents is not intended to change, alter, amend, or impose additional liability or responsibility upon the Tribe where it does not already exist.

#### **38. Required Use of American Iron, Steel, Manufactured Products, and Construction Materials**

The Applicant must comply with the "Build America, Buy America" Act (BABAA), enacted as part of the Infrastructure Investment and Jobs Act and Executive Order 14005. Applicants receiving a federal award subject to BABAA requirements may not use federal financial assistance funds for infrastructure projects unless:

- (a) All iron and steel used in the project are produced in the United States – this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- (b) All manufactured products used in the project are produced in the United States – this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and





## **Standard Assurances**

### **For Cal OES Federal Non-Disaster Grant Programs**

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(c) All construction materials are manufactured in the United States – this means that all manufacturing processes for the construction material occurred in the United States.

The “Buy America” preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. It does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a “Buy America” preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

Per section 70914(c) of BABAA, FEMA may waive the application of a “Buy America” preference under an infrastructure program in certain cases.

#### **39. Advancing Effective, Accountable Policing and Criminal Justice Practice to Enhance Public Trust and Public Safety**

The Applicant must comply with the requirements of section 12(c) of Executive Order 14074. The Applicant is also encouraged to adopt and enforce policies consistent with Executive Order 14074 to support safe and effective policing.



## Standard Assurances For Cal OES Federal Non-Disaster Grant Programs

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**IMPORTANT**

The purpose of these assurances is to obtain federal and state financial assistance, including any and all federal and state grants, loans, reimbursement, contracts, etc. Applicant recognizes and agrees that state financial assistance will be extended based on the representations made in these assurances. These assurances are binding on Applicant, its successors, transferees, assignees, etc. as well as any of its subrecipients. Failure to comply with any of the above assurances may result in suspension, termination, or reduction of grant funds.

All appropriate documentation, as outlined above, must be maintained on file by the Applicant and available for Cal OES or public scrutiny upon request. Failure to comply with these requirements may result in suspension of payments under the grant or termination of the grant or both and the Applicant may be ineligible for award of any future grants if Cal OES determines that the Applicant: (1) has made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

All of the language contained within this document must be included in the award documents for all subawards at all tiers. Applicants are bound by DHS Security Standard Terms and Conditions 2023, Version 2, hereby incorporated by reference, which can be found at: <https://www.dhs.gov/publication/fy15-dhs-standard-terms-and-conditions>.

**The undersigned represents that he/she is authorized to enter into this agreement for and on behalf of the Applicant.**

Applicant: \_\_\_\_\_

Signature of Authorized Agent: \_\_\_\_\_

Printed Name of Authorized Agent: \_\_\_\_\_

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

**FY 2023 STATE HOMELAND SECURITY PROGRAM (SHSP) APPROVED UDC GRANT ALLOCATION**

JURISDICTION	FY2022 Approved Formula with Award			FY2023 - APPROVED					
	CITIES	LE - 30% of FY22 Allocation	Non-LE Allocation	TOTAL	Sworn LE Personnel Figures (2022)	LE - 30% of FY23 Allocation	Non-LE Population (2022)	Non-LE Allocation	TOTAL
CARLSBAD	21,061	56,787	77,848	132	20,988	115,585	44,776	65,764	-15.52%
CHULA VISTA	43,877	128,053	171,930	280	44,520	276,785	100,248	144,768	-15.80%
CORONADO	7,339	15,024	22,363	46	7,314	22,277	12,666	19,980	-10.66%
DEL MAR	-	6,909	6,909	-	-	3,929	6,352	6,352	-8.06%
EL CAJON	19,625	51,290	70,915	123	19,557	105,638	41,353	60,910	-14.11%
ENCINITAS	-	32,928	32,928	-	-	61,515	26,169	26,169	-20.53%
ESCONDIDO	24,571	73,012	97,583	159	25,281	150,679	56,853	82,134	-15.83%
ESCONDIDO RINCON DEL DIABLO	-	6,289	6,289	-	-	-	4,626	4,626	-26.44%
IMPERIAL BEACH	-	17,453	17,453	-	-	26,243	14,031	14,031	-19.61%
LA MESA	11,169	31,713	42,882	70	11,130	60,472	25,810	36,940	-13.86%
LEMON GROVE	-	16,812	16,812	-	-	27,242	14,375	14,375	-14.50%
NATIONAL CITY	13,721	33,134	46,855	88	13,992	61,471	26,154	40,146	-14.32%
NATIONAL CITY - LINCOLN ACRES	-	723	723	-	-	-	534	534	-26.14%
OCEANSIDE	36,059	84,250	120,309	225	35,775	173,048	64,550	100,325	-16.61%
POWAY	-	26,941	26,941	-	-	48,759	21,779	21,779	-19.16%
SAN DIEGO	324,847	-	324,847	2,036	323,721	-	-	323,721	-0.35%
SAN MARCOS	-	48,178	48,178	-	-	93,585	37,205	37,205	-22.78%
SAN MARCOS FPD	-	6,566	6,566	-	-	-	4,946	4,946	-24.67%
SANTEE	-	30,467	30,467	-	-	59,015	25,309	25,309	-16.93%
SOLANA BEACH	-	11,200	11,200	-	-	12,812	9,409	9,409	-15.99%
VISTA	-	51,302	51,302	-	-	100,291	39,513	39,513	-22.98%
VISTA FPD	-	9,179	9,179	-	-	-	7,033	7,033	-23.38%
<b>TOTAL CITIES</b>	<b>502,269</b>	<b>738,210</b>	<b>1,240,479</b>	<b>3,159</b>	<b>502,278</b>	<b>1,399,346</b>	<b>583,691</b>	<b>1,085,969</b>	<b>-12.46%</b>
<b>FIRE DISTRICTS/OTHER</b>									
ALPINE FPD	-	12,274	12,274	-	-	15,550	10,351	10,351	-15.67%
DEER SPRINGS FPD	-	10,489	10,489	-	-	12,216	9,204	9,204	-12.25%
LAKESIDE FPD	-	33,621	33,621	-	-	63,251	26,766	26,766	-20.39%
NORTH COUNTY FPD	-	28,485	28,485	-	-	50,489	22,375	22,375	-21.45%
PORT OF SAN DIEGO	22,337	-	22,337	140	22,260	-	-	22,260	-0.34%
RANCHO SANTA FE FPD	-	20,338	20,338	-	-	35,103	17,080	17,080	-16.02%
SAN MIGUEL FPD	-	61,544	61,544	-	-	123,095	47,360	47,360	-23.05%
VALLEY CENTER FPD	-	12,338	12,338	-	-	15,904	10,473	10,473	-15.12%
<b>TOTAL FIRE DISTRICTS/OTHER</b>	<b>22,337</b>	<b>179,090</b>	<b>201,427</b>	<b>140</b>	<b>22,260</b>	<b>315,608</b>	<b>143,609</b>	<b>165,869.00</b>	<b>-17.65%</b>
<b>2-1-1 SAN DIEGO CONTRACT</b>		<b>70,000</b>	<b>70,000</b>				<b>100,000</b>	<b>100,000</b>	<b>42.86%</b>
<b>AlertSanDiego</b>			-				<b>350,000</b>	<b>350,000</b>	<b>100.00%</b>
<b>COUNTY DEPTS</b>									
UDC SHARE	0	102,357	102,357	-	-	-	102,357	102,357	0.00%
M&A (5%)	0	160,535	160,535	-	-	-	160,535	160,535	0.00%
HHSA-EMS	0	80,000	80,000	-	-	-	80,000	80,000	0.00%
OES	-	917,301	917,301	-	-	-	727,301	727,301	-20.71%
SHERIFF	438,607	-	438,607	2,759	438,676	-	-	438,676	0.02%
<b>TOTAL COUNTY DEPTS</b>	<b>438,607</b>	<b>1,260,193</b>	<b>1,698,800</b>	<b>2,759</b>	<b>438,676</b>	<b>-</b>	<b>1,070,193</b>	<b>1,508,869</b>	<b>-11.18%</b>
<b>TOTAL ALLOCATIONS</b>	<b>963,213</b>	<b>2,247,493</b>	<b>3,210,706</b>	<b>6,058</b>	<b>963,213</b>	<b>1,714,954</b>	<b>2,247,493</b>	<b>3,210,706</b>	<b>0.00%</b>

**Notes:**

\***Personnel Cap:** Each jurisdiction's allocation has a personnel cap of 50%.

\***San Diego Sheriff includes:** Unincorporated San Diego County and the contracted cities of Del Mar, Encinitas, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach and Vista.



# STAFF REPORT

## CITY OF SOLANA BEACH

**TO:** Honorable Mayor and City Councilmembers  
**FROM:** Alyssa Muto, City Manager  
**MEETING DATE:** September 25, 2024  
**ORIGINATING DEPT:** Community Development Department  
**SUBJECT:** **Public Hearing: Modification to a DRP at 403 Pacific Avenue. (Case # MOD24-001 Applicants: Peter and Sarah Bates Resolution 2024-088) APN: 263-051-07**

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### **BACKGROUND:**

The Applicants, Peter and Sarah Bates, are seeking the City Council's approval of a Modification to a Development Review Permit (DRP) to remodel the interior of the residence and replace the windows, exterior doors, roofing, siding, and replace existing fireplace with a gas fireplace at the existing two-story residence at 403 Pacific Avenue. The residence was originally constructed in 1966 prior to the City's incorporation and prior to the adoption of the Zoning Ordinance and the Local Coastal Program/Land Use Plan.

A square footage addition was approved at the project site in 1993. At that time, the City had not adopted the permanent Zoning Ordinance, therefore, development projects were reviewed under the regulations of Ordinance 80, the City's Interim Zoning Ordinance. A development permit at that time was called a Site Development Permit and had a comparable review process as a Development Review Permit. Site Development Permit 80-93-08 was approved by the adoption of Resolution 1993-055 which approved an addition with a minimum 40-foot rear yard setback from the top edge of the coastal bluff, a maximum height of 27 feet and the floor area of 3,505 square feet. The floor area exceeds the maximum floor area that would be permitted on the site today according to the Scaled Residential Overlay Zone that was adopted in 2007. Therefore, the existing residence is considered legally existing nonconforming for the height, bluff top setback and FAR.

The 6,795 square foot lot is located within the Medium Residential (MR) Zone and the Scaled Residential Overlay Zone (SROZ). The proposed project is below the bluff top redevelopment project threshold(s) as defined by the City's Certified Local Coastal Program (LCP)/Land Use Plan (LUP) as discussed in this Staff Report.

CITY COUNCIL ACTION:

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The proposed project requires a Modification to the DRP for one reason: 1) for development on a coastal bluff top property or on the face or toe of a bluff for which a coastal development permit will be required from the California Coastal Commission.

The issue before the Council is whether to approve, approve with conditions, or deny the Applicants' request as contained in Resolution 2024-088 (Attachment 1).

## **DISCUSSION:**

The subject property is located on the west side of Pacific Avenue just north of the intersection of Pacific Avenue and Cliff Street. The lot size is 6,795 square feet. The site is currently developed with a two-story, single-family residence with an attached garage that is considered legally existing nonconforming because it does not meet the minimum required 40-foot bluff top setback, it exceeds the maximum FAR and the maximum building height for the zone.

The existing home consists of approximately 1,470 square feet of living area and an attached 690 square foot garage on the first floor and second floor living area of 1,655 square feet with an existing covered and enclosed 170 square foot balcony. The proposed project would not add any additional square footage. The existing residence is setback approximately 25 feet from the front property line and the closest portion of the residence is approximately 9 feet from the top of the bluff in the southwest corner of the lot.

The western half of the residence encroaches into the minimum 40-foot bluff top setback. According to the site-specific borings taken onsite, the Geologic Setback Line (GSL) is 18 feet from the top of the bluff and only the southwest corner of the residence is seaward of the GSL line. Due to the fact that there are no proposed modifications to the structural components of the existing residence, the residence is allowed to remain in an existing nonconforming location.

As mentioned previously, the scope of work includes an interior remodel of the residence and like for like replacement of the windows, exterior doors, roofing, siding, and the replacement of the existing fireplace with a gas fireplace. The project plans are provided in Attachment 2. This scope of work does not exceed any DRP thresholds, however, the Applicants contacted the California Coastal Commission (CCC) prior to submitting their application and CCC Staff indicated that they would require a Coastal Development Permit for the proposed scope of work. The SBMC indicates that if the project is for development on a coastal bluff top property or on the face or toe of a bluff for which a coastal development permit will be required by the CCC, then a Development Review Permit is required.

The property is not located within any of the City's Specific Plan areas; however, it is located within the boundaries of the SROZ. The project has been evaluated for conformance with the policies contained in the City's Certified LCP LUP, regulations of the SROZ, and the Solana Beach Municipal Code (SBMC) which are discussed further later in this report. As a condition of project approval, the Applicants would be required

to obtain a Coastal Development Permit (CDP) from the California Coastal Commission (CCC) prior to the issuance of a building permit by the City.

Table 1 below provides an overview of the applicable Certified LUP and Solana Beach Municipal Code (SBMC) specific minimum and maximum requirements of the zoning regulations for the development of the property compared to the Applicants' proposed design. As mentioned previously, the existing residence is existing nonconforming for height, setbacks, and floor area ratio (FAR) and the proposed project will not increase those nonconformities and are allowed to remain the proposed project as shown below would be in compliance with the regulations of the SBMC.

<b>Table 1</b>			
<b>LOT INFORMATION</b>			
<b>Property Address:</b>	403 Pacific Ave.	<b>Zoning Designation:</b>	MR (5-7 du/ac)
<b>Legal Lot Size:</b>	6,795 ft <sup>2</sup>	<b># of Units Allowed:</b>	1 Dwelling Unit 1 ADU & 1 JADU
<b>Max. Allowable Floor Area:</b>	3,139 ft <sup>2</sup>	<b># of Units Requested:</b>	1 Existing Dwelling Unit
<b>Existing/Prop. Floor Area:</b>	3,585 ft <sup>2</sup>	<b>Setbacks:</b>	
<b>Over Max Floor Area:</b>	446 ft <sup>2</sup>	<b>Required</b>	<b>Existing</b>
<b>Max. Allowable Height:</b>	25 ft.	Front (E)	5 ft. 5.5 ft.
<b>Existing Height:</b>	27 ft.	Interior Side (N)	5 ft. 24.5 ft.
<b>Overlay Zone(s):</b>	SROZ	Interior Side (S)	5 ft. 7.5 ft.
		Rear (W)	40 ft. min. 9.5 ft.
<b>PROPOSED PROJECT INFORMATION</b>			
<b>Floor Area Breakdown:</b>		<b>Required Permits:</b>	
Existing Main Level Garage:	690 ft <sup>2</sup>	<b>DRP:</b> A DRP is required for any development on a coastal bluff top property or on the face or toe of a bluff for which a Coastal Development Permit issued by the California Coastal Commission is presently required.	
Existing Main Level Living Area:	1,470 ft <sup>2</sup>		
Existing Upper-Level Living Area:	1,655 ft <sup>2</sup>		
Existing Covered Patio:	170 ft <sup>2</sup>		
Subtotal:	3,985 ft <sup>2</sup>		
Required Parking Exemption:	-400 ft <sup>2</sup>		
<b>Total Floor Area:</b>	<b>3,585 ft<sup>2</sup></b>		
<b>Proposed Grading:</b> The proposed project does not include any grading.			

City Council Resolution 2024-088 provides the full text of the pertinent DRP regulations. Staff has prepared draft findings for approval of the project for Council's consideration based upon the information in this report and Staff's analysis of the proposed project. It provides the applicable LUP and SBMC sections in italicized text. Conditions from the Planning, Engineering and Fire Departments have been incorporated into the Resolution of Approval. The Council may direct Staff to modify the Resolution to reflect the findings and conditions as it deems appropriate as a part of the Public Hearing process. If the Council determines the project is to be denied, Staff will prepare a Resolution of Denial for an action to be taken at a subsequent Council meeting.

The following is a discussion of compliance with the policies of the LCP LUP as well as the findings for a DRP (as each applies to the proposed project) and a discussion of the

development plans and recommended conditions as contained in the attached Resolution.

Local Coastal Program (LCP) Land Use Plan (LUP):

The City's LUP applies citywide as the entire City is located within the Coastal Zone. Therefore, in addition to compliance with the City's Municipal Code and General Plan, the project's conformance with the certified LUP is also evaluated.

The LUP contains specific policies, provisions and regulations related to properties located on the coastal bluff including those related to bluff edge setbacks, existing legal non-conforming structures and the removal of permanent irrigation systems located within 100 feet of the bluff edge.

The key relevant policies from the City's Certified LUP which apply to this project are listed below in italics for reference followed by an analysis of the how the proposed project is designed in compliance with the respective Certified LUP policy:

***Policy 4.14:*** Existing, lawfully established structures that are located between the sea and the first public road paralleling the sea (or lagoon) built prior to the adopted date of the LUP that do not conform to the provisions of the LCP shall be considered legal non-conforming structures. Such structures may be maintained and repaired, as long as the improvements do not increase the size or degree of non-conformity. Additions and improvements to such structures that are not considered Bluff Top Redevelopment, as defined herein, may be permitted provided that such additions or improvements themselves comply with the current policies and standards of the LCP. Complete demolition and reconstruction or Bluff Top Redevelopment is not permitted unless the entire structure is brought into conformance with the policies and standards of the LCP.

***Policy 4.17:*** New development shall be set back a safe distance from the bluff edge, with a reasonable margin of safety, to eliminate the need for bluff retention devices to protect the new improvements. All new development, including additions to existing structures, on bluff property shall be landward of the Geologic Setback Line (GSL) as set forth in Policy 4.25. This requirement shall apply to the principal structure and accessory or ancillary structures such as guesthouses, pools, tennis courts, cabanas, and septic systems, etc. Accessory structures such as decks, patios, and walkways, which are at-grade and do not require structural foundations may extend into the setback area no closer than five feet from the bluff edge. On lots with a legally established bluff retention device, the required geologic analysis shall describe the condition of the existing seawall; identify any impacts it may be having on public access and recreation, scenic views, sand supply and other coastal resources; and evaluate options to mitigate any previously unmitigated impacts of the structure or modify, replace or remove the existing protective device in a manner that would eliminate or reduce those impacts.

The proposed project plans (Attachment 2) indicate that the project will consist of an interior remodel of the residence and like for like replacement of the windows, exterior doors, roofing, siding, and the replacement of the existing fireplace with a gas fireplace. There are no proposed changes to the structural components or changes to the floor area. The southwest corner of the existing nonconforming residence is seaward of the GSL and approximately ½ of the residence is seaward of the minimum 40-foot rear yard setback.

The property has required five-foot side yard setbacks along the north and south side yards as well as along the front (landward or east) side of the property. The existing residence meets the required five-foot setback on the northern property line with the allowed projections for eaves and fireplaces. The residence exceeds the required setbacks on the eastern and southern property lines. The SBMC and the LUP indicate that legally existing nonconforming structures can be maintained and repaired as long as it does not increase the size or degree of the nonconformity.

The GSL and bluff stability requirements of the LUP are provided under LUP Policy 4.25. The geotechnical analysis prepared by Geotechnical Exploration, Inc. (Attachment 3) that was provided by the Applicants and was reviewed by the City's third-party geotechnical engineering consultant Colm Kenny of Universal Engineering Sciences (UES) found that the project was in compliance with the policies of the LCP/LUP (Attachment 4).

***Policy 4.25:*** *All new bluff property development shall be set back from the bluff edge a sufficient distance to ensure that it will not be in danger from erosion and that it will ensure stability for its projected 75-year economic life. To determine the GSL, applications for bluff property development must include a geotechnical report, from a licensed Geotechnical Engineer or a certified Engineering Geologist that establishes the Geologic Setback Line (GSL) for the proposed development. This setback line shall establish the location on the bluff top stability where it can be reasonably assured for the economic life of the development. Such assurance will take the form of a quantitative slope analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) or 1.2 (pseudostatic, k=0.15 or determined through analysis by the geotechnical engineer), using shear strength parameters derived from relatively undeformed samples collected at the site. In no case shall the setback be less than 40 feet from the bluff edge, and only if it can be demonstrated that the structure will remain stable, as defined above, at such a location for its 75-year economic life and has been sited safely without reliance on existing or future bluff retention devices, other than a caisson foundation.*

The proposed project would not modify the structural components of the existing residence or change the footprint of the structure in any way, so the existing nonconforming structure is allowed to remain as is. The proposed improvements could be permitted as they would not increase the size or degree of the existing legal nonconformity as allowed under LUP Policy 4.14.

***Policy 4.26:*** *With respect to bluff properties only, the City will require the removal or capping of any permanent irrigation system within 100 feet of the bluff edge in*



*connection with issuance of discretionary permits for new development, redevelopment, or shoreline protection, or bluff erosion, unless the bluff property owner demonstrates to the satisfaction of the Public Works Director, or the CCC if the project is appealed, that such irrigation has no material impact on bluff erosion (e.g., watering hanging plants over hardscape which drains to the street).*

The proposed project has been conditioned to require that if there is any existing onsite irrigation that, prior to final inspection, the Applicants would be required to remove or cap off any/all onsite permanent irrigation systems located within 100 feet of the bluff edge.

Chapter 8 of the LUP (Definitions) contains the threshold listed below that is used by the City to evaluate whether a proposed project is considered a remodel or whether it meets the definition of a “Bluff Top Redevelopment” project.

*Bluff Top Redevelopment shall apply to proposed development located between the sea and the first public road paralleling the sea (or lagoon) that consists of alterations including (1) additions to an existing structure, (2) exterior and/or interior renovations, (3) and/or demolition of an existing bluff home or other principal structure, or portions thereof, which results in:*

*(a) Alteration of 50% or more of major structural components including exterior walls, floor and roof structure, and foundation, or a 50% increase in floor area. Alterations are not additive between individual major structural components; however, changes to individual major structural components are cumulative over time from the date of certification of the LUP.*

*(b) Demolition, renovation or replacement of less than 50% of a major structural component where the proposed alteration would result in cumulative alterations exceeding 50% or more of a major structural component, taking into consideration previous alterations approved on or after the date of certification of the LUP; or an alteration that constitutes less than 50% increase in floor area where the proposed alteration would result in a cumulative addition of greater than 50% of the floor area taking into consideration previous additions approved on or after the date of certification of the LUP.*

The proposed project would not modify the footprint of the existing residence or change the existing floor area. The existing residence is nonconforming in that it exceeds the maximum building height and the maximum allowable FAR. The proposed project would not increase the size or the degree of the existing legal nonconformity. Additionally, as shown in Table 3, the proposed project is below all thresholds listed above and is therefore not considered a Bluff Top Redevelopment project and is not subject to Certified LUP Policy 4.29 which would otherwise require the project, as new development, to be brought into conformance with the LCP.

Structural Component	Proposed or Modified	Percent Change / Difference	LUP Threshold Exceeded?
Exterior Walls	99 FT 2 1/8 IN	22.8%	No
Floor Area	0 SF	0%	No
Foundation	0 SF	0%	No
Roof Structure	400 SF	13.3%	No
Floor Structure	0 SF	0%	No

The property is located approximately 318.2 feet north of Tide Park Beach public beach access easement and 0.4 miles north of Fletcher Cove Park, which each provides public coastal access to the public beach below. As designed, the proposed project would not change the existing public access.

**Development Review Permit Compliance:**

In addition to meeting zoning requirements, the project must also be found in compliance with development review criteria. The proposed project requires a DRP for development on a coastal bluff top property that requires a coastal development permit issued by the CCC.

The following is a list of the development review criteria topics:

1. Relationship with Adjacent Land Uses
2. Building and Structure Placement
3. Landscaping
4. Roads, Pedestrian Walkways, Parking and Storage Areas
5. Grading
6. Lighting
7. Usable Open Space

The Council may approve, or conditionally approve, a DRP only if all the findings listed below can be made. Resolution 2024-088 (Attachment 1) provides a full discussion of the following findings.

1. The proposed development is consistent with the general plan and all applicable requirements of this title, including special regulations, overlay zones, and specific plans.
2. The proposed development complies with the development review criteria set forth in subsection F of this section.
3. All required permits and approvals issued by the city, including variances, conditional use permits, comprehensive sign plans, and coastal development permits have been obtained prior to or concurrently with the development review permit.

4. If the development project also requires a permit or approval to be issued by a state or federal agency, the city council may conditionally approve the development review permit upon the applicant obtaining the required permit or approval from the other agency.

If the above findings cannot be made, the Council shall deny the DRP. The following is a discussion of the applicable development review criteria as they relate to the proposed project.

#### **Relationship with Adjacent Land Uses:**

The property is located within the MR Zone. Other nearby properties are also located within the MR Zone and are developed with one and two-story, single-family residences. The project site is currently developed with a split-level, single-family residence.

The project, as designed, is consistent with the permitted uses for the MR Zone as described in SBMC Sections 17.20.010 and 17.12.020. The property is designated Medium Density Residential in the General Plan and intended for single-family residences developed at a maximum density of five to seven dwelling units per acre. The proposed development could be found to be consistent with the objectives of the General Plan as it encourages the development and maintenance of healthy residential neighborhoods, the stability of transitional neighborhoods, and the rehabilitation of deteriorated neighborhoods.

The property is not located within any of the City's Specific Plan areas; however, it is located within the boundaries of the SROZ and within the Coastal Zone. The project has been evaluated, and could be found to be in conformance with, the regulations of the SROZ, which are discussed further in this report. As a condition of project approval, the Applicants would be required to obtain a Coastal Development Permit, Waiver or Exemption from the California Coastal Commission prior to the issuance of a Building Permit.

#### **Building and Structure Placement:**

The Applicants are proposing like for like replacement of the windows, doors, siding, water proofing, non-structural roofing and light fixtures. There are no proposed modifications to the footprint floor area or height of the existing structure.

#### **Fences, Walls and Retaining Walls:**

The SBMC allows for fences and walls or any combination thereof, to be no higher than 42 inches in height as measured from existing grade within the front yard setback. Fences, walls and retaining walls located within the rear and interior side yards are allowed to be up to six feet in height with an additional 24 inches that is 50% open to light and air.

The plans indicate that there are existing walls in the rear and side yards and one in front of the existing residence that will remain without any proposed modifications. A condition

of approval has been added to the resolution that indicates that any proposed onsite fences, walls and any proposed railing located on top, or any combination thereof shall comply with applicable regulations of SBMC Section 17.20.040 and 17.60.070 (Fences and Walls).

**Landscape:**

The project is not subject to the water efficient landscaping regulations of SBMC Chapter 17.56. According to SBMC Section 17.56.040, the regulations apply to modified irrigated landscaped areas that exceed 500 square feet. The Applicants are not proposing any new irrigated landscaping.

The LCP Policy 4.26 requires the Applicants to cap or remove any permanent irrigation systems onsite unless the bluff property owner demonstrates, to the satisfaction of the City Engineer, that such irrigation has no material impact on bluff erosion. A condition has been added that if there are any permanent irrigation systems that they shall be capped or removed.

**Parking:**

The existing attached 690 square foot garage is located on the east side of the residence and will remain as it currently exists. The garage provides two unobstructed parking spaces that are 9 ft. X 19 ft. therefore the property qualifies for the 400 square footage exemption for required parking in an enclosed garage.

**Grading:**

The proposed project does not include any grading.

**Lighting:**

A condition of project approval includes that all new exterior lighting fixtures comply with the City-Wide Lighting Regulations of the Zoning Ordinance (SBMC 17.60.060). All light fixtures shall be shielded so that no light or glare is transmitted or reflected in such concentrated quantities or intensities as to be detrimental to the surrounding area.

**Useable Open Space:**

The project consists of an interior remodel and like for like replacement of existing finishes, windows and doors for an existing single-family residence with attached garage, therefore, usable open space and recreational facilities are not required according to SBMC 17.20.040.

**Property Frontage & Public Right-of-Way Improvements:**

No frontage or right-of-way improvements are required as part of this permit.

### **Public Hearing Notice:**

Notice of the City Council Public Hearing for this project was published in the San Diego Union Tribune more than 10 days prior to the public hearing. The same public notice was mailed to property owners and occupants within 300 feet of the proposed project site on September 10, 2024. As of the date of preparation of this Staff Report, Staff has not received any letters, phone calls, or emails from neighbors or interested parties in support of, or in opposition to, the proposed project.

In conclusion, if the Council can make the required findings, the proposed project, as conditioned, could be found in compliance with the requirements of the Certified LUP, Zoning Ordinance, and the General Plan, and could be found to meet the findings required to approve a DRP.

### **CEQA COMPLIANCE STATEMENT:**

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 (Class 1 Exemption) of the 2024 State CEQA Guidelines which is an exemption for minor alteration of existing public or private structures or facilities including additions to existing structures provided that the addition will not result in an increase of more than 50% of the floor area of the structures before the addition, or 2,500 square feet, whichever is less.

**FISCAL IMPACT:** N/A

**WORK PLAN:** N/A


### **OPTIONS:**

- Approve Staff recommendation adopting the attached Resolution 2024-088.
- Approve Staff recommendation subject to additional specific conditions necessary for the City Council to make all required findings for the approval of a DRP.
- Deny the project if all required findings for the DRP cannot be made.

**CITY STAFF RECOMMENDATION:**

The proposed project meets the minimum objective requirements under the LUP, SBMC, is consistent with the General Plan and may be found, as conditioned, to meet the discretionary findings required as discussed in this report to approve a modification to a DRP. Therefore, Staff recommends that the City Council:

1. Conduct the Public Hearing: Open the Public Hearing, Report Council Disclosures, Receive Public Testimony, and Close the Public Hearing.
2. Find the project exempt from the California Environmental Quality Act pursuant to Section 15301 of the State CEQA Guidelines; and
3. If the City Council makes the requisite findings and approves the project, adopt Resolution 2024-088 conditionally approving a Modification to a Development Review Permit (DRP) to remodel the interior of the residence and replace the windows, exterior doors, roofing, siding, and replace existing fireplace with a gas fireplace at the existing two-story residence at 403 Pacific Avenue.



Alyssa Muto, City Manager

Attachments:

1. Resolution 2024-088
2. Project Plans
3. Geotechnical Reports
4. UES Geotechnical Letter

**RESOLUTION 2024-088**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, CONDITIONALLY APPROVING A MODIFICATION TO A DEVELOPMENT REVIEW PERMIT TO REMODEL THE INTERIOR OF THE RESIDENCE AND REPLACE THE WINDOWS, EXTERIOR DOORS, ROOFING, SIDING, AND REPLACE EXISTING FIREPLACE WITH A GAS FIREPLACE AT THE EXISTING TWO-STORY RESIDENCE AT 403 PACIFIC AVENUE, SOLANA BEACH**

**APPLICANTS: PETER AND SARAH BATES  
CASE NO.: MOD24-001  
APN: 263-051-07**

**WHEREAS**, Peter and Sarah Bates (hereinafter referred to as “Applicants”) have submitted an application for a Modification to a Development Review Permit (DRP) pursuant to Title 17 (Zoning), of the Solana Beach Municipal Code (SBMC); and

**WHEREAS**, the Public Hearing was conducted pursuant to the provisions of Solana Beach Municipal Code Section 17.72.030; and

**WHEREAS**, Site Development Permit 80-93-08 was approved with the adoption of Resolution 1993-055 which establishes that the existing residence legally existing nonconforming to the current zoning regulations; and

**WHEREAS**, at the Public Hearing on September 25, 2024, the City Council received and considered evidence concerning the proposed application; and

**WHEREAS**, the City Council of the City of Solana Beach found the application request exempt from the California Environmental Quality Act pursuant to Section 15301 of the State CEQA Guidelines; and

**WHEREAS**, this decision is based upon the evidence presented at the Hearing and any information the City Council gathered by viewing the site and the area as disclosed at the hearing.

**NOW THEREFORE**, the City Council of the City of Solana Beach, California, does resolve as follows:

1. That the foregoing recitations are true and correct.
2. That the request for a Modification to a DRP to remodel the interior of the residence and replace the windows, exterior doors, roofing, siding, and the replacement of the existing fireplace with a gas fireplace at the existing two-story residence at 403

Pacific Avenue is conditionally approved based upon the following findings and subject to the following conditions:

### 3. FINDINGS

A. In accordance with Section 17.68.040 (Development Review Permit) of the City of Solana Beach Municipal Code, the City Council finds the following:

- I. *The proposed project is consistent with the General Plan and all applicable requirements of SBMC Title 17 (Zoning Ordinance), including special regulations, overlay zones and specific plans.*

General Plan Consistency: The proposed project, as conditioned, is consistent with the City's General Plan designation of Medium Density Residential, which allows for single-family residential development with a maximum density of 5-7 dwelling units per acre. Further, the proposed development is consistent with the objectives of the General Plan as it encourages the development and maintenance of healthy residential neighborhoods, the stability of transitional neighborhoods, and the rehabilitation of deteriorated neighborhoods.

Local Coastal Program Land Use Plan Consistency: The proposed project is consistent with all applicable requirements of the City's certified Local Coastal Program Land Use Plan including key policies related to bluff edge setbacks for new development.

Zoning Ordinance Consistency: The proposed project is consistent with all applicable requirements of the Zoning Ordinance (Title 17) (SBMC 17.20.030 and 17.48.040), which delineates maximum allowable Floor Area Ratio (FAR), Permitted Uses and Structures (SBMC Section 17.20.020), which provides for uses of the property for a single-family residence. Further, the proposed project adheres to all property development regulations established for the Medium Residential (MR) Zone and cited by SBMC Section 17.020.030 as well as the specific development regulations of the Scaled Residential Overlay Zone (SROZ) cited in SBMC Section 17.48.040.

The design of the proposed project is consistent with the provisions for minimum yard dimensions (i.e., setbacks) and the maximum FAR, maximum building height, and parking requirements. Prior to building permit issuance, the project will be reviewed for compliance with the landscape regulations as established by SBMC Section 17.56.

- II. *The proposed development complies with the following development review criteria set forth in Solana Beach Municipal Code Section 17.68.040.F:*



- a. *Relationship with Adjacent Land Uses: The development shall be designed in a manner compatible with and where feasible, complimentary to existing and potential development in the immediate vicinity of the project site. Site planning on the perimeter of the development shall give consideration to the protection of surrounding areas from potential adverse effects, as well as protection of the property from adverse surrounding influences.*

The property is located within the MR Zone. Other nearby properties are also located within the MR Zone and are developed with one and two-story, single-family residences. The project site is currently developed with a split-level, single-family residence.

The project, as designed, is consistent with the permitted uses for the MR Zone as described in SBMC Sections 17.20.010 and 17.12.020. The property is designated Medium Density Residential in the General Plan and intended for single-family residences developed at a maximum density of five to seven dwelling units per acre. The proposed development could be found to be consistent with the objectives of the General Plan as it encourages the development and maintenance of healthy residential neighborhoods, the stability of transitional neighborhoods, and the rehabilitation of deteriorated neighborhoods.

The property is not located within any of the City's Specific Plan areas; however, it is located within the boundaries of the SROZ and within the Coastal Zone. The project has been evaluated, and could be found to be in conformance with, the regulations of the SROZ, which are discussed further in this report. As a condition of project approval, the Applicants would be required to obtain a Coastal Development Permit, Waiver or Exemption from the California Coastal Commission prior to the issuance of a Building Permit.

- b. *Building and Structure Placement: Buildings and structures shall be sited and designed in a manner which visually and functionally enhances their intended use.*

The Applicants are proposing like for like replacement of the windows, doors, siding, water proofing, non-structural roofing and light fixtures. There are no proposed modifications to the footprint floor area or height of the existing structure.

- c. *Landscaping: The removal of significant native vegetation shall be minimized. Replacement vegetation and landscaping shall be compatible with the vegetation of the surrounding area. Trees and other large plantings shall not obstruct significant views when installed or at maturity.*

The project is not subject to the water efficient landscaping regulations of SBMC Chapter 17.56. According to SBMC Section 17.56.040, the regulations apply to modified irrigated landscaped areas that exceed 500 square feet. The Applicants are not proposing any new irrigated landscaping.

The LCP Policy 4.26 requires the Applicants to cap or remove any permanent irrigation systems onsite unless the bluff property owner demonstrates, to the satisfaction of the City Engineer, that such irrigation has no material impact on bluff erosion. A condition has been added that if there are any permanent irrigation systems that they shall be capped or removed.

- d. *Roads, Pedestrian Walkways, Parking and Storage Areas: Any development involving more than one building or structure shall provide common access roads and pedestrian walkways. Parking and outside storage areas, where permitted, shall be screened from view, to the extent feasible, by existing topography, by the placement of buildings and structures, or by landscaping and plantings.*

The existing attached 690 square foot garage is located on the east side of the residence and will remain as it currently exists. The garage provides two unobstructed parking spaces that are 9 ft. X 19 ft. therefore the property qualifies for the 400 square footage exemption for required parking in an enclosed garage.

- e. *Grading: To the extent feasible, natural topography and scenic features of the site shall be retained and incorporated into the proposed development. Any grading or earth-moving operations in connection with the proposed development shall be planned and executed so as to blend with the existing terrain both on and adjacent to the site. Existing exposed or disturbed slopes shall be landscaped with native or naturalized non-native vegetation and existing erosion problems shall be corrected.*

The proposed project does not include any grading.

- f. Lighting: Light fixtures for walkways, parking areas, driveways, and other facilities shall be provided in sufficient number and at proper locations to assure safe and convenient nighttime use. All light fixtures shall be appropriately shielded so that no light or glare is transmitted or reflected in such concentrated quantities or intensities as to be detrimental to the surrounding areas per SBMC 17.60.060 (Exterior Lighting Regulations).*

A condition of project approval includes that all new exterior lighting fixtures comply with the City-Wide Lighting Regulations of the Zoning Ordinance (SBMC 17.60.060). All light fixtures shall be shielded so that no light or glare is transmitted or reflected in such concentrated quantities or intensities as to be detrimental to the surrounding area.

- g. Usable Open Space: Recreational facilities proposed within required usable open space shall be located and designed to maintain essential open space values.*

The project consists of an interior remodel and like for like replacement of existing finishes, windows and doors for an existing single-family residence with attached garage, therefore, usable open space and recreational facilities are not required according to SBMC 17.20.040.

- III. All required permits and approvals, including variances, conditional use permits, comprehensive sign plans, and coastal development permits, have been obtained prior to or concurrently with the development review permit.*

All required permits are being processed concurrently with the modification.

- IV. If the development project also requires a permit or approval to be issued by a state or federal agency, the city council may conditionally approve the development review permit upon the Applicants obtaining the required permit or approval from the other agency.*

The Applicants are required to obtain approval from the CCC prior to issuance of Building Permits.

#### 4. CONDITIONS

Prior to use or development of the property in reliance on this permit, the Applicants shall provide for and adhere to the following conditions:

A. Community Development Department Conditions:

- I. Building Permit plans must be in substantial conformance with the plans presented to the City Council on September 11, 2024, and located in the project file with a submittal date of August 21, 2024.
- II. The Applicants shall obtain required California Coastal Commission (CCC) approval of a Coastal Development Permit, Waiver or Exemption as determined necessary by the CCC, prior to the issuance of a building permit by the City.
- III. The Applicants shall remove or cap any/all permanent irrigation systems onsite unless the bluff property owner demonstrates, to the satisfaction of the City Engineer/Public Works Director, that such irrigation has no material impact on bluff erosion (e.g., watering hanging plants over hardscape which drains to the street).
- IV. Any new bluff property landscaping shall consist of native, non-invasive, drought-tolerant, fire-resistant, and salt-tolerant species.
- V. Any new exterior lighting fixtures shall be in conformance with the City-Wide Lighting Regulations of SBMC 17.60.060.
- VI. All light fixtures shall be appropriately shielded so that no light or glare is transmitted or reflected in such concentrated quantities or intensities that render them detrimental to the surrounding area.
- VII. Construction vehicles shall be parked on the subject property at all times when feasible. If construction activity prohibits parking on the subject property, the Applicants shall ensure construction vehicles are parked in such a way to allow sufficient vehicular access on Pacific Avenue and minimize impact to the surrounding neighbors.
- VIII. Pursuant to SBMC 17.68.040 subsection K, the signed final development plan shall be the official site layout for the property and shall be attached to any application for a building permit for the subject property. Any subsequent revisions or changes to the final development plan as approved by the Council will require an amendment to the approved DRP.

B. Fire Department Conditions:

- I. GATES: All gates or other structures or devices, which could obstruct fire access roadways or otherwise hinder emergency operations, are prohibited unless they meet standards approved by the Fire

Department. An approved emergency key-operated switch and/or an approved emergency traffic control-activating strobe light sensor shall be installed per the Solana Beach Municipal Code Title 15 Building and Construction Chapter 15.32 Fire Code Section 503.6. All Knox Box products shall be purchased through Solana Beach Fire website.

- II. OBSTRUCTION OF ROADWAYS DURING CONSTRUCTION: All roadways shall be a minimum of 20 feet in width during construction and maintained free and clear, including the parking of vehicles per the 2022 California Fire Code Chapter 5 Section 503.4 and 503.2.1.
- III. ADDRESS NUMBERS: STREET NUMBERS: Approved numbers and/or addresses shall be placed on all new and existing buildings and at appropriate additional locations as to be plainly visible and legible from the street or roadway fronting the property from either direction of approach. Said numbers shall contrast with their background, and shall meet the following minimum standards as to size: 4" high with a 1/2" inch stroke width for residential buildings, 8" high with a 1/2" stroke for commercial and multi-family residential buildings, 12" high with a 1" stroke for industrial buildings. Additional numbers shall be required where deemed necessary by the Fire Marshal, such as rear access doors, building corners, and entrances to commercial centers per the 2022 California Fire Code Chapter 5 Section 505.1.
- IV. CLASS "A" ROOF: All structures shall be provided with a Class "A" Roof covering to the satisfaction of the Solana Beach Fire Department and per the 2022 California Building Code Chapter 15 Section 1505.

C. Engineering Department Conditions:

- I. All construction demolition materials shall be recycled according to the City's Construction and Demolition recycling program and an approved Waste Management Plan shall be submitted.
- 5. ENFORCEMENT: Pursuant to SBMC 17.72.120(B) failure to satisfy any and all of the above-mentioned conditions of approval is subject to the imposition of penalties as set forth in SBMC Chapters 1.1.6 and 1.18 in addition to any applicable revocation proceedings.
  - 6. EXPIRATION: The Modification for the project will expire 24 months from the date of this Resolution, unless the Applicants have obtained building permits and have commenced construction prior to that date, and diligently pursued construction to

completion. An extension of the expiration date of this Development Review Permit may be applied for pursuant to SBMC 17.72.110 subject to City Council approval.

7. INDEMNIFICATION AGREEMENT: The Applicants shall defend, indemnify, and hold harmless the City, its agents, officers, and employees from any and all claims, actions, proceedings, damages, judgments, or costs, including attorney’s fees, against the City or its agents, officers, or employees, relating to the issuance of this permit including, but not limited to, any action to attack, set aside, void, challenge, or annul this development approval and any environmental document or decision. The City will promptly notify the Applicants of any claim, action, or proceeding. The City may elect to conduct its own defense, participate in its own defense, or obtain independent legal counsel in defense of any claim related to this indemnification. In the event of such election, the Applicants shall pay all of the costs related thereto, including without limitation reasonable attorney’s fees and costs. In the event of a disagreement between the City and Applicants regarding litigation issues, the City shall have the authority to control the litigation and make litigation related decisions, including, but not limited to, settlement or other disposition of the matter. However, the Applicants shall not be required to pay or perform any settlement unless such settlement is approved by the Applicants.

NOTICE TO APPLICANTS: Pursuant to Government Code Section 66020, you are hereby notified that the 90-day period to protest the imposition of the fees, dedications, reservations or other exactions described in this resolution commences on the effective date of this resolution. To protest the imposition of any fee, dedications, reservations or other exactions described in this resolution you must comply with the provisions of Government Code Section 66020. Generally, the resolution is effective upon expiration of the tenth day following the date of adoption of this resolution, unless the resolution is appealed or called for review as provided in the Solana Beach Zoning Ordinance.

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Solana Beach, California, held on the 25<sup>th</sup> day of September 2024, by the following vote:

AYES: Councilmembers –  
NOES: Councilmembers –  
ABSENT: Councilmembers –  
ABSTAIN: Councilmembers –

\_\_\_\_\_  
LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

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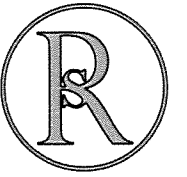
JOHANNA N. CANLAS, City Attorney

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ANGELA IVEY, City Clerk

# BATES RESIDENCE RENOVATION

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075  
6/21/2024



BATES RESIDENCE RENOVATION

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



REYES  
STUDIO  
ARCHITECTURE  
5588/0222/CA/16

T1  
TITLE SHEET

ABBREVIATIONS	GENERAL NOTES	PARCEL INFORMATION	PROJECT DIRECTORY	SCOPE OF WORK																																																																																																				
<p>CL CENTERLINE Ø DIAMETER OR ROUND (E) EXISTING EXISTG EXISTING ABV ABOVE ACOUS ACUSTICAL A.D. AREA DRAIN ADJ. ADJUSTABLE A.F.F. ABOVE FINISH FLOOR A.F.G. ADJACENT FINISH GRADE ALUM. ALUMINUM APPROX APPROXIMATE BD. BOARD B.I. BUILT-IN BLDG. BUILDING BLK. BLOCK BLKG. BLOCKING BM. BEAM CAB. CABINET CBM. CEMENT CLG. CEILING CLO. CLOSET CLR. CLEAR C.M.U. CONCRETE MASONRY UNIT COL. COLUMN CONC. CONCRETE CONN. CONNECTION CONSTR. CONSTRUCTION CONT. CONTINUOUS CSMT. CASEMENT WINDOW CTR. CENTER D. DRYER DBL. DOUBLE DEPT. DEPARTMENT DET. DETAIL DIA. DIAMETER DIM. DIMENSION DN. DOWN D.O. DOOR OPENING DR. DOOR DW. DISH WASHER DWS. DRAWINGS DWR. DRAWER E. EAST EA. EACH E.J. EXPANSION JOINT EL. ELEVATION ELEC. ELECTRICAL EQ. EQUAL EQIP. EQUIPMENT EXIST. EXISTING EXP. EXPANSION EXT. EXTERIOR FAU. FORCED AIR UNIT F.D. FLOOR DRAIN FDN. FOUNDATION F.F. FINISH FLOOR F.G. FINISH GRADE F.H. FIRE HYDRANT FN. FINISH FIXED FIXED WINDOW FL. FLOOR FLASH. FLASHING F.O.C. FACE OF CONCRETE F.O.F. FACE OF FINISH F.O.M. FACE OF MULLION F.O.S. FACE OF STUD F.P. FIREPLACE FRAMG. FRAMING FT. FOOT OR FEET FTG. FOOTING FURR. FURRING FUT. FUTURE G. GAS GA. GAUSE GALV. GALVANIZED G.D. GARBAGE DISPOSAL GFCI GROUND FAULT CURRENT INTERRUPTER GL. GLASS GND. GROUND GR. GRADE GRP. GYPSUM GYSPBD. GYPSUM BOARD H.B. HOSE BIB HDR. HEADER HDWD. HARDWOOD HDW. HARDWARE H.M. HOLLOW METAL HORIZ. HORIZONTAL HR. HOUR HT. HEIGHT H.V.A.C. HEATING, VENTILATION &amp; AIR CONDITIONING HORIZ. HORIZONTAL INSUL. INSULATION INT. INTERIOR LIN. LINEN</p>	<p>PROVIDE BACK DRAFT DAMPER AT EXHAUST FAN PER CMC SECTION 504.0.</p> <p>NEW VENTILATION OPENINGS IN VERTICAL WALL, OR OTHER SIMILAR VENTILATION OPENINGS, SHALL BE LOUVERED AND COVERED WITH 1/4" NON-COMBUSTIBLE, CORROSION RESISTANT METAL MESH, OR OTHER APPROVED MATERIAL THAT OFFERS EQUIVALENT PROTECTION.</p> <p>STATE HEALTH AND SAFETY CODE SEC. 17421.9 BANS THE USE OF CHLORINATED POLYVINYL CHLORIDE (CPVC) FOR INTERIOR WATER SUPPLY PIPING.</p> <p>PROVIDE MIXING VALVE AT SHOWER HEAD PER CPC SECTION 410.0.</p> <p>PROVIDE FAUCETS WITH A MAXIMUM FLOW OF 2.2 GALLONS PER MINUTE (GPM).</p> <p>PROVIDE ULTRA LOW FLUSH TOILETS.</p> <p>ONSITE BUILT-UP SHOWER RECEPTOR SHALL COMPLY WITH CPC 4110.</p> <p>PROVIDE CARBON-MONOXIDE SENSOR(S) PER CBC SECTION 420.4.</p> <p>PERMANENT VACUUM BREAKERS SHALL BE INCLUDED WITH ALL NEW HOSE BIBS.</p> <p>ALL ABS AND PVC PIPING AND FITTINGS SHALL BE ENCLOSED WITHIN WALL AND FLOORS COVERED WITH "TYPE X GYPSUM BOARD" OR SIMILAR THAT PROVIDE THE SAME LEVEL OF FIRE PROTECTION. PROTECTION MEMBRANE PENETRATIONS IS NOT REQUIRED.</p> <p>HABITABLE SPACE, HALLWAYS, BATHROOMS, TOILET ROOMS, LAUNDRY ROOMS AND PORTIONS OF BASEMENTS CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0". (R305.1)</p> <p>ALL DIMENSIONS ARE TO FACE OF STUDS, U.N.O.</p> <p>GAS VENTS &amp; NONCON PIPING IN WALLS, PASSING THRU THREE FLOORS OR LESS, SHALL BE EFFECTIVELY DRAFT STOPPED @ EACH FLOOR OR CEILING.</p> <p>CLEARANCE FOR CHIMNEYS, VENT FLUES, ETC. SHALL BE PER MANUFACTURERS INSTRUCTIONS OR PER UMC, WHICHEVER IS GREATER.</p> <p>PROVIDE SOLID BACKING IN STUD WALLS FOR HAND RAILS, TOILET ACCESSORIES, CABINETS, ETC.</p> <p>WINDOW AND DOOR SIZES ARE NOMINAL DIMENSIONS, IN FEET AND INCHES, THE HORIZONTAL DIMENSION FIRST.</p> <p>PROVIDE SEISMIC RESTRAINTS FOR WATER HEATERS, ONE STRAP AT THE TOP 1/3 OF THE TANK AND ONE STRAP AT THE BOTTOM 1/3 OF THE TANK.</p> <p>IN SHOWERS AND TUB-SHOWER COMBINATION CONTROL VALVES MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES.</p> <p>NEW WATER CLOSETS SHALL USE NO MORE THAN 1.6 GALLONS PER FLUSH AND SHALL MEET THE PERFORMANCE STANDARDS ESTABLISHED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE, STANDARD # A 112.19.2 H45 COD. SECTION 17421.9(D).</p> <p>PROVIDE WEATHER-STRIPPING ON ALL WINDOWS &amp; EXTERIOR DOORS &amp; DOOR TO GARAGE FROM HOUSE.</p> <p>PROVIDE SMOKE ALARMS, INTERCONNECTED AND HARD-WIRED WITH BATTERY BACK-UP, IN THE DWELLING UNDERGOING AN ADDITION, ALTERATION, OR REPAIR: (1) WITHIN EACH SLEEPING ROOM; (2) OUTSIDE EACH SLEEPING AREA IN IMMEDIATE VICINITY OF BEDROOMS; (3) ON EACH STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS.</p> <p>BATTERY OPERATED SMOKE ALARMS MAY BE USED IN EXISTING AREAS OF BUILDING WHERE THE INSTALLATION OF HARD-WIRED SMOKE ALARMS WOULD REQUIRE THE REMOVAL OF INTERIOR FINISHES. CRC R314.</p> <p>PROVIDE CARBON MONOXIDE ALARMS, INTERCONNECTED AND HARD-WIRED WITH BATTERY BACK-UP, IN THE DWELLING UNDERGOING AN ADDITION, ALTERATION, OR REPAIR: (1) OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S); (2) ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.</p> <p>BATTERY OPERATED CARBON MONOXIDE ALARMS MAY BE USED IN EXISTING AREAS OF BUILDING WHERE THE INSTALLATION OF HARD-WIRED CARBON MONOXIDE ALARMS WOULD REQUIRE THE REMOVAL OF INTERIOR FINISHES. CRC R315.</p> <p>CRC SECTION R303.1 HABITABLE ROOMS. ALL HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR. SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS. THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.</p> <p>CRC SECTION R303.3 BATHROOMS. WATER CLOSET COMPARTMENTS AND OTHER SIMILAR ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA IN WINDOWS OF NOT LESS THAN 9 SQUARE FEET (0.3 M2), ONE-HALF OF WHICH MUST BE OPENABLE. EXCEPTION: THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A MECHANICAL VENTILATION SYSTEM ARE PROVIDED. THE MINIMUM VENTILATION RATES SHALL BE 50 CUBIC FEET PER MINUTE (24 LBS) FOR INTERMITTENT VENTILATION OR CUBIC FEET PER MINUTE (12 US) FOR CONTINUOUS VENTILATION. VENTILATION AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTSIDE.</p> <p>PROVIDE SHOWER HEADS WITH A MAXIMUM FLOW OF 2.5 GALLONS PER MINUTE (GPM). SHOWER COMPARTMENTS AND BATHTUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH A NONABSORBENT SURFACE THAT EXTENDS TO THE HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR. SEC. R307.2</p> <p>DWELLINGS AND GARAGE SHALL BE SEPARATED PER COUNTY BUILDING CODE 92.2.R302.6, CBC 704.9</p>	<p>ADDRESS: 403 PACIFIC AVE, SOLANA BEACH, CA 92075</p> <p>APN #: 263-051-07</p> <p>TOTAL LOT SIZE: 7,260 SF LOT SIZE MINUS ERODED AREA: 6,795 SF ERODED AREA WEST OF T.O. BLUFF: 465 SF</p> <p>ZONING: MR (MEDIUM RESIDENTIAL)</p> <p>YEAR BUILT: 1967</p> <p>PARKING SPACES: 6 EXISTING TO REMAIN (ZERO ADDITIONAL PROPOSED)</p> <p>LANDSCAPING: 1,060 SQ. FT. EXISTING (NO NEW OR ALTERED LANDSCAPING IS PROPOSED FOR THIS PROJECT)</p> <p>PAVED AREA: 2,315 SQ. FT. EXISTING (NO NEW OR ALTERED PAVING IS PROPOSED FOR THIS PROJECT)</p> <p>EXST. &amp; PROPOSED IMPERVIOUS AREA: 4,415 SQ. FT.</p> <p>SETBACKS: FRONT: 25'-0" SIDE YARD: 5'-0" REAR: 40 FEET FROM THE TOP EDGE OF ANY COASTAL BLUFF</p> <p>*DWELLING STRUCTURES MAY BE BUILT TO WITHIN 25 FEET OF THE TOP EDGE OF A COASTAL BLUFF, BASED UPON AN ENGINEERING GEOLOGY REPORT PREPARED BY A DULY LICENSED ENGINEERING PROFESSIONAL AND MUST COMPLY WITH SBMC 17.20.030 (E)(1)</p> <p>MAX ALLOWABLE HEIGHT: 35'-0"</p> <p>OVERLAY ZONE DESIGNATION: COASTAL DEVELOPMENT ZONE; SCALED RESIDENTIAL OVERLAY; CITY OF SOLANA BEACH</p> <p>EXISTING &amp; PROPOSED REMODEL IS NON-SPRINKLERED</p> <p>FLOOR AREA CALCULATIONS</p> <table border="1"> <tr><td>EXISTING FIRST FLOOR LIVING AREA</td><td>1,470 SQ. FT.</td></tr> <tr><td>FIRST FLOOR LIVING AREA ADDITION</td><td>0 SQ. FT.</td></tr> <tr><td>EXISTING SECOND FLOOR LIVING AREA</td><td>1,655 SQ. FT.</td></tr> <tr><td>SECOND FLOOR LIVING AREA ADDITION</td><td>0 SQ. FT.</td></tr> <tr><td>EXISTING GARAGE</td><td>690 SQ. FT.</td></tr> <tr><td>GARAGE ADDITION</td><td>0 SQ. FT.</td></tr> <tr><td>EXISTING COVERED &amp; ENCLOSED PATIO</td><td>170 SQ. FT.</td></tr> <tr><td>ADU</td><td>0 SQ. FT.</td></tr> <tr><td>SUBTOTAL OF FLOOR AREA</td><td>3,985 SQ. FT.</td></tr> </table> <p>OFF-STREET PARKING EXEMPTION (2 SPACES) - 400 SQ. FT. TOTAL EXISTING/PROPOSED FLOOR AREA: 3,585 SQ. FT.</p> <p>MAX F.A.R. CALCS (BASED ON LOT SIZE MINUS ERODED AREA = 6,795 SQ. FT.) LOT AREA X 0.500 (FOR THE FIRST 6,000 SQ. FT.) = 3,000 SQ. FT. LOT AREA X 0.175 (FOR PORTION OF LOT 6,001 UP TO 19,000 SQ. FT.) = 1,191.25 SQ. FT. MAXIMUM F.A.R. = 3,191.25 SQ. FT.</p> <p>PROJECT ALTERATIONS CALCULATIONS</p> <table border="1"> <thead> <tr> <th>STRUCTURAL COMPONENTS (MAN &amp; UPPER LEVEL)</th> <th>EXISTING</th> <th>PROPOSED OR MODIFIED</th> <th>PERCENT CHANGE DIFFERENCE</th> <th>LUP THRESHOLD EXCEEDED?</th> </tr> </thead> <tbody> <tr><td>EXTERIOR WALLS</td><td>433'-9 1/4"</td><td>99'-2 1/8" LF</td><td>22.0%</td><td>NO</td></tr> <tr><td>FLOOR AREA</td><td>3,015 SF</td><td>0 SF</td><td>0%</td><td>NO</td></tr> <tr><td>FLOOR STRUCTURE</td><td>3,015 SF</td><td>0 SF</td><td>0%</td><td>NO</td></tr> <tr><td>ROOF STRUCTURE</td><td>3,012 SF</td><td>400 SF</td><td>13.3%</td><td>NO</td></tr> <tr><td>FOUNDATION</td><td>2,160 SF</td><td>0 SF</td><td>0%</td><td>NO</td></tr> </tbody> </table>	EXISTING FIRST FLOOR LIVING AREA	1,470 SQ. FT.	FIRST FLOOR LIVING AREA ADDITION	0 SQ. FT.	EXISTING SECOND FLOOR LIVING AREA	1,655 SQ. FT.	SECOND FLOOR LIVING AREA ADDITION	0 SQ. FT.	EXISTING GARAGE	690 SQ. FT.	GARAGE ADDITION	0 SQ. FT.	EXISTING COVERED & ENCLOSED PATIO	170 SQ. FT.	ADU	0 SQ. FT.	SUBTOTAL OF FLOOR AREA	3,985 SQ. FT.	STRUCTURAL COMPONENTS (MAN & UPPER LEVEL)	EXISTING	PROPOSED OR MODIFIED	PERCENT CHANGE DIFFERENCE	LUP THRESHOLD EXCEEDED?	EXTERIOR WALLS	433'-9 1/4"	99'-2 1/8" LF	22.0%	NO	FLOOR AREA	3,015 SF	0 SF	0%	NO	FLOOR STRUCTURE	3,015 SF	0 SF	0%	NO	ROOF STRUCTURE	3,012 SF	400 SF	13.3%	NO	FOUNDATION	2,160 SF	0 SF	0%	NO	<p>OWNER: PETER AND SARAH BATES, 403 PACIFIC AVENUE, SOLANA BEACH, CA 92075</p> <p>CONTRACTOR: JEFF SMITH, SMITH BROTHERS CONSTRUCTION, 444 S. CEDROS AVENUE, SOLANA BEACH, CA 92075. EMAIL: JEFFSMITH@SMITHBROTHERSCONSTRUCTION.COM</p> <p>ARCHITECT: REGGIE REYES, AIA, REYES STUDIO, 1566 HUNTERS POINTE AVENUE, CHULA VISTA, CA. 91913. PH: 050.922.6246. E-MAIL: R.REYES@REYESSTUDIO.COM. WEBSITE: WWW.REYESSTUDIO.COM</p> <p>SURVEYOR: JOHN VAN RYN, PE, PLS, VAN RYN ENGINEERING, INC., 16766 BERNARDO CENTER DR., SAN DIEGO, CA 92120. PH: 050.367.3504. E-MAIL: JOHN@VANRYNENG.COM</p> <p>SOILS ENGINEER: JAY K. HESER, GEOTECHNICAL EXPLORATION, INC., 7420 TRADE STREET, SAN DIEGO, CA 92121. PH: 050.549.7222. E-MAIL: JHEISER@GSI-SD.COM</p> <p>TYPE OF CONSTRUCTION: TYPE V-B NON-SPRINKLERED</p> <p>APPLICABLE CODES: ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE 2022 EDITION OF THE CALIFORNIA CODE OF REGULATIONS (TITLE 24) WHICH INCLUDE: THE 2022 CALIFORNIA BUILDING CODE (CBC) THE 2022 CALIFORNIA RESIDENTIAL CODE (CRC) THE 2022 CALIFORNIA ELECTRICAL CODE (CEC) THE 2022 CALIFORNIA MECHANICAL CODE (CMC) THE 2022 CALIFORNIA PLUMBING CODE (CPC) THE 2022 CALIFORNIA ENERGY CODE THE 2022 CALIFORNIA FIRE CODE (CFC) THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE</p> <p>ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY'S MUNICIPAL CODE</p> <p>VICINITY MAP</p>	<p>REMODEL TO EXISTING 2 STORY SINGLE FAMILY RESIDENCE. REPLACE EXISTING WINDOWS, DOORS, ROOFING &amp; SIDING. ADD NEW WINDOWS TO BEDROOM 3, LAUNDRY ROOM &amp; POWDER ROOM. INTERIOR WALL PARTITION MODIFICATIONS. NEW GAS FIREPLACE TO REPLACE EXISTING.</p> <p>CODE ANALYSIS</p> <p>SHEET INDEX</p> <table border="1"> <thead> <tr><th>GENERAL</th><th>TITLE SHEET</th></tr> </thead> <tbody> <tr><td>T1</td><td>TITLE SHEET</td></tr> </tbody> </table> <table border="1"> <thead> <tr><th>CIVIL</th><th>SITE SURVEY</th></tr> </thead> <tbody> <tr><td>C10</td><td>SITE SURVEY</td></tr> </tbody> </table> <table border="1"> <thead> <tr><th>ARCHITECTURAL</th><th></th></tr> </thead> <tbody> <tr><td>A1.0</td><td>SITE PHOTO SURVEY</td></tr> <tr><td>A1.1</td><td>SITE PLAN</td></tr> <tr><td>D2.1</td><td>DEMO MAIN LEVEL FLOOR PLAN</td></tr> <tr><td>D2.2</td><td>DEMO UPPER LEVEL FLOOR PLAN</td></tr> <tr><td>A2.1</td><td>EXISTING/PROPOSED MAIN LEVEL FLOOR PLAN</td></tr> <tr><td>A2.2</td><td>EXISTING/PROPOSED UPPER LEVEL FLOOR PLAN</td></tr> <tr><td>A2.3</td><td>ROOF PLAN</td></tr> <tr><td>A2.4</td><td>MAIN LEVEL WALL MODIFICATION PLAN</td></tr> <tr><td>A2.5</td><td>UPPER LEVEL WALL MODIFICATION PLAN</td></tr> <tr><td>A4.1</td><td>EXTERIOR ELEVATIONS</td></tr> <tr><td>A4.2</td><td>EXTERIOR ELEVATIONS</td></tr> <tr><td>A4.3</td><td>EXTERIOR ELEVATIONS</td></tr> <tr><td>A4.4</td><td>EXTERIOR ELEVATIONS</td></tr> <tr><td>A5.1</td><td>BUILDING SECTIONS</td></tr> </tbody> </table> <p>SYMBOL LEGEND</p> <table border="1"> <thead> <tr><th>ELEVATION MARKER</th><th>WINDOW TYPE INDICATOR</th></tr> </thead> <tbody> <tr><td>1 A101</td><td>11 WINDOW TYPE NUMBER</td></tr> <tr><td>1 A101</td><td>101 DOOR TYPE NUMBER</td></tr> <tr><td>1 A101</td><td>101 MATCH LINE/DATUM POINT</td></tr> <tr><td>1 A101</td><td>101 DATUM POINT</td></tr> <tr><td>1 A101</td><td>101 REVISION INDICATOR</td></tr> <tr><td>1 A101</td><td>101 REVISION INDICATOR</td></tr> </tbody> </table> <p>DETAIL MARKER: DETAIL LETTER CORRESPONDS TO COORDINATES ON THE BORDER OF THE DRAWING</p> <p>SECTION MARKER: DETAIL LETTER CORRESPONDS TO COORDINATES ON THE BORDER OF THE DRAWING, DIRECTION OF CUT, SHEET THAT SECTION APPEARS ON, EXTENT OF CUT</p>	GENERAL	TITLE SHEET	T1	TITLE SHEET	CIVIL	SITE SURVEY	C10	SITE SURVEY	ARCHITECTURAL		A1.0	SITE PHOTO SURVEY	A1.1	SITE PLAN	D2.1	DEMO MAIN LEVEL FLOOR PLAN	D2.2	DEMO UPPER LEVEL FLOOR PLAN	A2.1	EXISTING/PROPOSED MAIN LEVEL FLOOR PLAN	A2.2	EXISTING/PROPOSED UPPER LEVEL FLOOR PLAN	A2.3	ROOF PLAN	A2.4	MAIN LEVEL WALL MODIFICATION PLAN	A2.5	UPPER LEVEL WALL MODIFICATION PLAN	A4.1	EXTERIOR ELEVATIONS	A4.2	EXTERIOR ELEVATIONS	A4.3	EXTERIOR ELEVATIONS	A4.4	EXTERIOR ELEVATIONS	A5.1	BUILDING SECTIONS	ELEVATION MARKER	WINDOW TYPE INDICATOR	1 A101	11 WINDOW TYPE NUMBER	1 A101	101 DOOR TYPE NUMBER	1 A101	101 MATCH LINE/DATUM POINT	1 A101	101 DATUM POINT	1 A101	101 REVISION INDICATOR	1 A101	101 REVISION INDICATOR
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# 403 PACIFIC AVE. - TOPOGRAPHIC SURVEY

SOLANA BEACH, CA 92075

### LEGEND:

FOUND MONUMENT AS NOTED	●
BOUNDARY LINE	— — — — —
ADJOINING PROPERTY LINE	— — — — —
ROAD CENTERLINE	— — — — —
EX. EASEMENT LINE	— — — — —
EX. ROOF OVERHANG	— — — — —
EXISTING CONTOUR	○
SPOT ELEVATION	(FS=60.4)
EX. CONCRETE	▭
EX. ASPHALT PAVEMENT	▭
EX. TREE	○
EX. PALM TREE	○
EX. RETAINING WALL	▬
EX. STRUCTURE	▭
EX. NEIGHBORS STRUCTURE	▭
FENCE LINE WOOD	▭
EX. WATER MAIN	— W — W —
EX. WATER METER	⊗
EX. FIRE HYDRANT	⊗
EX. WATER VALVE	⊗
EX. UTILITY BOX	⊗
EX. EDGE VAULT	⊗
EX. POWER LINES	— OE — OE —
EX. POWER POLE	○
EX. FLOW LINE	→

### CLIENT INFORMATION:

SMITH BROTHERS CONSTRUCTION  
P.O. BOX 1068  
SOLANA BEACH, CA 92075

### OWNER INFORMATION:

PETER BATES  
4179 HERITAGE HILL LANE  
ELLCOTT CITY, MD 21042

### SITE INFORMATION:

SITE ADDRESS: 403 PACIFIC AVE. AEA: 263-051-07  
SOLANA BEACH, CA 92075 AEA: 7,260 S.F. / 0.167 ACRES

### LEGAL DESCRIPTION:

LOT 1, IN BLOCK 1, SOLANA BEACH VISTA, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF 2143, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY DECEMBER 17, 1928.

### SURVEY NOTE:

SURVEY COMPLETED BY: VAN RYN ENGINEERING, INC. DATE COMPLETED: 10/31/2023  
16766 BERNARDO CENTER DR., STE. 115  
SAN DIEGO, CA 92128  
858.521.8100

### BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, CCS83, ZONE 8, EPOCH 1991.35, AND IS DETERMINED BY G.P.S. MEASUREMENTS TAKEN ON NOVEMBER 7, 2023 OF CITY OF SOLANA BEACH GPS CONTROL POINT NO. 2001 "SOLB-1" AND 2012 "ENC-43", PER ROS. NO. 18971, BOTH HAVING A FIRST ORDER OR BETTER VALUES. THE BEARING FROM POINT "SOLB-1" TO POINT "ENC-43" IS N 20° 38' 51" W. QUOTED BEARINGS FROM REFERENCE MAPS OR DEEDS MAY OR MAY NOT BE IN TERMS OF S4D SYSTEM. THE COMBINED GRID FACTOR AT "SOLB-1" IS 0.99997420. GRID DISTANCE = GROUND DISTANCE x COMBINED GRID FACTOR. ELEVATION AT "SOLB-1" = 71.450 (NAVD88)

### BASIS OF ELEVATIONS:

ELEVATIONS SHOWN HEREON ARE BASED ON CITY OF SOLANA BEACH GPS CONTROL PT. NO. 2001, "SOLB-1", PER R.O.S. NO. 18971

LOCATION AND TYPE: 2.5" CITY OF SOLANA BEACH BRASS DISC ON CONCRETE DRAINAGE INLET ON THE EAST SHOULDER OF HIGHWAY 101, 0.1 MILES SOUTH OF LOMAS SANTA FE DRIVE.

ELEVATION: 71.450 (NAVD 88)

### SURVEY NOTES:

- THE PROPERTY BOUNDARY SHOWN HEREON IS THE RESULT OF A PRECISE RETRACEMENT OF THE PROPERTY DESCRIBED ABOVE. A PROCEDURE OF SURVEY DEPICTING PHYSICAL EVIDENCE AND MEASUREMENT DATA IS AVAILABLE FOR REVIEW UPON REQUEST.
- THE LOCATIONS OF UNDERGROUND UTILITY LINES AND/OR STRUCTURES AS SHOWN HEREON ARE BASED ON OBSERVED ABOVE GROUND EVIDENCE AND RECORD INFORMATION PROVIDED TO THE SURVEYOR. NO EXCAVATIONS WERE MADE DURING THE COURSE OF THIS SURVEY TO LOCATE UNDERGROUND UTILITIES. LOCATIONS OF UNDERGROUND UTILITIES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
- A PRELIMINARY TITLE REPORT WAS PROVIDED BY FIRST AMERICAN TITLE COMPANY DATED SEPTEMBER 02, 2020 ORDER NUMBER: DIV-6368109

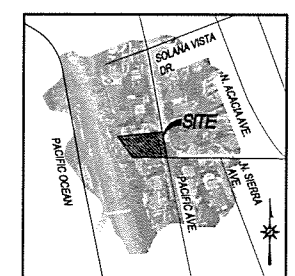
### ABBREVIATIONS:

EX.....	EXISTING
FF.....	FINISH FLOOR
FS.....	FINISH SURFACE
GS.....	GROUND SHOT
TS.....	TOP OF SURFACE
TW.....	TOP OF WALL
BW.....	BOTTOM OF WALL
SMH.....	SEWER MANHOLE
FH.....	FIRE HYDRANT
SS.....	SANITARY SEWER
WM.....	WATER METER
WV.....	WATER VALVE
EC.....	EDGE OF CONCRETE
TC.....	TOP OF CURB
FL.....	FLOW LINE
CMU.....	CONCRETE MASONRY UNIT
CONC.....	CONCRETE
AC.....	ASPHALT CONCRETE
BLDG.....	BUILDING
APN.....	ASSESSOR PARCEL NUMBER
NO.....	NUMBER
PP.....	POWER POLE

### REFERENCE MAPS:

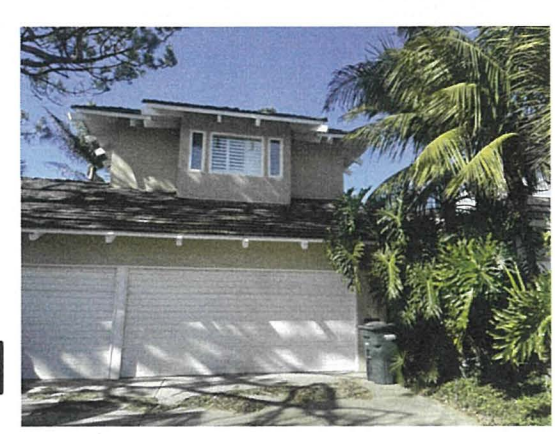
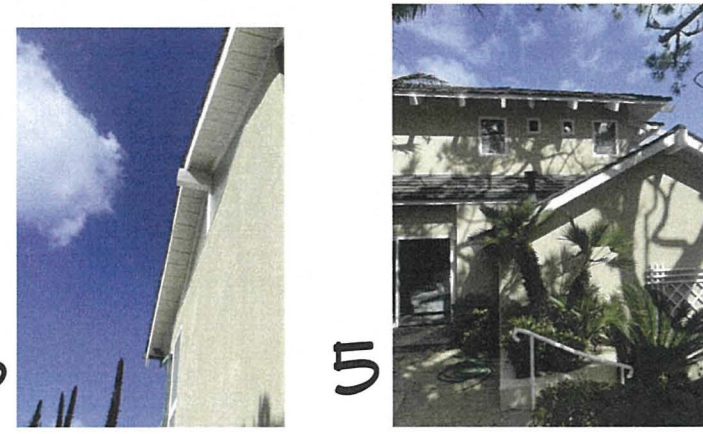
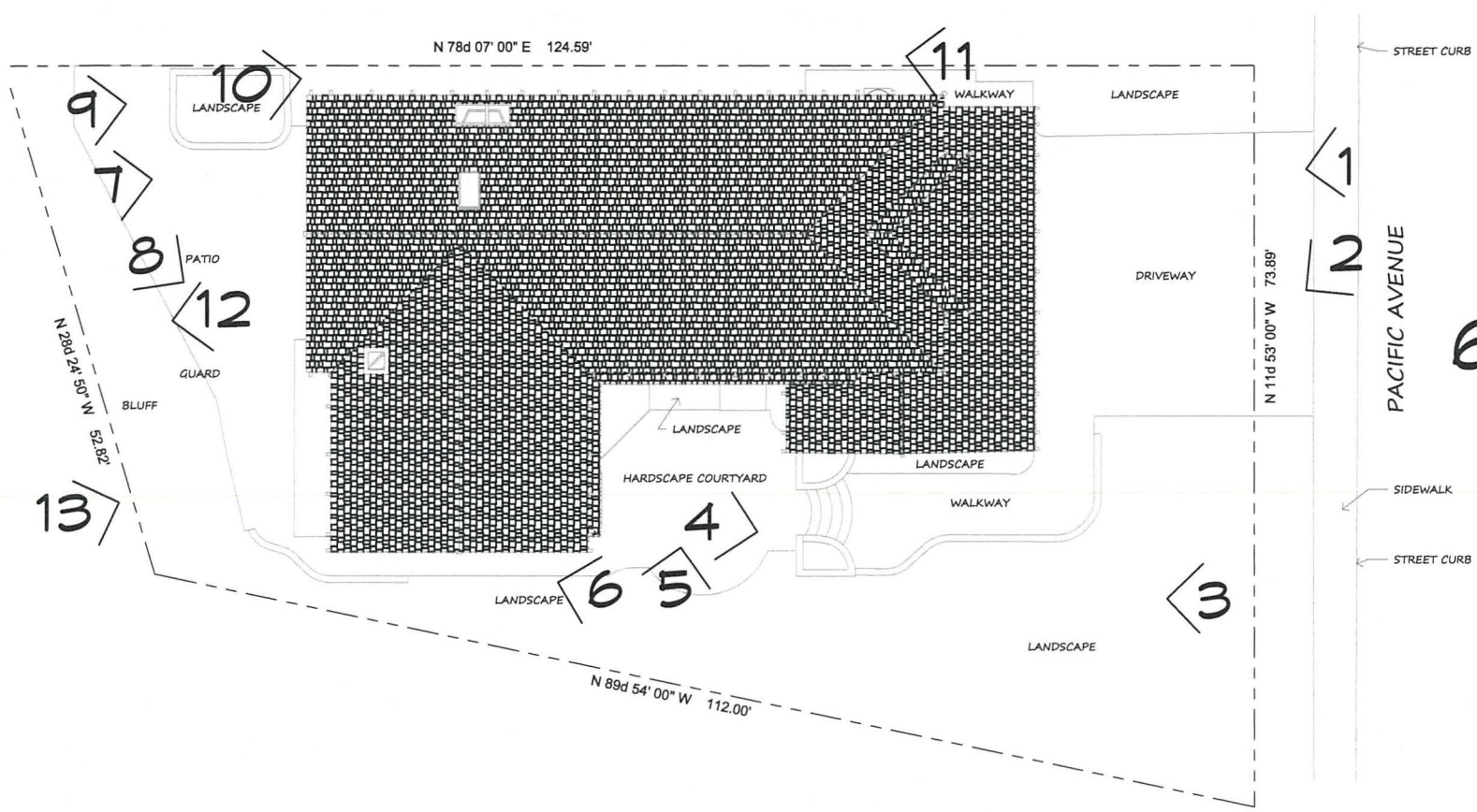
MAP NO. 2143  
CR NO. 25326

### GRAPHIC SCALE: 1" = 10'



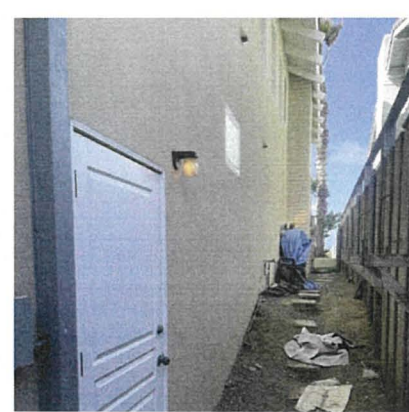
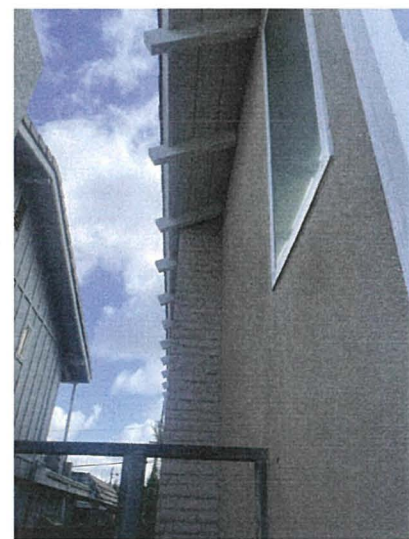
VICINITY MAP  
N.T.S.



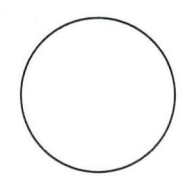


**R**

Original Date: \_\_\_\_\_  
 Revision 01: \_\_\_\_\_  
 Revision 02: \_\_\_\_\_  
 Revision 03: \_\_\_\_\_  
 Revision 04: \_\_\_\_\_  
 Revision 05: \_\_\_\_\_  
 Revision 06: \_\_\_\_\_  
 Revision 07: \_\_\_\_\_  
 Revision 08: \_\_\_\_\_

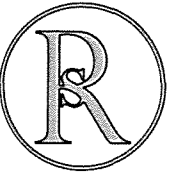


**BATES RESIDENCE**  
 403 PACIFIC AVENUE  
 SOLANA BEACH, CA 92075



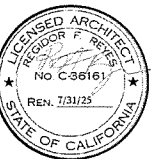
**REYES**  
 STUDIO  
 ARCHITECTURE  
 858.922.6246 info@reyesstudio.com

**A1.0**  
 SITE PHOTO SURVEY



**BATES RESIDENCE RENOVATION**

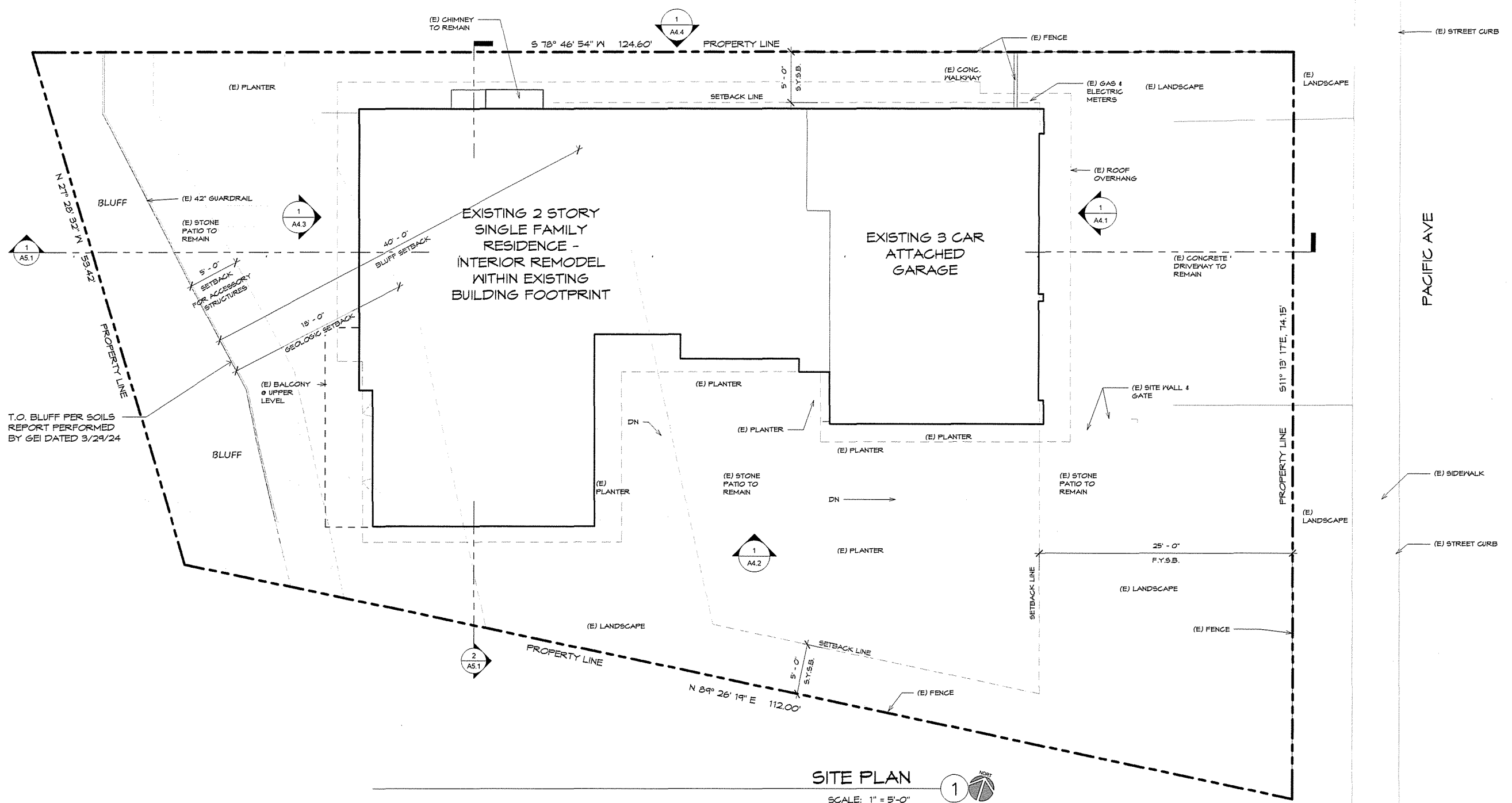
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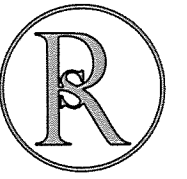
**A1.1**  
SITE PLAN

6/21/2024



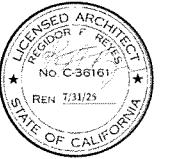
**FIRE NOTES**

- GATES:** AN APPROVED EMERGENCY KEY-OPERATED SWITCH AND/OR AN APPROVED EMERGENCY TRAFFIC CONTROL-ACTIVATING STROBE LIGHT SENSOR SHALL BE INSTALLED PER THE SOLANA BEACH MUNICIPAL CODE TITLE 15 BUILDING AND CONSTRUCTION CHAPTER 15.32 FIRE CODE SECTION 503.6. ALL KNOX BOX PRODUCTS SHALL BE PURCHASED THROUGH SOLANA BEACH FIRE WEBSITE.
- OBSTRUCTION OF ROADWAYS DURING CONSTRUCTION:** ALL ROADWAYS SHALL BE A MINIMUM OF 20 FEET IN WIDTH DURING CONSTRUCTION AND MAINTAINED FREE AND CLEAR, INCLUDING THE PARKING OF VEHICLES PER THE 2022 CALIFORNIA FIRE CODE CHAPTER 5 SECTION 503.4 AND 503.2.1.
- ADDRESS NUMBERS:** STREET NUMBERS, APPROVED NUMBERS AND/OR ADDRESSES SHALL BE PLACED ON ALL NEW AND EXISTING BUILDINGS AND AT APPROPRIATE ADDITIONAL LOCATIONS AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROADWAY FRONTING THE PROPERTY FROM EITHER DIRECTION OF APPROACH. SAID NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, AND SHALL MEET THE FOLLOWING MINIMUM STANDARDS AS TO SIZE: 4" HIGH WITH A 1/2" INCH STROKE WIDTH FOR RESIDENTIAL BUILDINGS, 6" HIGH WITH A 1/2" STROKE FOR COMMERCIAL AND MULTI-FAMILY RESIDENTIAL BUILDINGS, 12" HIGH WITH A 1" STROKE FOR INDUSTRIAL BUILDINGS. ADDITIONAL NUMBERS SHALL BE REQUIRED WHERE DEEMED NECESSARY BY THE FIRE MARSHAL, SUCH AS REAR ACCESS DOORS, BUILDING CORNERS, AND ENTRANCES TO COMMERCIAL CENTERS PER THE 2022 CALIFORNIA FIRE CODE CHAPTER 5 SECTION 505.1.
- CLASS "A" ROOF:** ALL STRUCTURES SHALL BE PROVIDED WITH A CLASS "A" ROOF COVERING TO THE SATISFACTION OF THE SOLANA BEACH FIRE DEPARTMENT AND PER THE 2022 CALIFORNIA BUILDING CODE CHAPTER 15 SECTION 1509.



**BATES RESIDENCE RENOVATION**

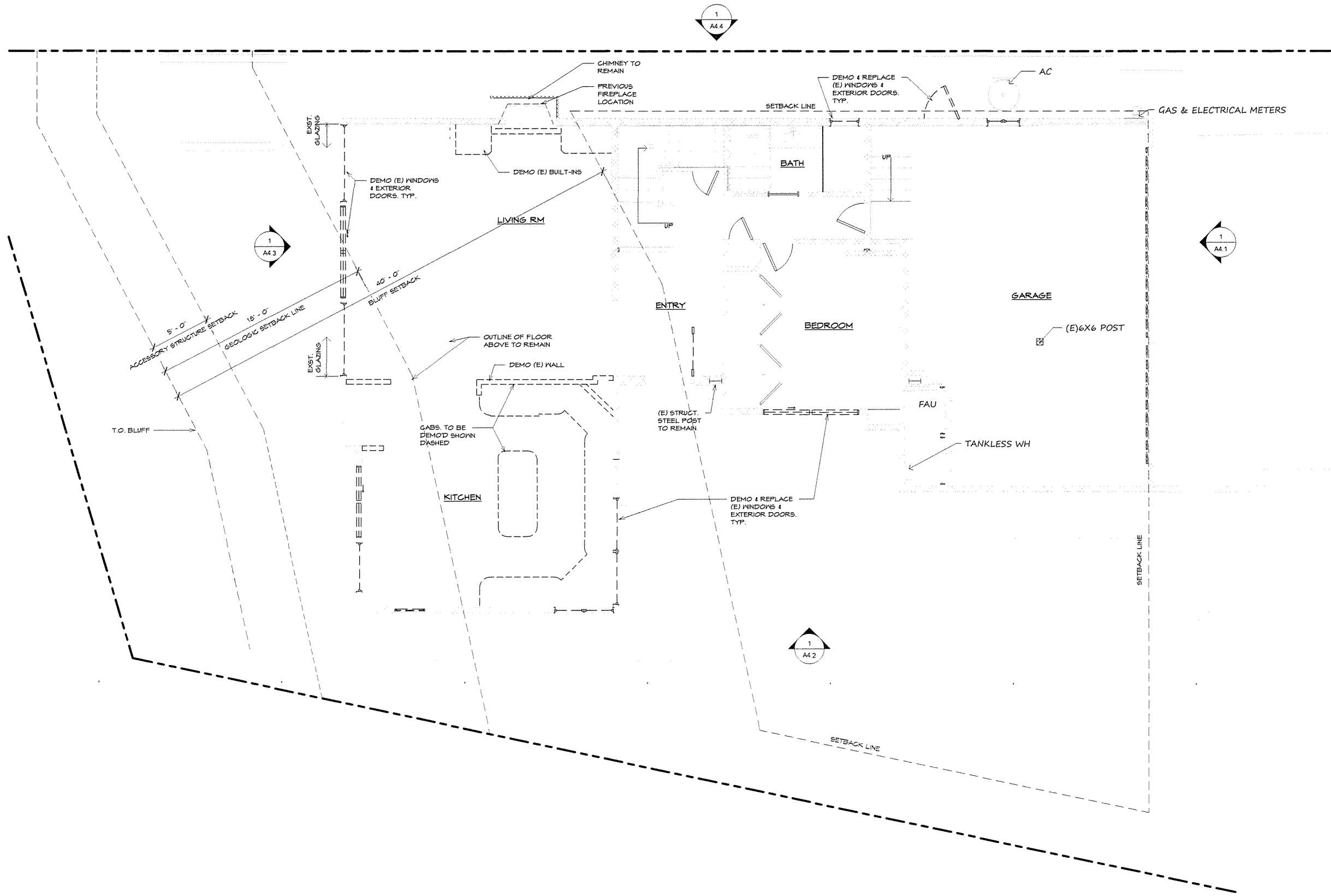
403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYES**  
STUDIO  
ARCHITECTURE  
NSA 0226346

**D2.1**  
DEMO MAIN  
LEVEL  
FLOOR PLAN

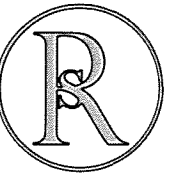
6/21/2024



**DEMOLITION MAIN LEVEL PLAN**

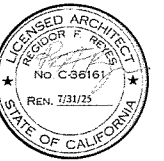
SCALE: 1/4" = 1'-0"

1



**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075

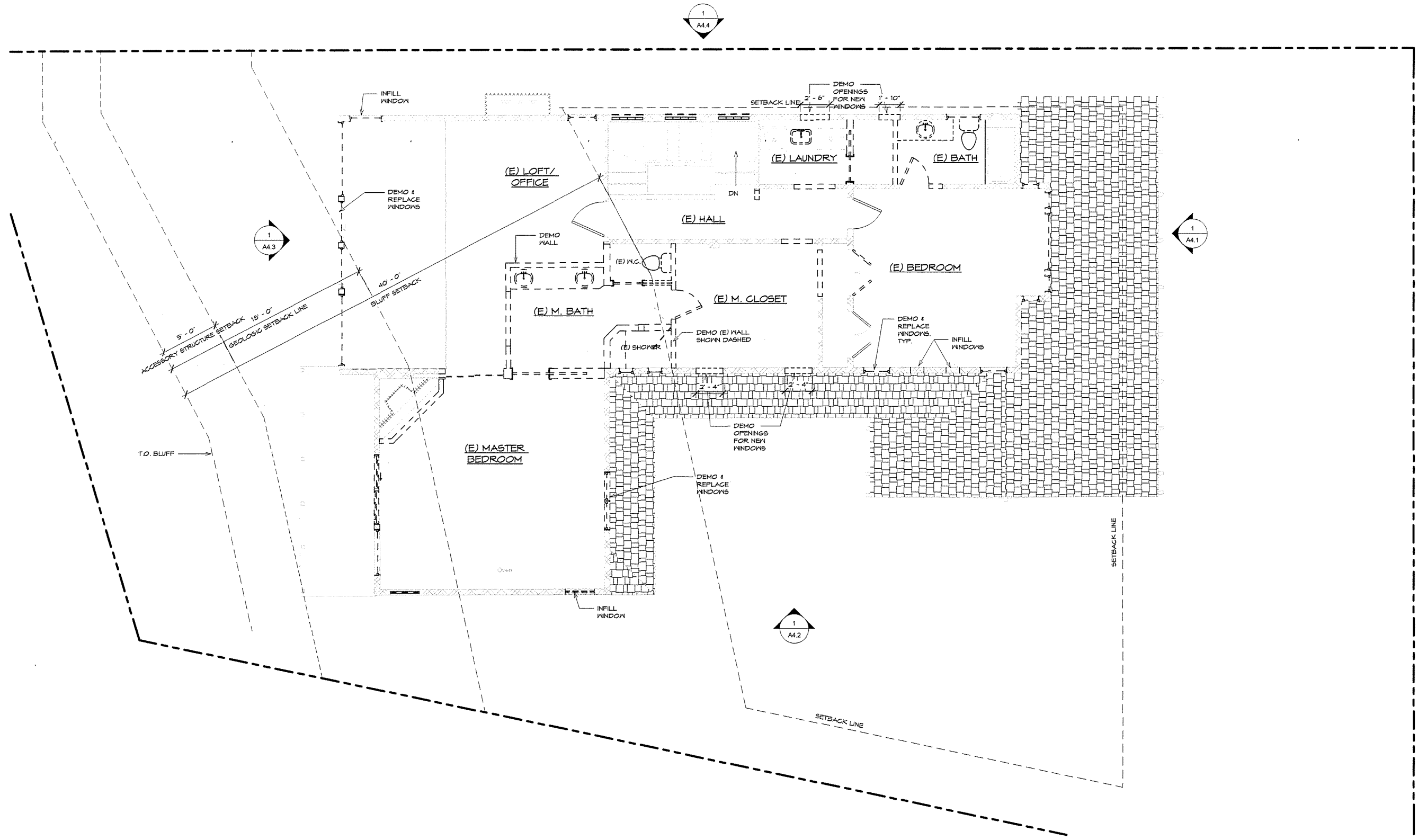


**REYES**  
**STUDIO**  
ARCHITECTURE  
858.922.6246

**D2.2**

DEMO UPPER  
LEVEL  
FLOOR PLAN

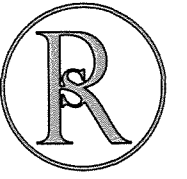
6/21/2024



**EXISTING/DEMO UPPER LEVEL FLOOR PLAN**

SCALE: 1/4" = 1'-0"

1

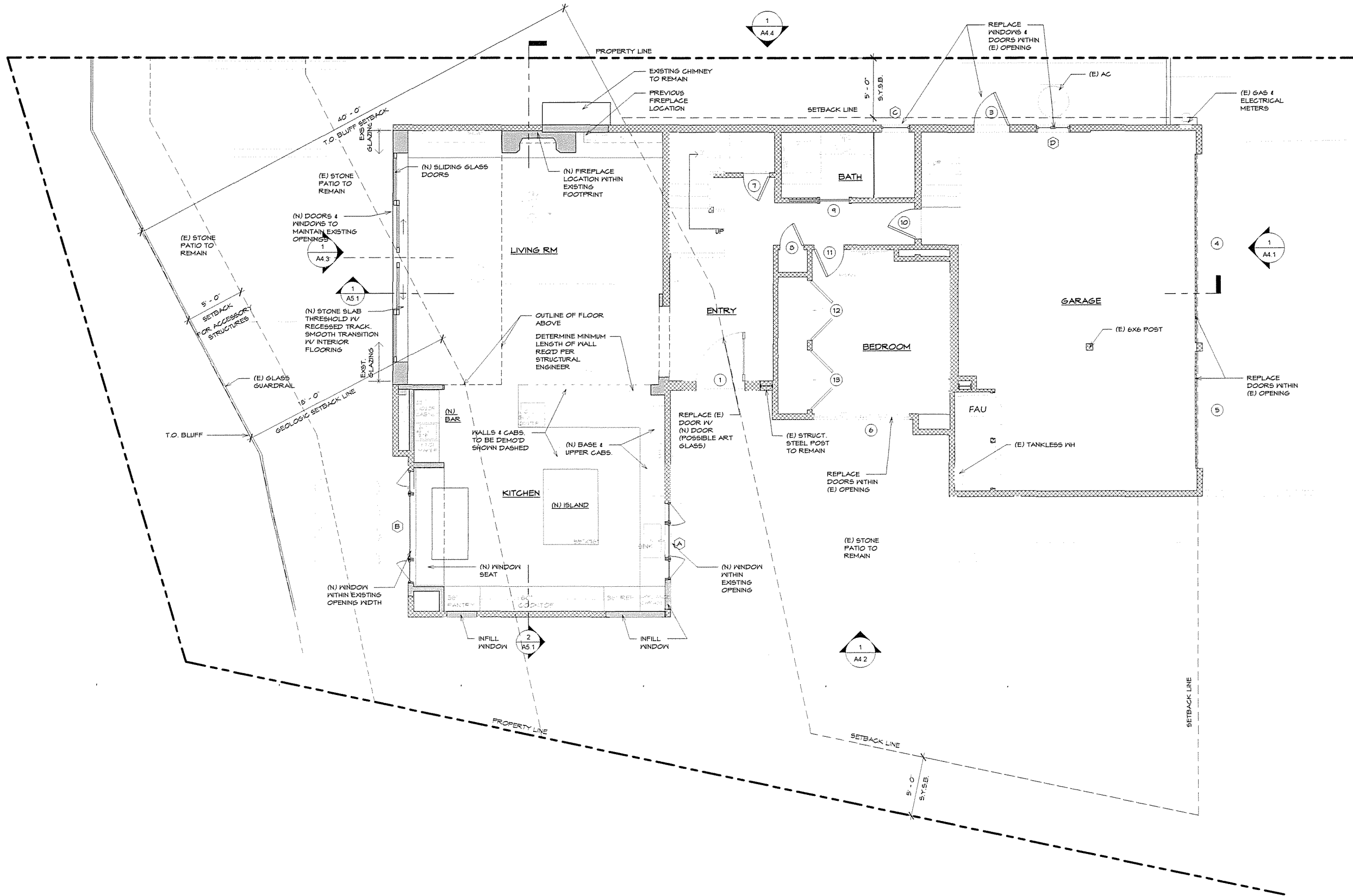


**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYES**  
STUDIO  
ARCHITECTURE  
NSA 022 0216



**WALL LEGEND**

- NEW CONSTRUCTION WALL
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE DEMOLISHED

**EXISTING / PROPOSED MAIN LEVEL FLOOR PLAN**

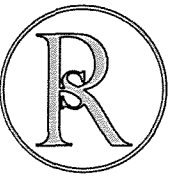
SCALE: 1/4" = 1'-0"



**A2.1**

EXISTING/PROPOSED  
MAIN LEVEL  
FLOOR PLAN

6/21/2024

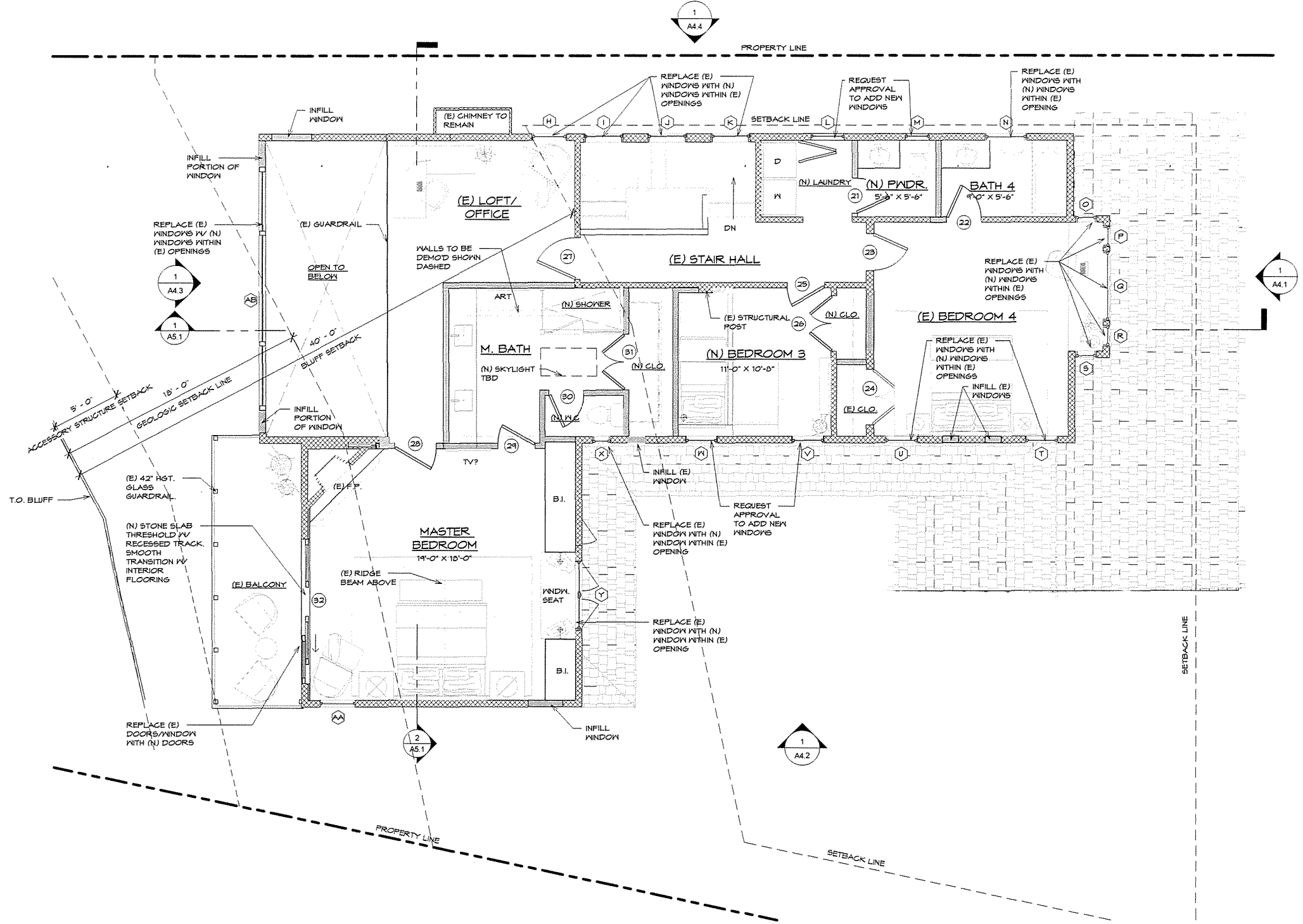


**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYES**  
STUDIO  
ARCHITECTURE  
858.922.0246



**WALL LEGEND**

- NEW CONSTRUCTION WALL
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE DEMOLISHED

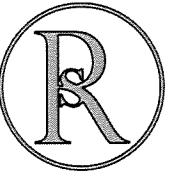
**EXISTING / PROPOSED UPPER LEVEL FLOOR PLAN**

SCALE: 1/4" = 1'-0"



**A2.2**

EXISTING/PROPOSED  
UPPER LEVEL  
FLOOR PLAN



**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075

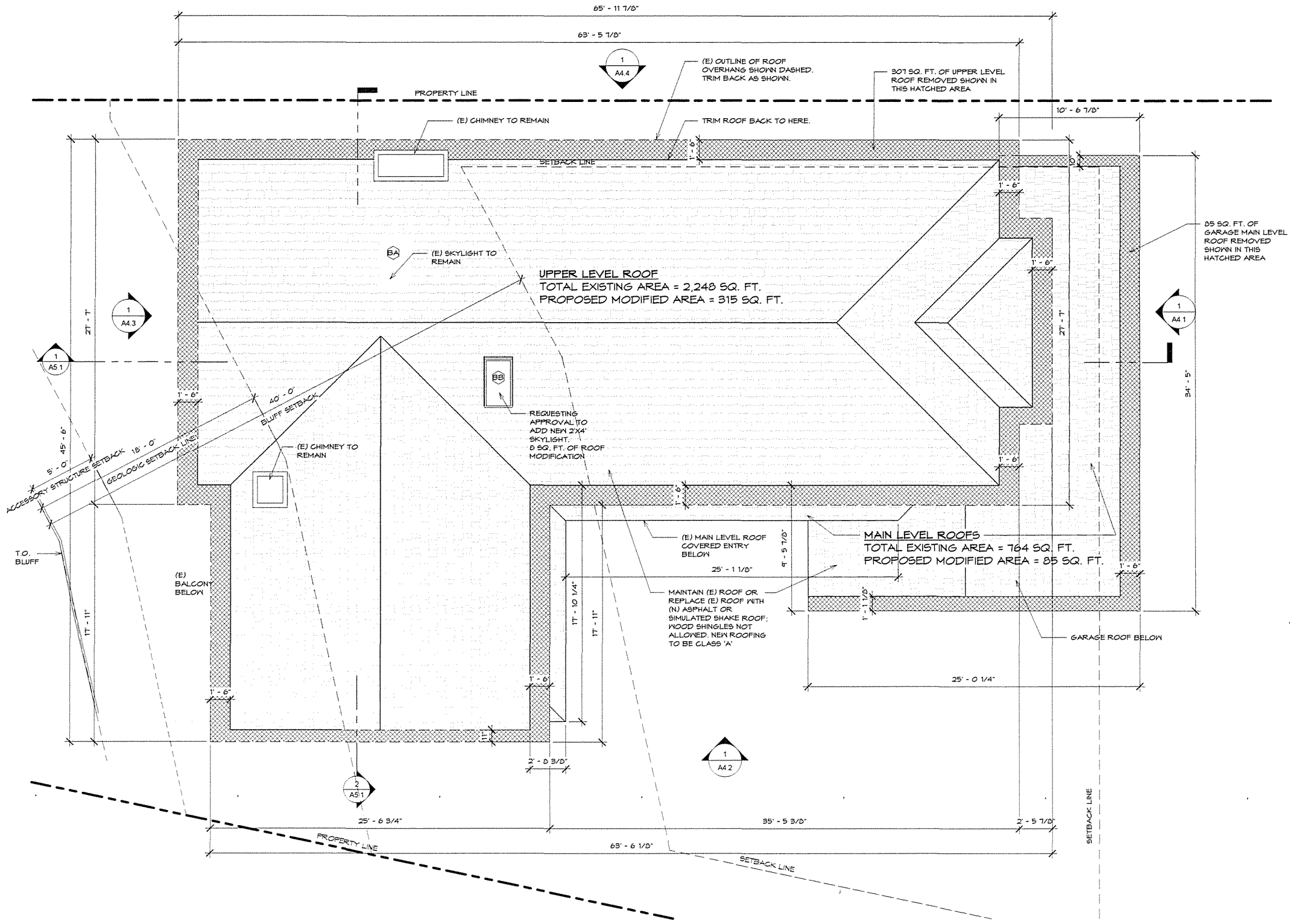


**REYES**  
STUDIO  
ARCHITECTURE  
NSA.023.02.14

**A2.3**

ROOF PLAN

6/21/2024

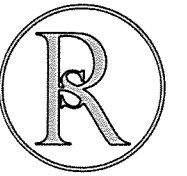


**EXISTING ROOF PLAN**

SCALE: 1/4" = 1'-0"







**BATES RESIDENCE RENOVATION**

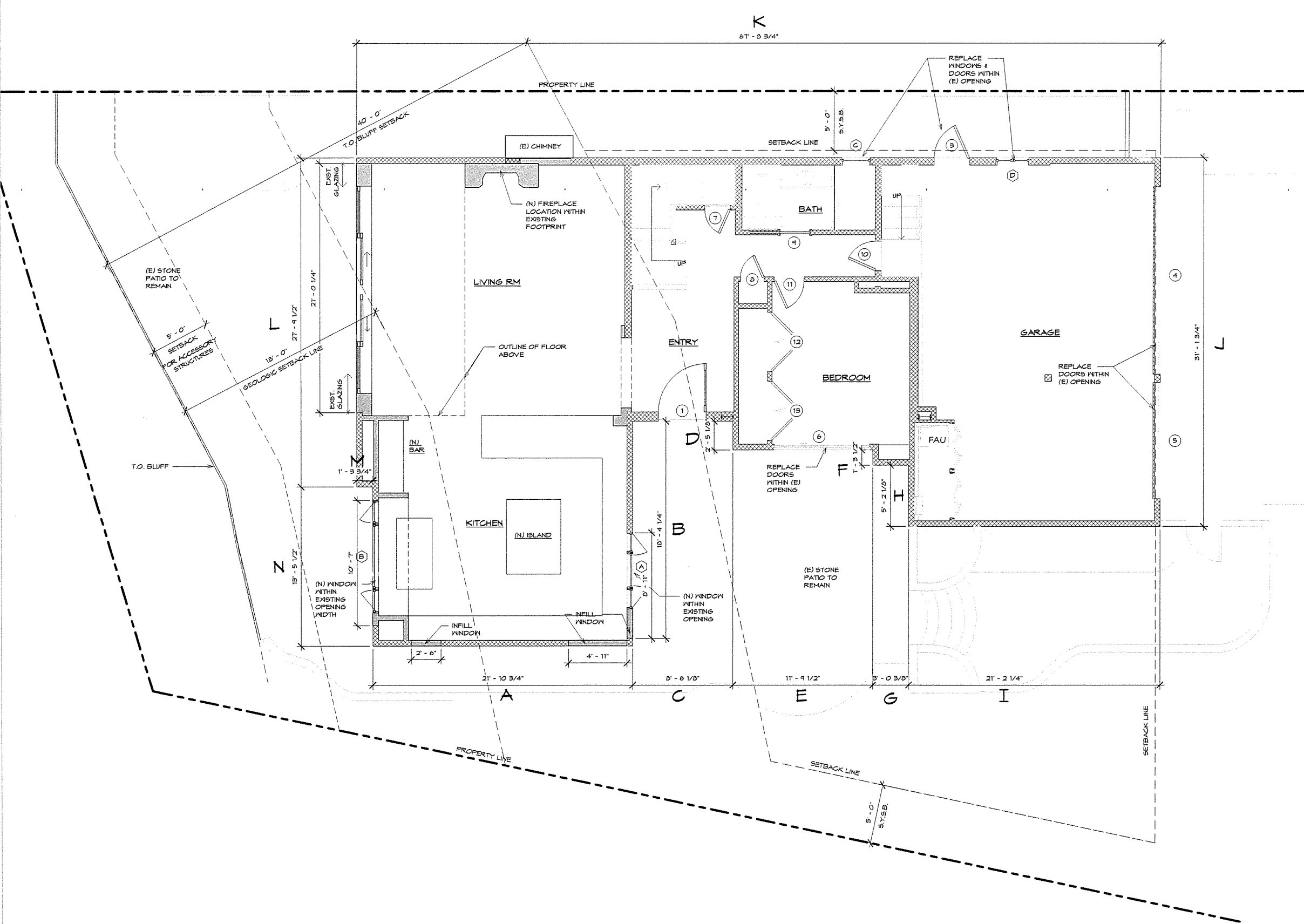
403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYCES**  
STUDIO  
ARCHITECTURE  
858.922.6246

**A2.4**  
MAIN LEVEL  
WALL  
MODIFICATION  
PLAN

6/21/2024



**MAIN LEVEL WALL  
MODIFICATION CALCULATIONS**

WALL TAG	EXST. WALL LENGTH	MODIFIED WALL LENGTH	UNCHANGED WALL LENGTH
A	21'-10 3/4"	16'-4"	5'-6 3/4"
B	10'-4 1/4"	2'-5 3/4"	15'-10 1/2"
C	8'-6 1/8"	0'-0"	8'-6 1/8"
D	2'-5 1/8"	0'-0"	2'-5 1/8"
E	11'-9 1/2"	0'-0"	11'-9 1/2"
F	1'-3 1/2"	0'-0"	1'-3 1/2"
G	3'-0 3/8"	0'-0"	3'-0 3/8"
H	5'-2 1/8"	0'-0"	5'-2 1/8"
I	21'-2 1/4"	0'-0"	21'-2 1/4"
J	31'-1 3/4"	0'-0"	31'-1 3/4"
K	67'-8 3/4"	0'-0"	67'-8 3/4"
L	27'-9 1/2"	24'-6 1/2"	3'-3"
M	1'-3 3/4"	0'-0"	1'-3 3/4"
N	13'-5 1/2"	11'-8"	1'-9 1/2"
TOTALS	235'-1 1/4"	55'-1/4"	180'-1"

**UPPER LEVEL WALL  
MODIFICATION CALCULATIONS**

WALL TAG	EXST. WALL LENGTH	MODIFIED WALL LENGTH	UNCHANGED WALL LENGTH
Q	20'-2 3/4"	14'-3 1/4"	6'-11 1/2"
R	14'-0"	5'-0"	9'-0"
S	35'-5 3/8"	8'-4"	27'-1 3/8"
T	2'-5 7/8"	0'-0"	2'-5 7/8"
U	10'-2 5/8"	0'-0"	10'-2 5/8"
V	2'-7 1/8"	0'-0"	2'-7 1/8"
W	5'-10 7/8"	0'-0"	5'-10 7/8"
X	58'-6 5/8"	7'-2"	51'-4 5/8"
Y	22'-3"	3'-1 5/8"	19'-1 3/8"
Z	2'-11 3/4"	0'-0"	2'-11 3/4"
AA	14'-0"	0'-5"	13'-7"
TOTALS	148'-8"	44'-1 7/8"	104'-6 1/8"

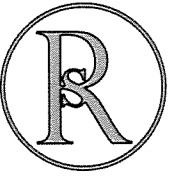
TOTAL EXISTING WALL LENGTH  
(MAIN LEVEL + UPPER LEVEL) = 483'-9 1/4"

TOTAL MODIFIED WALL LENGTH  
(MAIN LEVEL + UPPER LEVEL) = 99'-2 1/8"

PERCENTAGE OF WALL MODIFIED = 22.8%

**MAIN LEVEL WALL MODIFICATION PLAN**

SCALE: 1/4" = 1'-0" 1



**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYES**  
STUDIO  
ARCHITECTURE  
NSA 022,6246

**A2.5**  
UPPER LEVEL  
WALL  
MODIFICATION  
PLAN

6/21/2024

**MAIN LEVEL WALL  
MODIFICATION CALCULATIONS**

WALL TAG	EXST. WALL LENGTH	MODIFIED WALL LENGTH	UNCHANGED WALL LENGTH
A	21'-10 3/4"	16'-4"	5'-6 3/4"
B	10'-4 1/4"	2'-5 3/4"	15'-10 1/2"
C	0'-6 1/8"	0'-0"	0'-6 1/8"
D	2'-5 1/8"	0'-0"	2'-5 1/8"
E	11'-9 1/2"	0'-0"	11'-9 1/2"
F	1'-3 1/2"	0'-0"	1'-3 1/2"
G	3'-0 3/8"	0'-0"	3'-0 3/8"
H	5'-2 1/8"	0'-0"	5'-2 1/8"
I	21'-2 1/4"	0'-0"	21'-2 1/4"
J	31'-1 3/4"	0'-0"	31'-1 3/4"
K	67'-8 3/4"	0'-0"	67'-8 3/4"
L	27'-9 1/2"	24'-6 1/2"	3'-3"
M	1'-3 3/4"	0'-0"	1'-3 3/4"
N	13'-5 1/2"	11'-8"	1'-9 1/2"
TOTALS	235'-1 1/4"	55'-1/4"	180'-0"

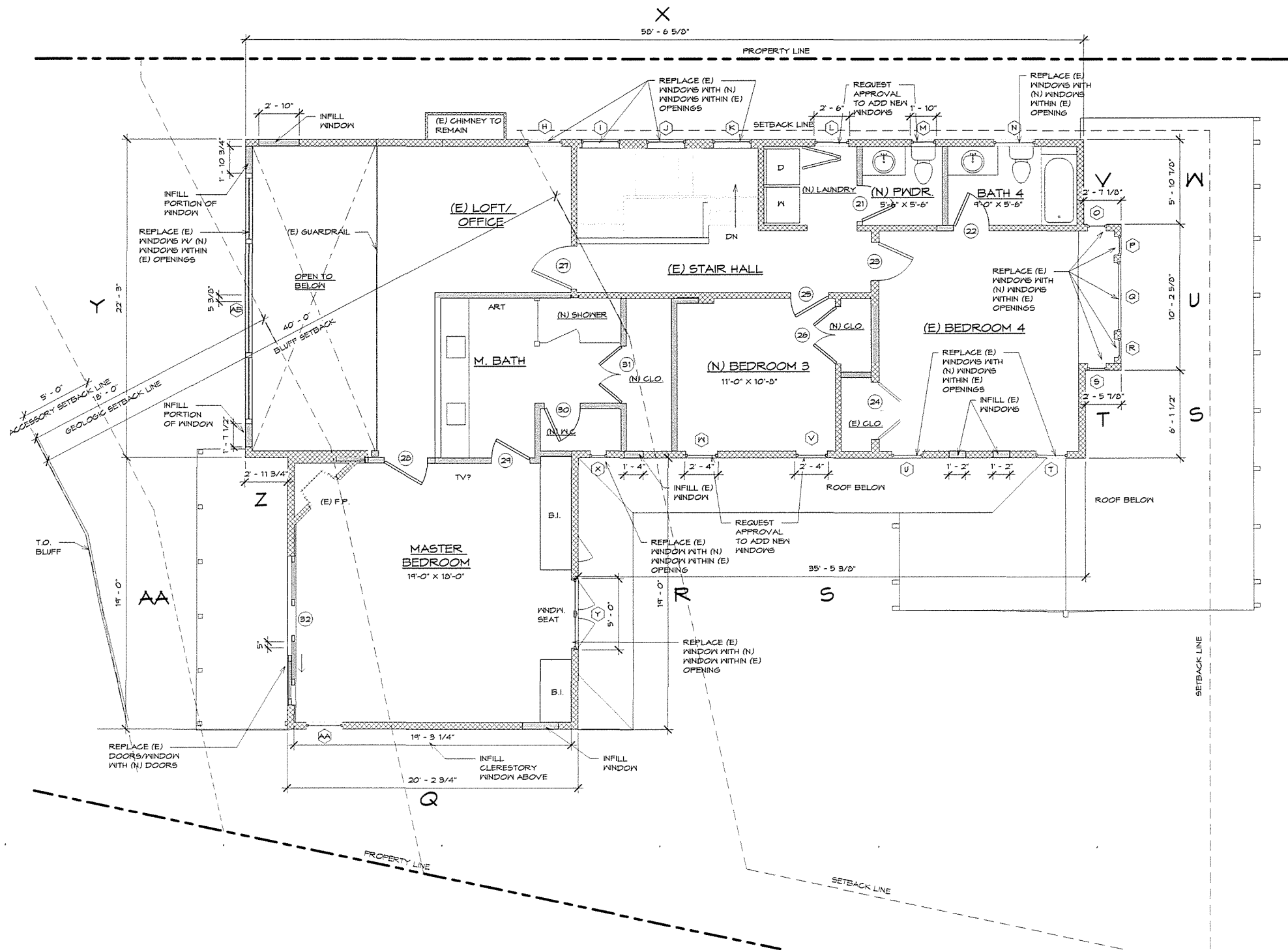
**UPPER LEVEL WALL  
MODIFICATION CALCULATIONS**

WALL TAG	EXST. WALL LENGTH	MODIFIED WALL LENGTH	UNCHANGED WALL LENGTH
Q	20'-2 3/4"	19'-3 1/4"	0'-11 1/2"
R	19'-0"	5'-0"	14'-0"
S	35'-5 3/8"	0'-4"	27'-1 3/8"
T	2'-5 7/8"	0'-0"	2'-5 7/8"
U	10'-2 5/8"	0'-0"	10'-2 5/8"
V	2'-1 1/8"	0'-0"	2'-1 1/8"
W	5'-10 7/8"	0'-0"	5'-10 7/8"
X	50'-6 5/8"	7'-2"	43'-4 5/8"
Y	22'-3"	3'-1 5/8"	19'-1 5/8"
Z	2'-11 3/4"	0'-0"	2'-11 3/4"
AA	19'-0"	0'-5"	18'-7"
TOTALS	190'-8"	44'-1 7/8"	146'-6 1/8"

TOTAL EXISTING WALL LENGTH  
(MAIN LEVEL + UPPER LEVEL) = 433'-9 1/4"

TOTAL MODIFIED WALL LENGTH  
(MAIN LEVEL + UPPER LEVEL) = 99'-2 1/8"

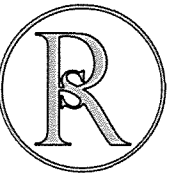
PERCENTAGE OF WALL MODIFIED = 22.8%



**UPPER LEVEL WALL MODIFICATION PLAN**

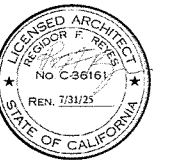
SCALE: 1/4" = 1'-0"

1



**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYF**  
**STUDIO**  
ARCHITECTURE  
858.922.6246

**A4.1**

EXTERIOR  
ELEVATIONS

6/21/2024



**PROPOSED EAST ELEVATION**

1

SCALE: 1/4" = 1'-0"

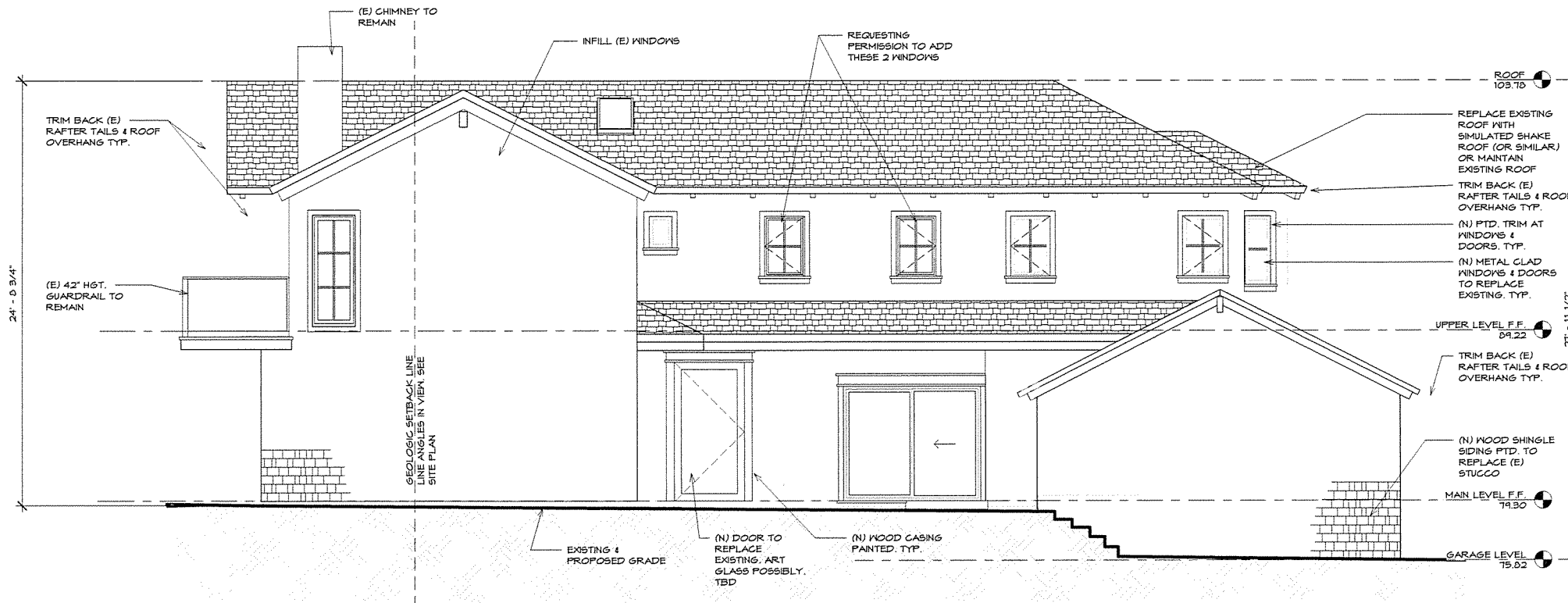


**EXISTING EAST ELEVATION**

2

SCALE: 1/4" = 1'-0"

DATE: 6/21/2024



PROPOSED SOUTH ELEVATION - ENTRY

SCALE: 1/4" = 1'-0"

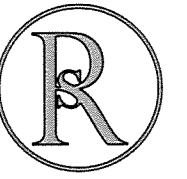
1



EXISTING SOUTH ELEVATION - ENTRY

SCALE: 1/4" = 1'-0"

2



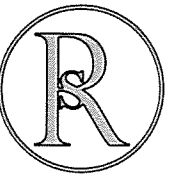
BATES RESIDENCE RENOVATION

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



REYES  
STUDIO  
ARCHITECTURE  
SSN: 022,62,16

A4.2  
EXTERIOR  
ELEVATIONS



**BATES RESIDENCE RENOVATION**

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075

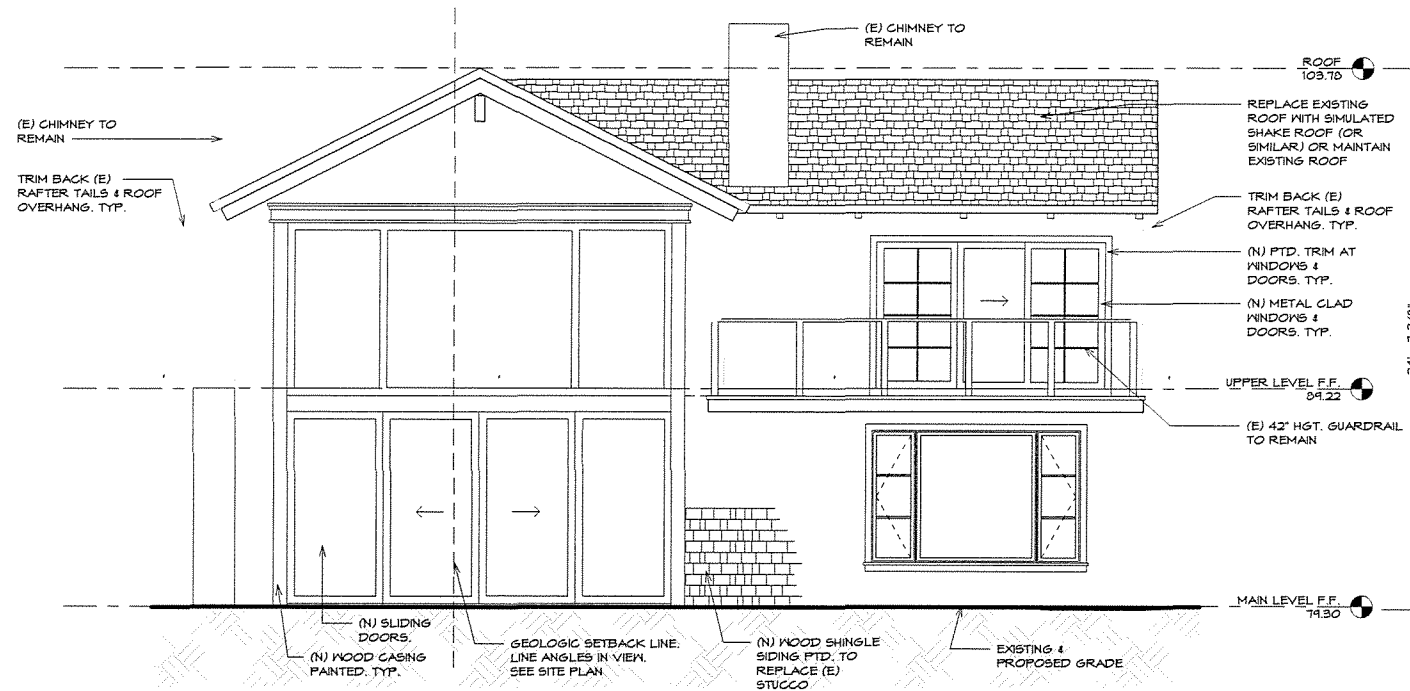


**REYES**  
STUDIO  
ARCHITECTURE  
858.922.6246

**A4.3**

EXTERIOR  
ELEVATIONS

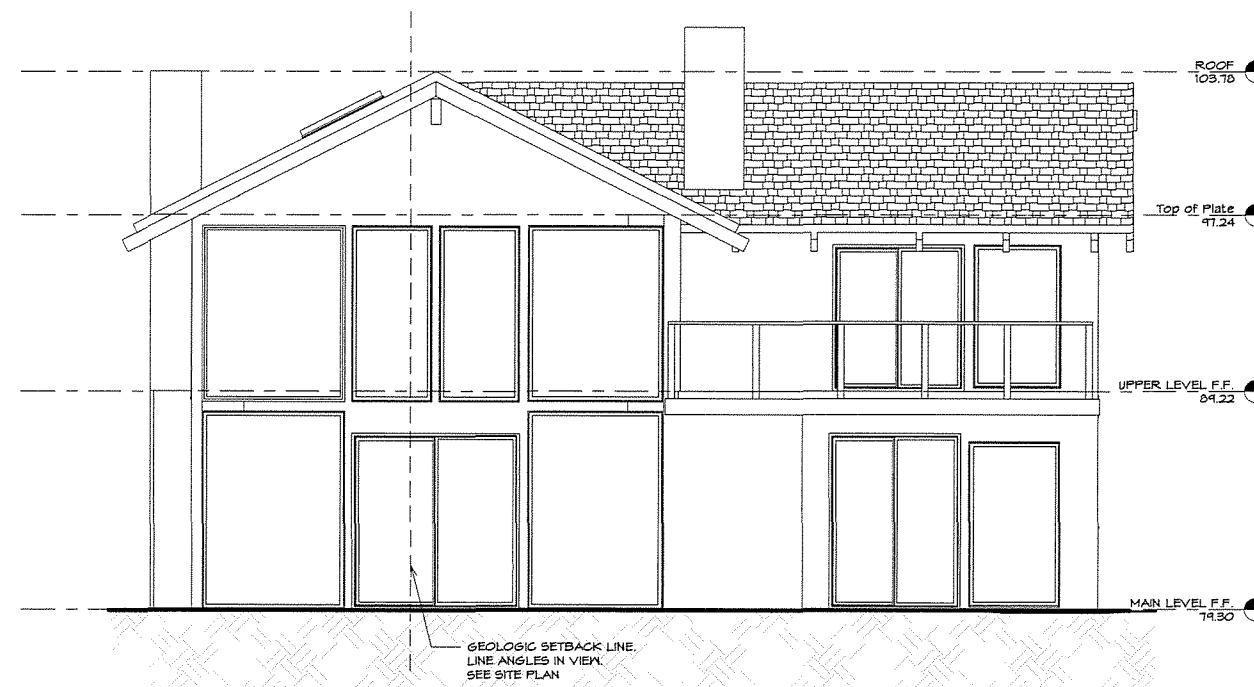
6/21/2024



**PROPOSED WEST ELEVATION**

SCALE: 1/4" = 1'-0"

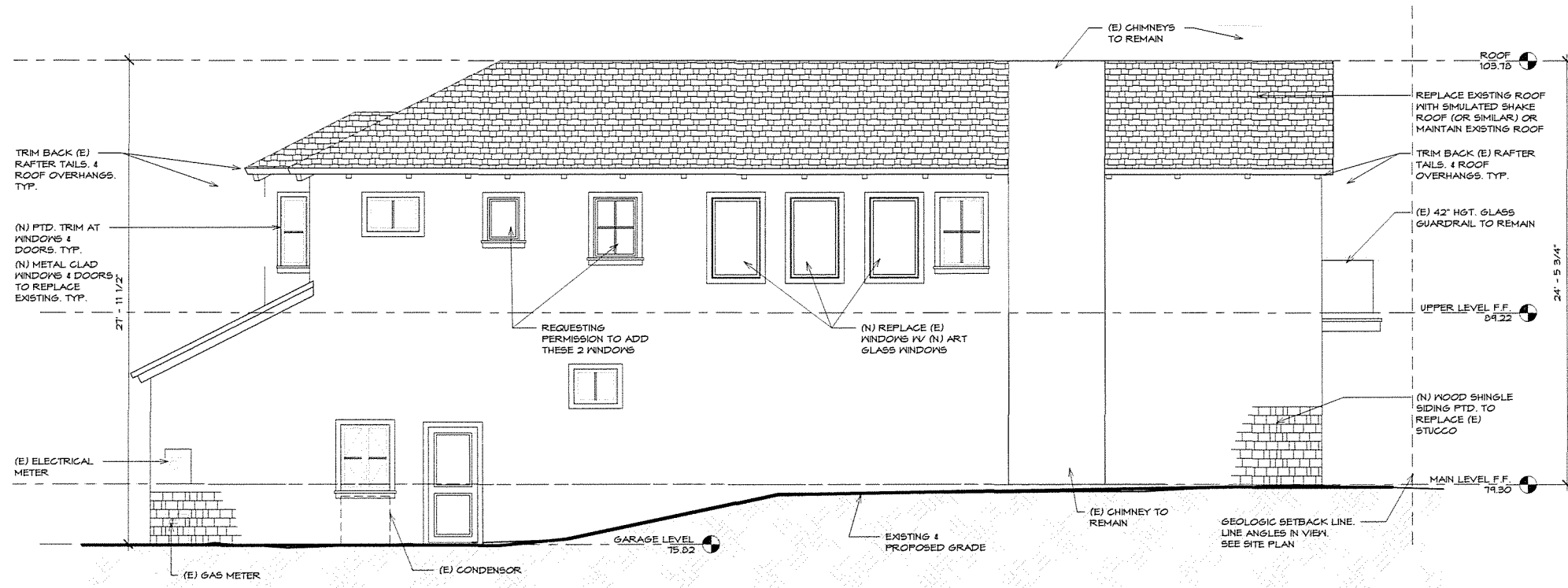
1



**EXISTING WEST ELEVATION**

SCALE: 1/4" = 1'-0"

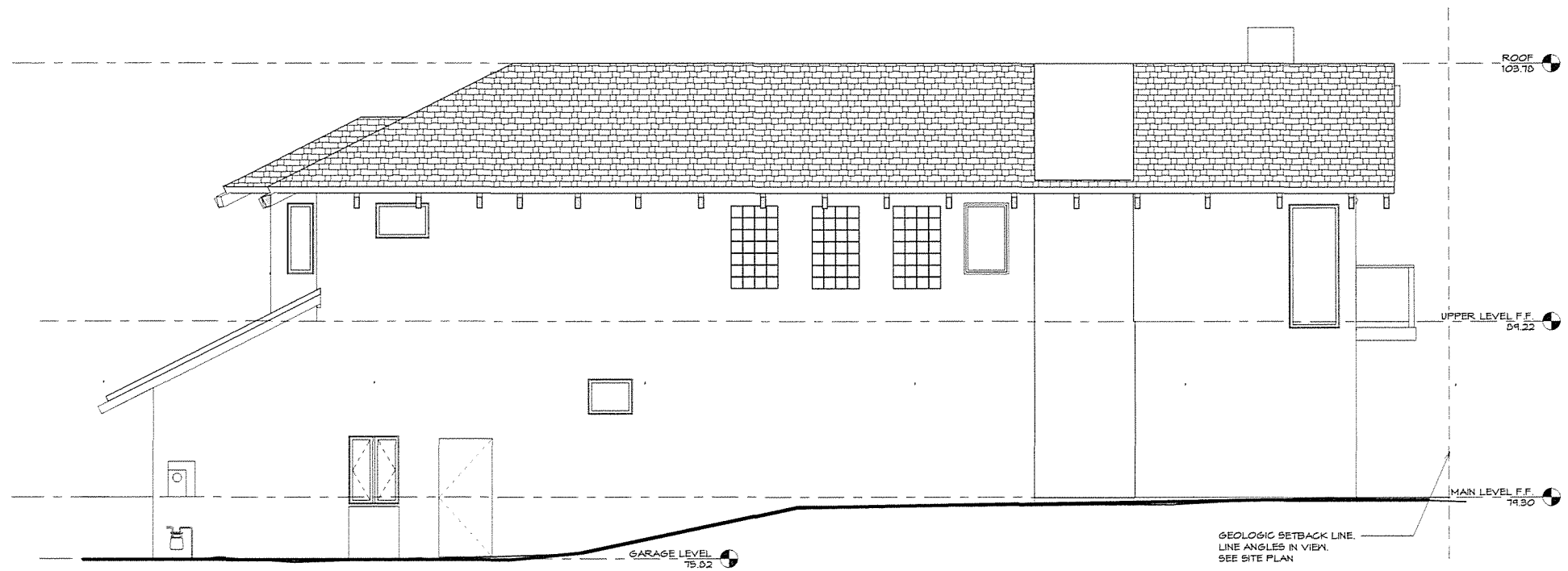
2



PROPOSED NORTH ELEVATION

SCALE: 1/4" = 1'-0"

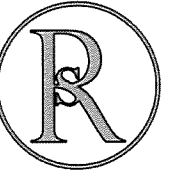
1



EXISTING NORTH ELEVATION

SCALE: 1/4" = 1'-0"

2



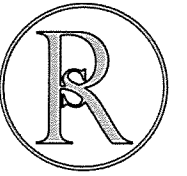
BATES RESIDENCE RENOVATION

403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



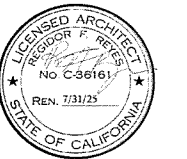
REYES  
STUDIO  
ARCHITECTURE  
SSS-022-0216

A4.4  
EXTERIOR  
ELEVATIONS



**BATES RESIDENCE RENOVATION**

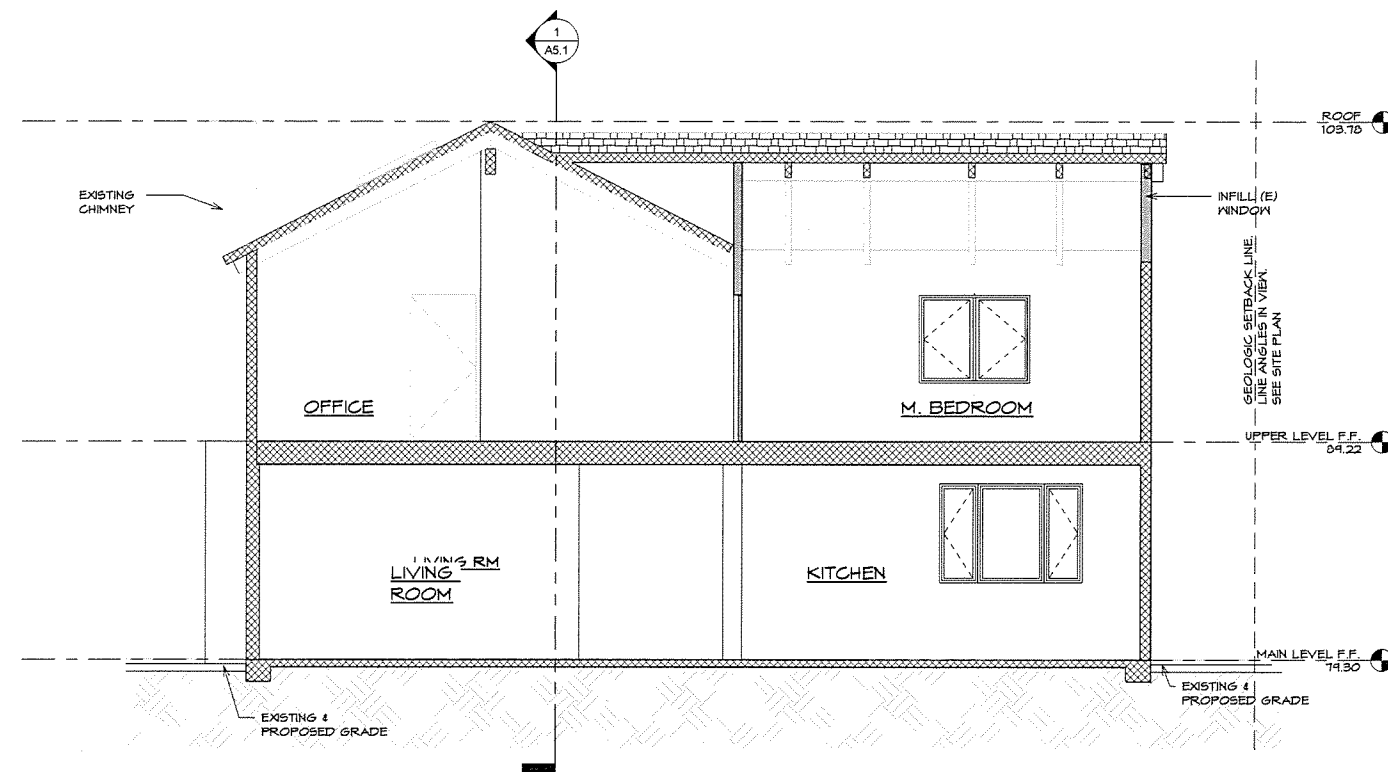
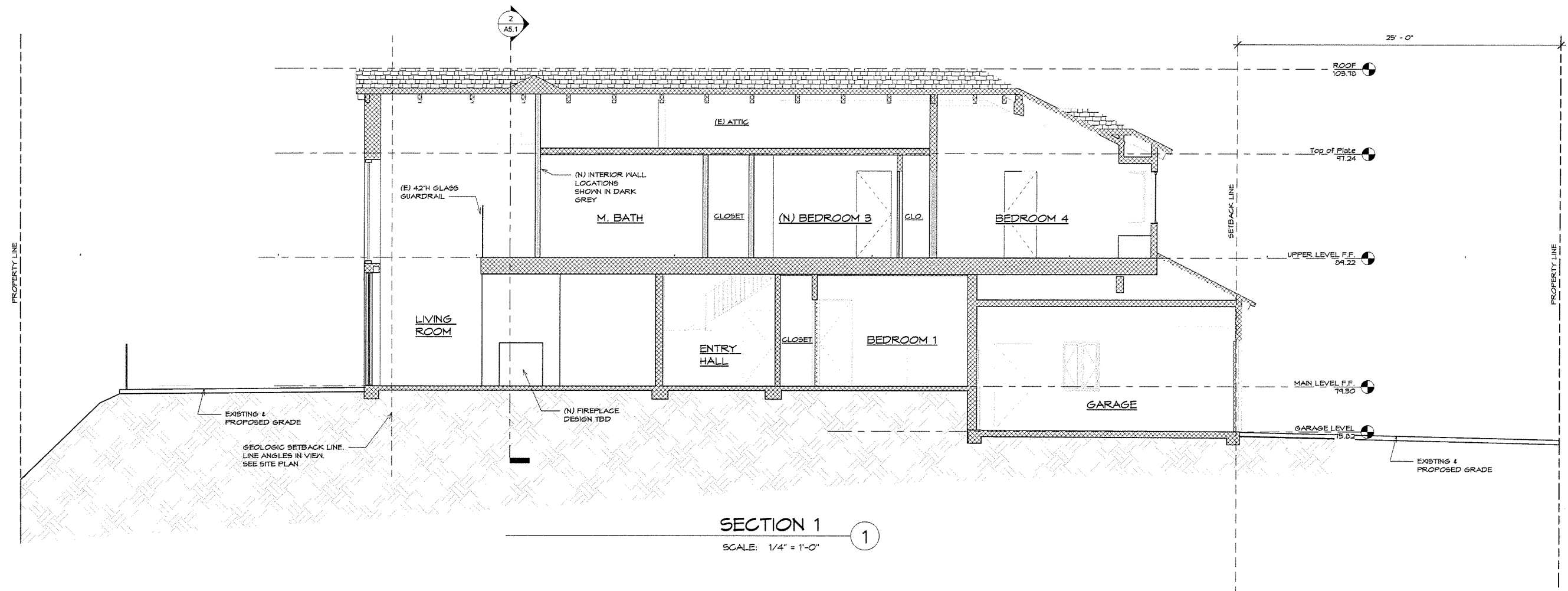
403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075



**REYCES**  
**STUDIO**  
ARCHITECTURE  
858.922.6246

**A5.1**  
BUILDING  
SECTIONS

6/21/2024



**SECTION 2**

SCALE: 1/4" = 1'-0"

**REPORT OF LIMITED GEOTECHNICAL INVESTIGATION  
AND COASTAL BLUFF EDGE EVALUATION**

Bates Residence Remodel  
403 Pacific Avenue  
Solana Beach, California

**JOB NO. 23-14438**  
15 January 2024

Prepared for:

***Smith Brothers Construction***







# Geotechnical Exploration, Inc.

SOIL AND FOUNDATION ENGINEERING • GROUNDWATER • ENGINEERING GEOLOGY

---

15 January 2024

Smith Brothers Construction  
444 S. Cedros Avenue #170  
Solana Beach, CA 92075  
Attn: Mr. Jeff Smith

**Job No. 23-14438**

Subject: **Report of Limited Geotechnical Investigation and Coastal Bluff Edge Evaluation**

Bates Residence Remodel  
403 Pacific Avenue  
Solana Beach, California

Dear Mr. Smith:

In accordance with your request, **Geotechnical Exploration, Inc.** has performed an investigation of the geotechnical and general geologic conditions at the location of the existing residence at 403 Pacific Avenue. Additionally, we have performed a coastal bluff edge evaluation per the requirements of the City of Solana Beach. The field work was performed on November 1, 2023.

In our opinion, if the conclusions and recommendations presented in this report are implemented during site preparation, the site will be suited for both the proposed remodel and the new residential improvements.

This opportunity to be of service is sincerely appreciated. Should you have any questions concerning the following report, please do not hesitate to contact us. Reference to our **Job No. 23-14438** will expedite a response to your inquiries.

Respectfully submitted,

**GEOTECHNICAL EXPLORATION, INC.**

Leslie D. Reed, President  
C.E.G. 999/P.G. 3391

Jaime A. Cerros, P.E.  
R.C.E. 34422/G.E. 2007  
Senior Geotechnical Engineer

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A.	Unified Soil Classification System
B.	Regional Geologic Description
C.	Coastal Hazard Report (Geosoils, Inc.)
D.	Seismic Design Criteria
E.	Slope Stability Analysis



**REPORT OF LIMITED GEOTECHNICAL INVESTIGATION AND  
COASTAL BLUFF EDGE EVALUATION**

Bates Residence Remodel  
403 Pacific Avenue  
Solana Beach, California

**JOB NO. 23-14438**

The following report presents the findings and recommendations of ***Geotechnical Exploration, Inc.*** for the subject project.

**I. PROJECT SUMMARY**

It is our understanding, based on communications with your architect Mr. Reggie Reyes, and review of preliminary architectural plans dated December 22, 2023, that the existing two-story, single-family residence is to be remodeled, including new window and door openings and other interior wall openings. No new foundations are proposed. The new residential remodel is to be constructed of standard-type building materials.

Conceptual plans have been provided to us for use in the preparation of this report, however, when finalized they should be made available for our review. The scope of work we performed is briefly outlined as follows:

1. Identify and classify the surface and subsurface soils in the area of the proposed construction, in conformance with the Unified Soil Classification System.
2. Make note of any landslides, faults or significant geologic features that may affect the development of the site.
3. Evaluation of existing coastal bluff stability as it relates to the proposed construction.



4. Recommend site soil preparation procedures.
5. Recommend the allowable bearing pressures for the existing medium dense to dense formational soils and properly compacted fills.
6. Evaluate the settlement potential of the existing formational soils or proposed properly compacted fills under the new structural loads.
7. Although no new foundations are proposed, we recommend preliminary foundation design information to be utilized in evaluation of the existing foundations.

Our subsurface investigation revealed that the lot is underlain at relatively shallow depth by medium dense silty sand materials referred to as Old Paralac Deposits (Qop<sub>6</sub>). The surficial fill soils consist of approximately 1 to 1.5 feet of variable density (loose to medium dense), gray-brown silty sand.

The existing coastal bluff is considered stable in its current configuration and will not be affected by the new residential remodel that is proposed within the footprint of the existing structure.

## **II. SITE DESCRIPTION**

The property is known as Assessor's Parcel No. 263-051-07-00, Lot 1 in Block 1, according to Recorded Map 2143, in the City of Solana Beach, County of San Diego, State of California. The roughly pie-shaped site, consisting of approximately 0.17 acre, is located at 403 Pacific Avenue in the City of Solana Beach (for site location, refer to the Vicinity Map, Figure No. I). The property is bounded on the north and south by similar residential properties at the approximate same elevation as the



subject property; on the east by Pacific Avenue approximately 6 feet lower in elevation; and on the west by a westerly descending coastal bluff and the Pacific Ocean.

The existing structure on the lot consists of a two-story, single-family residence with attached garage, concrete driveway, and concrete walkways and decks. Access to the lot is provided by a driveway along the northeast corner of the property from Pacific Avenue.

The property consists of a gently sloping building pad at the top of a coastal bluff. The approximately 80-foot-high bluff descends to the beach and the Pacific Ocean. The building pad is at approximate elevations of 78 feet above mean sea level (MSL). Elevations across the property range from approximately 78 feet above MSL at the northwest corner of the property to approximately 72 feet above MSL at the northeast corner of the property. The base of the bluff is at approximately 8 feet above mean sea level MSL. The lower 30 feet of the bluff is protected by a concrete seawall that was constructed approximately 20 years ago.

Information concerning approximate elevations across the site was obtained from topographic information included on the site plan prepared by Terracosta Consulting Group, dated October 19, 2004.

### **III. FIELD INVESTIGATION**

Three exploratory handpits and hand auger borings were placed around the perimeter of the existing residence in the vicinity of the proposed interior remodel and associated improvements. The excavations were placed where access and soil conditions allowed (for exploratory handpit and hand auger boring locations, refer to Figure No. II, Plot Plan and Site Specific Geologic Map). The exploratory excavations



were advanced to depths ranging from 3 to 5 feet in order to obtain representative soil samples and to define a soil profile across the lot.

The soils encountered in the exploratory excavations were logged by our field representative and samples were taken of the predominant soils throughout the field operation. Exploratory excavation logs have been prepared on the basis of our observations and laboratory testing. The results have been summarized on Figure Nos. IIIa-c, Excavation Logs. The predominant soils have been classified in general conformance with the Unified Soil Classification System (refer to Appendix A).

#### **IV. LABORATORY TESTS & SOIL INFORMATION**

Laboratory tests were performed on retrieved soil samples in order to evaluate their physical and mechanical properties and their ability to support the proposed residential addition and associated improvements. The test results are presented on the excavation logs, Figure Nos. IIIa-c and IV. The following tests were conducted on representative soil samples:

1. *Laboratory Compaction Characteristics (ASTM D1557-12e1)*
2. *Moisture Content (ASTM D2216-19)*
3. *Determination of Percentage of Particles Smaller than #200 Sieve (ASTM D1140-17)*

Laboratory compaction values (ASTM D1557-12e1) establish the optimum moisture content and the laboratory maximum dry density of the tested soils. The relationship between the moisture and density of remolded soil samples helps to establish soil compaction conditions to be anticipated during any future grading operation. The test results are presented on the logs at the appropriate sample depths.



Moisture content measurements were performed to establish the in-situ moisture of samples retrieved from the exploratory excavations. Moisture contents were performed by ASTM methods D2216. These tests help to establish the in-situ moisture of samples retrieved from the exploratory excavations.

The passing -200 sieve size analysis (ASTM D1140) and particle size analysis (ASTM D422) aid in classification of the tested soils based on their fine material content and provide qualitative information related to engineering characteristics such as expansion potential, permeability, and shear strength.

The expansion potential of soils is determined, when necessary, utilizing the Standard Test Method for Expansion Index of Soils (ASTM D4829). In accordance with the Standard (Table 5.3), potentially expansive soils are classified as follows:

<b><i>EXPANSION INDEX</i></b>	<b><i>POTENTIAL EXPANSION</i></b>
0 to 20	Very low
21 to 50	Low
51 to 90	Medium
91 to 130	High
Above 130	Very high

Based on our experience with similar soils, we considered the on-site fill and formational soils to possess a low expansion potential.

Based on the field and laboratory test data, our observations of the primary soil types on the project, and our previous experience with similar soils, our Geotechnical Engineer has assigned values for friction angle, coefficient of friction, and cohesion for those soils which will provide significant lateral support or load bearing functions on the project. These values have been utilized in determining the recommended



bearing value as well as active and passive earth pressure design criteria for foundations and retaining walls.

## **V. REGIONAL GEOLOGIC DESCRIPTION**

San Diego County has been divided into three major geomorphic provinces: The Coastal Plain, the Peninsular Ranges and the Salton Trough. The Coastal Plain exists west of the Peninsular Ranges. The Salton Trough is east of the Peninsular Ranges. These divisions are the result of the basic geologic distinctions between the areas. Mesozoic metavolcanic, metasedimentary and plutonic rocks predominate in the Peninsular Ranges with primarily Cenozoic sedimentary rocks to the west and east of this central mountain range (Demere, 1997). For a more detailed regional geologic description, refer to Appendix B.

## **VI. SITE-SPECIFIC GEOLOGIC DESCRIPTION**

### **A. Stratigraphy**

Our reconnaissance, field work, and review of pertinent geologic maps and reports indicate that dense, Tertiary-age Torrey sandstone (Tt) formational soils underlie the entire site at depth and are overlain by Quaternary-age Old Paralic Deposits (Qop<sub>6</sub>). The soil profile at the site includes up to 1.5 feet of surficial fill soils overlying the native soils. Refer to the excavation logs, Figure Nos. IIIa-c. Figure No. V presents a plan view geologic map of the general area of the site.

*Fill Soils (Qaf):* The lot is overlain by approximately 1 to 1.5 feet of surficial fill soils as encountered in all of the exploratory excavations. The fill soils consist of gray-brown, silty, fine- to medium-grained sand. The fill soils are generally damp, of variable density (loose to medium dense), low expansion potential, and are not





suitable in their current condition for support of new loads from structures or improvements. Refer to Figure Nos. IIIa-c for details.

Old Paralic Deposits (Qop<sub>6</sub>): Old Paralic deposits were encountered below the fill soils. The Old Paralic Deposits consist of red-brown, silty, fine- to medium-grained sand. They are generally medium dense, damp, and are considered suitable for support of loads from structures or additional fill. The Old Paralic Deposits were also observed in the bluff face below the lot and overlying the Torrey Sandstone (Tt). The thickness of these materials is estimated to be approximately 50 feet thick as encountered in our exploratory boring placed on a lot to the south of the Bates Property. Refer to Figure Nos. IIIa-c for details.

Torrey Sandstone (Tt): Although not encountered in our relatively shallow exploratory excavations, the Torrey Sandstone formational soils were encountered in our exploratory boring placed on a lot to the south of the Bates property at a depth of 50 feet, and exists behind the existing seawall at the base of the bluff face below the property. The formational materials observed in the bluff face below the property consists of well indurated, massively bedded, fine to medium grained sandstone. They are generally very dense, slightly moist, light yellowish brown and are considered to have good bearing strength characteristics.

## **B. Structure**

The Tertiary-age Torrey Sandstone (Tt) underlies the site. The Torrey Sandstone in this area strikes approximately north 35 degrees west and dips approximately 2 degrees to the northeast as depicted approximately 1 mile south of the property on the geologic map (Kennedy and Tan, 2008; see Figure No. V). No apparent geologic structure was observed in the massively bedded Torrey Sandstone immediately below the subject property. It should be noted that before the installation of the existing



seawall, sea caves in the lower portion of the bluff had been filled in during a previous bluff stabilization project.

**C. Bluff Observations**

The bluff along the west side of the subject property extends approximately 80 feet down to the beach below. The exposed bedrock configuration ranges from steeply sloping surfaces in the upper terrace deposits, to sub-vertical to vertical surfaces to approximately 20 feet in height, in the lower Torrey Sandstone. The lower 30 feet of the bluff is protected with a 30-foot-high, vertical concrete seawall. No out of slope dip components were noted that would adversely affect slope stability. Refer to Figure No. VI for the geologic cross section.

Although it appears unlikely that bluff recession due to wave erosion would affect the primary rear yard improvements during their useful economic life (considered 75 years), recession of the bluff into the western landscape area between the bluff edge and the rear yard patio should be expected.

**D. Bluff Stability and Recession Mechanisms**

As always with proposed coastal bluff top construction, bluff face geologic stability as well as bluff recession mechanisms and rates are significant factors to be considered in site development. Evaluations must be made of inherent strengths of the Torrey Sandstone and Old Paralac deposits (Marine terrace deposits), as well as their highly variable response to coastal erosion processes depending on lithologic variations and degrees of faulting and jointing.



The lower approximately 20 feet of the bluff face below the subject property stood essentially vertical or sub-vertical prior to construction of the seawall, due to the erosion resistant nature of the well indurated Torrey Sandstone. Prior to the construction of the seawall, portions of the lower bluff rim overhung the lower surfaces by 1 to 2 feet. The Old Paralac deposits are above the line of direct wave attack and a different combination of factors influence their erosion. Upper portions of coastal bluffs are exposed to precipitation, wind, pedestrian erosion, variations in landscape, landscape maintenance, and other activities.

Coastal bluff retreat is a naturally occurring process that is affected by man's action. Severe erosion is episodic in nature and is mostly dependent upon the intensity of storms and combined high tides, and it is possible that several feet of retreat could occur during severe weather conditions. There may also be periods during the future when erosion along the coast will be insignificant.

We have evaluated the 75-year erosion rate based on current information for historical erosion rates in this area of Solana Beach. This included reviews of historical aerial photographs, physical surveys, and photogrammetry. This method conforms to the guidelines for establishing long-term retreat rates provided in Johnsson (2005), which states "*...historic data currently are our best indicators of future erosion at any given site.*"

Based on information included in a report prepared for this property by Geosoils, Inc., dated December 4, 2023 (refer to Appendix C of this report), they have evaluated the 75-year erosion rate to include sea level rise (SLR). Review of the 2012 National Research Council (NRC) report indicates the CCC SLR estimate over the project 75-year design life to the year 2098 is between 2.5 feet and 5.8 feet. This is the estimated sea level rise range for the proposed project.



As stated in the Geosoils, Inc. report, "with the seawall in place the bluff retreat rate will be approximately 0 ft/yr. The site historical bluff top retreat rate is reasonably estimated to be 0.1 ft/yr. In the absence of the seawall the potential retreat rate will transition from the current rate to the future rate. The retreat rate from 1932 to 2023 is estimated to be 0.1 ft/yr. The retreat rate in the year 2100 with 5.8 feet SLR may be as much as 0.3 ft/yr. The expected retreat rate for the next 20 to 25 years will be the historical retreat rate of 0.1 ft/yr primarily because there is little expected SLR in the next 20 to 25 years. The maximum likely SLR from the CCC guidance for the year 2047 is about 1.7 feet and the minimum is about 2 feet. These estimates represent a small change in the 10-foot tidal range, 20% or less. As such, the impact of SLR on bluff retreat rate at year 25 will be less than 20% of the current retreat rate."

This analysis uses site-specific calculated historical bluff retreat, justified and probable SLR over the next 75 years, and scientifically reviewed methodology to calculate the potential annualized retreat rate including SLR over the project life.

## **VII. PRELIMINARY BLUFF STABILITY ANALYSES**

Slope stability analysis was performed along a cross section through the property and coastal bluff (refer to Figure No. VI for Geologic Cross Section). Because the site is underlain at depth by dense formational Torrey Sandstone (Tt) materials and medium dense Old Parallic Deposits (Qop<sub>6</sub>), and the existing coastal bluff below the property does not appear to have failed, it is our opinion that sufficient gross stability exists in the existing building pad area.

As part of geotechnical investigation, we reviewed a geotechnical report from a nearby project on Pacific Avenue where we collected similar soil samples of the coastal bluff materials (i.e., the Old Parallic Deposits and Torrey Sandstone) that exist



at the site. We used the soil classification and standard penetration blow counts to assign shear strength values to the soils. We assigned values of shear strength for the Old Paralac Deposits soils and the underlying Torrey Sandstone (34 degrees and 550 psf for the Old Paralac Deposits, and 35 degrees and 800 psf for the Torrey Sandstone formational materials).

Slope stability analysis was performed utilizing a computer program, *SLIDE*, which analyzes the factor of safety against shear stresses (refer to Appendix E for Slope Stability Analysis). Potential shear failure surfaces were analyzed with the assigned soil shear strength values. Shear failure analyses were run along the aforementioned cross section. All analyzed slide surfaces yielded a factor of safety of at least 1.5. The minimum acceptable factor of safety against soil shear deep failure is 1.5. Based on our test results, the coastal bluff at the site is considered stable against deep-seated failures.

## **VIII. GEOLOGIC HAZARDS**

The following is a discussion of the geologic conditions and hazards common to this area of the City of Solana Beach, as well as project-specific geologic information relating to development of the subject property.

### **A. Local and Regional Faults**

The primary seismic considerations for improvements at the subject site are surface rupture of fault traces, damage caused by ground shaking during a seismic event, and seismically-induced ground settlement. The potential for any or all of these hazards depends upon the recency of fault activity and the proximity of nearby faults to the subject site. Our review of the proper literature (CGS, 2021a) indicates that the subject site lies outside the present Earthquake Fault Zones, described in the



Alquist-Priolo Earthquake Fault Zoning Act as being placed along active faults. The major active faults nearest to the site are all part of the Newport-Inglewood-Rose Canyon Fault Zone. The following local and regional fault zones are mapped in southern California in general proximity to the site:

- Rose Canyon Fault Zone: The Rose Canyon Fault Zone is mapped approximately 2.9 miles southwest of the site and is estimated to be capable of generating a M6.9 earthquake (EERI, 2021).
- Newport-Inglewood Fault: Mapped approximately 14 miles northwest of the site, estimated to be capable of producing a M6.0 to M7.4 earthquake (Grant Ludwig and Shearer, 2004; SCEDC, 2022).
- Coronado Bank Fault Zone: Mapped approximately 16 miles southwest of the site and estimated to be capable of a M7.6 earthquake.
- Elsinore Fault Zone: The Julian and Temecula sections of the Elsinore Fault Zone are mapped approximately 30 miles east-northeast of the site and are estimated to be capable of a of a M6.5 to M7.5 earthquake (SCEDC, 2022).
- San Jacinto Fault Zone: Mapped approximately 53 miles northeast of the site. This fault is estimated to be capable of a M6.5 to M7.5 (SCEDC, 2022).

The potential for strong ground shaking from earthquakes on active southern California faults and active faults in northwestern Mexico should be anticipated at the site. Design of building structures in accordance with the current building codes would reduce the potential for injury or loss of human life. Buildings constructed in accordance with current building codes may suffer significant damage but should not undergo total collapse.



***B. Other Geologic Hazards***

*Ground Rupture:* Ground rupture is characterized by bedrock slippage along an established fault and may result in displacement of the ground surface. For ground rupture to occur along a fault, an earthquake usually exceeds M5.0. If a M5.0 earthquake were to take place on a local fault, an estimated surface-rupture length 1 mile long could be expected (Greensfelder, 1974). Our investigation indicates that the subject site is not directly on a known fault trace and, therefore, the risk of ground rupture is remote.

*Ground Shaking:* Structural damage caused by seismically induced ground shaking is a detrimental effect directly related to faulting and earthquake activity. Ground shaking is considered to be the greatest seismic hazard in San Diego County. The intensity of ground shaking is dependent on the magnitude of the earthquake, the distance from the earthquake, and the seismic response characteristics of underlying soils and geologic units. Earthquakes of M5.0 or greater are generally associated with notable to significant damage. It is our opinion that the most serious damage to the site would be caused by a large earthquake originating on a nearby strand of the Rose Canyon Fault Zone. Although the chance of such an event is remote, it could occur within the useful life of the structure.

*Landslides:* Based upon our geologic reconnaissance, review of the geologic map (Kennedy and Tan, 2008), review of the aerial photographs (5-2-53, AXN-8M-80 and 81), there are no known or suspected ancient landslides located on the site.

*Liquefaction:* The liquefaction of saturated sands during earthquakes can be a major cause of damage to buildings. Liquefaction is the process by which soils are transformed into a viscous fluid that will flow as a liquid when unconfined. It occurs



primarily in loose, saturated sands and silts when they are sufficiently shaken by an earthquake.

On this site, the risk of liquefaction of foundation materials due to seismic shaking is considered to be low due to the medium dense to dense nature of the natural-ground material and the lack of a shallow static groundwater surface under the site. The site does not have a potential for soil strength loss to occur due to a seismic event.

*Tsunami:* Based upon our review of the "*Tsunami Inundation Map for Emergency Planning,*" Del Mar Quadrangle, prepared by the California Geologic Survey, dated June 1, 2009, the site is not mapped within the tsunami inundation line. The risk of a tsunami affecting the site is considered low to moderate as the site is situated at an elevation of approximately 88 feet above mean sea level and adjacent to an exposed beach. In general, the orientation of the southern California coastline and the bathymetry of the offshore southern California borderland have, during historical times, combined to protect the shoreline from any large magnitude tsunami height increases, as shown by records of tsunami occurrences that have been observed and/or recorded along the southern California shoreline since 1810 (Lander et al., 1993). For this segment of the California coastline (south of Santa Monica), there is no evidence of any high magnitude tsunamis generated during the last 200 years by large-scale regional sea floor movements (Gayman, 1998).

### **C. Geologic Hazards Summary**

It is our opinion, based upon a review of the available maps and our site investigation, that the site is underlain by stable formational materials, and is suited for the proposed residential remodel and associated interior improvements. It is our opinion that a known "active" fault presents the greatest seismic risk to the subject site during the lifetime of the proposed residence and additions. To date, the nearest





known "active" faults to the subject site are the northwest-trending Rose Canyon Fault, Newport-Inglewood, Coronado Bank Fault and the Elsinore Fault. No significant geologic hazards are known to exist on the site that would prevent the proposed construction.

## **IX. GROUNDWATER**

No groundwater was encountered during the course of our field investigation and we do not anticipate significant groundwater problems to develop in the future, if the property is developed as proposed and proper drainage is implemented and maintained.

It should be kept in mind that any required grading operations will change surface drainage patterns and/or reduce permeabilities due to the densification of compacted soils. Such changes of surface and subsurface hydrologic conditions, plus irrigation of landscaping or significant increases in rainfall, may result in the appearance of surface or near-surface water at locations where none existed previously. The damage from such water is expected to be localized and cosmetic in nature, if good positive drainage is implemented, as recommended in this report, during and at the completion of construction.

On properties such as the subject site where formational materials exist at relatively shallow depths, even normal landscape irrigation practices or periods of extended rainfall can result in shallow "perched" water conditions. The perching (shallow depth) accumulation of water on a low permeability surface can result in areas of persistent wetting and drowning of lawns, plants and trees. Resolution of such conditions, should they occur, may require site-specific design and construction of subdrain and shallow "wick" drain dewatering systems.



Subsurface drainage with a properly designed and constructed subdrain system will be required along with continuous back drainage behind any proposed lower-level basement walls, property line retaining walls, or any perimeter stem walls for raised-wood floors where the outside grades are higher than the crawl space grades. Furthermore, crawl spaces should be provided with the proper cross-ventilation to help reduce the potential for moisture-related problems.

It must be understood that unless discovered during initial site exploration or encountered during site grading operations, it is extremely difficult to predict if or where perched or true groundwater conditions may appear in the future. When site fill or formational soils are fine-grained and of low permeability, water problems may not become apparent for extended periods of time.

Water conditions, where suspected or encountered during grading operations, should be evaluated and remedied by the project civil and geotechnical consultants. The project developer and property owner, however, must realize that post-construction appearances of groundwater may have to be dealt with on a site-specific basis.

## **X. CONCLUSIONS AND RECOMMENDATIONS**

The following conclusions and recommendations are based upon the practical field investigation conducted by our firm, and resulting laboratory tests, in conjunction with our knowledge and experience with soil conditions in the City of Solana Beach.

Our geotechnical investigation revealed that the property is underlain at shallow depth by medium dense silty sand materials identified as Old Paralac Deposits (Qop<sub>6</sub>) overlain by approximately 1 to 1.5 feet of variable density, silty sand fill soils. In their present condition, these fill soils will not provide a stable base for any proposed improvements. As such, we recommend that these soils be removed and



recompacted as part of site preparation prior to the addition of any new exterior improvements. The native materials have good bearing strength characteristics and are suitable for support of the proposed structural loads.

All foundations should be founded either entirely into the underlying medium dense native materials or entirely in properly compacted fill soils. In proposed exterior improvement areas, all existing fill soils will require removal, moisture conditioning, and recompaction prior to placement of new fill or improvements.

The opinions, conclusions, and recommendations presented in this report are contingent upon ***Geotechnical Exploration, Inc.*** being retained to review the final plans and specifications as they are developed and to observe the site earthwork and installation of foundations.

Accordingly, we recommend that the following paragraph be included on the foundation and/or improvement plans for the project:

If the geotechnical consultant of record is changed for the project, the work shall be stopped until the replacement has agreed in writing to accept the responsibility within their area of technical competence for approval upon completion of the work. It shall be the responsibility of the permittee to notify the governing agency in writing of such change prior to the commencement or recommencement of grading and/or foundation installation work.

**A. Seismic Design Criteria**

1. Seismic Design Criteria: Site-specific seismic design criteria for the proposed residence are presented in the following table in accordance with Section 1613 of the 2022 CBC, which incorporates by reference ASCE 7-16 for seismic design. We have determined the mapped spectral acceleration values for the



site, based on a latitude of 32.9968 degrees and longitude of -117.2757 degrees, utilizing a third-party GUI tool provided by the USGS, which provides a solution for ASCE 7-16 (Section 1613 of the 2022 CBC) utilizing digitized files for the Spectral Acceleration maps. Based on our experience with similar soil conditions, we have assigned a Soil Site Classification of D-Stiff Soil.

**TABLE I**  
***Mapped Spectral Acceleration Values and Design Parameters***

$S_s$	$S_1$	$F_a$	$F_v$	$S_{ms}$	$S_{m1}$	$S_{ds}$	$S_{d1}$
1.24g	0.44g	1.004	1.86	1.245g	0.818g	0.83g	0.545g

**B. Preparation of Soils for Site Development**

- Clearing and Stripping: The existing improvements and vegetation observed within the proposed addition areas should be removed prior to the preparation of the building pad and areas of associated improvements. This includes any roots from existing trees and shrubbery. Holes resulting from the removal of root systems or other buried foundations, debris or obstructions that extend below the planned grades should be cleared and backfilled with properly compacted fill.
- Treatment of Existing Fill Soils and/or Loose Surficial Soils: In order to provide suitable foundation support for the proposed additions and associated improvements, we recommend that all existing fill soils that remain after the necessary demolition and site excavations have been made be removed and recompacted. The recompaction work should consist of (a) removing these soils down to native medium dense materials; (b) scarifying, moisture conditioning, and compacting the exposed natural subgrade soils; and (c) cleaning and replacing the removed material as compacted structural fill.



Before any soils are processed our field representative should evaluate the soils at the bottom of the excavation.

The depth required to remove the fill soils is anticipated to be approximately 1 to 2 feet within the proposed addition areas, but should be confirmed by our representatives during the excavation work based on their examination of the soils being exposed. The lateral extent of the excavation and recompaction should be at least 5 feet beyond the edge of the perimeter foundations of the residential structure and any areas to receive exterior improvements where feasible.

Any unsuitable materials (such as oversize rubble, highly expansive clayey soils, and/or organic matter) should be selectively removed as indicated by our representative and disposed of off-site or be properly moisture conditioned and compacted.

Any rigid improvements founded on the existing variable density surface soils can be expected to undergo movement and possible damage. ***Geotechnical Exploration, Inc.*** takes no responsibility for the performance of any improvements built on loose natural soils or inadequately compacted fills. Any exterior area to receive concrete improvements should be verified for compaction and moisture within 48 hours prior to concrete placement or during the fill placement if the thickness of fill exceeds 1 foot. The bottom of excavation in areas to have fill soils recompacted shall be evaluated by our representative prior to fill/backfill placement.

4. *Subgrade Preparation:* After the site has been cleared, stripped, and the required excavations made, the exposed subgrade soils in areas to receive fill and/or building improvements should be scarified to a depth of 6 inches,



moisture conditioned, and compacted to the requirements for structural fill. Moisture content should be maintained by periodical sprinkling until within 48 hours prior to concrete placement.

5. *Expansive Soil Conditions:* We do not anticipate that significant quantities of medium or highly expansive clay soils will be encountered during grading. Should such soils be encountered and used as fill, however, they should be moisture conditioned to at least 5 percent above optimum moisture content, compacted to 88 to 92 percent, and placed outside building areas. Soils of medium or greater expansion potential should not be used as retaining wall backfill soils.
6. *Material for Fill:* Existing on-site soils with an organic content of less than 3 percent by volume are, in general, suitable for use as fill. Any required imported fill material should be a low-expansion potential (Expansion Index of 50 or less per ASTM D4829-11). In addition, both imported and existing on-site materials for use as fill should not contain rocks or lumps more than 3 inches in greatest dimension. All materials for use as fill should be approved by our representative prior to importing to the site.
7. *Fill Compaction:* All structural fill should be compacted to a minimum degree of compaction of 90 percent based upon ASTM D1557-12. Fill material should be spread and compacted in uniform horizontal lifts not exceeding 8 inches in uncompacted thickness. Before compaction begins, the fill should be brought to a moisture content that will permit proper compaction by either: (1) aerating and drying the fill if it is too wet, or (2) moistening the fill with water if it is too dry. Each lift should be thoroughly mixed before compaction to ensure a uniform distribution of moisture.



No uncontrolled fill soils should remain after completion of the site work. In the event that temporary ramps or pads are constructed of uncontrolled fill soils, the loose fill soils should be removed and/or recompacted prior to completion of the grading operation.

8. *Trench and Retaining Wall Backfill:* Utility trenches and retaining walls should preferably be backfilled with compacted fill; gravel is also a suitable backfill material but should be used only if space constraints will not allow the use of compaction equipment. Gravel can also be used as backfill around perforated subdrains. Backfill material should be placed in lift thicknesses appropriate to the type of compaction equipment utilized and compacted to a minimum degree of compaction of 90 percent by mechanical means.

Our experience has shown that even shallow, narrow trenches (such as for irrigation and electrical lines) that are not properly compacted can result in problems, particularly with respect to shallow groundwater accumulation and migration.

Backfill soils placed behind retaining walls should be installed as early as the retaining walls are capable of supporting lateral loads. Backfill soils behind retaining walls should be low expansive, with an Expansion Index equal to or lower than 50.

**C. Design Parameters for Proposed Foundations**

9. *Footings:* We recommend that any new structural loads within the current building footprint be supported on conventional, individual-spread and/or continuous footing foundations bearing on properly compacted fill soils prepared as stated above and/or undisturbed natural material. All new



footings should be founded at least 18 inches below the lowest adjacent finished grade. The existing perimeter footings were found to have a depth of 24 inches and a width of 14 inches. If existing foundations are to support new structural loads, they should be reviewed by the structural engineer to transmit to the soil no more than 2,000 psf. Otherwise, the existing footings should be widened to the necessary bearing area dimensions.

If footings are located closer than 8 feet inside the top or face of slopes, they should be deepened to 1½ feet below a line beginning at a point 8 feet horizontally inside the slopes and projected outward and downward, parallel to the face of the slope and into firm soils. Bearing surfaces of footings located adjacent to utility trenches should be situated below an imaginary 1.5:1.0 plane projected upward from the bottom edge of the adjacent utility trench.

10. *Bearing Values:* At the recommended depths, the existing footings on compacted fill or native soil may be designed for allowable bearing pressures of 2,500 pounds per square foot (psf) for combined dead and live loads and 3,300 psf for all loads, including wind or seismic. The footings should, however, have a minimum depth of 18 inches and a minimum width of 12 inches for one-story structures (minimum width of 15 inches for two-story structures). Footing excavations should be evaluated by our representative prior to steel and form placement. If suspended floors are to be used between deepened footings into dense formational soils, our firm can be contacted for additional recommendations.
  
11. *Footing Reinforcement:* All continuous footings should contain top and bottom reinforcement to provide structural continuity and to permit spanning of local irregularities. We recommend that a minimum of two No. 5 top and two No. 5 bottom reinforcing bars be provided in the footings. A minimum clearance





of 3 inches should be maintained between steel reinforcement and the bottom or sides of the footing. Isolated square footings should contain, as a minimum, a grid of three No. 4 steel bars on 12-inch centers, both ways. In order for us to offer an opinion as to whether the footings are founded on soils of sufficient load bearing capacity, it is essential that our representative inspect the footing excavations prior to the placement of reinforcing steel or concrete.

*NOTE: The project Civil/Structural Engineer should review all reinforcing schedules. The reinforcing minimums recommended herein are not to be construed as structural designs, but merely as minimum reinforcement to reduce the potential for cracking and separations.*

12. Lateral Loads: Lateral load resistance for the structures supported on footing foundations may be developed in friction between the foundation bottoms and the supporting subgrade. An allowable friction coefficient of 0.40 is considered applicable. An additional allowable passive resistance equal to an equivalent fluid weight of 260 pounds per cubic foot (pcf) acting against the foundations may be used in design provided the footings are poured neat against the adjacent undisturbed formational materials and/or properly compacted fill materials. These lateral resistance values assume a level surface in front of the footing for a minimum distance of three times the embedment depth of the footing or at least 8 ft to daylight, whichever is larger. Existing footings to support new loads should be reviewed to see that they don't transfer a lateral load to the soil over 150 pcf as passive resistance into the existing fills.
  
13. Settlement: Settlements under building loads are expected to be within tolerable limits for the proposed residence. For footings designed in accordance with the recommendations presented in the preceding paragraphs, we



anticipate that total settlements should not exceed 1 inch and that post-construction differential angular rotation should be less than 1/240.

**D. Concrete Slab-on-grade Criteria**

14. Minimum Floor Slab Reinforcement: Based on our experience, we have found that, for various reasons, floor slabs occasionally crack, causing brittle surfaces such as ceramic tiles to become damaged. Therefore, we recommend that all slabs-on-grade contain at least a minimum amount of reinforcing steel to reduce the separation of cracks, should they occur.

14.1 Interior new slabs-on-grade on properly compacted soils should be a minimum of 4 inches actual thickness and be reinforced with No. 3 bars on 15-inch centers, both ways, placed at midheight in the slab. *The slabs should be underlain by a moisture retardant membrane (i.e., 15-mil StegoWrap) over a 4-inch-thick capillary break layer consisting of clean 3/8-inch gravel.* Slab subgrade soil should be verified by a **Geotechnical Exploration, Inc.** representative to have the proper moisture content within 48 hours prior to placement of the vapor barrier and pouring of concrete. The StegoWrap membrane may be placed directly on properly compacted subgrade soils or dense formational soils.

14.2 Following placement of concrete floor slabs, sufficient drying time must be allowed prior to placement of any floor coverings. Premature placement of floor coverings may result in degradation of adhesive materials and loosening of the finish floor materials.



15. Concrete Isolation Joints: We recommend the project Civil/Structural Engineer incorporate isolation joints and sawcuts to at least one-fourth the thickness of the slab in any floor designs. The joints and cuts, if properly placed, should reduce the potential for and help control floor slab cracking. We recommend that concrete shrinkage joints be spaced no farther than approximately 20 feet apart, and also at re-entrant corners. However, due to a number of reasons (such as base preparation, construction techniques, curing procedures, and normal shrinkage of concrete), some cracking of slabs can be expected.
  
16. Slab Moisture Emission: Although it is not the responsibility of geotechnical engineering firms to provide moisture protection recommendations, as a service to our clients we provide the following discussion and suggested minimum protection criteria. Actual recommendations should be provided by the architect and waterproofing consultants. Soil moisture vapor can result in damage to moisture-sensitive floors, some floor sealers, or sensitive equipment in direct contact with the floor, in addition to mold and staining on slabs, walls, and carpets.

The common practice in Southern California is to place vapor retarders made of PVC, or of polyethylene. PVC retarders are made in thickness ranging from 10- to 60-mil. Polyethylene retarders, called visqueen, range from 5- to 10-mil in thickness. These products are no longer considered adequate for moisture protection and can actually deteriorate over time.

Specialty vapor retarding products possess higher tensile strength and are more specifically designed for and intended to retard moisture transmission into and through concrete slabs. The use of such products is highly recommended for reduction of floor slab moisture emission.



The following American Society for Testing and Materials (ASTM) and American Concrete Institute (ACI) sections address the issue of moisture transmission into and through concrete slabs: ASTM E1745-97 (2009) Standard Specification for Plastic Water Vapor Retarders Used in Contact Concrete Slabs; ASTM E154-88 (2005) Standard Test Methods for Water Vapor Retarders Used in Contact with Earth; ASTM E96-95 Standard Test Methods for Water Vapor Transmission of Materials; ASTM E1643-98 (2009) Standard Practice for Installation of Water Vapor Retarders Used in Contact Under Concrete Slabs; and ACI 302.2R-06 Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.

Based on the above, we recommend that the vapor barrier consist of a minimum 15-mil extruded polyolefin plastic (no recycled content or woven materials permitted). Permeance as tested before and after mandatory conditioning (ASTM E1745 Section 7.1 and sub-paragraphs 7.1.1-7.1.5) should be less than 0.01 perms (grains/square foot/hour in Hg) and comply with the ASTM E1745 Class A requirements. Installation of vapor barriers should be in accordance with ASTM E1643. The basis of design is StegoWrap vapor barrier 15-mil or equivalent placed as previously indicated.

16.1 Common to all acceptable products, vapor retarder/barrier joints must be lapped and sealed with mastic or the manufacturer's recommended tape or sealing products. In actual practice, stakes are often driven through the retarder material, equipment is dragged or rolled across the retarder, overlapping or jointing is not properly implemented, etc. All these construction deficiencies reduce the retarder's effectiveness. In no case should retarder/barrier products be punctured or gaps be allowed to form prior to or during concrete placement.



- 16.2 Vapor retarders/barriers do not provide full waterproofing for structures constructed below free water surfaces. They are intended to help reduce or prevent vapor transmission and/or capillary migration through the soil and through the concrete slabs. Waterproofing systems must be designed and properly constructed if full waterproofing is desired. The owner and project designers should be consulted to determine the specific level of protection required.
- 16.3 Following placement of any concrete floor slabs, sufficient drying time must be allowed prior to placement of floor coverings. Premature placement of floor coverings may result in degradation of adhesive materials and loosening of the finish floor materials.
17. Exterior Slab Reinforcement: As a minimum for protection of on-site improvements, we recommend that all nonstructural concrete slabs (such as patios, sidewalks, etc.) be at least 4 inches in actual thickness, founded on properly compacted and tested fill or dense native formation and underlain by no more than 3 inches of clean leveling sand, with No. 3 bars at 18-inch centers, both ways, at the center of the slab, and contain adequate isolation and control joints. The performance of on-site improvements can be greatly affected by soil base preparation and the quality of construction. It is therefore important that all improvements are properly designed and constructed for the existing soil conditions. The improvements should not be built on loose soils or fills placed without our observation and testing. The subgrade of exterior improvements should be verified as properly prepared within 48 hours prior to concrete placement. A minimum thickness of 2 feet of properly recompacted soils should underlie the exterior slabs on-grade.



For exterior slabs with the minimum shrinkage reinforcement, control joints should be placed at spaces no farther than 15 feet apart or the width of the slab, whichever is less, and also at re-entrant corners. Control and isolation joints in exterior slabs should be sealed with elastomeric joint sealant. The sealant should be inspected every 6 months and be properly maintained.

***E. Site Drainage Considerations***

18. ***Erosion Control:*** Appropriate erosion control measures should be taken at all times during and after construction to prevent surface runoff waters from entering footing excavations, ponding on finished building pad areas or causing erosion on soil surface.
  
19. ***Surface Drainage:*** Adequate measures should be taken to properly finish-grade the lot after the remodel and other improvements are in place. Drainage waters from this site and adjacent properties should be directed away from the footings, floor slabs, and slopes, onto the natural drainage direction for this area or into properly designed and approved drainage facilities provided by the project civil engineer. Roof gutters and downspouts should be installed on the residence, with the runoff directed away from the foundations via closed drainage lines. Proper subsurface and surface drainage will help minimize the potential for waters to seek the level of the bearing soils under the footings and floor slabs.

Failure to observe this recommendation could result in undermining and possible differential settlement of the structure or other improvements or cause other moisture-related problems. Currently, the CBC requires a minimum one-percent surface gradient for proper drainage of building pads



unless waived by the building official. Concrete pavement may have a minimum gradient of 0.5-percent.

20. Planter Drainage: Planter areas, flower beds and planter boxes should be sloped to drain away from the footings and floor slabs at a gradient of at least 5 percent within 5 feet from the perimeter walls. Any planter areas adjacent to the residence or surrounded by concrete improvements should be provided with sufficient area drains to help with rapid runoff disposal. No water should be allowed to pond adjacent to the residence or other improvements or anywhere on the site.

**F. General Recommendations**

21. Project Start Up Notification: In order to reduce any work delays during site development, this firm should be contacted at least 48 hours and preferably 48 hours prior to any need for observation of footing excavations or field density testing of compacted fill soils. If possible, placement of formwork and steel reinforcement in footing excavations should not occur prior to observing the excavations; in the event that our observations reveal the need for deepening or redesigning foundation structures at any locations, any formwork or steel reinforcement in the affected footing excavation areas would have to be removed prior to correction of the observed problem (i.e., deepening the footing excavation, recompacting soil in the bottom of the excavation, etc.).
22. Construction Best Management Practices (BMPs): Construction BMPs must be implemented in accordance with the requirements of the controlling jurisdiction. Sufficient BMPs must be installed to prevent silt, mud or other construction debris from being tracked into the adjacent street(s) or storm water conveyance systems due to construction vehicles or any other



construction activity. The contractor is responsible for cleaning any such debris that may be in the street at the end of each work day or after a storm event that causes breach in the installed construction BMPs.

All stockpiles of uncompacted soil and/or building materials that are intended to be left unprotected for a period greater than 7 days are to be provided with erosion and sediment controls. Such soil must be protected each day when the probability of rain is 40% or greater. A concrete washout should be provided on all projects that propose the construction of any concrete improvements that are to be poured in place. All erosion/sediment control devices should be maintained in working order at all times. All slopes that are created or disturbed by construction activity must be protected against erosion and sediment transport at all times. The storage of all construction materials and equipment must be protected against any potential release of pollutants into the environment.

## **XI. GRADING NOTES**

***Geotechnical Exploration, Inc.*** recommends that we be retained to verify the actual soil conditions revealed during site grading work and footing excavation to be as anticipated in this "*Report of Limited Geotechnical Investigation and Coastal Bluff Edge Evaluation*" for the project. In addition, the compaction of any fill soils placed during site grading work must be observed and tested by the soil engineer. It is the responsibility of the grading contractor to comply with the requirements on the grading plans and the local grading ordinance. All retaining wall and trench backfill should be properly compacted. ***Geotechnical Exploration, Inc.*** will assume no liability for damage occurring due to improperly or uncompacted backfill placed without our observations and testing.





## **XII. LIMITATIONS**

Our conclusions and recommendations have been based on available data obtained from our field investigation and laboratory analysis, as well as our experience with similar soils and formational materials located in this area of Solana Beach. Of necessity, we must assume a certain degree of continuity between exploratory excavations and/or natural exposures.

It is, therefore, necessary that all observations, conclusions, and recommendations be verified at the time grading operations begin or when footing excavations are placed. In the event discrepancies are noted, additional recommendations may be issued, if required.

The work performed and recommendations presented herein are the result of an investigation and analysis that meet the contemporary standard of care in our profession within the County of San Diego. No warranty is provided.

As stated previously, it is not within the scope of our services to provide quality control oversight for surface or subsurface drainage construction or retaining wall sealing and base of wall drain construction. It is the responsibility of the contractor to verify proper wall sealing, geofabric installation, protection board installation (if needed), drain depth below interior floor or yard surfaces; pipe percent slope to the outlet, etc.

This report should be considered valid for a period of two (2) years, and is subject to review by our firm following that time. If significant modifications are made to the building plans, especially with respect to the height and location of any proposed structures, this report must be presented to us for immediate review and possible revision.



It is the responsibility of the owner and/or developer to ensure that the recommendations summarized in this report are carried out in the field operations and that our recommendations for design of this project are incorporated in the structural plans. We should be retained to review the project plans once they are available to verify that our recommendations have been adequately incorporated into them.

This firm does not practice or consult in the field of safety engineering. We do not direct the contractor's operations, and we cannot be responsible for the safety of personnel other than our own; the safety of others is the responsibility of the contractor. The contractor should notify the owner if any of the recommended actions presented herein are considered to be unsafe.

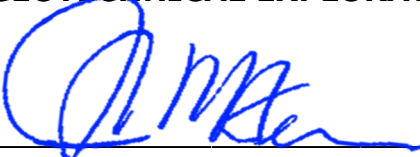
The firm of **Geotechnical Exploration, Inc.** shall not be held responsible for changes to the physical condition of the property, such as addition of fill soils or changing drainage patterns, which occur subsequent to issuance of this report and the changes are made without our observations, testing, and approval.



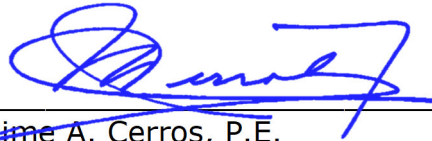
Once again, should any questions arise concerning this report, please feel free to contact the undersigned. Reference to our **Job No. 23-14438** will expedite a reply to your inquiries.

Respectfully submitted,

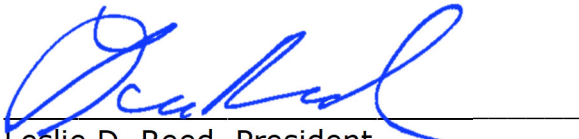
**GEOTECHNICAL EXPLORATION, INC.**



Jay K. Heiser  
Senior Project Geologist



Jaime A. Cerros, P.E.  
R.C.E. 34422/G.E. 2007  
Senior Geotechnical Engineer



Leslie D. Reed, President  
C.E.G. 999/P.G. 3391



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January 2024

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# VICINITY MAP



Thomas Bros. Guide San Diego County pg 1167-E6

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.

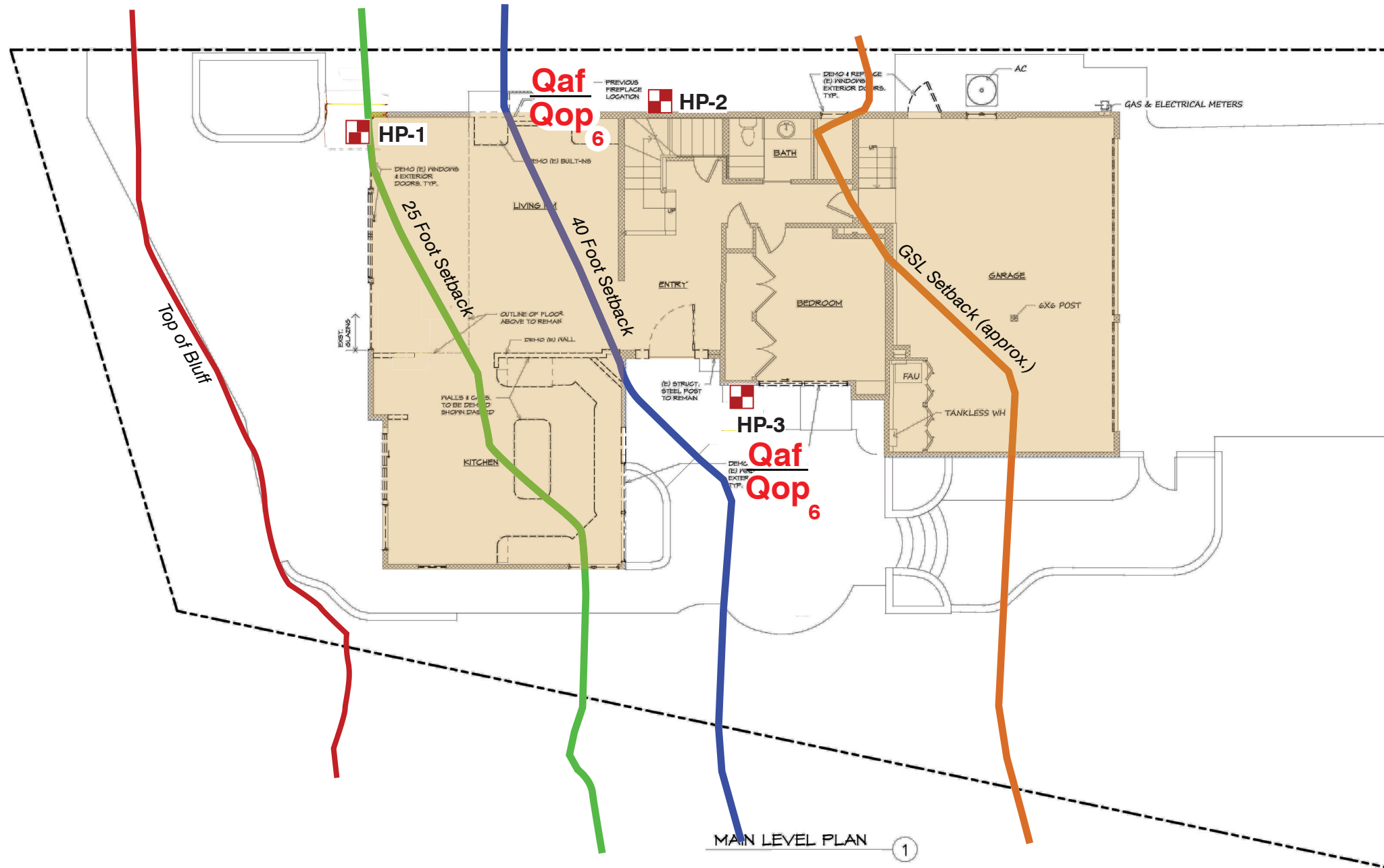
Figure No. 1  
Job No. 23-14438



BATES RESIDENCE REMODEL  
403 PACIFIC AVENUE  
SOLANA BEACH, CA 92075





REYES  
STUDIO  
ARCHITECTURE



PACIFIC AVENUE

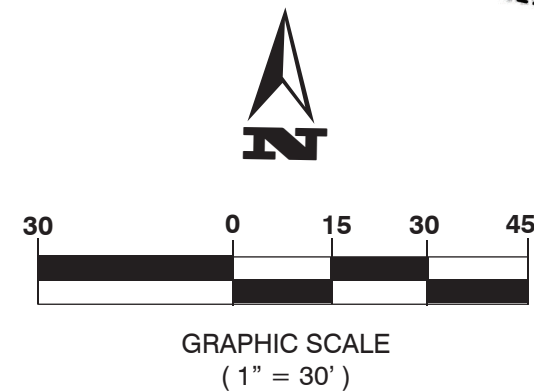
LEGEND

-  **HP-3** Approximate Location of Exploratory Handpit
-  Bates Residence

REFERENCE: This Plot Plan is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

GEOLOGIC LEGEND

- Qaf** Artificial Fill
- Qop<sub>6</sub>** Old Paralic Deposits, Unit 6



**PLOT PLAN AND SITE SPECIFIC GEOLOGIC MAP**

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.  
Figure No. II  
Job No. 23-14438



January 2024



EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>3' X 3' X 5' Handpit</b>	DATE LOGGED
SURFACE ELEVATION <b>± 78' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JKH</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
1			<b>SILTY SAND</b> , fine- to medium-grained, with some roots. Loose to medium dense. Damp. Gray-brown.  <b>FILL (Qaf)</b>		SM								
2			<b>SILTY SAND</b> , fine- to medium-grained; poorly cemented. Medium dense. Damp. Red-brown.  <b>OLD PARALIC DEPOSITS (Qop 6)</b> -- 15% passing #200 sieve. Footing : 24" deep, 14" wide.		SM	5.1	98.2	9.6	120.4				
3													
4													
5		1	-- 23% passing #200 sieve.			7.4							
6			Bottom @ 5'										








EXPLORATION LOG 14438 BATES.GPJ GEO\_EXPL.GDT 12/11/23

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bates Residence</b>		LOG No. <b>HP-1</b>
	SITE LOCATION <b>403 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>23-14438</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>IIIa</b>		

EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>3' X 3' X 3' Handpit</b>	DATE LOGGED
SURFACE ELEVATION <b>± 75' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JKH</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. - (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)	U.S.C.S.								
0				<b>SILTY SAND</b> , fine- to medium-grained, with some gravel. Loose to medium dense. Damp. Gray-brown.	SM							
0.5				<b>FILL (Qaf)</b>	SM							
0.5				<b>SILTY SAND</b> , fine- to medium-grained; moderately cemented. Medium dense. Damp. Red-brown.								
1.5				<b>OLD PARALIC DEPOSITS (Qop 6)</b>								
2.0				Footing : 24" deep.								
2.5		1		-- 19% passing #200 sieve.	7.0							
3.0												
3.0				Bottom @ 3'								
4.0												

EXPLORATION LOG 14438 BATES.GPJ GEO\_EXPL.GDT 12/11/23

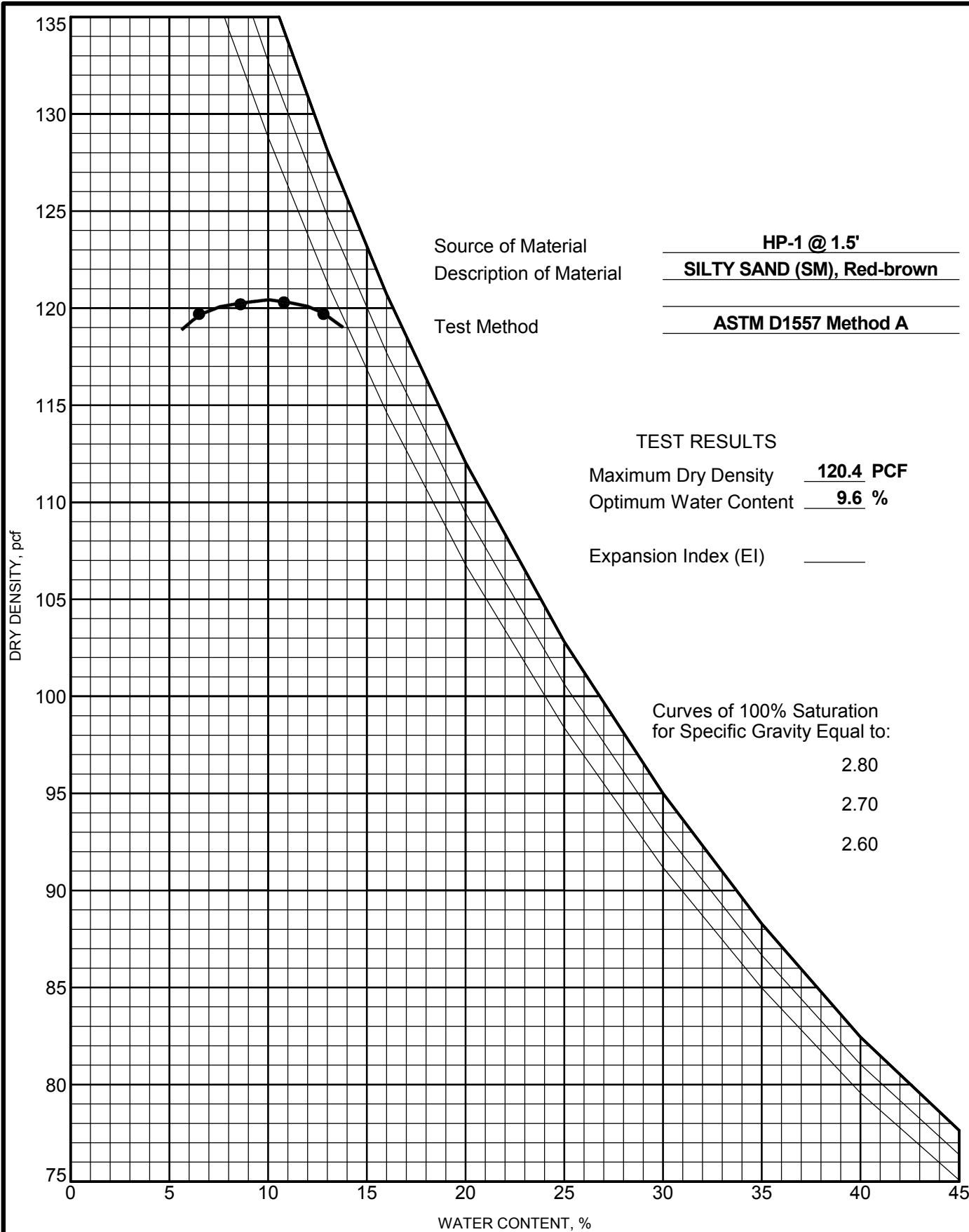
 PERCHED WATER TABLE  BULK BAG SAMPLE  IN-PLACE SAMPLE  MODIFIED CALIFORNIA SAMPLE  NUCLEAR FIELD DENSITY TEST  STANDARD PENETRATION TEST	JOB NAME <b>Bates Residence</b>		LOG No. <b>HP-2</b>
	SITE LOCATION <b>403 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>23-14438</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>IIIb</b>		

EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>3' X 3' X 4' Handpit</b>	DATE LOGGED
SURFACE ELEVATION <b>± 75' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JKH</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
1			<b>SILTY SAND</b> , fine- to medium-grained, with some roots. Loose to medium dense. Damp. Gray-brown.	<b>FILL (Qaf)</b>	SM								
2		1	<b>SILTY SAND</b> , fine- to medium-grained; moderately cemented. Medium dense. Damp. Red-brown.	<b>OLD PARALIC DEPOSITS (Qop 6)</b> -- 15% passing #200 sieve.	SM	9.2							
4			Bottom @ 4'										

EXPLORATION LOG 14438 BATES.GPJ GEO\_EXPL.GDT 12/11/23

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bates Residence</b>
	SITE LOCATION <b>403 Pacific Avenue, Solana Beach, CA</b>
	JOB NUMBER <b>23-14438</b>
	FIGURE NUMBER <b>IIIc</b>
	REVIEWED BY <b>LDR/JAC</b>
	LOG No. <b>HP-3</b>

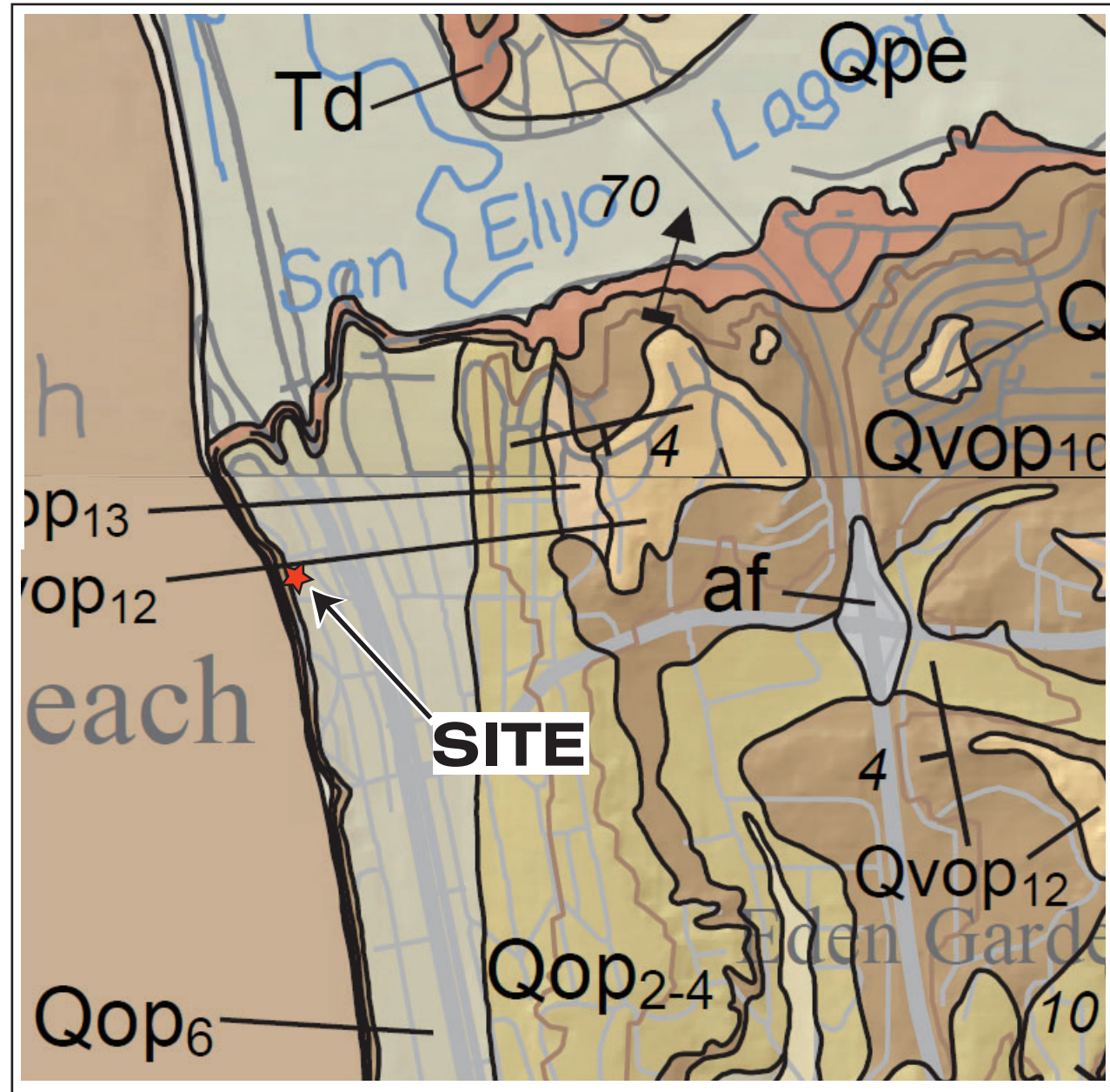


COMPACTION + EIDARK GRID - 14438 BATES.GPJ GEI FEB06.GDT - 12/11/23



**MOISTURE-DENSITY RELATIONSHIP**

Figure Number: IV  
 Job Name: Bates Residence  
 Site Location: 403 Pacific Avenue, Solana Beach, CA  
 Job Number: 23-14438



Bates Residence  
403 Pacific Avenue  
Solana Beach CA.

# EXCERPT FROM GEOLOGIC MAP OF THE OCEANSIDE 30' x 60' QUADRANGLE, CALIFORNIA


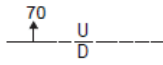














Compiled by  
Michael P. Kennedy<sup>1</sup> and Siang S. Tan<sup>1</sup>  
2007


Digital preparation by  
Kelly R. Bovard<sup>2</sup>, Rachel M. Alvarez<sup>2</sup>, Michael J. Watson<sup>2</sup>, and Carlos I. Gutierrez<sup>1</sup>

<sup>1</sup> Department of Conservation, California Geological Survey  
<sup>2</sup> U.S. Geological Survey, Department of Earth Sciences, University of California, Riverside

## ONSHORE MAP SYMBOLS

## DESCRIPTION OF MAP UNITS

-  Contact - Contact between geologic units; dotted where concealed.
-  Fault - Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
-  Anticline - Solid where accurately located; dashed where approximately located; dotted where concealed. Arrow indicates direction of axial plunge.
-  Kgp - Granite pegmatite dike.
-  Syncline - Solid where accurately located; dotted where concealed. Arrow indicates direction of axial plunge.
-  Landslide - Arrows indicate principal direction of movement. Quired where existence is questionable.
- Strike and dip of beds
  -  70° Inclined
  -  70° Overturned
  -  Vertical
  -  Horizontal
- Strike and dip of igneous foliation
  -  45° Inclined
  -  Vertical
- Strike and dip of igneous joints
  -  60° Inclined
  -  Vertical
- Strike and dip of metamorphic foliation
  -  55° Inclined
- Strike and dip of sedimentary joints
  -  Vertical

 Qop<sub>6</sub> Old Paralic Deposits, Unit 6

Base Map  
Onshore base (hypsography, hydrography, and transportation) from U.S.G.S. digital line graph (DLG) data, Oceanside 30' x 60' metric quadrangle. Shaded topographic base from U.S.G.S. digital elevation models (DEM's). Offshore bathymetric contours and shaded bathymetry from N.O.A.A. single and multibeam data. Projection is UTM, zone 11, North American Datum 1927.



This map was funded in part by the U.S. Geological Survey National Cooperative Geologic Mapping Program, STATEMAP Award no. 01NQAG0092.

Prepared in cooperation with the U.S. Geological Survey, Southern California Areal Mapping Project.

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The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

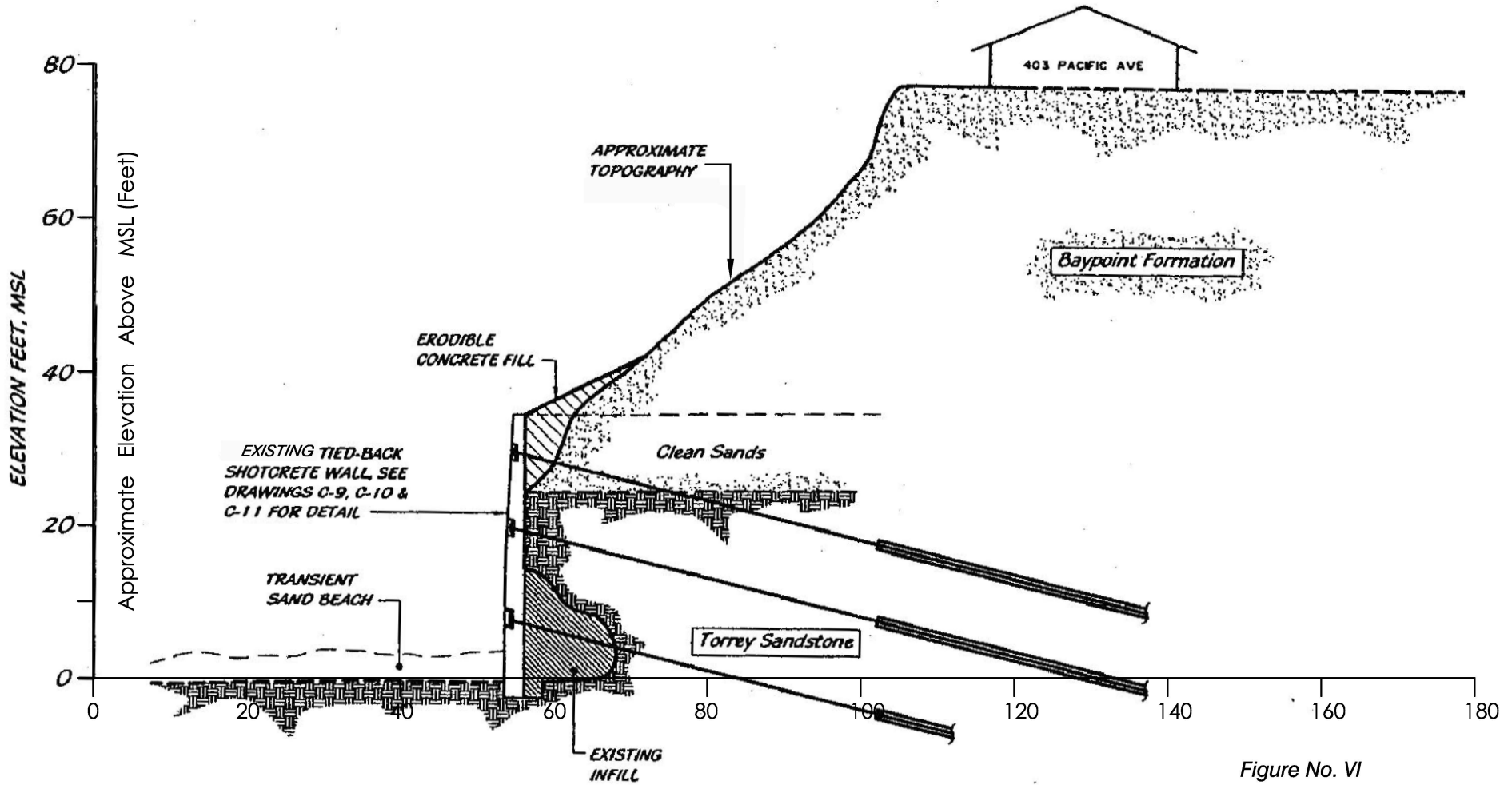
Figure No. V  
Job No. 23-14438



# GEOLOGIC CROSS SECTION A-A'

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.

A'



NOTE: This Cross Section is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

Relative Horizontal Distance (feet)

Scale: 1" = 20'  
(Horizontal and Vertical)

Figure No. VI  
Job No. 23-14438



**APPENDIX A**  
**UNIFIED SOIL CLASSIFICATION SYSTEM (U.S.C.S.)**  
**SOIL DESCRIPTION**

**Coarse-grained (More than half of material is larger than a No. 200 sieve)**

GRAVELS, CLEAN GRAVELS (More than half of coarse fraction is larger than No. 4 sieve size, but smaller than 3")	GW	Well-graded gravels, gravel and sand mixtures, little or no fines.
	GP	Poorly graded gravels, gravel and sand mixtures, little or no fines.
GRAVELS WITH FINES	GC	Clay gravels, poorly graded gravel-sand-silt mixtures
SANDS, CLEAN SANDS (More than half of coarse fraction is smaller than a No. 4 sieve)	SW	Well-graded sand, gravelly sands, little or no fines
	SP	Poorly graded sands, gravelly sands, little or no fines.
SANDS WITH FINES	SM	Silty sands, poorly graded sand and silty mixtures.
	SC	Clayey sands, poorly graded sand and clay mixtures.

**Fine-grained (More than half of material is smaller than a No. 200 sieve)**

SILTS AND CLAYS

<u>Liquid Limit Less than 50</u>	ML	Inorganic silts and very fine sands, rock flour, sandy silt and clayey-silt sand mixtures with a slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, silty clays, lean clays.
	OL	Organic silts and organic silty clays of low plasticity.
<u>Liquid Limit Greater than 50</u>	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
	CH	Inorganic clays of high plasticity, fat clays.
	OH	Organic clays of medium to high plasticity.
HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils



# APPENDIX B

## REGIONAL GEOLOGIC DESCRIPTION

In the Coastal Plain region, where the subject property is located, the “basement” consists of Mesozoic crystalline rocks. Basement rocks are also exposed as high relief areas (e.g., Black Mountain northeast of the subject property and Cowles Mountain near the San Carlos area of San Diego). Younger Cretaceous and Tertiary sediments lap up against these older features. These sediments form a “*layer cake*” sequence of marine and non-marine sedimentary rock units, with some formations up to 140 million years old. Faulting related to the La Nación and Rose Canyon Fault zones has broken up this sequence into a number of distinct fault blocks in the southwestern part of the county. Northwestern portions of the county are relatively undeformed by faulting (Demere, 1997).

The Peninsular Ranges form the granitic spine of San Diego County. These rocks are primarily plutonic, forming at depth beneath the earth’s crust 140 to 90 million years ago as the result of the subduction of an oceanic crustal plate beneath the North American continent. These rocks formed the much larger Southern California batholith. Metamorphism associated with the intrusion of these great granitic masses affected the much older sediments that existed near the surface over that period of time. These metasedimentary rocks remain as roof pendants of marble, schist, slate, quartzite and gneiss throughout the Peninsular Ranges. Locally, Miocene-age volcanic rocks and flows have also accumulated within these mountains (e.g., Jacumba Valley). Regional tectonic forces and erosion over time have uplifted and unroofed these granitic rocks to expose them at the surface (Demere, 1997).

The Salton Trough is the northerly extension of the Gulf of California. This zone is undergoing active deformation related to faulting along the Elsinore and San Jacinto Fault Zones, which are part of the major regional tectonic feature in the southwestern portion of California, the San Andreas Fault Zone. Translational movement along these fault zones has resulted in crustal rifting and subsidence. The Salton Trough, also referred to as the Colorado Desert, has been filled with sediments to depth of approximately 5 miles since the movement began in the early Miocene, 24 million years ago. The source of these sediments has been the local mountains as well as the ancestral and modern Colorado River (Demere, 1997).

The San Diego area is part of a seismically active region of California. It is on the eastern boundary of the Southern California Continental Borderland, part of the Peninsular Ranges Geomorphic Province. This region is part of a broad tectonic boundary between the North American and Pacific Plates. The actual plate boundary is characterized by a complex system of active, major, right-lateral strike-slip faults, trending northwest/southeast. This fault system extends eastward to the San Andreas Fault (approximately 70 miles from San Diego) and westward to the San Clemente Fault (approximately 50 miles off-shore from San Diego) (Berger and Schug, 1991).





In California, major earthquakes can generally be correlated with movement on active faults. As defined by the California Division of Mines and Geology (Hart et al., 1980), an "active" fault is one that has had ground surface displacement within Holocene time (about the last 11,000 years). In addition, "potentially active fault" has been amended to Pre-Holocene fault: a fault whose recency of past movement is older than 11,700 years, and thus does not meet the criteria of Holocene-Active fault as defined in the State Mining and Geology Board regulations.

A three-tier fault classification is used as follows:

- Active Faults: Faults that have demonstrable surface displacement during Holocene time.
- Potentially Active Faults: Faults with Quaternary displacement but Holocene surface displacement is indeterminate.
- Inactive Faults: Pre-Quaternary faults.

During recent history, prior to April 2010, the San Diego County area has been relatively quiet seismically. The youngest paleoearthquake that cuts the early historical living surface is likely the 1862 San Diego earthquake that had an estimated magnitude of M6 (Singleton et al., 2019). Paleoseismic trenches at the Presidio Hills Golf Course on the main trace of the Rose Canyon Fault contained evidence for historical ground rupturing earthquakes as recently as 1862 and the mid-1700s. Results of the study also suggest the Rose Canyon Fault has a ~700-800-year recurrence interval (Singleton et al., 2019).

On June 15, 2004, a M5.3 earthquake occurred approximately 45 miles southwest of downtown San Diego (26 miles west of Rosarito, Mexico). Another widely felt earthquake on a distant southern California fault was a M5.4 event that took place on July 29, 2008, west-southwest of the Chino Hills area of Riverside County.

Several earthquakes ranging from M5.0 to M6.0 occurred in northern Baja California, centered in the Gulf of California on August 3, 2009. A M5.8 earthquake followed by a M4.9 aftershock occurred on December 30, 2009, centered about 20 miles south of the Mexican border city of Mexicali.

On April 4, 2010, a large earthquake occurred in Baja California, Mexico. It was widely felt throughout the southwest including Phoenix, Arizona and San Diego in California. This M7.2 event, the Sierra El Mayor earthquake, occurred in northern Baja California, approximately 40 miles south of the Mexico-USA border at shallow depth along the principal plate boundary between the North American and Pacific plates. According to the U. S. Geological Survey this is an area with a high level of historical seismicity, and it has recently also been seismically active, although this is the largest event to strike in this area since 1892. The April 4, 2010, earthquake



appears to have been larger than the M6.9 earthquake in 1940 or any of the early 20<sup>th</sup> century events (e.g., 1915 and 1934) in this region of northern Baja California.

This event's aftershock zone extends significantly to the northwest, overlapping with the portion of the fault system that is thought to have ruptured in 1892. Ground motions for the April 4, 2010, main event, recorded at stations in San Diego and reported by the California Strong Motion Instrumentation Program (CSMIP), ranged up to 0.058g.

On July 7, 2010, a M5.4 earthquake occurred in Southern California at 4:53 pm (Pacific Time) about 30 miles south of Palm Springs, 25 miles southwest of Indio, and 13 miles north-northwest of Borrego Springs. The earthquake occurred near the Coyote Creek segment of the San Jacinto Fault. The earthquake exhibited right lateral slip to the northwest, consistent with the direction of movement on the San Jacinto Fault. It was followed by more than 60 aftershocks of M1.3 and greater during the first hour.

In the last 50 years, there have been four other earthquakes in the magnitude M5.0 range within 20 kilometers of the Coyote Creek segment: M5.8 in 1968, M5.3 on 2/25/1980, M5.0 on 10/31/2001, and M5.2 on 6/12/2005. The biggest earthquake near this location was the M6.0 Buck Ridge earthquake on 3/25/1937.



# **APPENDIX C**

Coastal Hazard and Wave Run Up Analysis  
403 Pacific Avenue  
Solana Beach, California

December 4, 2023

By Geosoils, Inc.





**Geotechnical • Geologic • Coastal • Environmental**

5741 Palmer Way • Carlsbad, California 92010 • (760) 438-3155 • FAX (760) 931-0915 • [www.geosoilsinc.com](http://www.geosoilsinc.com)

December 4, 2023

**Mr. Jay Heiser**

Geotechnical Exploration Inc.  
7420 Trade Street  
San Diego, CA 92121

Subject: Coastal Hazard Discussion for Proposed Remodel at 403 Pacific Avenue,  
Solana Beach, San Diego County, California

Dear Mr. Heiser:

GeoSoils, Inc. (GSI) is pleased to provide this coastal hazard discussion for the proposed remodel at 403 Pacific, Solana Beach, CA. The analysis is based upon our review of the project plans, the California Coastal Commission (CCC) Sea Level Rise (SLR) 2018 guidance document, our site inspection, and knowledge of local coastal conditions. This report provides the necessary coastal hazard information for the project requested by the City of Solana Beach, and typically requested by the CCC.

### **INTRODUCTION**

The project site is a single family residence located at 403 Pacific Avenue, Solana Beach, California. The proposed project is a minor remodel that includes replacing and adding new windows, new roofing, new siding, and modification of interior walls. There are no new footings or foundation elements proposed and no change in the actual footprint of the development. It is GSI's experience that this scope of remodel would not be considered "new development," and does not extend the life of the existing development. Figure 1 is a 2022 "birds-eye" photograph showing the site and adjacent properties. There CCC approved a seawall at the site under Coastal Development Permit (CDP) 6-04-83. The permit was issued because the bluff fronting the existing residence did not have an adequate factor of safety against failure, and the residence was in jeopardy from erosion. The seawall has been in place for about 20 years and had no visible impact of the adjacent shoreline. The top of the bluff is at an elevation of approximately +80 feet National Geodetic Vertical Datum 1929 (NGVD29) and the top of the permitted shore protection is at approximately +37 feet NGVD29. The beach near the site has been nourished in the past with sand as part of a regional beach nourishment program.



Figure 1. Subject site, seawall, and adjacent properties in 2022.

### **DATUM AND UNITS OF MEASUREMENT**

The datum used in this report is the National Geodetic Vertical Datum 1929 (NGVD29). In the open ocean of the San Diego County coast, Mean High Water (MHW) is approximately 2.3 feet above NGVD29, and MLLW is approximately 2.3 feet below NGVD29. The units of measurement in this report are feet (ft), pounds force (lbs), and second (sec). A site topographic survey was taken from the approved plans by Terra Costa Consulting Group, the seawall project engineer. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) is shown in Figure 2. The proposed remodel is located in the FEMA X Zone. The base flood elevation (BFE) of the VE Zone at the site seawall is +23 feet NAVD88 (approximately +20.0 feet NGVD29). This roughly corresponds to the FEMA estimate of wave runup limit on the bluff/seawall. This FEMA BFE does not include SLR over the life of the project. In consideration of the age of the existing residence (decades), the life of the proposed remodel is about 50 years. Typically, the life of the “new development” is about 75 years. It should be noted that the permit for the existing seawall requires the owner to apply for an amendment to the seawall permit in about 10 years.

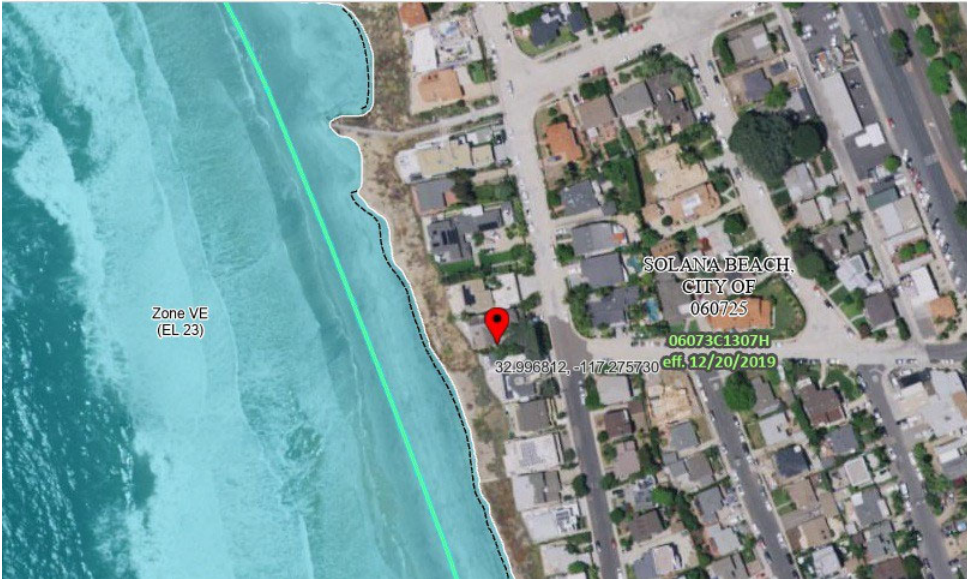


Figure 2. Proposed 2018 FEMA panel and flood zones for the site.

## **COASTAL HAZARDS**

There are three different potential oceanographic hazards identified for most coastal sites: wave runoff/attack, shoreline erosion, and ocean flooding. For ease of review, each of these hazards will be analyzed and discussed separately, followed by a summary of the analysis including conclusions and recommendations as necessary.

## **WAVE RUNUP ANALYSIS**

As waves encounter the beach in front of this section of shoreline, the water rushes up the beach as well as the bluff and existing shore protection. Wave runoff is defined as the vertical height above the still water level to which a wave will rise on a structure of infinite height. Overtopping is the flow rate of water over the top of a finite height structure as a result of wave runoff. The elevation of the top of the seawall is about +37 feet NGVD29. The top of the bluff is at an elevation +80 feet NGVD29.

Wave runoff on the proposed seawall is calculated using the US Army Corps of Engineers (USACOE) Automated Coastal Engineering System, ACES. The methods to calculate runoff implemented within this ACES application are discussed in greater detail in the Coastal Engineering Manual (2004). The runoff estimates calculated herein are corrected for the effect of onshore winds. The runoff analysis will consider the maximum credible SLR over the project design life (75 years) to determine if wave runoff will exceed the top of the seawall elevation or impact the proposed remodel. Figure 3 from the ACES manual shows some of the variables involved in the runoff analysis.

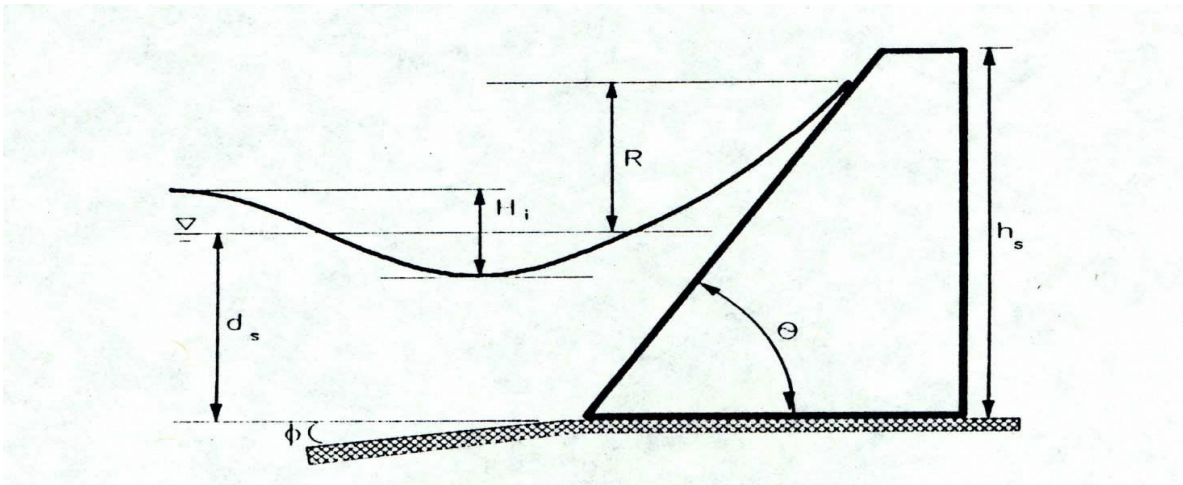


Figure 3. Wave runup terms from ACES analysis.

$D_s$  is the depth of the water at the toe of the seawall.

$H_i$  is the breaking wave height at the toe

$R$  is the height of the wave runup above the still water elevation

$H_s$  is the height of the seawall above the toe

$\theta$  is the slope of the seawall

$\phi$  is the nearshore slope or slope from the shoreline to beyond the breakers

### Oceanographic Design Parameters

The wave, wind, and water level data used as inputs to the ACES runup analysis were taken from the historical data reported in USACOE CCSTWS report #88-6, and updated as necessary. The San Diego North County shoreline has experienced a series of storms over the years. These events have impacted coastal property and beaches depending upon the severity of the storm, the direction of wave approach and the local shoreline orientation. The ACES analysis was performed on oceanographic conditions that represent a typical 75- to 100-year recurrence storm.

### Project SLR

The historical water levels (tides) in the project area are well documented. The National Oceanographic and Atmospheric (NOAA) National Ocean Survey tidal data station closest to the project site is at the Scripps Institution of Oceanography La Jolla Pier Station. The current (last tidal epoch) tidal datum elevations in feet are as follows:

MEAN HIGHER HIGH WATER (MHHW)	= 3.03
MEAN HIGH WATER (MHW)	= 2.30
MEAN TIDE LEVEL (MTL)	= 0.45
MEAN SEA LEVEL (MSL)	= 0.43

NGVD29	= 0.00
MEAN LOW WATER (MLW)	=-1.39
MEAN LOWER LOW WATER (MLLW)	=-2.30

The maximum historical water elevation at the site including El Niño effects is approximately +5.3 feet NGVD29. The top of the seawall is at approximately +37 feet NGVD29 and thus is over 30 feet above the historical El Niño highest water elevation. The bluff is at elevation +85 NGVD29 and well beyond the limit of wave runup. As a result, the seawall top and bluff top are located at an elevation that would not expose it to flooding from the ocean under current sea level conditions.

### **Future Water Levels Due to Sea Level Rise (SLR)**

Any incorporation of sea level rise (SLR) in a project needs to appropriately consider several factors that include: the expected life of the structure, the range of future SLR estimates and their accuracy, and the elevation of the proposed seawall. The coastal hazard analysis should use the best available science to determine a sea level rise (SLR) range, which currently, per CCC mandate, is the 2018 California Ocean Protection Council (COPC) SLR Guidance. This is stated in the November 2018 CCC SLR Guidance update. The COPC's SLR projection probabilities are based upon a report by Robert E. Kopp and others (Kopp et al., 2014). The design life of a residential structure is 75 years; we will thus conservatively estimate the end of the structure's design life to be the year 2098. The Kopp paper has three emission scenarios (low, medium, and high), which the 2018 OPC narrowed down to just low and high (no medium emission scenario). The Kopp et al paper does state that "local decisions require local projections that accommodate different risk tolerances that can be linked to storm surge projections." The SLR tables in the CCC 2018 Guidance have been modified by the CCC and don't provide the complete data set from the COPC document with the best available science. The following Figure 4 is taken from the 2018 OPC SLR Guidance for the closest tidal station in La Jolla. Projections for the year 2098 are not provided in the COPC table and therefore must be extrapolated from the projections provided for 2090 and 2100. Based upon current NOAA (NOAA, 2022) and NASA (NASA, 2023) information (the best available SLR science), and Figure 4, the year 2098 the SLR is reasonably determined to be between 5.25 and 6.45, with a midpoint of about 5.8 feet.



LA JOLLA STATION		Probabilistic Projections (in feet) (based on Kopp et al. 2014)				H++ scenario (Sweet et al. 2017) *Single scenario
		MEDIAN	LIKELY RANGE	1-IN-20 CHANCE	1-IN-200 CHANCE	
		50% probability sea-level rise meets or exceeds...	66% probability sea-level rise is between...	5% probability sea-level rise meets or exceeds...	0.5% probability sea-level rise meets or exceeds...	
			Low Risk Aversion		Medium - High Risk Aversion	Extreme Risk Aversion
High emissions	2030	0.5	0.4 - 0.6	0.7	0.9	1.1
	2040	0.7	0.5 - 0.9	1.0	1.3	1.8
	2050	0.9	0.7 - 1.2	1.4	2.0	2.8
Low emissions	2060	1.0	0.7 - 1.3	1.7	2.5	
High emissions	2060	1.2	0.9 - 1.6	1.9	2.7	3.9
Low emissions	2070	1.2	0.9 - 1.6	2.0	3.1	
High emissions	2070	1.5	1.1 - 2.0	2.5	3.6	5.2
Low emissions	2080	1.4	1.0 - 1.9	2.4	4.0	
High emissions	2080	1.9	1.3 - 2.5	3.1	4.6	6.7
Low emissions	2090	1.6	1.0 - 2.2	2.9	4.8	
High emissions	2090	2.2	1.6 - 3.0	3.8	5.7	8.3
Low emissions	2100	1.7	1.1 - 2.5	3.3	5.8	
High emissions	2100	2.6	1.8 - 3.6	4.6	7.1	10.2

Figure 4. Sea level rise prediction comparison with the CCC range estimates.

The proposed remodel has a conservative design life of 75 years. **Using the OPC SLR estimate along with NOAA and NASA science over the project design life, the range in the year 2098 is between 2.5 feet (the “likely” low emission SLR), and 5.8 feet on the high end. This is the projected sea level rise range for the proposed project.**

The wave that has the greatest runup is the wave that has not yet broken when it reaches the toe of the structure (bluff or seawall). It is not the largest wave to come into the area. The larger waves break offshore and lose much of their energy before reaching the shoreline. The maximum scour at the seawall and natural bluff toe is about elevation -2 feet MSL. If the total water depth for the maximum SLR case (5.3 feet NGVD29 + 5.8 feet SLR) is the water elevation minus the scour depth, then water depth is 13.1 feet. The maximum wave runup is from the wave that breaks just at the toe of the bluff. This is a depth limited case where the breaker height is 78% of the water depth. Therefore, the design wave height is 10.3 feet with a chosen period of 15 seconds (a peak period for storm waves at the site). This design wave determination is consistent with the guidelines in the current FEMA specifications. Because our analysis uses conservative oceanographic design conditions (largest wave, highest still water elevation, and scoured beach), the longshore transport rate and the seasonal beach profile changes are not relevant. **Table I** is the ACES output for these design conditions. GSI also analyzed the impact of 7.1 feet of SLR on the site and it is provided in **Table II**.

Table I

ACES		Mode: Single Case		Functional Area: Wave - Structure Interaction	
Application: Wave Runup and Overtopping on Impermeable Structures					
Item		Unit	Value	Smooth Slope Runup and Overtopping	
Incident Wave Height	Hi:	ft	8.100	403 Pacific  Wave Runup  5.8 FT SLR	
Wave Period	T:	sec	16.000		
COTAN of Nearshore Slope	COT( $\phi$ ):		50.000		
Water Depth at Structure Toe	ds:	ft	10.400		
COTAN of Structure Slope	COT( $\theta$ ):		0.030		
Structure Height Above Toe	hs:	ft	37.000		
Wave Runup	R:	ft	25.028		
Onshore Wind Velocity	U:	ft/sec	16.878		
Deepwater Wave Height	H0:	ft	5.346		
Relative Height	ds/H0:		1.946		
Wave Steepness	H0/(gT <sup>2</sup> ):		0.000649		
Overtopping Coefficient	$\alpha$ :		0.070000		
Overtopping Coefficient	Qstar $\theta$ :		0.050000		
Overtopping Rate	Q:	ft <sup>3</sup> /s-ft	0.000		

Table II

ACES		Mode: Single Case		Functional Area: Wave - Structure Interaction	
Application: Wave Runup and Overtopping on Impermeable Structures					
Item		Unit	Value	Smooth Slope Runup and Overtopping	
Incident Wave Height	Hi:	ft	10.900	403 Pacific  Wave Runup  7.1 FT SLR	
Wave Period	T:	sec	16.000		
COTAN of Nearshore Slope	COT( $\phi$ ):		70.000		
Water Depth at Structure Toe	ds:	ft	14.100		
COTAN of Structure Slope	COT( $\theta$ ):		0.030		
Structure Height Above Toe	hs:	ft	37.000		
Wave Runup	R:	ft	28.054		
Onshore Wind Velocity	U:	ft/sec	16.878		
Deepwater Wave Height	H0:	ft	7.728		
Relative Height	ds/H0:		1.825		
Wave Steepness	H0/(gT <sup>2</sup> ):		0.00938		
Overtopping Coefficient	$\alpha$ :		0.070000		
Overtopping Coefficient	Qstar $\theta$ :		0.050000		
Overtopping Rate	Q:	ft <sup>3</sup> /s-ft	0.834		

The maximum wave runup with 5.8 feet of SLR is elevation +36.1 feet NGVD29 (25 + 11.1 feet NGVD29). It should be noted that the foregoing runup analysis doesn't take into account the textured face of the bluff or the seawall. Because of the roughened face of the wall and the bluff, wave runup will not exceed elevation +35 feet NGVD29 in the future including consideration of 5.8 feet of SLR. For 7.1 feet of SLR the wave runup on the site may reach elevation +40 feet NGVD29, which is well below the top of the bluff.

## **BLUFF RETREAT RATE**

### **United States Geological Survey (USGS)**

The USGS produced a report in 2007 concerning cliff retreat along the California coast, including the Solana Beach area (Hapke and Reid, 2007), which states, ***“Rates of change are being published for the purpose of regional characterization. The results and products prepared by USGS are not intended for comprehensive detailed site specific analysis of cliff retreat.”*** The analysis was based upon just two data points (historical bluff tops). The first data point was 1933 NOS Topographic Maps (T-Sheets), which included significant uncertainties. For instance, the measurement uncertainties (see page 9 of Hapke and Reid [2007]) of the bluff top location in 1933 had a total position uncertainty of 10.8 meters, or approximately 35 feet. The second data point was 1998 Lidar data with a total position uncertainty of 1.4 meters or roughly 5 feet. The annualized retreat rate uncertainly is reported to be 0.2 m/yr (0.656 ft/yr). What this means is that the retreat rate can be  $\pm 0.65$  ft/yr of the reported retreat rate. The uncertainty is on the order of the actual measurement.

### **United States Army Corps of Engineers (USACOE)**

The USACOE and the cities of Encinitas and Solana Beach prepared a joint Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) in 2015 to evaluate potential options for reducing storm damage related coastal erosion over a 50- year period anticipated to occur from 2018 through 2068. This included cost assessments of damages caused by bluff erosion and shoreline restoration for the cities. In order for the cities to receive federal funding for shoreline restoration, the USACOE report needed to demonstrate that the benefit to cost ratio was significant, or greater than 1.0. While the subject site is located within a reach of the Solana Beach shoreline examined by the USACOE, their findings are **NOT** specific to the subject property. The 2015 USACOE report documented a historical (Pre-Anthropogenic) retreat rate near Fletcher Cove of 0.116 ft/yr. In addition, for the section of shoreline from Table Tops Reef to Fletcher Cove the estimated future bluff retreat rate ranges from 0.4 ft/yr to 1.2 ft/yr. These are estimates for a length of shoreline that is roughly 3,500 feet long and has varying geologic profiles and geologic structures. The 2015 USACOE report clearly states that the bluff top erosion rates will be less where a partially cemented cap is present. This cemented cap condition exists at the site and can be seen in Figure 1 above.

Under the CDP for the seawall the bluff retreat rate used for the sand fee calculation was 0.3 ft/yr. With the seawall in place the bluff retreat rate will be approximately 0 ft/yr. A simple comparison of historical and current aerial photographs of the site can be used to estimate the actual retreat at this site. The University of California at Santa Barbara aerial photograph collection has a 1932 photograph that can be downloaded and compared with the current Google Earth image. Figure 5 is a portion of the 1932 image and Figure 6 is the same area in a June 2023 image from Google Earth.



Figure 5. 1932 photograph showing the street, the site, and the top of the bluff.



Figure 6. June 2023 photograph of the site for comparison with Figure 5.

Carefully overlaying these photographs, taken over 90 years apart, reveals that very little movement (erosion) of the bluff top has occurred at this site. Using the street locations to estimate a scale, the bluff top appears to have moved (eroded) about 5 feet in the last 90 years. This translates into a historical bluff retreat of 0.06 ft/yr. In contrast, using the CDP permit sand fee erosion rate of 0.3 ft/yr, which would mean that the bluff moved about 27 feet over that 90 year period. This amount of erosion clearly didn't happen as evidenced by the images.

With the seawall in place the bluff retreat rate will be approximately 0 ft/yr. The site historical bluff top retreat rate is reasonably estimated to be 0.1 ft/yr. In the absence of the seawall the potential retreat rate will transition from the current rate to the future rate. The retreat rate from 1932 to 2023 is estimated to be 0.1 ft/yr. The retreat rate in the year 2100 with 5.8 feet SLR may be as much as 0.3 ft/yr. The expected retreat rate for the next 20 to 25 years will be the historical retreat rate of 0.1 ft/yr primarily because there is little expected SLR in the next 20 to 25 years. The maximum likely SLR from the CCC guidance for the year 2047 is about 1.7 feet and the minimum is about 2 feet. These estimates represent a small change in the 10-foot tidal range, 20% or less. As such, the impact of SLR on bluff retreat rate at year 25 will be less than 20% of the current retreat rate. This analysis uses area-specific calculated historical bluff retreat, justified and probable SLR over the next 75 years, and reasonable methodology to calculate the potential future retreat rate over the project life.

### **COASTAL FLOODING**

Due to the project elevation there is no coastal flooding hazard at the site. The existing site drainage has performed adequately to mitigate the impacts of rain.

### **CALIFORNIA COASTAL COMMISSION SLR POLICY GUIDANCE INFORMATION**

**Step 1. Establish the projected sea level rise range for the proposed project's planning horizon using the best available science.**

Using the CCC SLR estimate over the project maximum potential design life, the range in the year 2098 is between 2.5 feet and 5.8 feet. This is the sea level rise range for the proposed project. Based upon the latest NASA and NOAA SLR science it is likely that SLR will be much less.

**Step 2. Determine how physical impacts from sea level rise may constrain the project site, including erosion, structural and geologic stability, flooding, and inundation.**

This report demonstrates that the remodel project is reasonably safe from SLR related coastal hazards.

**Step 3. Determine how the project may impact coastal resources, considering the influence of future sea level rise upon the landscape as well as potential impacts of sea level rise adaptation strategies that may be used over the lifetime of the project.**

The remodel project itself will not impact coastal resources. The seawall will prevent the erosion of the bluff, and the resulting deposit of bluff material onto the beach. However, the owner is required to revisit this issue within the next 10 years as part of the seawall CDP.

**Step 4. Identify alternatives to avoid resource impacts and minimize risks throughout the expected life of the development.**

The project has no resource impacts. The impact of preventing bluff material erosion on the sand supply is mitigated through mandatory sand mitigation fees.

**Step 5. Finalize project design and submit CDP application.**

The project designer will be provided this report.

In conclusion, coastal hazards, which include shoreline erosion, wave and wave runup attack, and flooding, will not impact the proposed remodel development over its projected life.

The opportunity to be of service is greatly appreciated. If you have any questions concerning this report, or if we may be of further assistance, please do not hesitate to contact any of the undersigned.

Respectfully Submitted,



GeoSoils Inc.  
David W. Skelly, RCE #47857



## REFERENCES

California Coastal Commission, 2018, Updated California Coastal Commission Sea Level Rise policy guidance, interpretative guidelines for addressing sea level rise in local coastal programs and coastal development permits.

Hapke, Cheryl J. and, Reid, David; 2007, National Assessment of Shoreline Change Part 4: Historical Coastal Cliff Retreat Along the California Coast: U.S. Geological Survey Open-File Report 2007-1133.

Hapke, Cheryl J.; Reid, David; Richmond, Bruce M.; Ruggiero, Peter; and List, Jeff; 2006, National assessment of shoreline change part 3: historical shoreline change and associated coastal land loss along sandy shorelines of the California coast: U.S. Geological Survey Open-File Report 2006-1219.

Kopp, Robert E., Radley M. Horton Christopher M. Little Jerry X. Mitrovica Michael Oppenheimer D. J. Rasmussen Benjamin H. Strauss Claudia Tebaldi Radley M. Horton, Christopher M. Little, Jerry X. Mitrovica, Michael Oppenheimer D. J. Rasmussen Benjamin H. Strauss Claudia Tebaldi "Probabilistic 21st and 22nd century sea-level projections at a global network of tide-gauge sites" First published: 13 June 2014

NASA, 2023, IPCC 6<sup>th</sup> Assessment Report Sea Level Projection Tool, <https://sealevel.nasa.gov/ipcc-ar6-sea-level-projection-tool>.

NOAA, 2023, <https://tidesandcurrents.noaa.gov/datums.html?id=9410660>

Sea Level Rise Technical Report dated February 2022, <https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html>.

United States Army Corps of Engineers, 2015, Encinitas-Solana Beach coastal storm damage reduction project, San Diego County, California, Appendix C, geotechnical engineering.

# APPENDIX D

## Search Information

Coordinates:	32.9968, -117.2757
Elevation:	79 ft
Timestamp:	2024-01-11T22:42:48.464Z
Hazard Type:	Seismic
Reference Document:	ASCE7-16
Risk Category:	II
Site Class:	D



## Basic Parameters

Name	Value	Description	
$S_S$	1.24	$MCE_R$ ground motion (period=0.2s)	
$S_1$	0.44	$MCE_R$ ground motion (period=1.0s)	
$S_{MS}$	1.245	Site-modified spectral acceleration value	
$S_{M1}$	* null	Site-modified spectral acceleration value	0.818
$S_{DS}$	0.83	Numeric seismic design value at 0.2s SA	
$S_{D1}$	* null	Numeric seismic design value at 1.0s SA	0.545

\* See Section 11.4.8

## Additional Information

Name	Value	Description	
SDC	* null	Seismic design category	D
$F_a$	1.004	Site amplification factor at 0.2s	
$F_v$	* null	Site amplification factor at 1.0s	1.86
$CR_S$	0.875	Coefficient of risk (0.2s)	
$CR_1$	0.895	Coefficient of risk (1.0s)	
PGA	0.558	$MCE_G$ peak ground acceleration	
$F_{PGA}$	1.1	Site amplification factor at PGA	
$PGA_M$	0.614	Site modified peak ground acceleration	
$T_L$	8	Long-period transition period (s)	
$SsRT$	1.24	Probabilistic risk-targeted ground motion (0.2s)	
$SsUH$	1.417	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)	
$SsD$	1.855	Factored deterministic acceleration value (0.2s)	
$S1RT$	0.44	Probabilistic risk-targeted ground motion (1.0s)	
$S1UH$	0.492	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)	
$S1D$	0.645	Factored deterministic acceleration value (1.0s)	
$PGA_d$	0.765	Factored deterministic acceleration value (PGA)	

\* See Section 11.4.8

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Please note that the ATC Hazards by Location website will not be updated to support ASCE 7-22. [Find out why.](#)

## Disclaimer

Hazard loads are provided by the U.S. Geological Survey [Seismic Design Web Services](#).

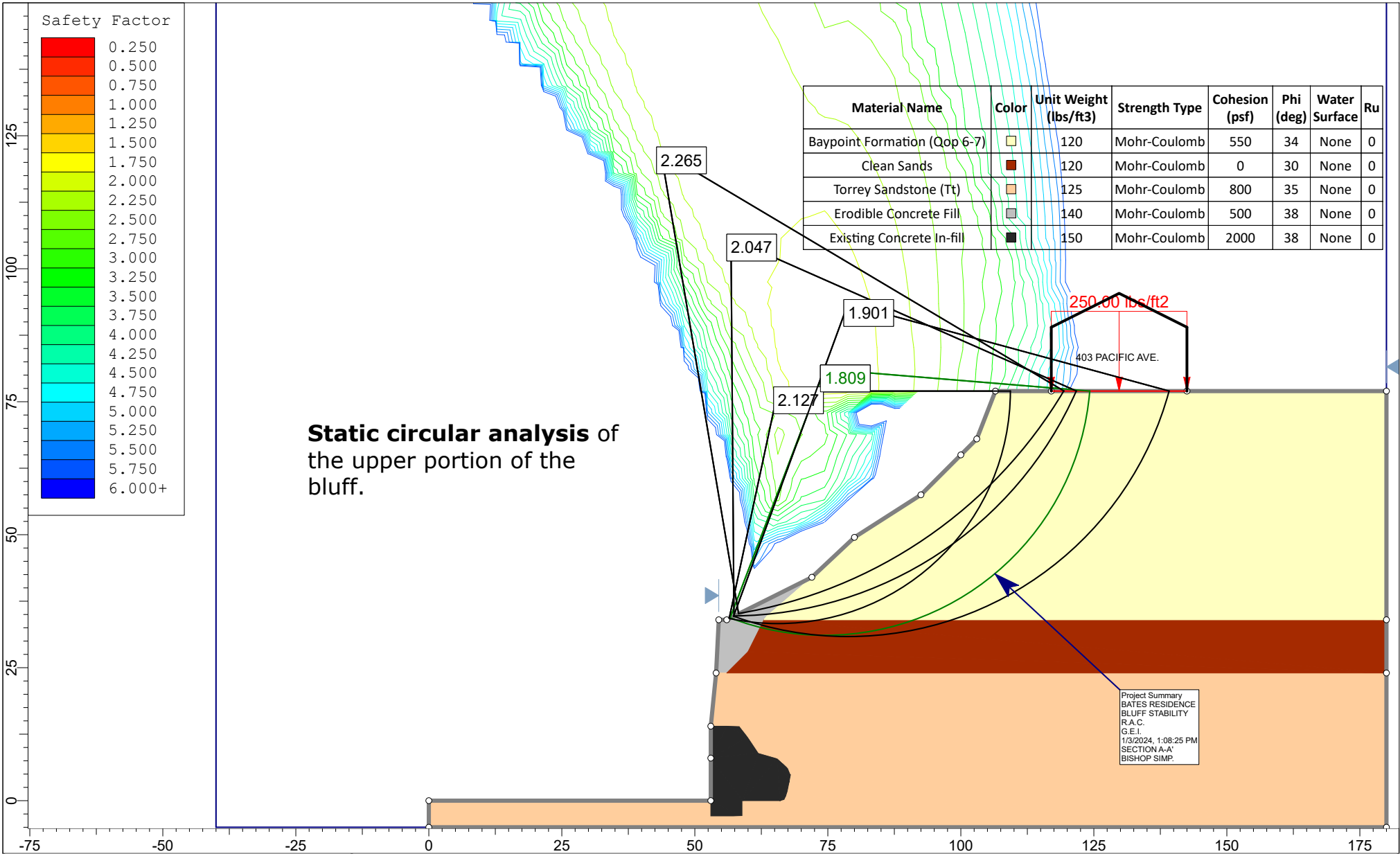
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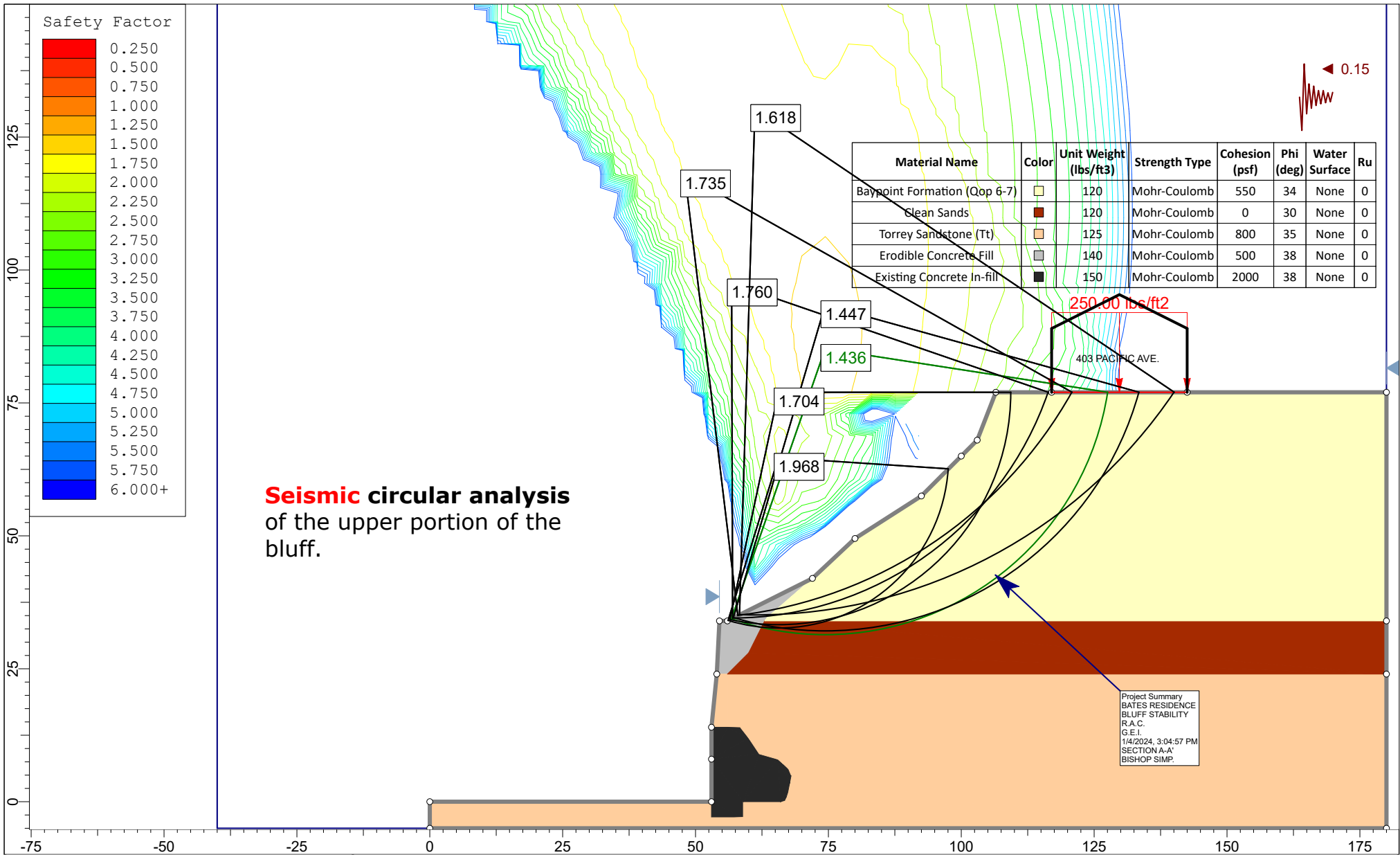
# **A P P E N D I X E**

## **Slope Stability Analysis**





<p><b>Geotechnical Exploration, Inc.</b></p> <p>SLIDEINTERPRET 6.039</p>	Project		BATES RESIDENCE		SECTION A-A'	
	Analysis Description		BLUFF STABILITY			
	Drawn By	R.A.C.	Scale	1:300	Company	G.E.I.
	Date	1/3/2024, 1:08:25 PM		File Name	JOB NO. 23-14438_S(A)_01.slim	



<p><b>Geotechnical Exploration, Inc.</b></p>	Project		BATES RESIDENCE		SECTION A-A'		
	Analysis Description						BLUFF STABILITY
	Drawn By	R.A.C.	Scale	1:300	Company	G.E.I.	
	Date	1/4/2024, 3:04:57 PM		File Name	JOB NO. 23-14438_S(A)_01w_0.15gSHAKE.slim		



# Geotechnical Exploration, Inc.

SOIL AND FOUNDATION ENGINEERING • GROUNDWATER • ENGINEERING GEOLOGY

---

29 March 2024

Smith Brothers Construction  
P.O. Box 1068  
Solana Beach, CA 92075  
Attn: Mr. Jeff Smith

**Job No. 23-14438**

Subject: **Response to City of Solana Beach Comments**  
Bates Residence  
403 Pacific Avenue  
Solana Beach, California

Dear Mr. Smith:

At the request of Mr. Reggie Reyes and as required by the City of Solana Beach reviewer, we are responding to the following comments presented in the Geotechnical Review by Universal Engineering Sciences, Job No. 4830.2400013 dated March 1, 2024, for the subject project.

*Comment No. 1: The applicant's geotechnical engineer states that they used laboratory data from a nearby site on Pacific Avenue to derive soil strength parameters for the provided slope stability analysis. Nevertheless, the soil parameters applied by the engineer appear appropriate and conservative for the soil materials being modeled. Please note that LCP Policy 4.25 requires that shear strength parameters be derived from relatively undeformed samples collected at the site (emphasis added).*

*It is requested that the applicant provide soil shear strength laboratory data for samples collected from the subject site, and if applicable, revise the slope stability analysis based on these values. The applicant may also submit the report they referenced for the soil shear strength values used in the current slope stability analysis as additional support for their soil parameter selection.*

**GEI Response:** Based on the current scope of the project, we did not perform a deep boring to obtain soil samples representative of the bluff materials for our slope stability analysis. We only performed shallow exploratory excavations adjacent to the existing residence foundation. Since we have performed several other borings for past projects on Pacific Avenue, we assigned conservative shear strength values based on the results of those borings and laboratory testing for use in our slope

stability analysis. We have included a copy of our previous geotechnical report for 141 Pacific Avenue, dated November 8, 2017.

Comment No. 2: *The applicant applies a FOS of 1.5 for their static slope stability analysis. The City's LCP Policy 4.25 indicates a pseudo-static FOS of 1.2 should also be performed.*

**GEI Response:** Our slope stability analysis in the geotechnical report included a static slope stability analysis as well as a pseudo-static slope stability analysis.

Comment No. 3: *To supplement the submitted geotechnical report, it is requested that the applicant provide on their plot plan and geologic map the locations of the geologic cross-sections utilized for the slope stability analysis and the locations of Geologic Setback Lines (GSLs) for both static and pseudo-static conditions*

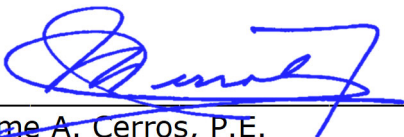
**GEI Response:** We have included the location of our geologic cross section as well as the geologic setback lines on the plot plan and geologic map (see Figure No. II).

The findings and opinions presented here have been made in accordance with generally accepted principles and practice in the field of geotechnical engineering within the City of Solana Beach. No warranty, either expressed or implied, is made.

If you have any questions regarding this letter, please contact our office. Reference to our **Job No. 23-14438** will help expedite a response to your inquiry.

Respectfully submitted,

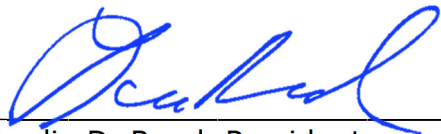
**GEOTECHNICAL EXPLORATION, INC.**



Jaime A. Cerros, P.E.  
R.C.E. 34422/G.E. 2007  
Senior Geotechnical Engineer



Jay K. Heiser  
Senior Project Geologist



Leslie D. Reed, President  
C.E.G. 999/P.G. 3391



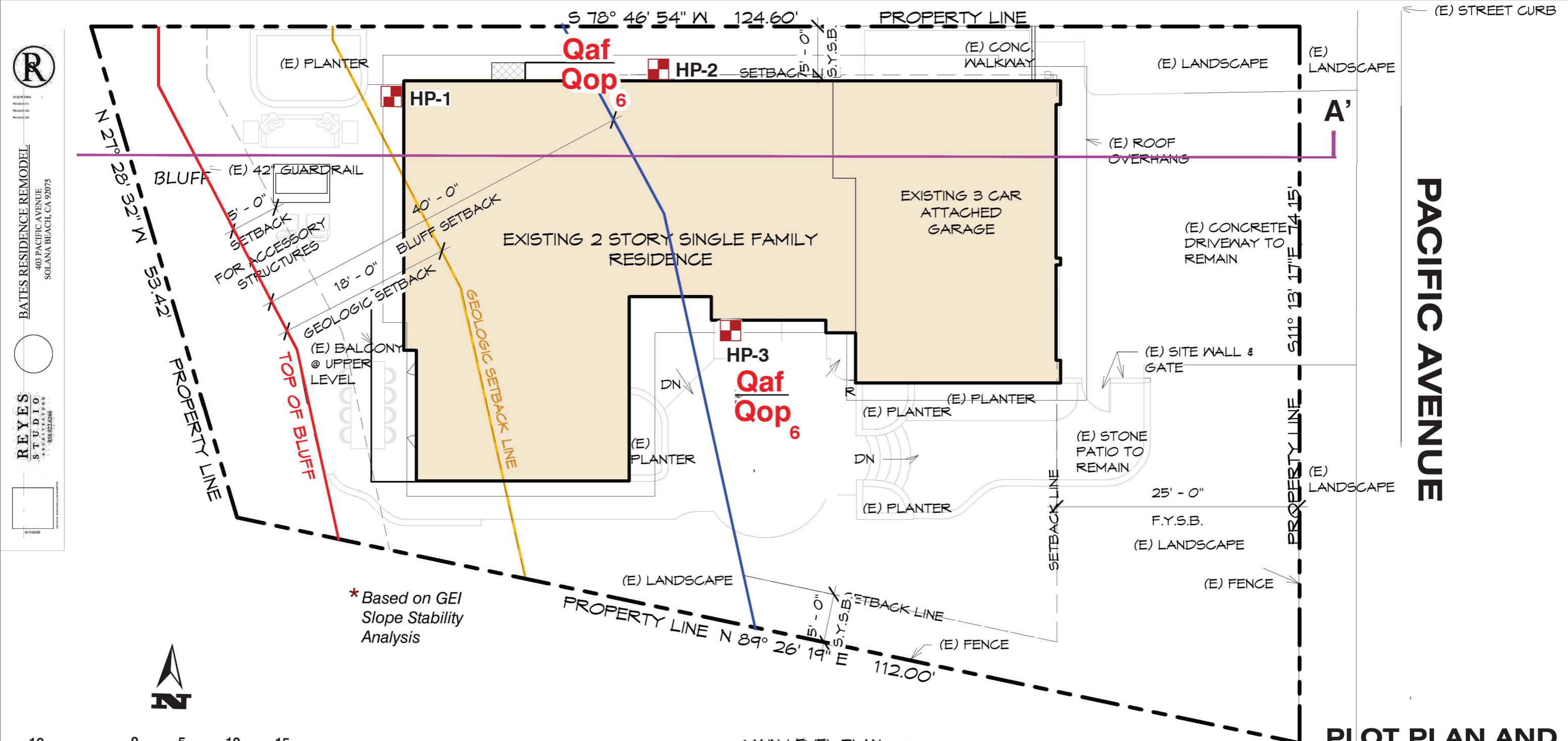
# VICINITY MAP



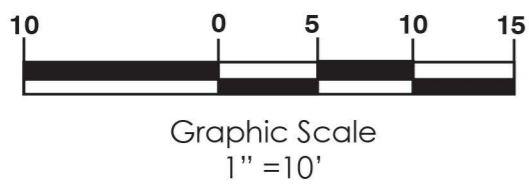
Thomas Bros. Guide San Diego County pg 1167-E6

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.

Figure No. 1  
Job No. 23-14438



\* Based on GEI Slope Stability Analysis



**GEOLOGIC LEGEND**

- Qaf** Artificial Fill
- Qop 6** Old Paralic Deposits, Unit 6

**LEGEND**

- HP-3** Approximate Location of Exploratory Handpit
- Bates Residence
- Cross Section Location

**PACIFIC AVENUE**

**PLOT PLAN AND SITE SPECIFIC GEOLOGIC MAP**

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.  
Figure No. II  
Job No. 23-14438



BATES RESIDENCE REMODEL  
 403 PACIFIC AVENUE  
 SOLANA BEACH, CA 92075  
 REYES STUDIO  
 ARCHITECTURE  
 858.522.0546

REFERENCE: This Plot Plan is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>3' X 3' X 5' Handpit</b>	DATE LOGGED
SURFACE ELEVATION <b>± 78' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JKH</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
1			<b>SILTY SAND</b> , fine- to medium-grained, with some roots. Loose to medium dense. Damp. Gray-brown.  <b>FILL (Qaf)</b>		SM								
2			<b>SILTY SAND</b> , fine- to medium-grained; poorly cemented. Medium dense. Damp. Red-brown.  <b>OLD PARALIC DEPOSITS (Qop 6)</b> -- 15% passing #200 sieve. Footing : 24" deep, 14" wide.		SM	5.1	98.2	9.6	120.4				
3													
4													
5		1	-- 23% passing #200 sieve.			7.4							
6			Bottom @ 5'										

EXPLORATION LOG 14438 BATES.GPJ GEO\_EXPL.GDT 12/11/23

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bates Residence</b>		LOG No. <b>HP-1</b>
	SITE LOCATION <b>403 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>23-14438</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>IIIa</b>		



EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>3' X 3' X 3' Handpit</b>	DATE LOGGED
SURFACE ELEVATION <b>± 75' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JKH</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. - (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)	U.S.C.S.								
0				<b>SILTY SAND</b> , fine- to medium-grained, with some gravel. Loose to medium dense. Damp. Gray-brown.	SM							
0.5				<b>FILL (Qaf)</b>	SM							
0.5				<b>SILTY SAND</b> , fine- to medium-grained; moderately cemented. Medium dense. Damp. Red-brown.								
1				<b>OLD PARALIC DEPOSITS (Qop 6)</b>								
2				Footing : 24" deep.								
2.5		1		-- 19% passing #200 sieve.		7.0						
3				Bottom @ 3'								
4												

EXPLORATION LOG 14438 BATES.GPJ GEO\_EXPL.GDT 12/11/23

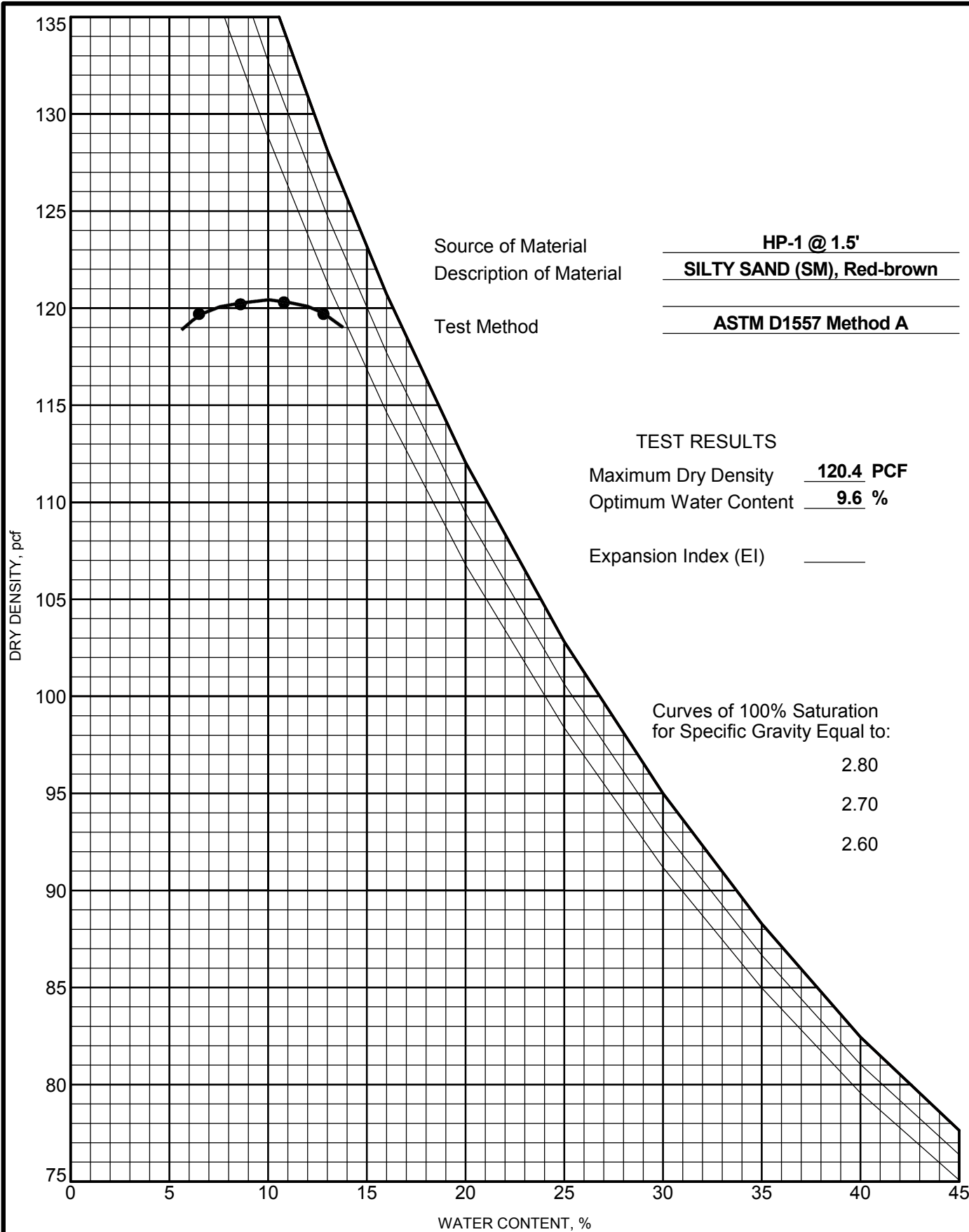
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	SITE LOCATION <b>403 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>23-14438</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>IIIb</b>		

EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>3' X 3' X 4' Handpit</b>	DATE LOGGED
SURFACE ELEVATION <b>± 75' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JKH</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
1			<b>SILTY SAND</b> , fine- to medium-grained, with some roots. Loose to medium dense. Damp. Gray-brown.	<b>FILL (Qaf)</b>	SM								
2		1	<b>SILTY SAND</b> , fine- to medium-grained; moderately cemented. Medium dense. Damp. Red-brown.	<b>OLD PARALIC DEPOSITS (Qop 6)</b> -- 15% passing #200 sieve.	SM	9.2							
4			Bottom @ 4'										

EXPLORATION LOG 14438 BATES.GPJ GEO\_EXPL.GDT 12/11/23

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bates Residence</b>
	SITE LOCATION <b>403 Pacific Avenue, Solana Beach, CA</b>
	JOB NUMBER <b>23-14438</b>
	FIGURE NUMBER <b>IIIc</b>
	REVIEWED BY <b>LDR/JAC</b>
	LOG No. <b>HP-3</b>

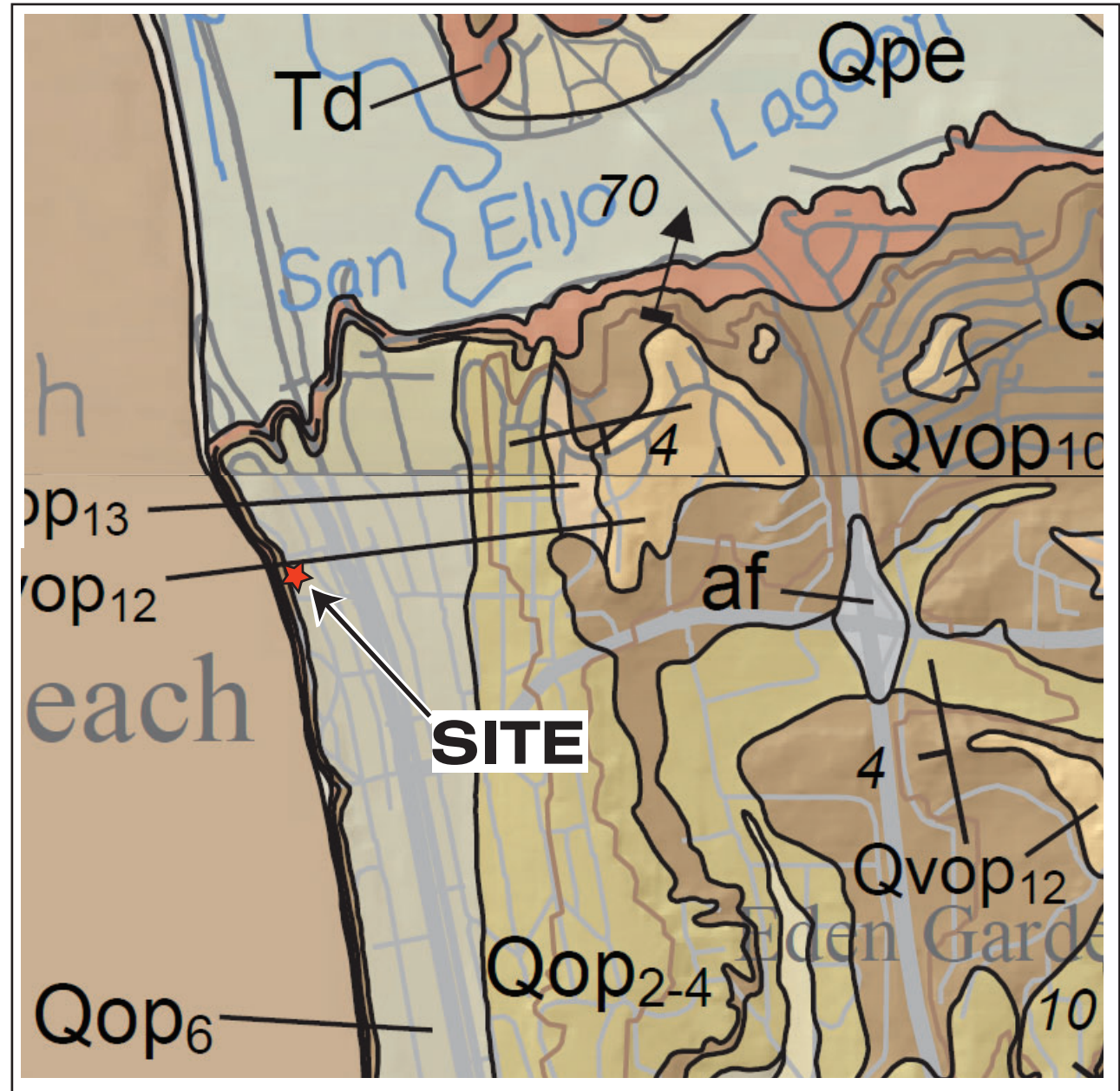


COMPACTION + EIDARK GRID - 14438 BATES.GPJ GEI FEB06.GDT - 12/11/23



**MOISTURE-DENSITY RELATIONSHIP**

Figure Number: IV  
 Job Name: Bates Residence  
 Site Location: 403 Pacific Avenue, Solana Beach, CA  
 Job Number: 23-14438



Bates Residence  
403 Pacific Avenue  
Solana Beach CA.

EXCERPT FROM  
GEOLOGIC MAP OF THE OCEANSIDE 30' x 60' QUADRANGLE, CALIFORNIA


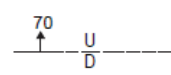














Compiled by  
Michael P. Kennedy<sup>1</sup> and Siang S. Tan<sup>1</sup>  
2007

Digital preparation by  
Kelly R. Bovard<sup>2</sup>, Rachel M. Alvarez<sup>2</sup>, Michael J. Watson<sup>2</sup>, and Carlos I. Gutierrez<sup>1</sup>

<sup>1</sup> Department of Conservation, California Geological Survey  
<sup>2</sup> U.S. Geological Survey, Department of Earth Sciences, University of California, Riverside

ONSHORE MAP SYMBOLS

DESCRIPTION OF MAP UNITS

-  Contact - Contact between geologic units; dotted where concealed.
-  Fault - Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
-  Anticline - Solid where accurately located; dashed where approximately located; dotted where concealed. Arrow indicates direction of axial plunge.
-  Kgp - Granite pegmatite dike.
-  Syncline - Solid where accurately located; dotted where concealed. Arrow indicates direction of axial plunge.
-  Landslide - Arrows indicate principal direction of movement. Quired where existence is questionable.
- Strike and dip of beds
  -  70° Inclined
  -  70° Overturned
  -  Vertical
  -  Horizontal
- Strike and dip of igneous foliation
  -  45° Inclined
  -  Vertical
- Strike and dip of igneous joints
  -  60° Inclined
  -  Vertical
- Strike and dip of metamorphic foliation
  -  55° Inclined
- Strike and dip of sedimentary joints
  -  Vertical

 Qop<sub>6</sub> Old Paralic Deposits, Unit 6

Base Map  
Onshore base (hypsography, hydrography, and transportation) from U.S.G.S. digital line graph (DLG) data, Oceanside 30' x 60' metric quadrangle. Shaded topographic base from U.S.G.S. digital elevation models (DEM's). Offshore bathymetric contours and shaded bathymetry from N.O.A.A. single and multibeam data. Projection is UTM, zone 11, North American Datum 1927.



This map was funded in part by the U.S. Geological Survey National Cooperative Geologic Mapping Program, STATEMAP Award no. 01NQA0092.  
Prepared in cooperation with the U.S. Geological Survey, Southern California Areal Mapping Project.

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The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

Figure No. V  
Job No. 23-14438

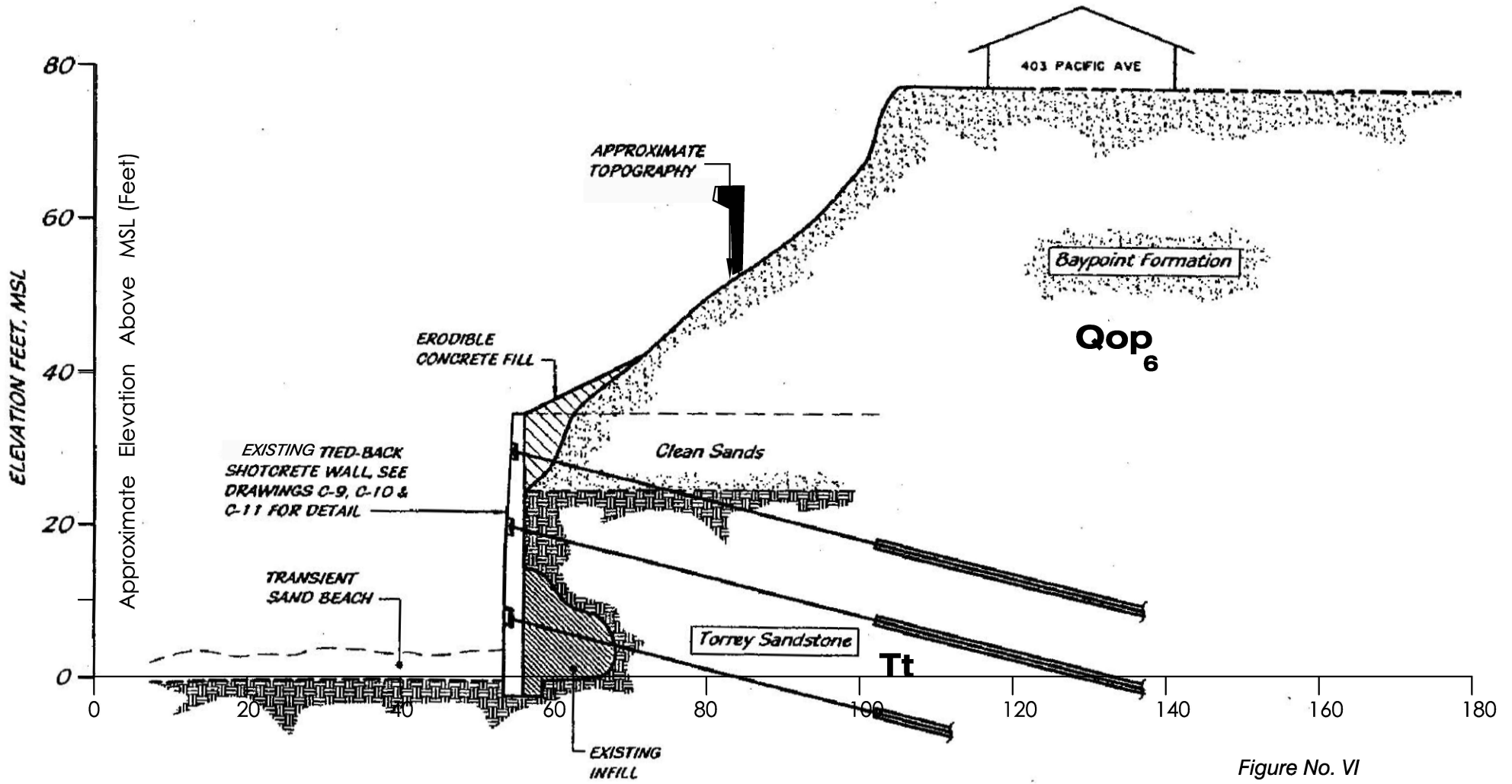


# GEOLOGIC CROSS SECTION A-A'

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.

A

A'



NOTE: This Cross Section is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

Relative Horizontal Distance (feet)  
Scale: 1" = 20'  
(Horizontal and Vertical)

Figure No. VI  
Job No. 23-14438

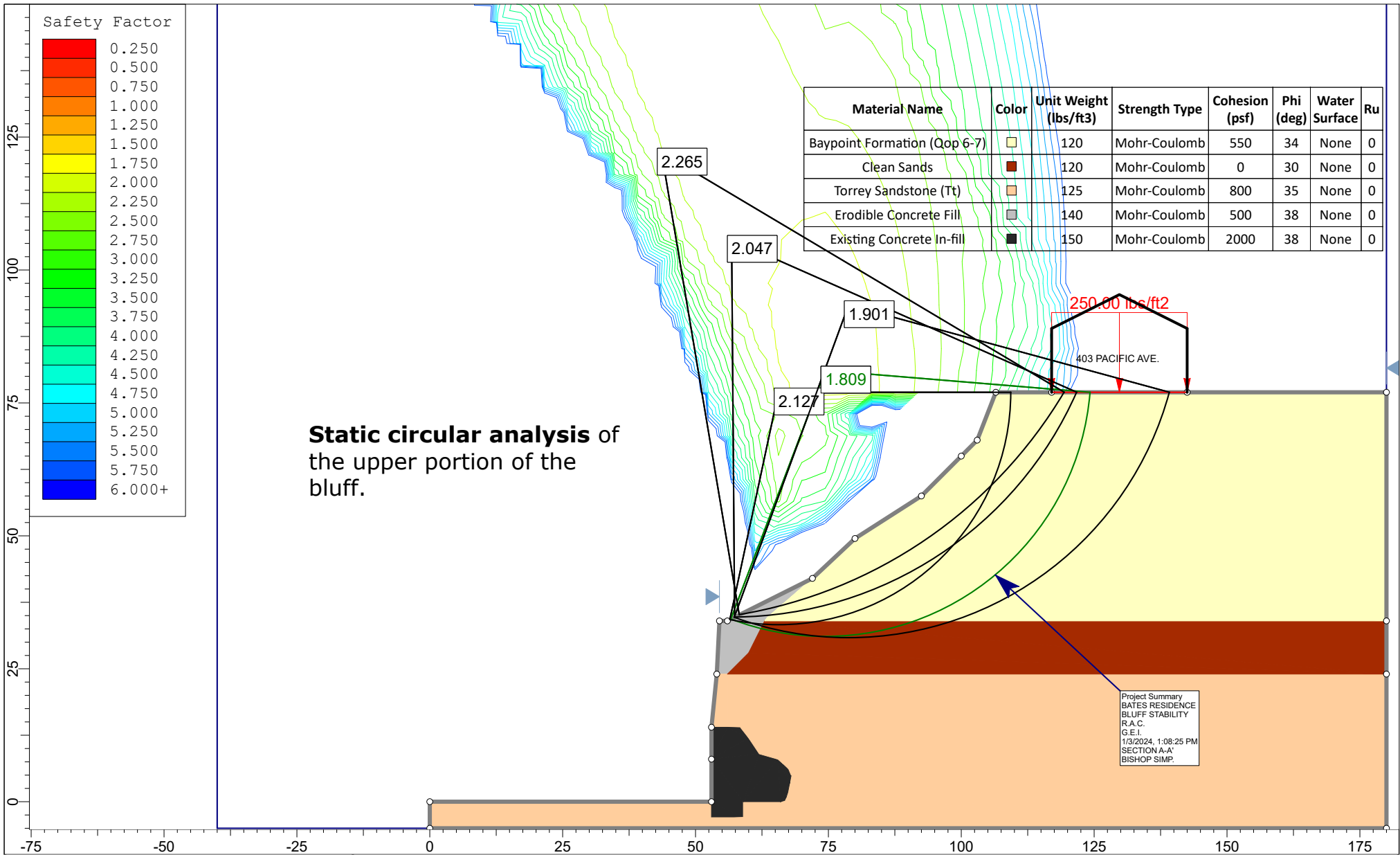


March 2024

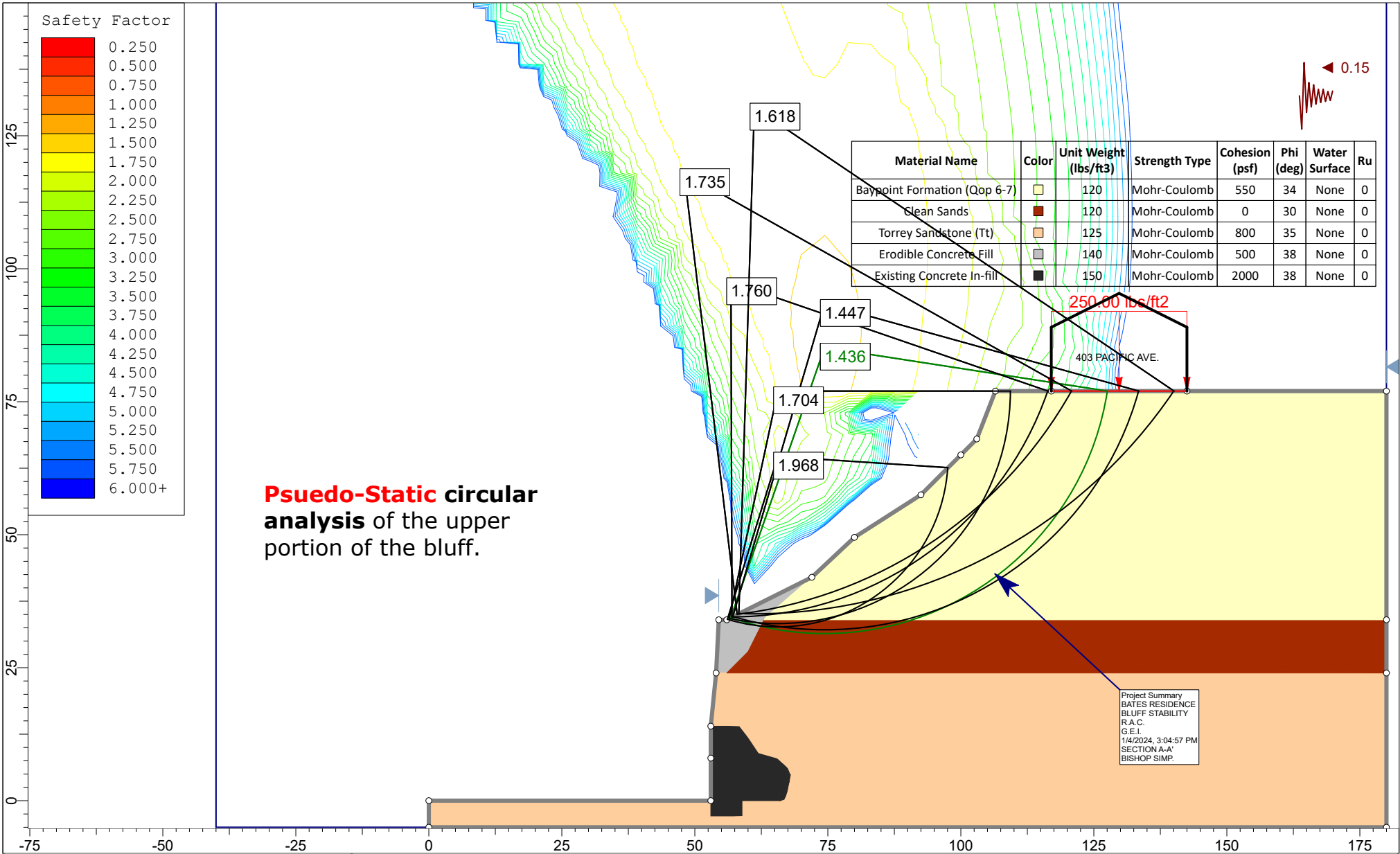
# **A P P E N D I X A**

## **Slope Stability Analysis**



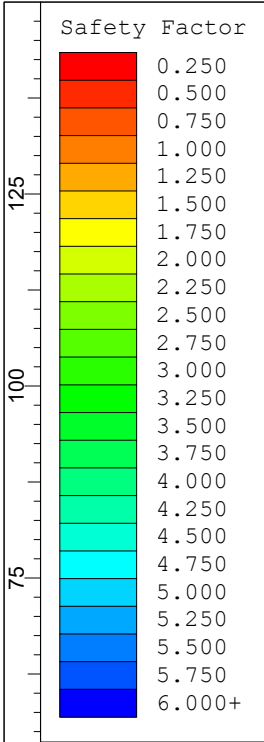


<p><b>Geotechnical Exploration, Inc.</b></p>	Project		BATES RESIDENCE		SECTION A-A'	
	Analysis Description		BLUFF STABILITY			
	Drawn By	R.A.C.	Scale	1:300	Company	G.E.I.
	Date	1/3/2024, 1:08:25 PM		File Name	JOB NO. 23-14438_S(A)_01.slim	



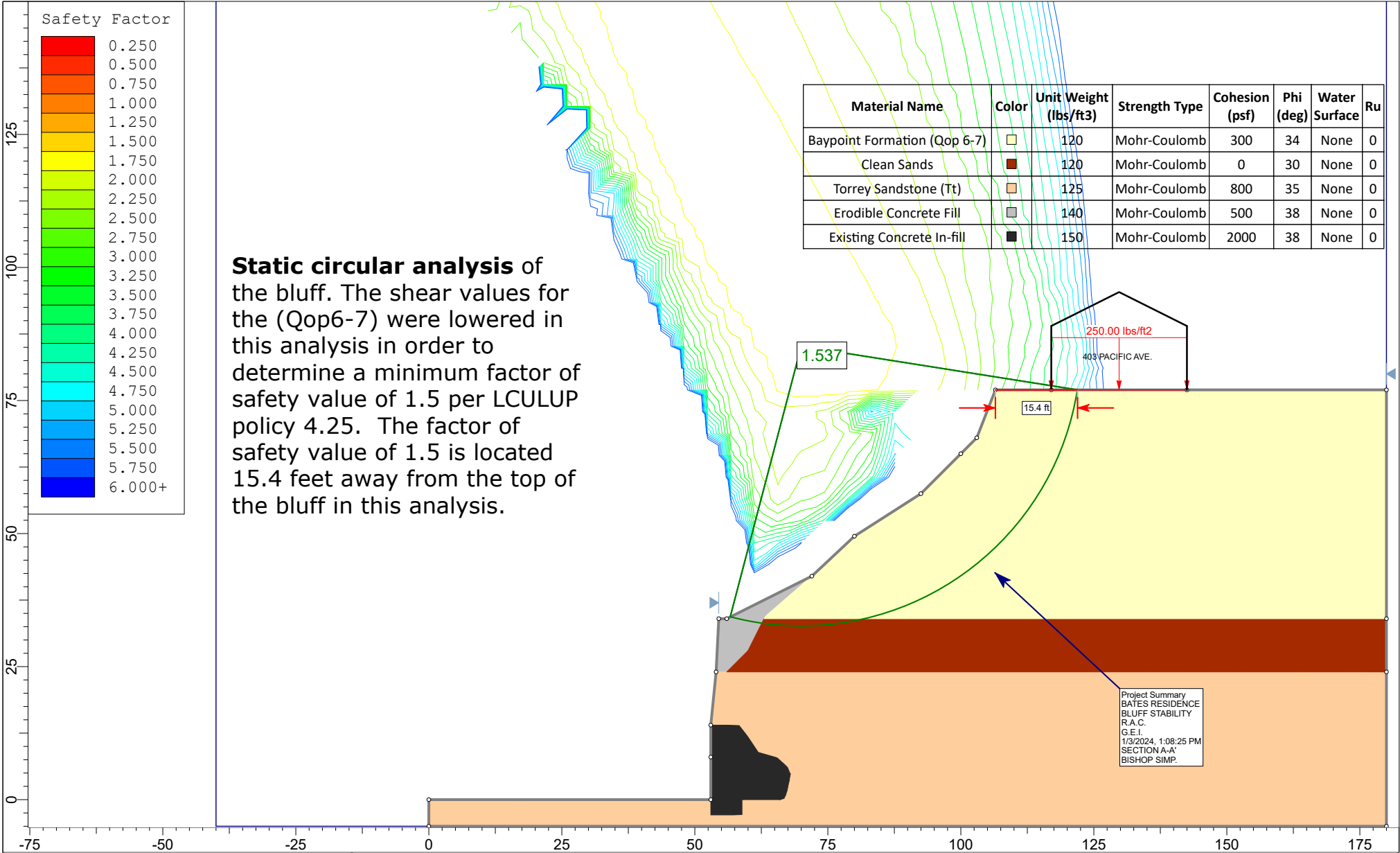
	Project		BATES RESIDENCE		SECTION A-A'	
	Analysis Description		BLUFF STABILITY			
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	Date	1/4/2024, 3:04:57 PM		File Name	JOB NO. 23-14438_S(A)_01w_0.15gSHAKE.slim	





**Static circular analysis** of the bluff. The shear values for the (Qop6-7) were lowered in this analysis in order to determine a minimum factor of safety value of 1.5 per LCULUP policy 4.25. The factor of safety value of 1.5 is located 15.4 feet away from the top of the bluff in this analysis.

Material Name	Color	Unit Weight (lbs/ft <sup>3</sup> )	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Baypoint Formation (Qop 6-7)		120	Mohr-Coulomb	300	34	None	0
Clean Sands		120	Mohr-Coulomb	0	30	None	0
Torrey Sandstone (Tt)		125	Mohr-Coulomb	800	35	None	0
Erodible Concrete Fill		140	Mohr-Coulomb	500	38	None	0
Existing Concrete In-fill		150	Mohr-Coulomb	2000	38	None	0

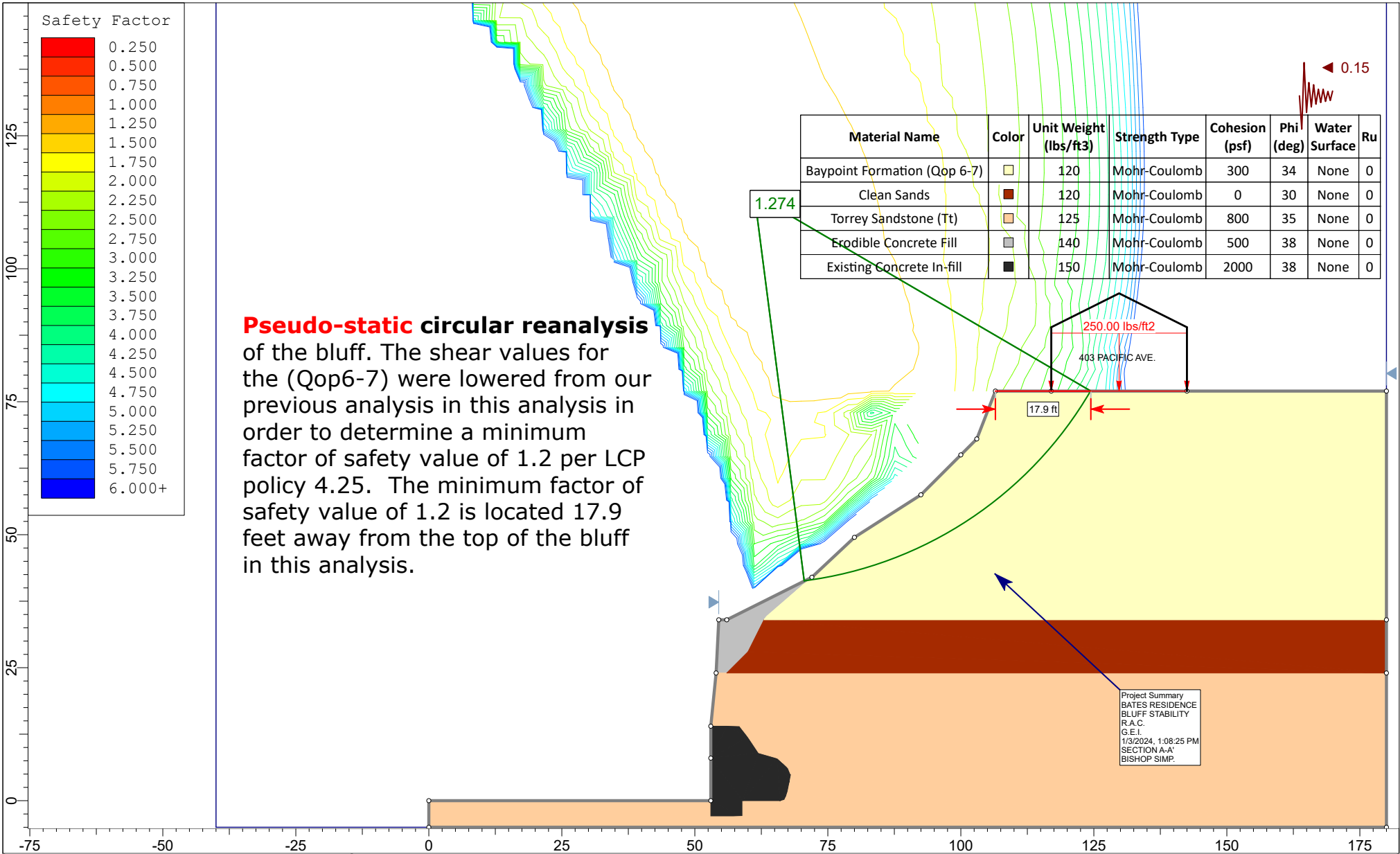


Project Summary  
 BATES RESIDENCE  
 BLUFF STABILITY  
 R.A.C.  
 G.E.I.  
 1/3/2024, 1:08:25 PM  
 SECTION A-A'  
 BISHOP SIMP.



**Geotechnical  
 Exploration, Inc.**

Project		BATES RESIDENCE		SECTION A-A'	
Analysis Description		BLUFF STABILITY			
Drawn By	R.A.C.	Scale	1:300	Company	G.E.I.
Date	1/3/2024, 1:08:25 PM	File Name	JOB NO. 23-14438_S(A)_01.slim		



**Pseudo-static circular reanalysis** of the bluff. The shear values for the (Qop6-7) were lowered from our previous analysis in this analysis in order to determine a minimum factor of safety value of 1.2 per LCP policy 4.25. The minimum factor of safety value of 1.2 is located 17.9 feet away from the top of the bluff in this analysis.

Material Name	Color	Unit Weight (lbs/ft <sup>3</sup> )	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Baypoint Formation (Qop 6-7)	□	120	Mohr-Coulomb	300	34	None	0
Clean Sands	■	120	Mohr-Coulomb	0	30	None	0
Torrey Sandstone (Tt)	■	125	Mohr-Coulomb	800	35	None	0
Erodible Concrete Fill	■	140	Mohr-Coulomb	500	38	None	0
Existing Concrete In-fill	■	150	Mohr-Coulomb	2000	38	None	0

Project Summary  
 BATES RESIDENCE  
 BLUFF STABILITY  
 R.A.C.  
 G.E.I.  
 1/3/2024, 1:08:25 PM  
 SECTION A-A'  
 BISHOP SIMP.



**Geotechnical  
 Exploration, Inc.**

Project		BATES RESIDENCE		SECTION A-A'	
Analysis Description		BLUFF STABILITY			
Drawn By	R.A.C.	Scale	1:300	Company	G.E.I.
Date	1/3/2024, 1:08:25 PM		File Name	JOB NO. 23-14438_S(A)_01w_0.15gSHAKE.slim	

## **A P P E N D I X B**

### **Report of Preliminary Geotechnical Investigation and Reconnaissance; Bradberry Residence;**

Report Date: November 08,  
2017; Job No. 17-11545



**REPORT OF PRELIMINARY GEOTECHNICAL  
INVESTIGATION**

**AND GEOLOGIC RECONNAISSANCE**

Bradberry Residence Remodel & Additions  
141 Pacific Street  
Solana Beach, California

**JOB NO. 17-11545**  
08 November 2017

Prepared for:

***Travis and Maribel Bradberry***





# Geotechnical Exploration, Inc.

SOIL AND FOUNDATION ENGINEERING • GROUNDWATER • ENGINEERING GEOLOGY

---

08 November 2017

Travis and Maribel Bradberry  
141 Pacific Avenue  
Solana Beach, CA 92075

**Job No. 17-11545**

Subject: **Report of Preliminary Geotechnical Investigation and  
Geologic Reconnaissance**

Bradberry Residence Remodel & Additions  
141 Pacific Avenue  
Solana Beach, California

Dear Mr. and Mrs. Bradberry:

In accordance with your request, **Geotechnical Exploration, Inc.** has performed an investigation of the geotechnical and general geologic conditions at the location of the existing residence at 141 Pacific Avenue. Additionally, we have performed a geologic reconnaissance of the site and a bluff evaluation, per the requirements of the City of Solana Beach. The field work was performed on January 7 and 10, 2017.

In our opinion, if the conclusions and recommendations presented in this report are implemented during site preparation, the site will be suited for both the proposed remodel and the new construction.

This opportunity to be of service is sincerely appreciated. Should you have any questions concerning the following report, please do not hesitate to contact us. Reference to our **Job No. 17-11545** will expedite a response to your inquiries.

Respectfully submitted,

**GEOTECHNICAL EXPLORATION, INC.**

Jaime A. Cerros, P.E.  
R.C.E. 34422/G.E. 2007  
Senior Geotechnical Engineer

Jay K. Heiser  
Senior Project Geologist

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- VI. Geologic Cross Section

### **APPENDICES**

- A. Unified Soil Classification System
- B. USGS Design Maps Summary Report
- C. Slope Stability Analysis
- D. Coastal Hazard Report (Geosoils, Inc.)



**REPORT OF PRELIMINARY GEOTECHNICAL INVESTIGATION AND GEOLOGIC  
RECONNAISSANCE**

Bradberry Residence Remodel & Additions  
141 Pacific Avenue  
Solana Beach, California

**JOB NO. 17-11545**

The following report presents the findings and recommendations of ***Geotechnical Exploration, Inc.*** for the subject project.

**I. PROJECT SUMMARY**

It is our understanding, based on communications with you, that the existing two-story, single-family residence will undergo an extensive remodel with new additions, and associated improvements. The new residential additions are to be constructed of standard-type building materials utilizing a conventional foundation system and a slab on-grade.

Construction plans for development of the site have not been provided to us during the preparation of this report, however, when completed they should be made available for our review. The scope of work we performed is briefly outlined as follows:

1. Identify and classify the surface and subsurface soils in the area of the proposed construction, in conformance with the Unified Soil Classification System.
2. Make note of any landslides, faults or significant geologic features that may affect the development of the site.



3. Evaluation of existing coastal bluff stability as it relates to the proposed construction.
4. Recommend site soil preparation procedures.
5. Recommend the allowable bearing pressures for the existing medium dense to very dense formational soils and properly compacted fills.
6. Evaluate the settlement potential of the existing formational soils or proposed properly compacted fills under the new structural loads.
7. Recommend preliminary foundation design information, including active and passive earth pressures to be utilized in design of proposed retaining walls, basement walls and foundation structures.

Our subsurface investigation revealed that the lot is underlain at shallow depth by medium dense to dense silty and clayey sand materials identified as Old Parallic Deposits (Qop<sub>6</sub>). The surficial fill soils consist of approximately 1 to 2 feet of variable density (loose to medium dense), light reddish-brown silty sand. It is recommended that the fill soils and any loose native soils be removed and recompacted as part of site preparation prior to the addition of any new fill or structural improvements.

All foundations for the proposed additions should be founded into the underlying medium dense to dense native materials or properly compacted fill soils. In proposed secondary improvement areas, all existing fill soils will require removal and recompaction prior to placement of new fill or improvements.

The existing coastal bluff is considered stable in its current configuration and will not be affected by the proposed new development.





## **II. SITE DESCRIPTION**

The property is known as Assessor's Parcel No. 263-323-06-00, Lot 4 in Block 23, according to Recorded Map 1749, in the City of Solana Beach, County of San Diego, State of California. The roughly rectangular-shaped site, consisting of approximately 5,700 square feet, is located at 141 Pacific Avenue in the City of Solana Beach (for site location, refer to the Vicinity Map, Figure No. I). The property is bounded to the northwest and southeast by similar residential properties at the approximate same elevation as the subject property; to the northeast by Pacific Avenue approximately 6 feet lower in elevation; and to the southwest by a westerly descending ocean bluff (sea cliff) and the Pacific Ocean (for site plan, refer to Figure No. II).

The existing structure on the lot consists of a single-family, two-story residence with attached garage, asphalt driveway, and concrete walkways and decks. Access to the lot is provided by a driveway along the northeast side of the property from Pacific Avenue. Property line walls form the northwest and southeast boundaries of the property.

The property consists of a gently sloping building pad at the top of a coastal bluff. The approximately 80-foot-high bluff descends to the beach and the Pacific Ocean. The building pad is at approximate elevations of 86 feet above mean sea level (MSL). Elevations across the property range from approximately 82 feet above (MSL) along the southwest and northeast property lines and approximately 86 feet above (MSL) at the building pad. The base of the bluff is at approximately 6 feet above mean sea level.

Information concerning approximate elevations across the site was obtained from topographic information included on the site plan prepared by Sowards & Brown Engineering, dated July 6, 2017.



### **III. FIELD INVESTIGATION**

One exploratory boring and three exploratory handpits were placed around the perimeter of the existing residence and in areas near where the proposed improvements are to be located. The excavations were placed where access and soil conditions allowed (for exploratory boring and handpit locations, refer to Figure No. II). The exploratory handpits were excavated to depths ranging from 2 to 3 feet in order to obtain representative soil samples and to define a soil profile across the lot. The exploratory boring was advanced to a depth of 78 feet to evaluate the subsurface soils that comprise the coastal bluff.

The soils encountered in the boring and excavations were logged by our field representative and samples were taken of the predominant soils throughout the field operation. Exploratory boring and handpit logs have been prepared on the basis of our observations and laboratory testing. The results have been summarized on Figure Nos. III and IV. The predominant soils have been classified in general conformance with the Unified Soil Classification System (refer to Appendix A).

### **IV. FIELD AND LABORATORY TESTS & SOIL INFORMATION**

#### **A. Field Tests**

Standard Penetration Tests were performed in the borings by using a 140-pound weight falling 30 inches to drive a 2-inch O.D. by 1 $\frac{3}{8}$ -inch I.D. sampler tube a distance of 18 inches. The number of blows required to drive the sampler the last 12 inches was recorded for use in evaluation of the soil consistency. The following chart provides an in-house correlation between the number of blows and the consistency of the soil for the Standard Penetration Test and the 3-inch O.D. ("Cal") sampler. Test results are summarized on Figure No. III.



<b>Soil</b>	<b>Density Designation</b>	<b>2-inch O.D. Sampler Blows/Foot</b>	<b>3-inch O.D. Sampler Blows/Foot</b>
Sand and Non-plastic Silt	Very loose	0-4	0-7
	Loose	5-10	8-20
	Medium	11-30	21-53
	Dense	31-50	54-98
	Very Dense	Over 50	Over 98
Clay and Plastic Silt	Very soft	0-2	0-2
	Soft	3-4	3-4
	Firm	5-8	5-9
	Stiff	9-15	10-18
	Very Stiff	15-30	19-45
	Hard	31-60	46-90
	Very Hard	Over 60	Over 90

Bulk (disturbed) and relatively undisturbed (ring) samples were retrieved, sealed and transported to the laboratory for testing.

In general, the tests performed in the field included the Standard Practice for Soil Investigation and Sampling by Auger Borings (ASTM D1452), Test Method for Penetration Test and Split-barrel Sampling of Soils (ASTM D1586), and Standard Practice for Ring-lined Barrel Sampling of Soils (ASTM D3550).

**B. Laboratory Tests**

Laboratory tests were performed on relatively undisturbed and bulk samples of the soils encountered in order to evaluate their index, strength, expansion, and compressibility properties. Test results are summarized on Figure Nos. III and IV. The following tests were conducted on the sampled soils:



1. *Moisture Content (ASTM D2216-05)*
2. *Standard Test Method for Density of Soil In-place by the Drive Cylinder Method (ASTM D2937-10)*
3. *Laboratory Compaction Characteristics (ASTM D1557-12)*
4. *Determination of Percentage of Particles Smaller than No. 200 Sieve (ASTM D1140-14)*
5. *Standard Test Method for Direct Shear Test of Soils under Consolidated Drained Conditions (ASTM D3080)*

Moisture content measurements were performed to establish the in situ moisture of samples retrieved from the exploratory borings. Moisture content and density measurements were performed by ASTM methods D2216 and D2937. These density tests help to establish the in situ moisture and density of samples retrieved from the exploratory boring.

Laboratory compaction tests establish the laboratory maximum dry density and optimum moisture content of the tested soils and are also used to aid in evaluating the strength characteristics of the soils. The test results are presented on the boring log at the appropriate sample depths.

The particle size smaller than a No. 200 sieve analysis aids in classifying the tested soils in accordance with the Unified Soil Classification System and provides qualitative information related to engineering characteristics such as expansion potential, permeability, and shear strength. The test results are presented on the boring log at the appropriate sample depths.

Three direct shear tests (ASTM D3080) were performed on in-place soil samples in order to evaluate strength characteristics of the Old Parallic Deposits and Torrey Sandstone formational materials. The shear tests were performed with a constant strain rate direct shear machine. The specimens tested were saturated and then sheared under various normal loads.



Based on the field and laboratory test data, our observations of the primary soil types on the project, and our previous experience with laboratory testing of similar soils, our Geotechnical Engineer has assigned values for friction angle, coefficient of friction, and cohesion for those soils which will have significant lateral support or load bearing functions on the project. These values have been utilized in determining the recommended bearing value as well as active and passive earth pressure design criteria for foundations, retaining walls, slope stability analyses, etc.

The expansion potential of soils is determined, when necessary, utilizing the Standard Test Method for Expansion Index of Soils. In accordance with the Standard (Table 5.3), potentially expansive soils are classified as follows:

<b><i>Expansion Index</i></b>	<b><i>Potential Expansion</i></b>
0 to 20	Very low
21 to 50	Low
51 to 90	Medium
91 to 130	High
Above 130	Very high

Based on our experience with similar soils, it is our opinion that the on-site fill and formational soils possess a very low to low expansion potential (EI less than 50).

## **V. REGIONAL GEOLOGIC DESCRIPTION**

San Diego County has been divided into three major geomorphic provinces: the Coastal Plain, Peninsular Ranges and Salton Trough. The Coastal Plain exists west of the Peninsular Ranges. The Salton Trough is east of the Peninsular Ranges. These divisions are the result of the basic geologic distinctions between the areas. Mesozoic metavolcanic, metasedimentary and plutonic rocks predominate in the Peninsular



Ranges with primarily Cenozoic sedimentary rocks to the west and east of this central mountain range (Demere, 1997).

In the Coastal Plain region, where the subject property is located, the "basement" consists of Mesozoic crystalline rocks. Basement rocks are also exposed as high relief areas (e.g., Black Mountain northeast of the subject property and Cowles Mountain near the San Carlos area of San Diego). Younger Cretaceous and Tertiary sediments lap up against these older features. The Cretaceous sediments form the local basement rocks on the Point Loma area. These sediments form a "layer cake" sequence of marine and non-marine sedimentary rock units, with some formations up to 140 million years old. Faulting related to the La Nacion and Rose Canyon Fault zones has broken up this sequence into a number of distinct fault blocks in the southwestern part of the county. Northwestern portions of the county are relatively undeformed by faulting (Demere, 1997).

The Peninsular Ranges form the granitic spine of San Diego County. These rocks are primarily plutonic, forming at depth beneath the earth's crust 140 to 90 million years ago as the result of the subduction of an oceanic crustal plate beneath the North American continent. These rocks formed the much larger Southern California batholith. Metamorphism associated with the intrusion of these great granitic masses affected the much older sediments that existed near the surface over that period of time. These metasedimentary rocks remain as roof pendants of marble, schist, slate, quartzite and gneiss throughout the Peninsular Ranges. Locally, Miocene-age volcanic rocks and flows have also accumulated within these mountains (e.g., Jacumba Valley). Regional tectonic forces and erosion over time have uplifted and unroofed these granitic rocks to expose them at the surface (Demere, 1997).



The Salton Trough is the northerly extension of the Gulf of California. This zone is undergoing active deformation related to faulting along the Elsinore and San Jacinto Fault Zones, which are part of the major regional tectonic feature in the southwestern portion of California, the San Andreas Fault Zone. Translational movement along these fault zones has resulted in crustal rifting and subsidence. The Salton Trough, also referred to as the Colorado Desert, has been filled with sediments to depth of approximately 5 miles since the movement began in the early Miocene, 24 million years ago. The source of these sediments has been the local mountains as well as the ancestral and modern Colorado River (Demere, 1997).

As indicated previously, the San Diego area is part of a seismically active region of California. It is on the eastern boundary of the Southern California Continental Borderland, part of the Peninsular Ranges Geomorphic Province. This region is part of a broad tectonic boundary between the North American and Pacific Plates. The actual plate boundary is characterized by a complex system of active, major, right-lateral strike-slip faults, trending northwest/southeast. This fault system extends eastward to the San Andreas Fault (approximately 70 miles from San Diego) and westward to the San Clemente Fault (approximately 50 miles off-shore from San Diego) (Berger and Schug, 1991).

During recent history, the San Diego County area has been relatively quiet seismically. No fault ruptures or major earthquakes have been experienced in historic time within the San Diego area. Since earthquakes have been recorded by instruments (since the 1930s), the San Diego area has experienced scattered seismic events with Richter magnitudes (M) generally less than M4.0. During June 1985, a series of small earthquakes occurred beneath San Diego Bay, three of which had recorded magnitudes of M4.0 to M4.2. In addition, the Oceanside earthquake of July 13, 1986, located approximately 26 miles offshore of the City of Oceanside, had a magnitude of M5.3 (Hauksson and Jones, 1988). On June 15, 2004, a M5.3



earthquake occurred approximately 45 miles southwest of downtown San Diego (26 miles west of Rosarito, Mexico). Although this earthquake was widely felt, no significant damage was reported.

On Sunday, April 4, 2010, a large earthquake occurred in Baja California, Mexico. It was widely felt throughout the southwest including Phoenix, Arizona and San Diego in California. This M7.2 event, the Sierra El Mayor earthquake, occurred in northern Baja California approximately 40 miles south of the Mexico-USA border at shallow depth along the principal plate boundary between the North American and Pacific plates. According to the U. S. Geological Survey this is an area with a high level of historical seismicity, and it has recently also been seismically active, though this is the largest event to strike in this area since 1892. The April 4, 2010, earthquake appears to have been larger than the M6.9 earthquake in 1940 or any of the early 20<sup>th</sup> century events (e.g., 1915 and 1934) in this region of northern Baja California. The event caused widespread damage to structures, closure of businesses, government offices and schools, power outages, displacement of people from their homes and injuries in the nearby major metropolitan areas of Mexicali in Mexico and Calexico in southern California. Preliminary estimates of the cost of the damage range to \$100 million.

This event's aftershock zone extends significantly to the northwest, overlapping with the portion of the fault system that is thought to have ruptured in 1892. Some structures in the San Diego area experienced minor damage and there were some injuries. Ground motions for the April 4, 2010, main event, recorded at stations in San Diego and reported by the California Strong Motion Instrumentation Program (CSMIP), ranged up to 0.058g. Aftershocks from this event continue to the date of this report along the trend northwest of the original event, including within San Diego County, closer to the San Diego metropolitan area. There have been hundreds of these earthquakes including events up to M5.7.





In California, major earthquakes can generally be correlated with movement on active faults. As defined by the California Division of Mines and Geology (Hart, E.W., 1980), an "active" fault is one that has had ground surface displacement within Holocene time (about the last 11,000 years). Additionally, faults along which major historical earthquakes have occurred (about the last 210 years in California) are also considered to be active (Association of Engineering Geologist, 1973). The California Division of Mines and Geology defines a "potentially active" fault as one that has had ground surface displacement during Quaternary time, that is, between 11,000 and 1.6 million years (Hart, E.W., 1980).

## **VI. SITE-SPECIFIC GEOLOGIC DESCRIPTION**

### **A. Stratigraphy**

Our reconnaissance, field work, and review of pertinent geologic maps and reports indicate that dense, Tertiary-age Torrey sandstone (Tt) formational soils underlie the entire site at depth and are overlain by Quaternary-age Old Paralic Deposits (Qop<sub>6</sub>). The soil profile at the site includes up to 2 feet of surficial fill soils overlying the native soils. Refer to the boring and excavation logs, Figure Nos. IIIa-g. Figure No. V presents a plan view geologic map of the general area of the site.

*Fill Soils (Qaf):* The lot is overlain by approximately 1 to 2 feet of surficial fill soils as encountered in the boring and in all of the handpit locations. The fill soils consist of grayish-brown to reddish brown, silty, fine- to medium-grained sand. The fill soils are generally dry to slightly moist, of variable density (loose to medium dense) and low expansion potential, and are not suitable in their current condition for support of new loads from structures or additional fill. Refer to Figure Nos. III and IV for details.



Old Paralic Deposits (Qop<sub>6</sub>): Old Paralic deposits were encountered below the fill. The thickness of these materials is approximately 56 feet thick as encountered in our exploratory boring. The Old Paralic Deposits consist of brown, light grayish-brown, and reddish-brown, silty and clayey, fine- to medium-grained sand. The Old Paralic Deposits were also observed in the bluff face below the lot and overlying the Torrey (Tt). They are generally medium dense to dense, slightly moist to moist, and are considered suitable for support of loads from structures or additional fill. Refer to Figure Nos. III and IV for details.

Torrey Sandstone (Tt): Torrey Sandstone formational soils were encountered in our exploratory boring at a depth of 56 feet and also observed in the bluff face below the property. The formational materials observed in the bluff face below the property consists of well indurated, massively bedded, fine to medium grained sandstone. They are generally very dense, slightly moist, light yellowish brown and are considered to have good bearing strength characteristics. Refer to Figure Nos. III and IV for details.

## **B. Structure**

The Tertiary-age Torrey Sandstone (Tt) underlies the site. The Torrey Sandstone in this area strikes approximately north 35 degrees west and dips approximately 2 degrees to the northeast as depicted approximately 1 mile south of the property on the geologic map (Kennedy and Tan, 2008; see Figure No. V). No apparent geologic structure was observed in the massively bedded Torrey Sandstone immediately below the subject property.



**C. Bluff Observations**

The bluff along the southwest side of the subject property extends approximately 80 feet down to the beach. The exposed bedrock configuration ranges from steeply sloping surfaces in the upper terrace deposits, to near-vertical surfaces to approximately 24 feet in height, in the lower Torrey Sandstone. No out of slope dip components were noted that would adversely affect slope stability.

Although it appears unlikely that bluff recession due to wave erosion would affect the primary rear yard improvements during their useful economic life (considered 75 years), recession of the bluff into the southwestern landscape area between the bluff edge and the rear patio should be expected.

**D. Bluff Stability and Recession Mechanisms**

As always with proposed coastal bluff top construction, bluff face geologic stability as well as bluff recession mechanisms and rates are significant factors to be considered in site development. Evaluations must be made of inherent strengths of the Torrey Sandstone and Old Paralic deposits (Marine terrace deposits), as well as their highly variable response to coastal erosion processes depending on lithologic variations and degrees of faulting and jointing.

The lower 24 feet of the bluff face below the subject property stands essentially vertical or sub-vertical due to the erosion resistant nature of the well indurated Torrey Sandstone. At some locations, the lower bluff rim overhangs the lower surfaces by 1 to 2 feet. The Old Paralic deposits are above the line of direct wave attack and a different combination of factors influence their erosion. Upper portions of coastal bluffs are exposed to precipitation, wind, pedestrian erosion, variations in landscape, landscape maintenance, and other activities.



Coastal bluff retreat is a naturally occurring process that is affected by man's action. Severe erosion is episodic in nature and is mostly dependent upon the intensity of storms and combined high tides, and it is possible that several feet of retreat could occur during severe weather conditions. There may also be periods during the future when erosion along the coast will be insignificant.

We have recalculated the 75-year erosion rate based on current information for historical erosion rates in this area of Solana Beach. This included reviews of historical aerial photographs, physical surveys, and photogrammetry. This method conforms to the "Guidelines for establishing long-term retreat rates" provided in Johnsson (2005), which states "historic data currently are our best indicators of future erosion at any given site." We have calculated a measured historical erosion rate of 2.88 inches per year (or 0.24 feet per year) for the subject property. This is slightly greater than the 2.46 inches per year (0.20 feet per year) for Solana Beach bluff recession between 1932 and 1994, as reported by Benumof and Griggs (Journal of American Shore and Beach Association, Vol. 67, No. 4, October 1999), and the Benumof and Griggs study was recommended for use in evaluation of North County bluff recession rates by Mr. Mark Johnsson of the California Coastal Commission (CCC).

It is our opinion that the 0.40 feet per year (or 30 feet in 75 years) erosion rate utilized by the City of Solana Beach, if it does not include sea level rise, is too conservative when added to the bluff stability 1.5 safety factor line currently required by the City of Solana Beach. A bluff retreat based on calculations using a 0.24 feet per year rate would be 18 feet in 75 years. This does not include adjustments for anticipated rise in sea level.



Based on information included in a report prepared for the subject site by Geosoils, Inc., dated September 15, 2017 (refer to Appendix D of this report), we have recalculated the 75-year erosion rate to include sea level rise (SLR). Review of the 2012 NRC Report (National Research Council) indicates the CCC SLR estimate over the project 75-year design life to the year 2092 is between 1.8 feet and 3.3 feet. This is the estimated sea level rise range for the proposed project.

The retreat rate from 1932 to 2014 is calculated to be 0.24 ft/yr. The retreat rate in the year 2100 with 125 cm SLR (COSMOS) is estimated to be 0.58 ft/yr. To assign an average retreat rate from today to the year 2092, we conservatively recommend the average of the 0.24 ft/yr historic rate and the 0.58 ft/yr estimated 2100 rate or 0.41 ft/yr. Over the 75-year life this translates to a total bluff retreat of about 30.75 feet.

This analysis uses site-specific calculated historical bluff retreat, justified and probable SLR over the next 75 years, and scientifically reviewed methodology to calculate the potential annualized retreat rate including SLR over the project life.

## **VII. PRELIMINARY BLUFF STABILITY ANALYSES**

Slope stability analysis was performed along one cross section of the property and coastal bluff in the area where improvements are proposed. The cross section is included herein as Figure No. VI. Given the site is underlain at depth by medium dense to dense formational materials and medium dense, native Old Paralac Deposits, and the existing coastal bluffs below the property do not appear to have failed, it is our opinion that sufficient gross stability exists in the building pad areas.



As part of geotechnical investigations we have collected similar soil samples of the coastal bluff materials (i.e., the Old Paralac Deposits and Torrey Sandstone) that exist at the site. We used the soil classification and standard penetration blow counts to assign shear strength values to the soils. We assigned values of shear strength for overlying fill soils, Old Paralac Deposits soils and the underlying Torrey Sandstone (35 degrees and 550 psf for the Old Paralac Deposits, and 38 degrees and 850 psf for the Torrey Sandstone formational materials).

Slope stability analysis was performed utilizing a computer program, *SLIDE*, which analyzes the factor of safety against shear stresses (see Appendix C). Potential shear failure surfaces were analyzed with the assigned soil shear strength values. Shear failure analyses were run along the cross section depicted on Figure No. VI. All analyzed slide surfaces yielded a factor of safety of at least 1.5. The minimum acceptable factor of safety against soil shear deep failure is 1.5. Based on our test results, the coastal bluff at the site is considered stable against deep-seated failures. The minimum bluff top setback for new construction is confirmed to be 25 feet. Shallow slope failure analysis was also performed and results indicate a factor of safety higher than 1.5. The factor of safety for seismic slope stability analysis is also higher than 1.15, the minimum acceptable factor of safety for this type of analysis. The combined 75 year erosion rate setback and slope stability setback is calculated to be 47 feet.

### **VIII. GEOLOGIC HAZARDS**

The following is a discussion of the geologic conditions and hazards common to this area of the City of Solana Beach, as well as project-specific geologic information relating to development of the subject property.



**A. Local and Regional Faults**

Rose Canyon Fault: The Rose Canyon Fault Zone (Mount Soledad and Rose Canyon Faults), located approximately 2.9 miles southwest of the subject site, is mapped trending north-south from Oceanside to downtown San Diego, from where it appears to head southward into San Diego Bay, through Coronado and offshore. The Rose Canyon Fault Zone is considered to be a complex zone of onshore and offshore, echelon strike slip, oblique reverse, and oblique normal faults. The Rose Canyon Fault is considered to be capable of causing a M7.2 earthquake per the California Geologic Survey (2002) and considered microseismically active, although no significant recent earthquake is known to have occurred on the fault.

Investigative work on faults that are part of the Rose Canyon Fault Zone at the Police Administration and Technical Center in downtown San Diego, at the SDG&E facility in Rose Canyon, and within San Diego Bay and elsewhere within downtown San Diego, has encountered offsets in Holocene (geologically recent) sediments. These findings confirm Holocene displacement on the Rose Canyon Fault, which was designated an "active" fault in November 1991 (California Division of Mines and Geology -- Fault Rupture Hazard Zones in California, 1999).

Newport-Inglewood Fault: The Newport-Inglewood Fault Zone is located approximately 14 miles northwest of the site. A significant earthquake (M6.4) occurred along this fault on March 10, 1933. Since then no additional significant events have occurred. The fault is believed to have a slip rate of approximately 0.6 mm/yr with an unknown recurrence interval. This fault is believed capable of producing an earthquake of M6.0 to M7.4 (SCEC, 2004).



*Coronado Bank Fault:* The Coronado Bank Fault is located approximately 16.4 miles southwest of the site. Evidence for this fault is based upon geophysical data (acoustic profiles) and the general alignment of epicenters of recorded seismic activity (Greene, 1979). The Oceanside earthquake of M5.3, recorded July 13, 1986, is known to have been centered on the fault or within the Coronado Bank Fault Zone. Although this fault is considered active, due to the seismicity within the fault zone, it is significantly less active seismically than the Elsinore Fault (Hileman, 1973). It is postulated that the Coronado Bank Fault is capable of generating a M7.6 earthquake and is of great interest due to its close proximity to the greater San Diego metropolitan area.

*Elsinore Fault:* The Elsinore Fault is located approximately 30 miles east and northeast of the site. The fault extends approximately 200 km (125 miles) from the Mexican border to the northern end of the Santa Ana Mountains. The Elsinore Fault zone is a 1- to 4-mile-wide, northwest-southeast-trending zone of discontinuous and en echelon faults extending through portions of Orange, Riverside, San Diego, and Imperial Counties. Individual faults within the Elsinore Fault Zone range from less than 1 mile to 16 miles in length. The trend, length and geomorphic expression of the Elsinore Fault Zone identify it as being a part of the highly active San Andreas Fault system.

Like the other faults in the San Andreas system, the Elsinore Fault is a transverse fault showing predominantly right-lateral movement. According to Hart, et al. (1979), this movement averages less than 1 centimeter per year. Along most of its length, the Elsinore Fault Zone is marked by a bold topographic expression consisting of linearly aligned ridges, swales and hallows. Faulted Holocene alluvial deposits (believed to be less than 11,000 years old) found along several segments of the fault zone suggest that at least part of the zone is currently active.





Although the Elsinore Fault Zone belongs to the San Andreas set of active, northwest-trending, right-slip faults in the southern California area (Crowell, 1962), it has not been the site of a major earthquake in historic time, other than a M6.0 earthquake near the town of Elsinore in 1910 (Richter, 1958; Topozada and Parke, 1982). However, based on length and evidence of late-Pleistocene or Holocene displacement, Greensfelder (1974) has estimated that the Elsinore Fault Zone is reasonably capable of generating an earthquake as large as M7.5. Study and logging of exposures in trenches placed in Glen Ivy Marsh across the Glen Ivy North Fault (a strand of the Elsinore Fault Zone between Corona and Lake Elsinore), suggest a maximum earthquake recurrence interval of 300 years, and when combined with previous estimates of the long-term horizontal slip rate of 0.8 to 7.0 mm/year, suggest typical earthquakes of M6.0 to M7.0 (Rockwell, 1985). More recently, the California Geologic Survey (2002) considers the Elsinore Fault capable of producing an earthquake of M6.8 to M7.1.

*San Jacinto Fault:* The San Jacinto Fault is located 53 miles to the northeast of the site. The San Jacinto Fault Zone consists of a series of closely spaced faults, including the Coyote Creek Fault, that form the western margin of the San Jacinto Mountains. The fault zone extends from its junction with the San Andreas Fault in San Bernardino, southeasterly toward the Brawley area, where it continues south of the international border as the Imperial Transform Fault (Earth Consultants International [ECI], 2009).

The San Jacinto Fault zone has a high level of historical seismic activity, with at least 10 damaging earthquakes (M6.0 to M7.0) having occurred on this fault zone between 1890 and 1986. Earthquakes on the San Jacinto Fault in 1899 and 1918 caused fatalities in the Riverside County area. Offset across this fault is predominantly right-lateral, similar to the San Andreas Fault, although some investigators have suggested that dip-slip motion contributes up to 10% of the net slip (ECI, 2009).



The segments of the San Jacinto Fault that are of most concern to major metropolitan areas are the San Bernardino, San Jacinto Valley and Anza segments. Fault slip rates on the various segments of the San Jacinto are less well constrained than for the San Andreas Fault, but the available data suggest slip rates of  $12 \pm 6$  mm/yr for the northern segments of the fault, and slip rates of  $4 \pm 2$  mm/yr for the southern segments. For large ground-rupturing earthquakes on the San Jacinto fault, various investigators have suggested a recurrence interval of 150 to 300 years. The Working Group on California Earthquake Probabilities (WGCEP, 2008) has estimated that there is a 31 percent probability that an earthquake of M6.7 or greater will occur within 30 years on this fault. Maximum credible earthquakes of M6.7, M6.9 and M7.2 are expected on the San Bernardino, San Jacinto Valley and Anza segments, respectively, capable of generating peak horizontal ground accelerations of 0.48 to 0.53 g in the County of Riverside, (ECI, 2009). A M5.4 earthquake occurred on the San Jacinto Fault on July 7, 2010.

The United States Geological Survey has issued the following statements with respect to the recent seismic activity on southern California faults:

The San Jacinto fault, along with the Elsinore, San Andreas, and other faults, is part of the plate boundary that accommodates about 2 inches/year of motion as the Pacific plate moves northwest relative to the North American plate. The largest recent earthquake on the San Jacinto fault, near this location, the M6.5 1968 Borrego Mountain earthquake April 8, 1968, occurred about 25 miles southeast of the July 7, 2010, M5.4 earthquake.

This M5.4 earthquake follows the April 4, 2010, Easter Sunday, M7.2 earthquake, located about 125 miles to the south, well south of the US Mexico international border. A M4.9 earthquake occurred in the same area on June 12, 2010, at 8:08 pm (Pacific Time). Thus, this section of the San Jacinto fault remains active.



Seismologists are watching two major earthquake faults in southern California. The San Jacinto fault, the most active earthquake fault in southern California, extends for more than 100 miles from the international border into San Bernardino and Riverside, a major metropolitan area often called the Inland Empire. The Elsinore fault is more than 110 miles long, and extends into the Orange County and Los Angeles area as the Whittier fault. The Elsinore fault is capable of a major earthquake that would significantly affect the large metropolitan areas of southern California. The Elsinore fault has not hosted a major earthquake in more than 100 years. The occurrence of these earthquakes along the San Jacinto fault and continued aftershocks demonstrates that the earthquake activity in the region remains at an elevated level. The San Jacinto fault is known as the most active earthquake fault in southern California. Caltech and USGS seismologist continue to monitor the ongoing earthquake activity using the Caltech/USGS Southern California Seismic Network and a GPS network of more than 100 stations.

***B. Other Geologic Hazards***

Ground Rupture: Ground rupture is characterized by bedrock slippage along an established fault and may result in displacement of the ground surface. For ground rupture to occur along a fault, an earthquake usually exceeds M5.0. If a M5.0 earthquake were to take place on a local fault, an estimated surface-rupture length 1 mile long could be expected (Greensfelder, 1974). Our investigation indicates that the subject site is not directly on a known fault trace and, therefore, the risk of ground rupture is remote.

Ground Shaking: Structural damage caused by seismically induced ground shaking is a detrimental effect directly related to faulting and earthquake activity. Ground shaking is considered to be the greatest seismic hazard in San Diego County. The intensity of ground shaking is dependent on the magnitude of the earthquake, the



distance from the earthquake, and the seismic response characteristics of underlying soils and geologic units. Earthquakes of M5.0 or greater are generally associated with notable to significant damage. It is our opinion that the most serious damage to the site would be caused by a large earthquake originating on a nearby strand of the Rose Canyon Fault Zone. Although the chance of such an event is remote, it could occur within the useful life of the structure.

Landslides: Based upon our geologic reconnaissance, review of the geologic map (Kennedy and Tan, 2008), review of the aerial photographs (5-2-53, AXN-8M-80 and 81), there are no known or suspected ancient landslides located on the site.

Slope Stability: It is our opinion slopes on the site possess a factor of safety of 1.5 or higher against gross shear and/or shallow failure (1.15 or higher when including seismic loading).

Liquefaction: The liquefaction of saturated sands during earthquakes can be a major cause of damage to buildings. Liquefaction is the process by which soils are transformed into a viscous fluid that will flow as a liquid when unconfined. It occurs primarily in loose, saturated sands and silts when they are sufficiently shaken by an earthquake.

On this site, the risk of liquefaction of foundation materials due to seismic shaking is considered to be low due to the medium dense to dense nature of the natural-ground material and the lack of a shallow static groundwater surface under the site. The site does not have a potential for soil strength loss to occur due to a seismic event.

Tsunami: Based upon our review of the "Tsunami Inundation Map for Emergency Planning," Del Mar Quadrangle, prepared by the California Geologic Survey, dated June 1, 2009, the site is not mapped within the tsunami inundation line. The risk of



a tsunami affecting the site is considered low to moderate as the site is situated at an elevation of approximately 86 feet above mean sea level and in close distance to an exposed beach. In general, the orientation of the southern California coastline and the bathymetry of the offshore southern California borderland have, during historical times, combined to protect the shoreline from any large magnitude tsunami height increases, as shown by records of tsunami occurrences that have been observed and/or recorded along the southern California shoreline since 1810 (Lander et al., 1993). For this segment of the California coastline (south of Santa Monica), there is no evidence of any high magnitude tsunamis generated during the last 200 years by large-scale regional sea floor movements (Gayman, 1998).

*Summary:* It is our opinion, based upon a review of the available maps and our site investigation, that the site is underlain by stable formational materials, and is suited for the proposed structural additions and associated improvements. It is our opinion that a known "active" fault presents the greatest seismic risk to the subject site during the lifetime of the proposed residence and additions. To date, the nearest known "active" faults to the subject site are the northwest-trending Rose Canyon Fault, Newport-Inglewood, Coronado Bank Fault and the Elsinore Fault. No significant geologic hazards are known to exist on the site that would prevent the proposed construction. Refer to Section X of this report for seismic design criteria.

## **IX. GROUNDWATER**

No groundwater was encountered during the course of our field investigation and we do not anticipate significant groundwater problems to develop in the future, if the property is developed as proposed and proper drainage is implemented and maintained.



It should be kept in mind that any required grading operations will change surface drainage patterns and/or reduce permeabilities due to the densification of compacted soils. Such changes of surface and subsurface hydrologic conditions, plus irrigation of landscaping or significant increases in rainfall, may result in the appearance of surface or near-surface water at locations where none existed previously. The damage from such water is expected to be localized and cosmetic in nature, if good positive drainage is implemented, as recommended in this report, during and at the completion of construction.

On properties such as the subject site where formational materials exist at relatively shallow depths, even normal landscape irrigation practices or periods of extended rainfall can result in shallow "perched" water conditions. The perching (shallow depth) accumulation of water on a low permeability surface can result in areas of persistent wetting and drowning of lawns, plants and trees. Resolution of such conditions, should they occur, may require site-specific design and construction of subdrain and shallow "wick" drain dewatering systems.

Subsurface drainage with a properly designed and constructed subdrain system will be required along with continuous back drainage behind any proposed lower-level basement walls, property line retaining walls, or any perimeter stem walls for raised-wood floors where the outside grades are higher than the crawl space grades. Furthermore, crawl spaces should be provided with the proper cross-ventilation to help reduce the potential for moisture-related problems.

It must be understood that unless discovered during initial site exploration or encountered during site grading operations, it is extremely difficult to predict if or where perched or true groundwater conditions may appear in the future. When site fill or formational soils are fine-grained and of low permeability, water problems may not become apparent for extended periods of time.



Water conditions, where suspected or encountered during grading operations, should be evaluated and remedied by the project civil and geotechnical consultants. The project developer and property owner, however, must realize that post-construction appearances of groundwater may have to be dealt with on a site-specific basis.

## **X. CONCLUSIONS AND RECOMMENDATIONS**

The following conclusions and recommendations are based upon the practical field investigation conducted by our firm, and resulting laboratory tests, in conjunction with our knowledge and experience with soil conditions in the City of Solana Beach.

Our geotechnical investigation revealed that the property is underlain at shallow depth by medium dense clayey and silty sand materials identified as Old Paralac Deposits (Qop<sub>6</sub>) overlain by approximately 1 to 2 feet of variable density, silty sand fill soils. In their present condition, these fill soils will not provide a stable base for structure additions and improvements. As such, we recommend that these soils be removed and recompacted as part of site preparation prior to the addition of any new fill or structural improvements. The native materials have good bearing strength characteristics and are suitable for support of the proposed structural loads.

All foundations should be founded either entirely into the underlying medium dense native materials or entirely in properly compacted fill soils. In proposed secondary improvement areas, all existing fill soils will require removal, moisture conditioning, and recompaction prior to placement of new fill or improvements. New structures may be founded into dense formational soils, and new floors may be designed to span between those foundations.



The opinions, conclusions, and recommendations presented in this report are contingent upon **Geotechnical Exploration, Inc.** being retained to review the final plans and specifications as they are developed and to observe the site earthwork and installation of foundations. Accordingly, we recommend that the following paragraph be included on the grading and foundation plans for the project:

If the geotechnical consultant of record is changed for the project, the work shall be stopped until the replacement has agreed in writing to accept the responsibility within their area of technical competence for approval upon completion of the work. It shall be the responsibility of the permittee to notify the governing agency in writing of such change prior to the commencement or recommencement of grading and/or foundation installation work.

**A. Seismic Design Criteria**

1. Seismic Design Criteria: Site-specific seismic design criteria for the proposed residence are presented in the following table in accordance with Section 1613 of the 2016 CBC, which incorporates by reference ASCE 7-10 for seismic design. We have determined the mapped spectral acceleration values for the site, based on a latitude of 32.9923 degrees and longitude of -117.2746 degrees, utilizing a tool provided by the USGS, which provides a solution for ASCE 7-10 (Section 1613 of the 2016 CBC) utilizing digitized files for the Spectral Acceleration maps. Based on our experience with similar soil conditions, we have assigned a Site Soil Classification of D. Refer to the "USGS Design Maps Summary Report" presented as Appendix B.

**TABLE I**  
**Mapped Spectral Acceleration Values and Design Parameters**

$S_s$	$S_1$	$F_a$	$F_v$	$S_{ms}$	$S_{m1}$	$S_{ds}$	$S_{d1}$
1.208g	0.469g	1.017	1.531	1.228g	0.718g	0.819g	0.479g





***B. Preparation of Soils for Site Development***

2. Clearing and Stripping: The existing improvements and vegetation observed within the proposed addition areas should be removed prior to the preparation of the building pad and areas of associated improvements. This includes any roots from existing trees and shrubbery. Holes resulting from the removal of root systems or other buried foundations, debris or obstructions that extend below the planned grades should be cleared and backfilled with properly compacted fill.
  
3. Treatment of Existing Fill Soils and/or Loose Surficial Soils: In order to provide suitable foundation support for the proposed additions and associated improvements, we recommend that all existing fill soils that remain after the necessary demolition and site excavations have been made be removed and recompacted. The recompaction work should consist of (a) removing these soils down to native medium dense materials; (b) scarifying, moisture conditioning, and compacting the exposed natural subgrade soils; and (c) cleaning and replacing the removed material as compacted structural fill. Before any soils are processed our field representative should evaluate the soils at the bottom of the excavation.

The depth required to remove the fill soils is anticipated to be approximately 1 to 2 feet but should be confirmed by our representatives during the excavation work based on their examination of the soils being exposed. The lateral extent of the excavation and recompaction should be at least 5 feet beyond the edge of the perimeter foundations of the residential structure and any areas to receive exterior improvements where feasible.



Any unsuitable materials (such as oversize rubble, highly expansive clayey soils, and/or organic matter) should be selectively removed as indicated by our representative and disposed of off-site or be properly moisture conditioned and compacted.

Any rigid improvements founded on the existing variable density surface soils can be expected to undergo movement and possible damage. **Geotechnical Exploration, Inc.** takes no responsibility for the performance of any improvements built on loose natural soils or inadequately compacted fills. Any exterior area to receive concrete improvements should be verified for compaction and moisture within 48 hours prior to concrete placement or during the fill placement if the thickness of fill exceeds 1 foot.

4. Subgrade Preparation: After the site has been cleared, stripped, and the required excavations made, the exposed subgrade soils in areas to receive fill and/or building improvements should be scarified to a depth of 6 inches, moisture conditioned, and compacted to the requirements for structural fill. Moisture content should be maintained by periodical sprinkling until within 48 hours prior to concrete placement.
  
5. Expansive Soil Conditions: We do not anticipate that significant quantities of medium or highly expansive clay soils will be encountered during grading. Should such soils be encountered and used as fill, however, they should be moisture conditioned to at least 5 percent above optimum moisture content, compacted to 88 to 92 percent, and placed outside building areas. Soils of medium or greater expansion potential should not be used as retaining wall backfill soils.



6. Material for Fill: Existing on-site soils with an organic content of less than 3 percent by volume are, in general, suitable for use as fill. Any required imported fill material should be a low-expansion potential (Expansion Index of 50 or less per ASTM D4829-11). In addition, both imported and existing on-site materials for use as fill should not contain rocks or lumps more than 3 inches in greatest dimension. All materials for use as fill should be approved by our representative prior to importing to the site.
  
7. Fill Compaction: All structural fill should be compacted to a minimum degree of compaction of 90 percent based upon ASTM D1557-12. Fill material should be spread and compacted in uniform horizontal lifts not exceeding 8 inches in uncompacted thickness. Before compaction begins, the fill should be brought to a moisture content that will permit proper compaction by either: (1) aerating and drying the fill if it is too wet, or (2) moistening the fill with water if it is too dry. Each lift should be thoroughly mixed before compaction to ensure a uniform distribution of moisture.

No uncontrolled fill soils should remain after completion of the site work. In the event that temporary ramps or pads are constructed of uncontrolled fill soils, the loose fill soils should be removed and/or recompacted prior to completion of the grading operation.

8. Trench and Retaining Wall Backfill: Utility trenches and retaining walls should preferably be backfilled with compacted fill; gravel is also a suitable backfill material but should be used only if space constraints will not allow the use of compaction equipment. Gravel can also be used as backfill around perforated subdrains. Backfill material should be placed in lift thicknesses appropriate to the type of compaction equipment utilized and compacted to a minimum degree of compaction of 90 percent by mechanical means.



Our experience has shown that even shallow, narrow trenches (such as for irrigation and electrical lines) that are not properly compacted can result in problems, particularly with respect to shallow groundwater accumulation and migration.

Backfill soils placed behind retaining walls should be installed as early as the retaining walls are capable of supporting lateral loads. Backfill soils behind retaining walls should be low expansive, with an Expansion Index equal to or lower than 50.

***C. Design Parameters for Proposed Foundations***

9. Footings: We recommend that the proposed additions be supported on conventional, individual-spread and/or continuous footing foundations bearing on recompacted fill soils prepared as stated above and/or undisturbed natural material. All footings should be founded at least 18 inches below the lowest adjacent finished grade.

If the proposed footings are located closer than 8 feet inside the top or face of slopes, they should be deepened to 1½ feet below a line beginning at a point 8 feet horizontally inside the slopes and projected outward and downward, parallel to the face of the slope and into firm soils. Bearing surfaces of footings located adjacent to utility trenches should be situated below an imaginary 1.5:1.0 plane projected upward from the bottom edge of the adjacent utility trench.

10. Bearing Values: At the recommended depths, footings on compacted fill or native soil may be designed for allowable bearing pressures of 2,500 pounds per square foot (psf) for combined dead and live loads and 3,300 psf for all



loads, including wind or seismic. The footings should, however, have a minimum depth of 18 inches and a minimum width of 12 inches for one-story structures (minimum width of 15 inches for two-story structures). Footing excavations should be evaluated by our representative prior to steel and form placement. If suspended floors are to be used between deepened footings into dense formational soils, our firm can be contacted for additional recommendations.

11. Footing Reinforcement: All continuous footings should contain top and bottom reinforcement to provide structural continuity and to permit spanning of local irregularities. We recommend that a minimum of two No. 5 top and two No. 5 bottom reinforcing bars be provided in the footings. A minimum clearance of 3 inches should be maintained between steel reinforcement and the bottom or sides of the footing. Isolated square footings should contain, as a minimum, a grid of three No. 4 steel bars on 12-inch centers, both ways. In order for us to offer an opinion as to whether the footings are founded on soils of sufficient load bearing capacity, it is essential that our representative inspect the footing excavations prior to the placement of reinforcing steel or concrete.

*NOTE: The project Civil/Structural Engineer should review all reinforcing schedules. The reinforcing minimums recommended herein are not to be construed as structural designs, but merely as minimum reinforcement to reduce the potential for cracking and separations.*

12. Lateral Loads: Lateral load resistance for the structures supported on footing foundations may be developed in friction between the foundation bottoms and the supporting subgrade. An allowable friction coefficient of 0.40 is considered applicable. An additional allowable passive resistance equal to an equivalent fluid weight of 300 pounds per cubic foot (pcf) acting against the foundations



may be used in design provided the footings are poured neat against the adjacent undisturbed formational materials and/or properly compacted fill materials. These lateral resistance values assume a level surface in front of the footing for a minimum distance of three times the embedment depth of the footing.

13. Settlement: Settlements under building loads are expected to be within tolerable limits for the proposed residence. For footings designed in accordance with the recommendations presented in the preceding paragraphs, we anticipate that total settlements should not exceed 1 inch and that post-construction differential angular rotation should be less than 1/240.

**D. Concrete Slab-on-grade Criteria**

14. Minimum Floor Slab Reinforcement: Based on our experience, we have found that, for various reasons, floor slabs occasionally crack, causing brittle surfaces such as ceramic tiles to become damaged. Therefore, we recommend that all slabs-on-grade contain at least a minimum amount of reinforcing steel to reduce the separation of cracks, should they occur.

14.1 Interior slabs-on-grade should be a minimum of 4 inches actual thickness and be reinforced with No. 3 bars on 15-inch centers, both ways, placed at midheight in the slab. *The slabs should be underlain by a moisture retardant membrane (i.e., 15-mil StegoWrap) over a 4-inch-thick capillary break layer consisting of clean 3/8-inch gravel.* Slab subgrade soil should be verified by a **Geotechnical Exploration, Inc.** representative to have the proper moisture content within 48 hours prior to placement of the vapor barrier and pouring of concrete. The



StegoWrap membrane may be placed directly on properly compacted subgrade soils or dense formational soils.

- 14.2 Following placement of concrete floor slabs, sufficient drying time must be allowed prior to placement of any floor coverings. Premature placement of floor coverings may result in degradation of adhesive materials and loosening of the finish floor materials.
15. Concrete Isolation Joints: We recommend the project Civil/Structural Engineer incorporate isolation joints and sawcuts to at least one-fourth the thickness of the slab in any floor designs. The joints and cuts, if properly placed, should reduce the potential for and help control floor slab cracking. We recommend that concrete shrinkage joints be spaced no farther than approximately 20 feet apart, and also at re-entrant corners. However, due to a number of reasons (such as base preparation, construction techniques, curing procedures, and normal shrinkage of concrete), some cracking of slabs can be expected.
16. Slab Moisture Emission: Although it is not the responsibility of geotechnical engineering firms to provide moisture protection recommendations, as a service to our clients we provide the following discussion and suggested minimum protection criteria. Actual recommendations should be provided by the architect and waterproofing consultants.

Soil moisture vapor can result in damage to moisture-sensitive floors, some floor sealers, or sensitive equipment in direct contact with the floor, in addition to mold and staining on slabs, walls, and carpets.



The common practice in Southern California is to place vapor retarders made of PVC, or of polyethylene. PVC retarders are made in thickness ranging from 10- to 60-mil. Polyethylene retarders, called visqueen, range from 5- to 10-mil in thickness. These products are no longer considered adequate for moisture protection and can actually deteriorate over time.

Specialty vapor retarding products possess higher tensile strength and are more specifically designed for and intended to retard moisture transmission into and through concrete slabs. The use of such products is highly recommended for reduction of floor slab moisture emission.

The following American Society for Testing and Materials (ASTM) and American Concrete Institute (ACI) sections address the issue of moisture transmission into and through concrete slabs: ASTM E1745-97 (2009) Standard Specification for Plastic Water Vapor Retarders Used in Contact Concrete Slabs; ASTM E154-88 (2005) Standard Test Methods for Water Vapor Retarders Used in Contact with Earth; ASTM E96-95 Standard Test Methods for Water Vapor Transmission of Materials; ASTM E1643-98 (2009) Standard Practice for Installation of Water Vapor Retarders Used in Contact Under Concrete Slabs; and ACI 302.2R-06 Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.

Based on the above, we recommend that the vapor barrier consist of a minimum 15-mil extruded polyolefin plastic (no recycled content or woven materials permitted). Permeance as tested before and after mandatory conditioning (ASTM E1745 Section 7.1 and sub-paragraphs 7.1.1-7.1.5) should be less than 0.01 perms (grains/square foot/hour in Hg) and comply with the ASTM E1745 Class A requirements. Installation of vapor barriers should be in





accordance with ASTM E1643. The basis of design is StegoWrap vapor barrier 15-mil or equivalent placed as previously indicated.

- 16.1 Common to all acceptable products, vapor retarder/barrier joints must be lapped and sealed with mastic or the manufacturer's recommended tape or sealing products. In actual practice, stakes are often driven through the retarder material, equipment is dragged or rolled across the retarder, overlapping or jointing is not properly implemented, etc. All these construction deficiencies reduce the retarder's effectiveness. In no case should retarder/barrier products be punctured or gaps be allowed to form prior to or during concrete placement.
  - 16.2 Vapor retarders/barriers do not provide full waterproofing for structures constructed below free water surfaces. They are intended to help reduce or prevent vapor transmission and/or capillary migration through the soil and through the concrete slabs. Waterproofing systems must be designed and properly constructed if full waterproofing is desired. The owner and project designers should be consulted to determine the specific level of protection required.
  - 16.3 Following placement of any concrete floor slabs, sufficient drying time must be allowed prior to placement of floor coverings. Premature placement of floor coverings may result in degradation of adhesive materials and loosening of the finish floor materials.
17. Exterior Slab Reinforcement: As a minimum for protection of on-site improvements, we recommend that all nonstructural concrete slabs (such as patios, sidewalks, etc.) be at least 4 inches in actual thickness, founded on properly compacted and tested fill or dense native formation and underlain by



no more than 3 inches of clean leveling sand, with No. 3 bars at 18-inch centers, both ways, at the center of the slab, and contain adequate isolation and control joints. The performance of on-site improvements can be greatly affected by soil base preparation and the quality of construction. It is therefore important that all improvements are properly designed and constructed for the existing soil conditions. The improvements should not be built on loose soils or fills placed without our observation and testing. The subgrade of exterior improvements should be verified as properly prepared within 48 hours prior to concrete placement. A minimum thickness of 2 feet of properly recompacted soils should underlie the exterior slabs on-grade.

For exterior slabs with the minimum shrinkage reinforcement, control joints should be placed at spaces no farther than 15 feet apart or the width of the slab, whichever is less, and also at re-entrant corners. Control and isolation joints in exterior slabs should be sealed with elastomeric joint sealant. The sealant should be inspected every 6 months and be properly maintained.

**E. Slopes**

It is our understanding that no new permanent slopes are proposed. Should portions of the site be modified with new slopes, the following recommendations should be applied.

18. Slope Observations: A representative of **Geotechnical Exploration, Inc.** must observe any steep temporary slopes *during construction*. In the event that soils and formational material comprising a slope are not as anticipated, any required slope design changes would be presented at that time.



19. Temporary Slopes: Based on our subsurface investigation work, laboratory test results, and engineering analysis, temporary unsurcharged slopes should be stable for a maximum slope height of up to 10 feet and may be cut at a slope ratio of 1.0:1.0 in properly compacted fill soils and at 0.75:1.0 in medium dense natural soils. Some localized sloughing or raveling of the soils exposed on the slopes, however, may occur. Since the stability of temporary construction slopes will depend largely on the contractor's activities and safety precautions (storage and equipment loadings near the tops of cut slopes, surface drainage provisions, etc.), it should be the contractor's responsibility to establish and maintain all temporary construction slopes at a safe inclination appropriate to his methods of operation. No soil stockpiles or surcharge may be placed within a horizontal distance of 10 feet from the excavation.

If these recommendations are not feasible due to space constraints, temporary shoring may be required for safety and to protect adjacent property improvements. Similarly, footings near temporary cuts should be underpinned and/or protected with shoring.

20. Cal-OSHA: Where not superseded by specific recommendations presented in this report, trenches, excavations, and temporary slopes at the subject site should be constructed in accordance with Title 8, Construction Safety Orders, issued by Cal-OSHA.
21. Slope Top/Face Performance: The soils that occur in close proximity to the top or face of even properly compacted fill or dense natural ground cut slopes often possess poor lateral stability. The degree of lateral and vertical deformation depends on the inherent expansion and strength characteristics of the soil types comprising the slope, slope steepness and height, loosening of slope face soils by burrowing rodents, and irrigation and vegetation maintenance



practices, as well as the quality of compaction of fill soils. Structures and other improvements could suffer damage due to these soil movement factors if not properly designed to accommodate or withstand such movement. A minimum 8-foot setback to the slope face should be provided for foundations supporting structures or improvements.

22. *Slope Top Structure Performance:* Rigid improvements such as top-of-slope walls, columns, decorative planters, concrete flatwork, swimming pools, and other similar types of improvements can be expected to display varying degrees of separation typical of improvements constructed at the top of a slope. The separations result primarily from slope top lateral and vertical soil deformation processes. These separations often occur regardless of being underlain by cut or fill slope material. Proximity to a slope top is often the primary factor affecting the degree of separations occurring.

Typical and to-be-expected separations can range from minimal to up to 1 inch or greater in width. In order to reduce the effect of slope-top lateral soil deformation, we recommend that the top-of-slope improvements be designed with flexible connections and joints in rigid structures so that the separations do not result in visually apparent cracking damage and/or can be cosmetically dressed as part of the ongoing property maintenance. These flexible connections may include "slip joints" in wrought iron fencing, evenly spaced vertical joints in block walls or fences, control joints with flexible caulking in exterior flatwork improvements, etc.

In addition, use of planters to provide separation between top-of-slope hardscape such as patio slabs and pool decking from top-of-slope walls can aid greatly in reducing cosmetic cracking and separations in exterior improvements. Actual materials and techniques would need to be determined



by the project architect or the landscape architect for individual properties. Steel dowels placed in flatwork may prevent noticeable vertical differentials, but if provided with a slip-end they may still allow some lateral displacement.

**F. Retaining Wall Design Criteria**

23. Retaining Wall Seismic Earth Pressures (If Applicable): If seismic loading is to be considered for the unrestrained retaining walls more than 6 feet in height, they should be designed for seismic earth pressures in addition to the normal static pressures. For unrestrained retaining walls with level backfill, we recommend that the seismic pressure increment be taken as an additional triangular pressure distribution (zero pressure at the ground surface and maximum pressure at the base) utilizing an equivalent fluid weight of 15 pcf. Restrained retaining walls do not require additional soil seismic increments added to the static soil pressure. The recommended active soil pressure for unrestrained retaining walls is 38 pcf, and the restrained soil pressure is 56 pcf. Surcharge pressure coefficients are 0.31 and 0.47 for unrestrained and restrained retaining walls, respectively.
24. Wall Drainage: The preceding design pressures assume that the walls are backfilled with the on-site soils or imported low-expansive soils, and that there is sufficient drainage behind the walls to prevent the build-up of hydrostatic pressures from surface water infiltration. We recommend that drainage be provided by a composite drainage material such as Miradrain 6000/6200 or equivalent. The drain material should terminate 3 inches below the finish surface where the surface is covered by pavements or slabs or 6 inches below the finish surface in landscape areas (see Figure No. X for Retaining Wall Drainage/Waterproofing Schematic). Waterproofing should extend from the bottom to the top of the wall.



***Geotechnical Exploration, Inc.*** will assume no liability for damage to structures or improvements that is attributable to poor drainage. The architectural plans should clearly indicate that subdrains for any lower-level walls be placed at an elevation at least 1 foot below the bottom of the lower-level slabs. At least 0.5-percent gradient should be provided to the subdrain. The subdrain should be placed in an envelope of crushed rock gravel up to 1 inch in maximum diameter, and be wrapped with Mirafi 140N filter or equivalent. A sump pump may be needed if the subdrain does not outlet via gravity. The collected water should be taken to an approved drainage facility.

25. *Drainage Quality Control!*: It must be understood that it is not within the scope of our services to provide quality control oversight for surface or subsurface drainage construction or retaining wall sealing and base of wall drain construction. It is the responsibility of the contractor to verify proper wall sealing, geofabric installation, protection board (if needed), drain depth below interior floor or yard surface, pipe percent slope to the outlet, etc.

**G. Site Drainage Considerations**

26. *Erosion Control!*: Appropriate erosion control measures should be taken at all times during and after construction to prevent surface runoff waters from entering footing excavations, ponding on finished building pad areas or causing erosion on soil surface.
27. *Surface Drainage!*: Adequate measures should be taken to properly finish-grade the lot after the residence, swimming pool and other improvements are in place. Drainage waters from this site and adjacent properties should be directed away from the footings, floor slabs, and slopes, onto the natural drainage direction for this area or into properly designed and approved



drainage facilities provided by the project civil engineer. Roof gutters and downspouts should be installed on the residence, with the runoff directed away from the foundations via closed drainage lines. Proper subsurface and surface drainage will help minimize the potential for waters to seek the level of the bearing soils under the footings and floor slabs.

Failure to observe this recommendation could result in undermining and possible differential settlement of the structure or other improvements or cause other moisture-related problems. Currently, the CBC requires a minimum one-percent surface gradient for proper drainage of building pads unless waived by the building official. Concrete pavement may have a minimum gradient of 0.5-percent.

28. Planter Drainage: Planter areas, flower beds and planter boxes should be sloped to drain away from the footings and floor slabs at a gradient of at least 5 percent within 5 feet from the perimeter walls. Any planter areas adjacent to the residence or surrounded by concrete improvements should be provided with sufficient area drains to help with rapid runoff disposal. No water should be allowed to pond adjacent to the residence or other improvements or anywhere on the site.

#### **H. General Recommendations**

29. Project Start Up Notification: In order to reduce any work delays during site development, this firm should be contacted at least 48 hours and preferably 48 hours prior to any need for observation of footing excavations or field density testing of compacted fill soils. If possible, placement of formwork and steel reinforcement in footing excavations should not occur prior to observing the excavations; in the event that our observations reveal the need for



deepening or redesigning foundation structures at any locations, any formwork or steel reinforcement in the affected footing excavation areas would have to be removed prior to correction of the observed problem (i.e., deepening the footing excavation, recompacting soil in the bottom of the excavation, etc.).

30. Construction Best Management Practices (BMPs): Construction BMPs must be implemented in accordance with the requirements of the controlling jurisdiction. Sufficient BMPs must be installed to prevent silt, mud or other construction debris from being tracked into the adjacent street(s) or storm water conveyance systems due to construction vehicles or any other construction activity. The contractor is responsible for cleaning any such debris that may be in the street at the end of each work day or after a storm event that causes breach in the installed construction BMPs.

All stockpiles of uncompacted soil and/or building materials that are intended to be left unprotected for a period greater than 7 days are to be provided with erosion and sediment controls. Such soil must be protected each day when the probability of rain is 40% or greater. A concrete washout should be provided on all projects that propose the construction of any concrete improvements that are to be poured in place. All erosion/sediment control devices should be maintained in working order at all times. All slopes that are created or disturbed by construction activity must be protected against erosion and sediment transport at all times. The storage of all construction materials and equipment must be protected against any potential release of pollutants into the environment.





## **XI. GRADING NOTES**

**Geotechnical Exploration, Inc.** recommends that we be retained to verify the actual soil conditions revealed during site grading work and footing excavation to be as anticipated in this "*Report of Preliminary Geotechnical Investigation and Geologic Reconnaissance*" for the project. In addition, the compaction of any fill soils placed during site grading work must be observed and tested by the soil engineer. It is the responsibility of the grading contractor to comply with the requirements on the grading plans and the local grading ordinance. All retaining wall and trench backfill should be properly compacted. **Geotechnical Exploration, Inc.** will assume no liability for damage occurring due to improperly or uncompacted backfill placed without our observations and testing.

## **XII. LIMITATIONS**

Our conclusions and recommendations have been based on available data obtained from our field investigation and laboratory analysis, as well as our experience with similar soils and formational materials located in this area of Solana Beach. Of necessity, we must assume a certain degree of continuity between exploratory excavations and/or natural exposures. It is, therefore, necessary that all observations, conclusions, and recommendations be verified at the time grading operations begin or when footing excavations are placed. In the event discrepancies are noted, additional recommendations may be issued, if required.

The work performed and recommendations presented herein are the result of an investigation and analysis that meet the contemporary standard of care in our profession within the County of San Diego. No warranty is provided.



As stated previously, it is not within the scope of our services to provide quality control oversight for surface or subsurface drainage construction or retaining wall sealing and base of wall drain construction. It is the responsibility of the contractor to verify proper wall sealing, geofabric installation, protection board installation (if needed), drain depth below interior floor or yard surfaces; pipe percent slope to the outlet, etc.

This report should be considered valid for a period of two (2) years, and is subject to review by our firm following that time. If significant modifications are made to the building plans, especially with respect to the height and location of any proposed structures, this report must be presented to us for immediate review and possible revision.

It is the responsibility of the owner and/or developer to ensure that the recommendations summarized in this report are carried out in the field operations and that our recommendations for design of this project are incorporated in the structural plans. We should be retained to review the project plans once they are available to verify that our recommendations have been adequately incorporated into them.

This firm does not practice or consult in the field of safety engineering. We do not direct the contractor's operations, and we cannot be responsible for the safety of personnel other than our own; the safety of others is the responsibility of the contractor. The contractor should notify the owner if any of the recommended actions presented herein are considered to be unsafe.

The firm of **Geotechnical Exploration, Inc.** shall not be held responsible for changes to the physical condition of the property, such as addition of fill soils or

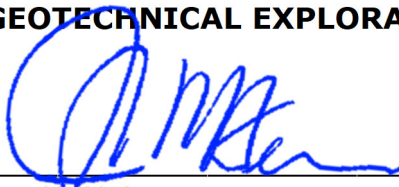


changing drainage patterns, which occur subsequent to issuance of this report and the changes are made without our observations, testing, and approval.

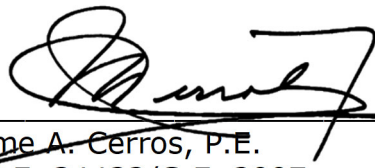
Once again, should any questions arise concerning this report, please feel free to contact the undersigned. Reference to our **Job No. 17-11545** will expedite a reply to your inquiries.

Respectfully submitted,

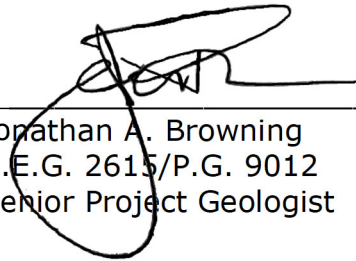
**GEOTECHNICAL EXPLORATION, INC.**



Jay K. Heiser  
Senior Project Geologist



Jaime A. Cerros, P.E.  
R.C.E. 34422/G.E. 2007  
Senior Geotechnical Engineer



Jonathan A. Browning  
C.E.G. 2615/P.G. 9012  
Senior Project Geologist



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JOB NO. 17-11545  
November 2017

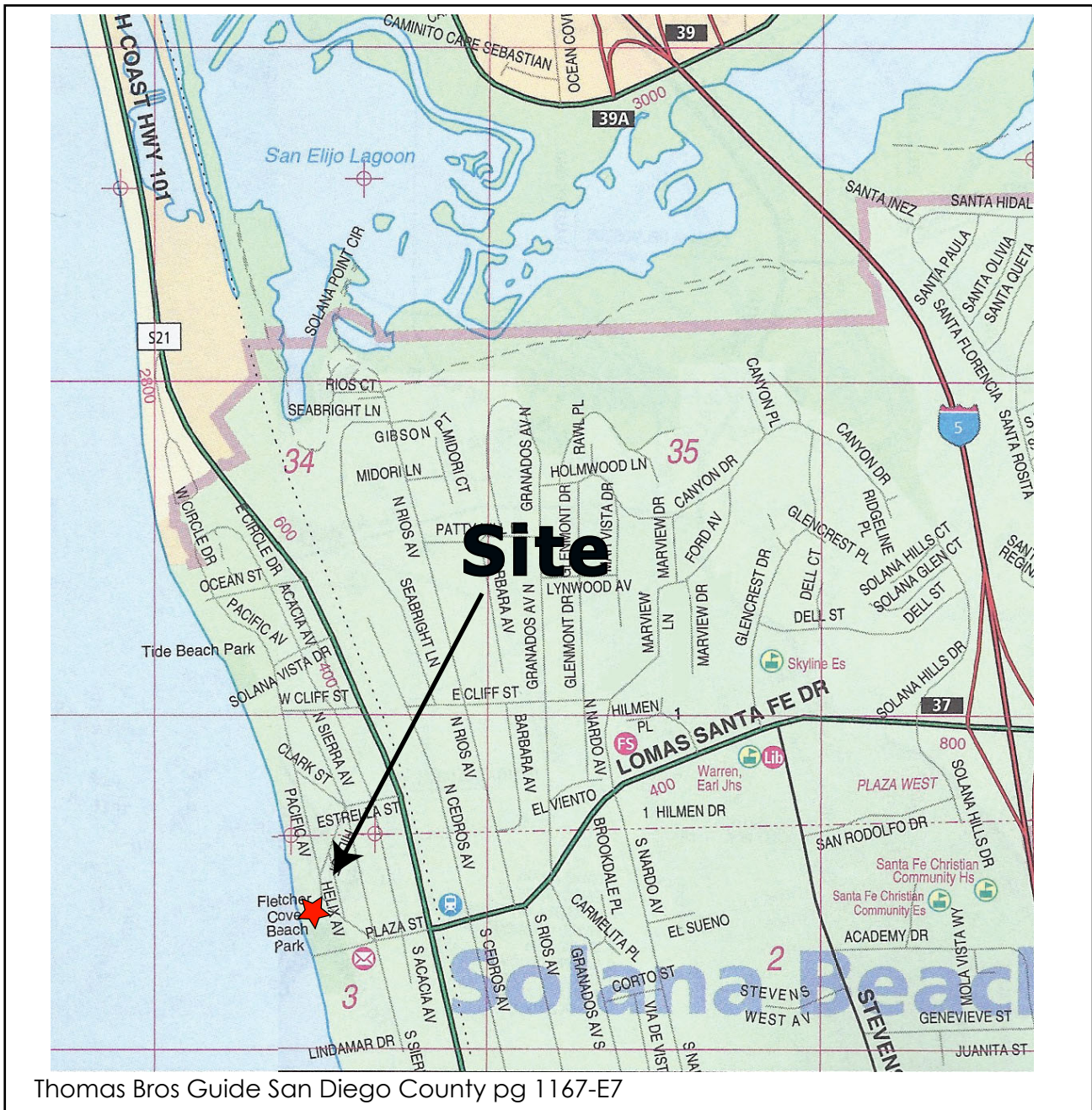
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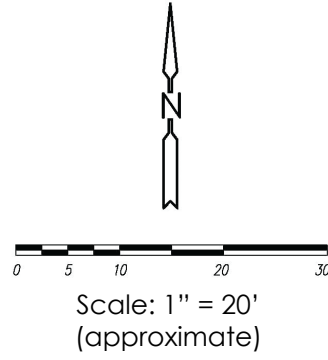


# VICINITY MAP



Bradberry Residence  
141 Pacific Avenue  
Solana Beach, CA.

Figure No. 1  
Job No. 17-11545



- NOTES:**
1. THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION PER RECORD DATA.
  2. THE PROPERTY LINES SHOWN HEREON WERE CALCULATED FROM RECORD DATA USING A MIN. OF TWO (2) TIES TO CERTAIN FOUND SURVEY MONUMENTS.
  3. THERE ARE NO EASEMENTS BASED UPON A PRELIMINARY TITLE REPORT FIRST AMERICAN TITLE COMPANY DATED OCTOBER 02, 2014.

**CLIENT:** TRAVIS & MARIBEL BRADBERRY  
141 PACIFIC AVE.  
SOLANA BEACH, CA 92075

**SITE ADDRESS:** 141 PACIFIC AVENUE  
SOLANA BEACH, CA 92075

**ASSESSORS PARCEL NUMBER:** 263-323-06

**LEGAL DESCRIPTION:** LOT 4 IN BLOCK 23 OF SOLANA BEACH, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1749, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY MARCH 5, 1923.

**BENCHMARK:** CITY OF SOLANA BEACH BENCHMARK SOLB-1  
A 2.5" BRASS DISC ON CONCRETE DRAINAGE INLET ON THE EAST SHOULDER OF HWY 101 0.1 MILE SOUTH OF LOMAS SANTA FE DRIVE.  
ELEV: 69.28 DATUM: MSL

LEGEND	SYMBOL
ABOVE GRADE ELEV.	[91.59]
ON GRADE ELEV.	X 82.33
PROPERTY LINE	—
ADJACENT PROPERTY LINE	- - -
EASEMENT LINE	- · - · -
RETAINING WALL	==
FENCE	— · — · —
EXISTING BUILDING ROOF LINE	- - - - -

**PRELIMINARY**  
PROGRESS SET ONLY!

JOB NO. 17-031 7/06/17  
**SOWARDS & BROWN ENGINEERING**  
CONSULTING ENGINEERS  
5187 NEWCASTLE AVENUE SUITE 105  
CANDIFF BY THE SEA, CA., 92007  
TEL. 760/436-8500 FAX 760/436-8603

**LEGEND**

- HP-3** Approximate Location of Exploratory Handpit
- B-1** Approximate Location of Exploratory Boring
- A A'** Approximate Location of Cross Section

**PLOT PLAN**

*Bradberry Residence*  
141 Pacific Avenue  
Solana Beach, CA.  
Figure No. II  
Job No. 17-11545



(November 2017)

**GSL Setback**  
(combined 75 year erosion and factor of safety)

**75 Year Erosion Rate Setback**

**1.5 Factor of Safety Setback**

**Bluff Edge**

NOTE: This Plot Plan is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

REFERENCE: This Plot Plan was prepared from an existing Preliminary Topographic Plat by SOWARDS & BROWN ENGINEERING dated 7/06/17 and from on-site field reconnaissance performed by GEI.

EQUIPMENT <b>Truck-mounted Auger Drill Rig</b>	DIMENSION & TYPE OF EXCAVATION <b>8-inch diameter Boring</b>	DATE LOGGED <b>7-7-17</b>
SURFACE ELEVATION <b>± 86' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
0 - 2			<b>ASPHALT</b> , 2.5" thick.		SM								
2 - 3			<b>SILTY SAND</b> , fine- to medium-grained. Loose to medium dense. Dry. Light red-brown.										
3 - 4			<b>FILL (Qaf)</b>		SC								
4 - 6			<b>CLAYEY SAND</b> , fine- to medium-grained. Medium dense. Moist. Dark red-brown.			4.4	107.4					13	3"
6 - 8			<b>OLD PARALIC DEPOSITS (Qop 6)</b>									27	2"
8 - 10			Bulk bag sample from 4'- 8'. -- 11% passing #200 sieve.					9.5	120.0				
10 - 12			<b>POORLY GRADED SAND/ CLAYEY SAND</b> , fine- to medium-grained. Dense. Slightly moist. Red-brown to light gray-brown.		SP-SC	4.3	120.2					31	3"
12 - 14			<b>OLD PARALIC DEPOSITS (Qop 6)</b>									31	2"
14 - 16												82	3"
16 - 18												59	2"
18 - 20						3.8	111.3					94/11"	3"
20 - 22			Bulk bag sample from 18'- 22'. -- 15% passing #200 sieve.					9.0	128.0			46	2"

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

<ul style="list-style-type: none"> <li> PERCHED WATER TABLE</li> <li> BULK BAG SAMPLE</li> <li> IN-PLACE SAMPLE</li> <li> MODIFIED CALIFORNIA SAMPLE</li> <li> NUCLEAR FIELD DENSITY TEST</li> <li> STANDARD PENETRATION TEST</li> </ul>	JOB NAME <b>Bradberry Residence</b>		LOG No. <b>B-1</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>17-11545</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>IIIa</b>		



EQUIPMENT <b>Truck-mounted Auger Drill Rig</b>	DIMENSION & TYPE OF EXCAVATION <b>8-inch diameter Boring</b>	DATE LOGGED <b>7-7-17</b>
SURFACE ELEVATION <b>± 86' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
24				<b>POORLY GRADED SAND</b> , fine- to medium-grained; cohesionless, some mica. Dense. Slightly moist. Light gray-brown.	SP							86/11"	3"
26				<b>OLD PARALIC DEPOSITS (Qop 6)</b>								44	2"
28						1.8	102.9					94/11"	3"
30												46	2"
32													
34												83	3"
36												44	2"
36				Bulk bag sample from 33'- 38'. -- 4% passing #200 sieve.				10.0	110.5				
38				-- becomes very dense, light brown.		2.2	100.8					81/11"	3"
40												60	2"
42													
44												84/10.5"	3"
												64	2"

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

	JOB NAME <b>Bradberry Residence</b>		LOG No. <b>B-1</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>17-11545</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>IIIb</b>		

EQUIPMENT <b>Truck-mounted Auger Drill Rig</b>	DIMENSION & TYPE OF EXCAVATION <b>8-inch diameter Boring</b>	DATE LOGGED <b>7-7-17</b>
SURFACE ELEVATION <b>± 86' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
48			<b>POORLY GRADED SAND</b> , fine- to medium-grained; cohesionless, some mica. Dense. Slightly moist. Light gray-brown.		SP							82/11"	3"
			<b>OLD PARALIC DEPOSITS (Qop 6)</b>									65	2"
50			<b>SILTY SAND</b> , fine- to medium-grained. Very dense. Moist. Brown.		SM								
			<b>OLD PARALIC DEPOSITS (Qop 6)</b>										
52													
54													
56													
58			<b>SILTY SAND</b> , fine- to medium-grained, trace iron oxide staining; moderate to strong cementation. Very dense. Slightly moist. Light yellow-brown.		SM							50/2"	3"
			<b>TORREY SANDSTONE (Tt)</b> -- 16% passing #200 sieve.									50/3"	2"
60													
62													
64			Bulk bag sample from 62'- 68'. -- 9% passing #200 sieve.										
66													
68												50/2"	2"

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bradberry Residence</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>
	JOB NUMBER <b>17-11545</b>
	FIGURE NUMBER <b>IIIc</b>
REVIEWED BY <b>LDR/JAC</b>	LOG No. <b>B-1</b>

EQUIPMENT <b>Truck-mounted Auger Drill Rig</b>	DIMENSION & TYPE OF EXCAVATION <b>8-inch diameter Boring</b>	DATE LOGGED <b>7-7-17</b>
SURFACE ELEVATION <b>± 86' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
70			<b>SILTY SAND</b> , fine- to medium-grained, trace iron oxide staining; moderate to strong cementation. Very dense. Slightly moist. Light yellow-brown.		SM								
72			<b>TORREY SANDSTONE (Tt)</b>										
74													
76													
78												50/2"	2"
80			Bottom @ 78.25'										
82													
84													
86													
88													
90													

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

	JOB NAME <b>Bradberry Residence</b>		LOG No. <b>B-1</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>17-11545</b>	REVIEWED BY <b>LDR/JAC</b>	
	FIGURE NUMBER <b>III d</b>		

EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>2' X 2' X 2' Handpit</b>	DATE LOGGED <b>7-10-17</b>
SURFACE ELEVATION <b>± 85' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)										
0			<b>SILTY SAND</b> , fine- to medium-grained, with some roots and rock fragments. Loose. Dry. Gray-brown.	<b>FILL (Qaf)</b>	SM								
1			<b>POORLY GRADED SAND</b> , fine- to medium-grained. Medium dense. Slightly moist. Red-brown.	<b>OLD PARALIC DEPOSITS (Qop 6)</b>	SP								
2			Bottom @ 2'										
3													
4													

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bradberry Residence</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>
	JOB NUMBER <b>17-11545</b>
	FIGURE NUMBER <b>Ille</b>
	REVIEWED BY <b>LDR/JAC</b>
	LOG No. <b>HP-1</b>

EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>2' X 3' X 3' Handpit</b>	DATE LOGGED <b>7-10-17</b>
SURFACE ELEVATION <b>± 86' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		U.S.C.S.	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + (%)	CONSOL. - (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)											
0			<b>SILTY SAND</b> , fine- to medium-grained, with some roots. Loose to medium dense. Slightly moist. Red-brown.	<b>FILL (Qaf)</b>	SM									
1			<b>POORLY GRADED SAND</b> , fine- to medium-grained. Medium dense. Slightly moist. Red-brown.	<b>OLD PARALIC DEPOSITS (Qop 6)</b>	SP									
2														
3														
4														
5														
			Bottom @ 3'											

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bradberry Residence</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>
	JOB NUMBER <b>17-11545</b>
	FIGURE NUMBER <b>III f</b>
	REVIEWED BY <b>LDR/JAC</b>
	LOG No. <b>HP-2</b>

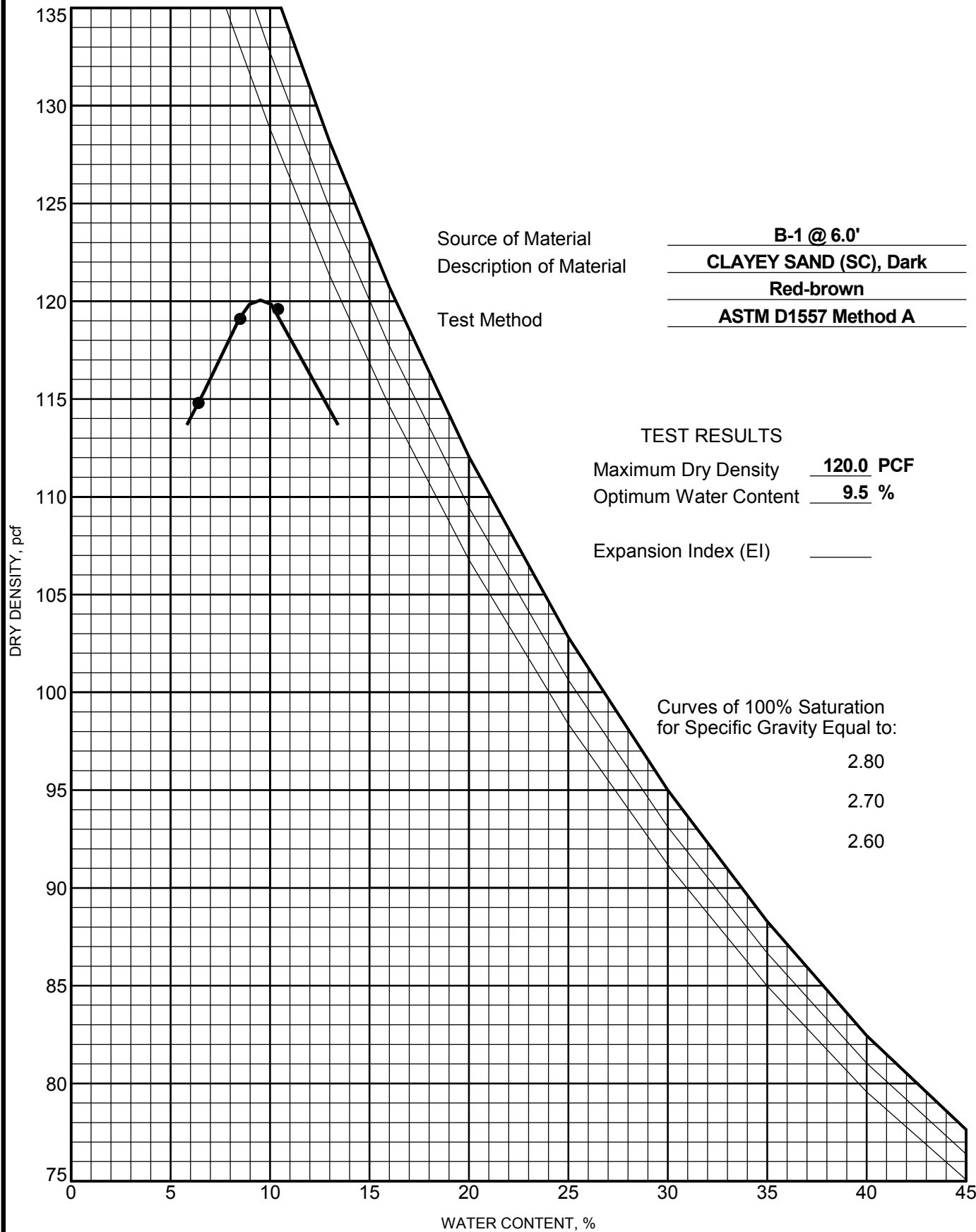
EQUIPMENT <b>Hand Tools</b>	DIMENSION & TYPE OF EXCAVATION <b>2' X 2' X 2' Handpit</b>	DATE LOGGED <b>7-10-17</b>
SURFACE ELEVATION <b>± 86' Mean Sea Level</b>	GROUNDWATER/ SEEPAGE DEPTH <b>Not Encountered</b>	LOGGED BY <b>JAB</b>

DEPTH (feet)	SYMBOL	SAMPLE	FIELD DESCRIPTION AND CLASSIFICATION		IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	DENSITY (% of M.I.D.)	EXPAN. + CONSOL. (%)	BLOW COUNTS/FT.	SAMPLE O.D. (INCHES)
			DESCRIPTION AND REMARKS (Grain size, Density, Moisture, Color)	U.S.C.S.								
1			<b>SILTY SAND</b> , fine- to medium-grained, with some roots and rock fragments. Loose. Dry. Gray-brown.  <b>FILL (Qaf)</b>	SM								
2			<b>POORLY GRADED SAND</b> , fine- to medium-grained. Medium dense. Slightly moist. Red-brown.  <b>OLD PARALIC DEPOSITS (Qop 6)</b>	SP								
3			Bottom @ 2'									
4												

EXPLORATION LOG 11545 BRADBERRY.GPJ GEO\_EXPL\_GDT 7/24/17

PERCHED WATER TABLE BULK BAG SAMPLE IN-PLACE SAMPLE MODIFIED CALIFORNIA SAMPLE NUCLEAR FIELD DENSITY TEST STANDARD PENETRATION TEST	JOB NAME <b>Bradberry Residence</b>	REVIEWED BY <b>LDR/JAC</b>	LOG No. <b>HP-3</b>
	SITE LOCATION <b>141 Pacific Avenue, Solana Beach, CA</b>		
	JOB NUMBER <b>17-11545</b>		
	FIGURE NUMBER <b>IIIg</b>		

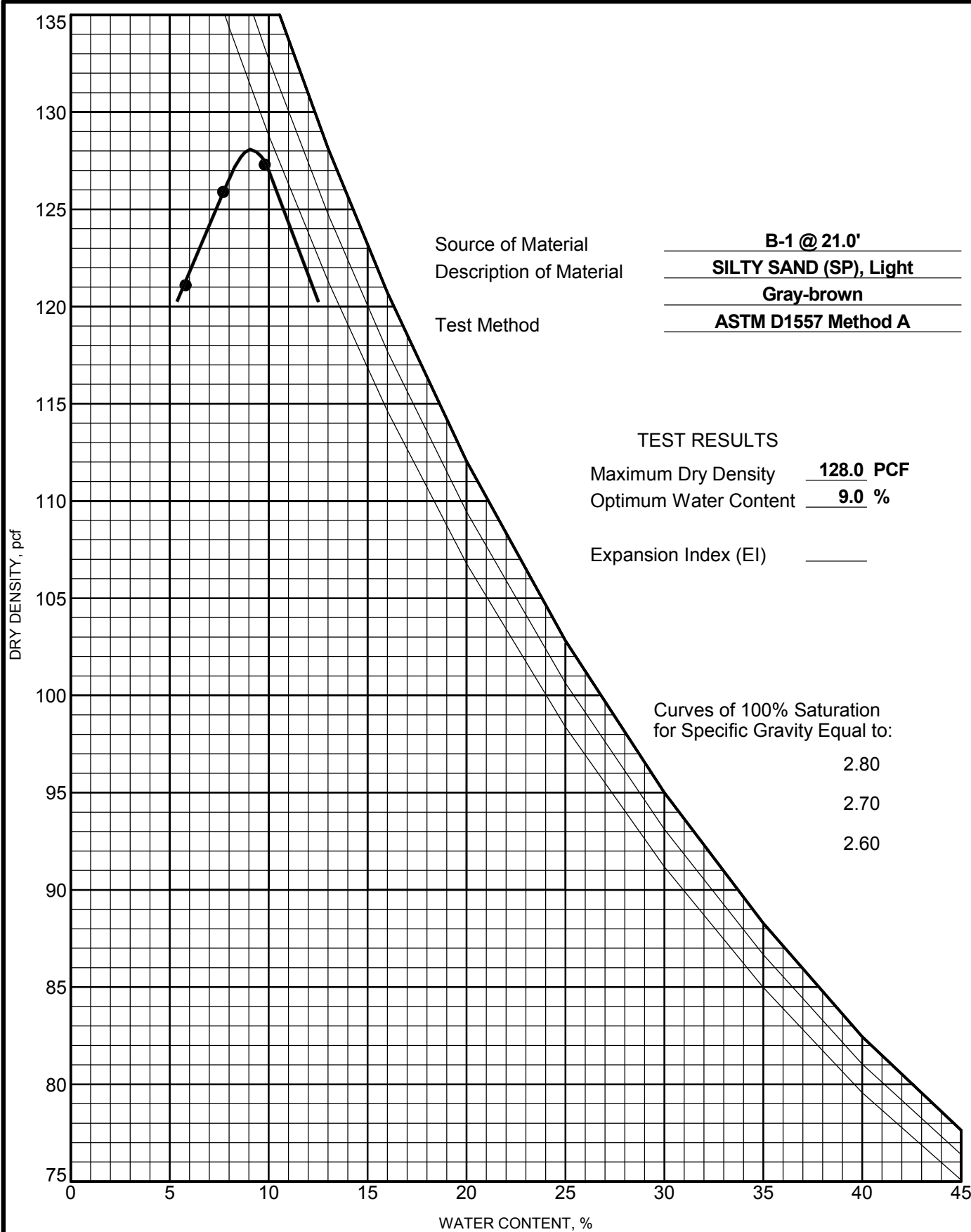
COMPACTION + E1 DARK GRID - 11545 BRADBERRY.GPJ GEI FEB06.GDT 7/24/17



**MOISTURE-DENSITY RELATIONSHIP**

Figure Number: IVa  
Job Name: Bradberry Residence  
Site Location: 141 Pacific Avenue, Solana Beach, CA  
Job Number: 17-11545

COMPACTION + EILDARK GRID - 11545 BRADBERRY.GPJ GEI FEB06.GDT 7/24/17



**MOISTURE-DENSITY RELATIONSHIP**

Figure Number: IVb

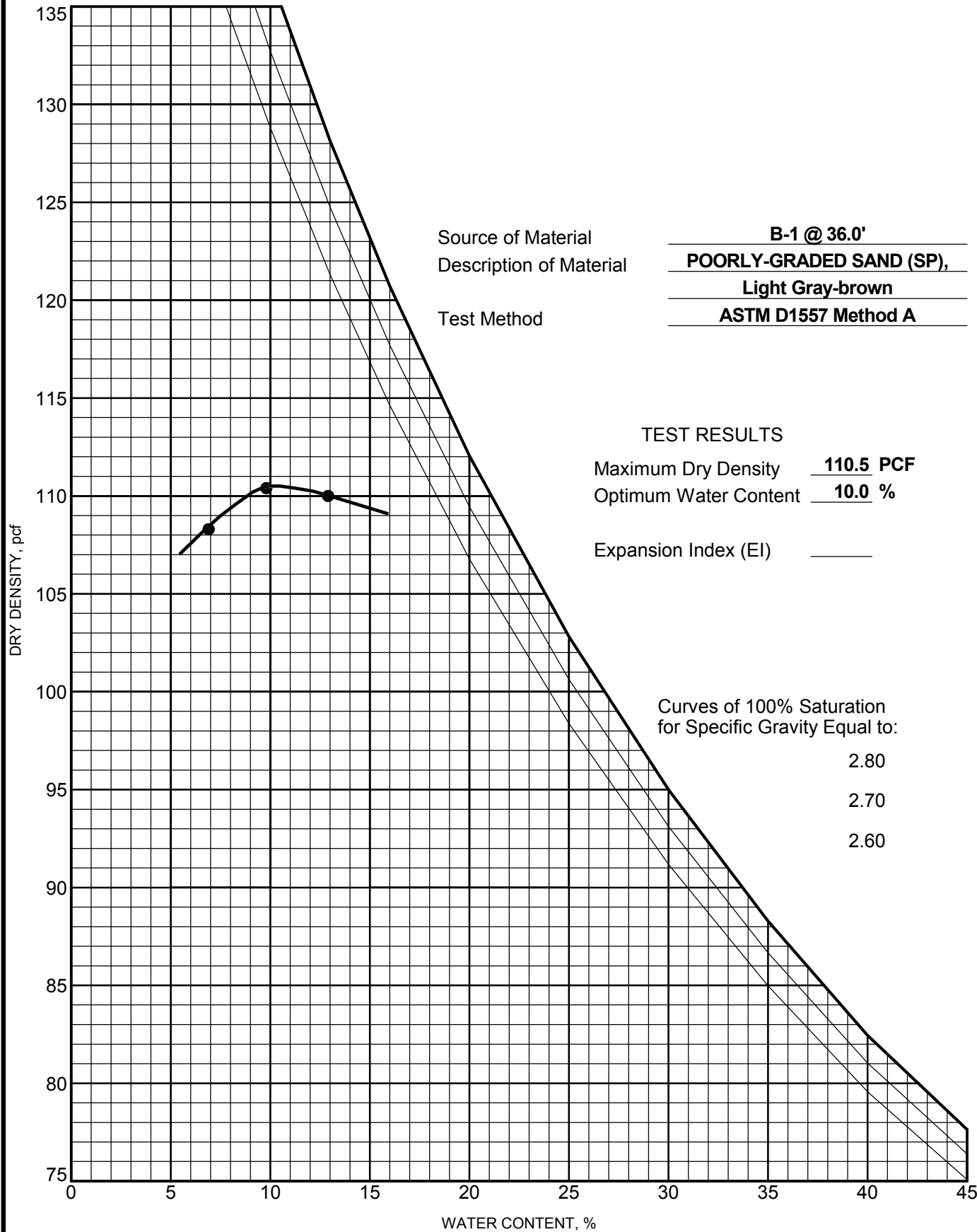
Job Name: Bradberry Residence

Site Location: 141 Pacific Avenue, Solana Beach, CA

Job Number: 17-11545



COMPACTION + EIDARK GRID - 11545 BRADBERRY.GPJ GEI FEB06.GDT 7/24/17

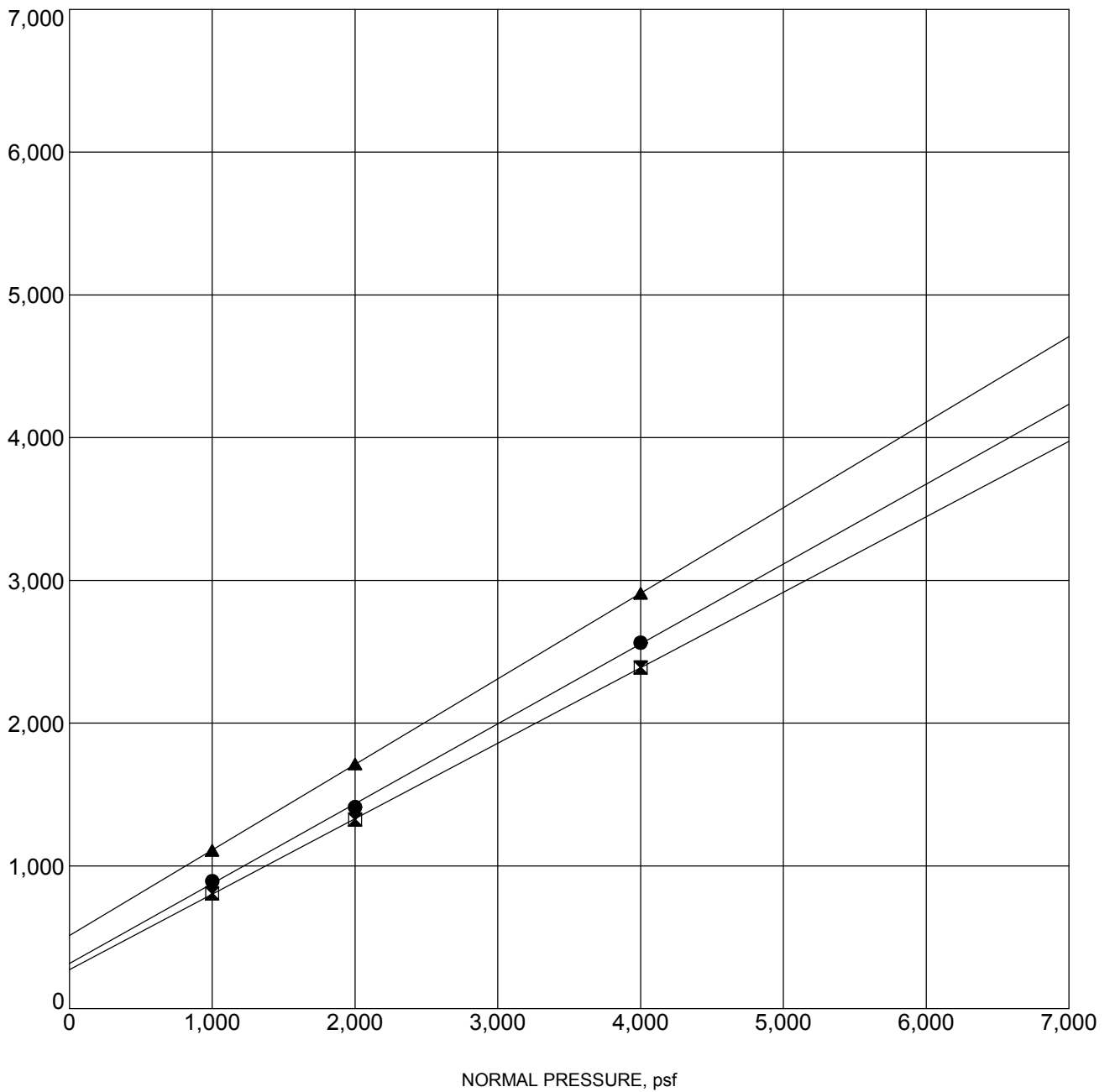


Source of Material B-1 @ 36.0'  
Description of Material POORLY-GRADED SAND (SP),  
Light Gray-brown  
Test Method ASTM D1557 Method A



**MOISTURE-DENSITY RELATIONSHIP**  
Figure Number: IVc  
Job Name: Bradberry Residence  
Site Location: 141 Pacific Avenue, Solana Beach, CA  
Job Number: 17-11545

SHEAR STRENGTH, psf



US DIRECT SHEAR 11545 BRADBERRY.GPJ GEO EXPL.GDT 8/1/17

Specimen Identification	Classification	$\gamma_d$	MC%	c	$\phi$
● B-1 @ 8.5'	CLAYEY SAND (SC), Dark Red-brown			317	29
⊠ B-1 @ 29.0'	POORLY-GRADED SAND (SP), Light Gray-brown			274	28
▲ B-1 @ 62.0'	SILTY SAND (SM), Light Yellow-brown			511	31



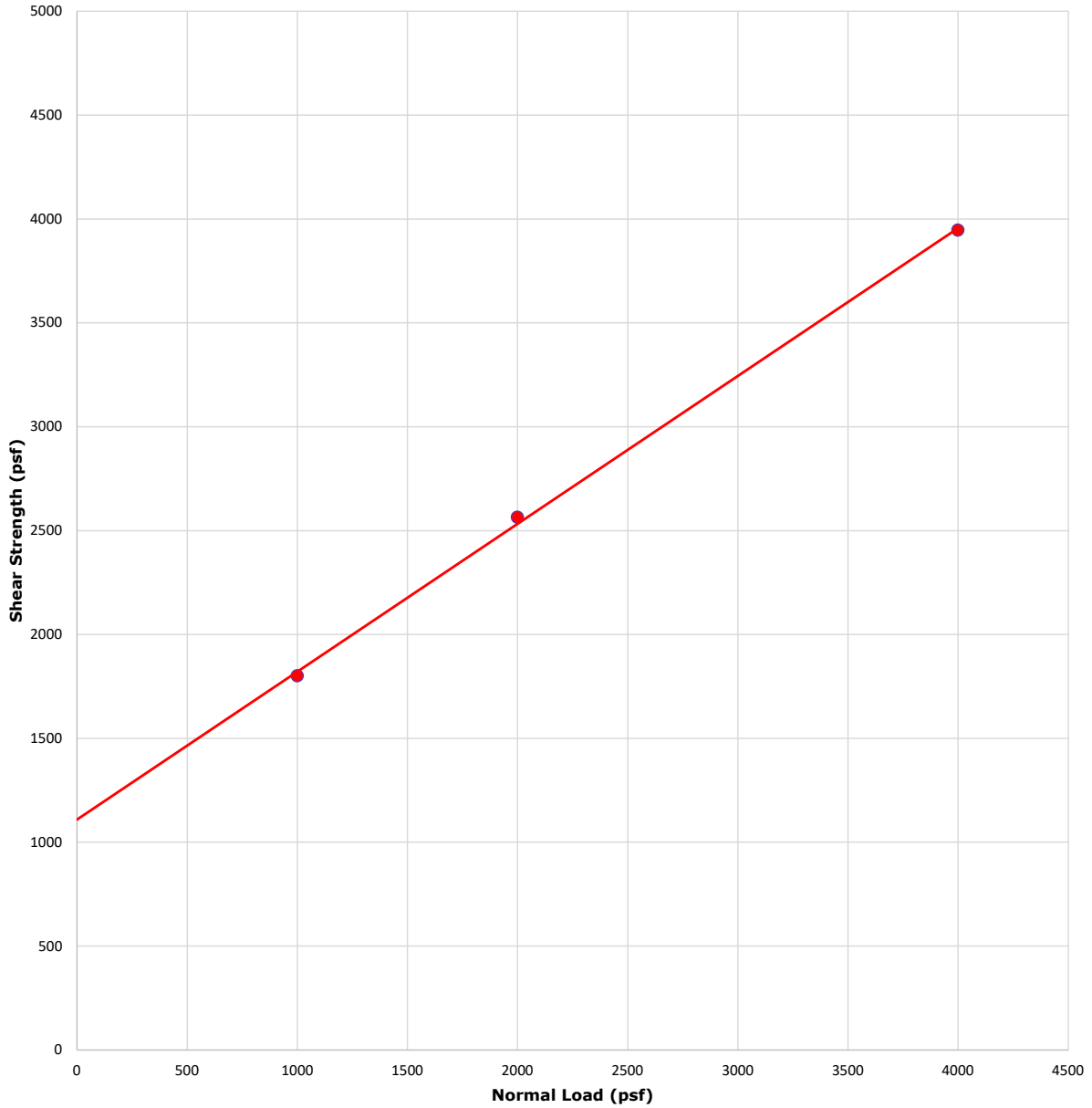
**Geotechnical  
Exploration, Inc.**


**DIRECT SHEAR TEST**


Figure Number: IVd  
 Job Name: Bradberry Residence  
 Site Location: 141 Pacific Avenue, Solana Beach, CA  
 Job Number: 17-11545

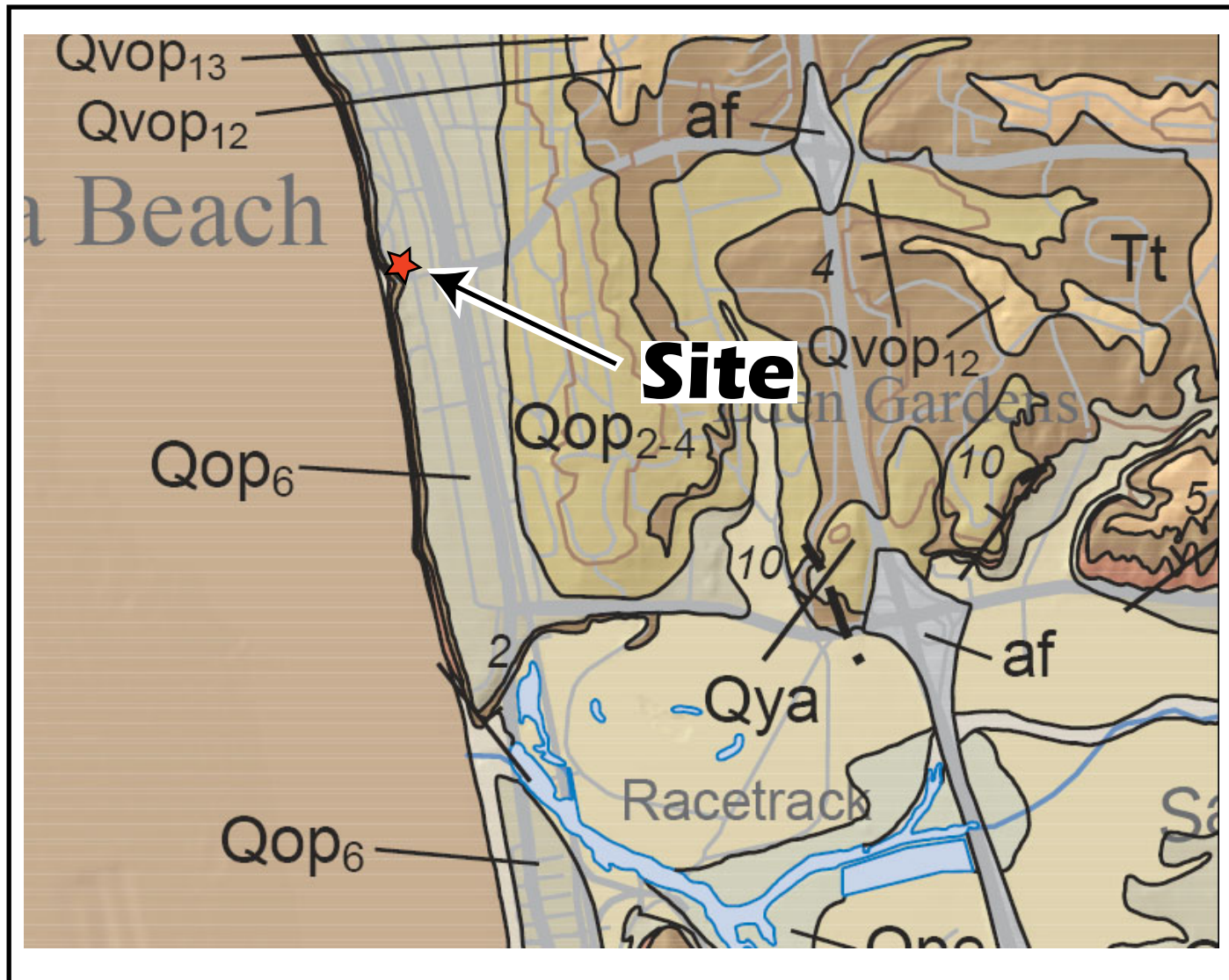
# LABORATORY TEST RESULTS

Standard Test Method for Direct Shear Tests of Soils



Symbol	
Source of Material	B-1
Depth	35-36 Feet
U.S.C.S.	SILTY SAND (SM)
Test Method	ASTM D3080, Unsaturated Peak, Remolded to 95%
Friction Angle $\phi$ (degrees)	35.4
Cohesion (psf)	1108.8

 <b>Geotechnical Exploration, Inc.</b>	<b>JOB NUMBER:</b> 17-11545 <b>JOB NAME:</b> Bradberry Residence	<b>DIRECT SHEAR</b>  <b>Figure No. IVd</b>
	<b>SITE LOCATION:</b> 141 Pacific Street, Solana Beach, CA	



Bradberry Residence  
141 Pacific Avenue  
Solana Beach, CA.

EXCERPT FROM GEOLOGIC MAP OF THE SAN DIEGO 30' x 60' QUADRANGLE, CALIFORNIA

By  
Michael P. Kennedy<sup>1</sup> and Siang S. Tan<sup>1</sup>  
2008

Digital preparation by  
Kelly R. Bovard<sup>2</sup>, Anne G. Garcia<sup>2</sup>, Diane Burns<sup>2</sup>, and Carlos I. Gutierrez<sup>1</sup>

<sup>1</sup> Department of Conservation, California Geological Survey  
<sup>2</sup> U.S. Geological Survey, Department of Earth Sciences, University of California, Riverside

ONSHORE MAP SYMBOLS

- Contact - Contact between geologic units; dotted where concealed.
- Fault - Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
- Anticline - Solid where accurately located; dashed where approximately located; dotted where concealed. Arrow indicates direction of axial plunge.
- Syncline - Solid where accurately located; dotted where concealed. Arrow indicates direction of axial plunge.
- Landslide - Arrows indicate principal direction of movement. Queried where existence is questionable.

Strike and dip of beds

70  
Inclined

Strike and dip of igneous joints

60  
Inclined

Vertical

Strike and dip of metamorphic foliation

55  
Inclined

DESCRIPTION OF MAP UNITS

**Tt** **Torrey Sandstone (middle Eocene)**—White to light-brown, medium- to coarse-grained, moderately well indurated, massive and broadly cross-bedded, arkosic sandstone. This unit is the Torrey Sand Member of Hanna (1926) and was named for exposures at Torrey Pines State Park. It is now considered a formation of the La Jolla Group (Kennedy and Moore, 1971)

**Qop6** **Old paralic deposits, undivided (late to middle Pleistocene)**  
Unit 6

Base Map  
Onshore base (topography, hydrography, and transportation) from U.S.G.S. digital line graph (DLG) data, San Diego 30' x 60' metric quadrangle. Shaded topographic base from U.S.G.S. digital elevation models (DEM's). Offshore bathymetric contours and shaded bathymetry from N.O.A.A. single and multibeam data. Projection is UTM, zone 11, North American Datum 1927.



This map was funded in part by the U.S. Geological Survey National Cooperative Geologic Mapping Program, STATEMAP Award no. 98HQAG2049.  
Prepared in cooperation with the U.S. Geological Survey, Southern California Areal Mapping Project.

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The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

Figure No. V  
Job No. 17-11545



# CROSS SECTION A-A'

Bradberry Residence  
141 Pacific Avenue  
Solana Beach, CA.

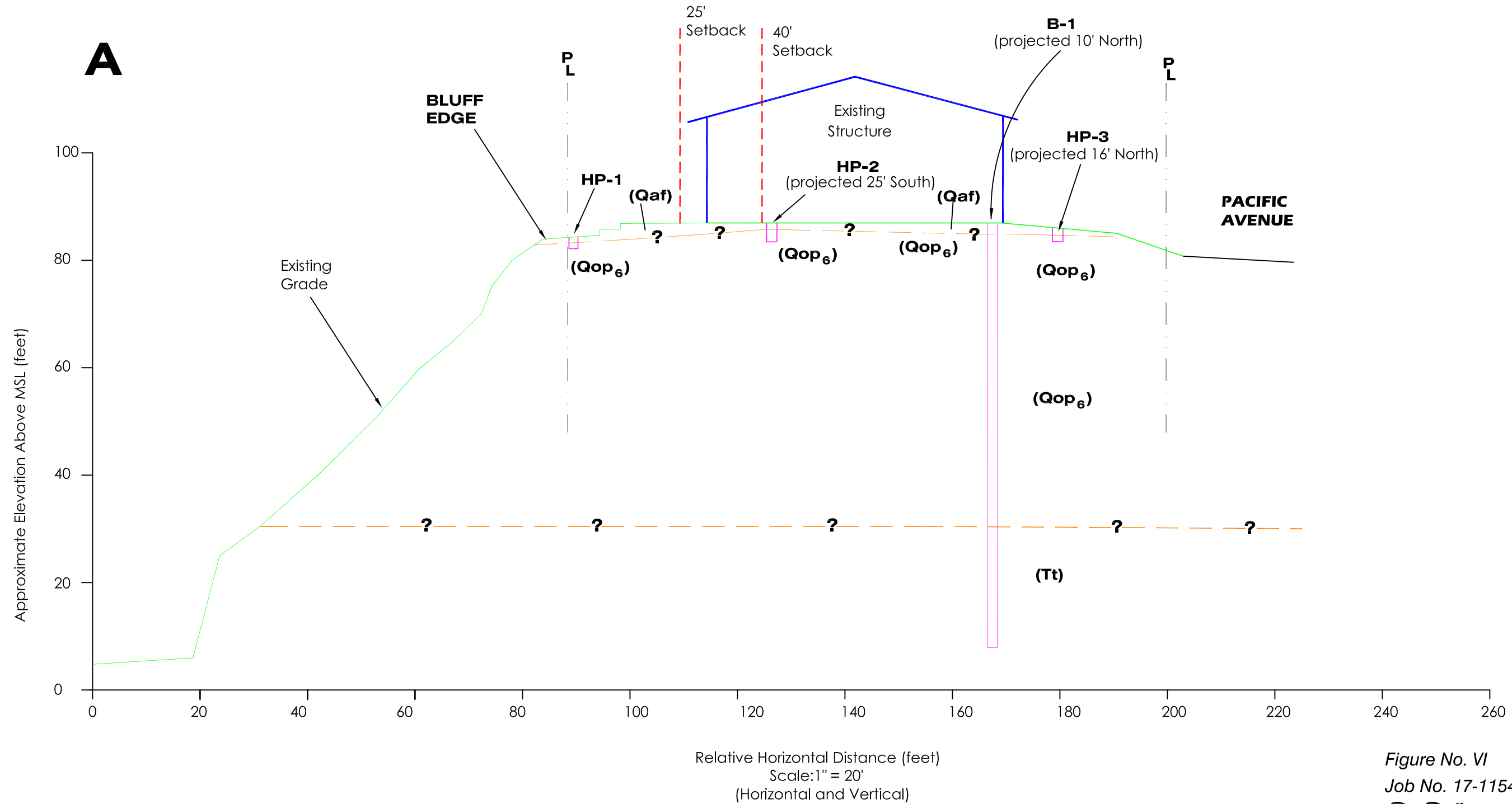


Figure No. VI  
Job No. 17-11545



July 2017

NOTE: This Cross Section is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

**APPENDIX A**  
**UNIFIED SOIL CLASSIFICATION SYSTEM (U.S.C.S.)**  
**SOIL DESCRIPTION**

**Coarse-grained (More than half of material is larger than a No. 200 sieve)**

GRAVELS, CLEAN GRAVELS (More than half of coarse fraction is larger than No. 4 sieve size, but smaller than 3")	GW	Well-graded gravels, gravel and sand mixtures, little or no fines.
	GP	Poorly graded gravels, gravel and sand mixtures, little or no fines.
GRAVELS WITH FINES	GC	Clay gravels, poorly graded gravel-sand-silt mixtures
SANDS, CLEAN SANDS (More than half of coarse fraction is smaller than a No. 4 sieve)	SW	Well-graded sand, gravelly sands, little or no fines
	SP	Poorly graded sands, gravelly sands, little or no fines.
SANDS WITH FINES	SM	Silty sands, poorly graded sand and silty mixtures.
	SC	Clayey sands, poorly graded sand and clay mixtures.

**Fine-grained (More than half of material is smaller than a No. 200 sieve)**

SILTS AND CLAYS

<u>Liquid Limit Less than 50</u>	ML	Inorganic silts and very fine sands, rock flour, sandy silt and clayey-silt sand mixtures with a slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, silty clays, lean clays.
	OL	Organic silts and organic silty clays of low plasticity.
<u>Liquid Limit Greater than 50</u>	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
	CH	Inorganic clays of high plasticity, fat clays.
	OH	Organic clays of medium to high plasticity.
HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils



## **APPENDIX B**

USGS Design Map Summary Report



# USGS Design Maps Summary Report

## User-Specified Input

**Report Title** Bradberry residence

Mon July 31, 2017 23:52:11 UTC

**Building Code Reference Document** ASCE 7-10 Standard

(which utilizes USGS hazard data available in 2008)

**Site Coordinates** 32.9923°N, 117.2746°W

**Site Soil Classification** Site Class D – "Stiff Soil"

**Risk Category** I/II/III

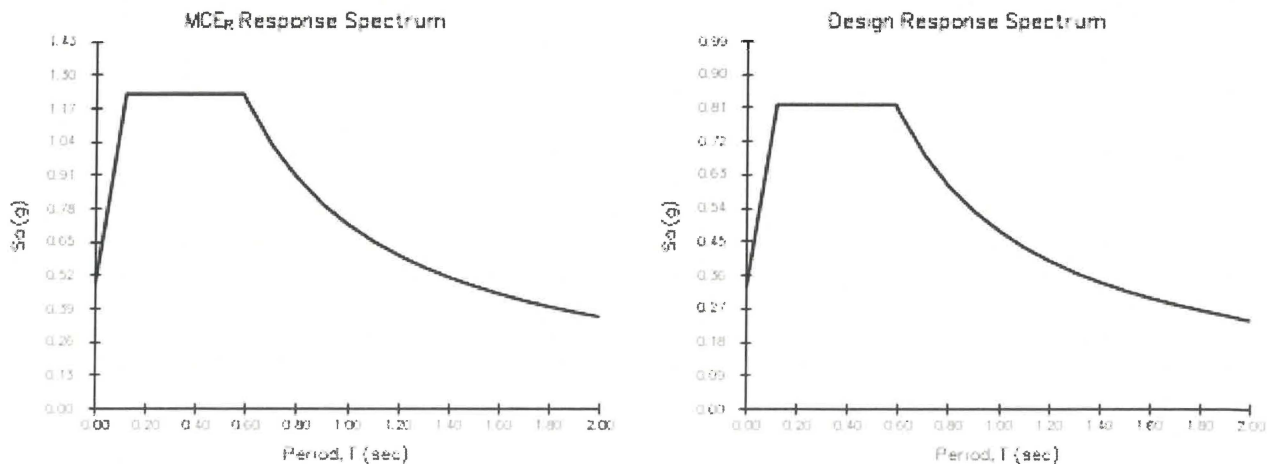


## USGS-Provided Output

$S_s = 1.208 \text{ g}$        $S_{MS} = 1.228 \text{ g}$        $S_{DS} = 0.819 \text{ g}$

$S_1 = 0.469 \text{ g}$        $S_{M1} = 0.718 \text{ g}$        $S_{D1} = 0.479 \text{ g}$

For information on how the  $S_s$  and  $S_1$  values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



For  $PGA_M$ ,  $T_L$ ,  $C_{RS}$ , and  $C_{R1}$  values, please [view the detailed report](#).

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.



# **A P P E N D I X C**

## **Slope Stability Analysis**



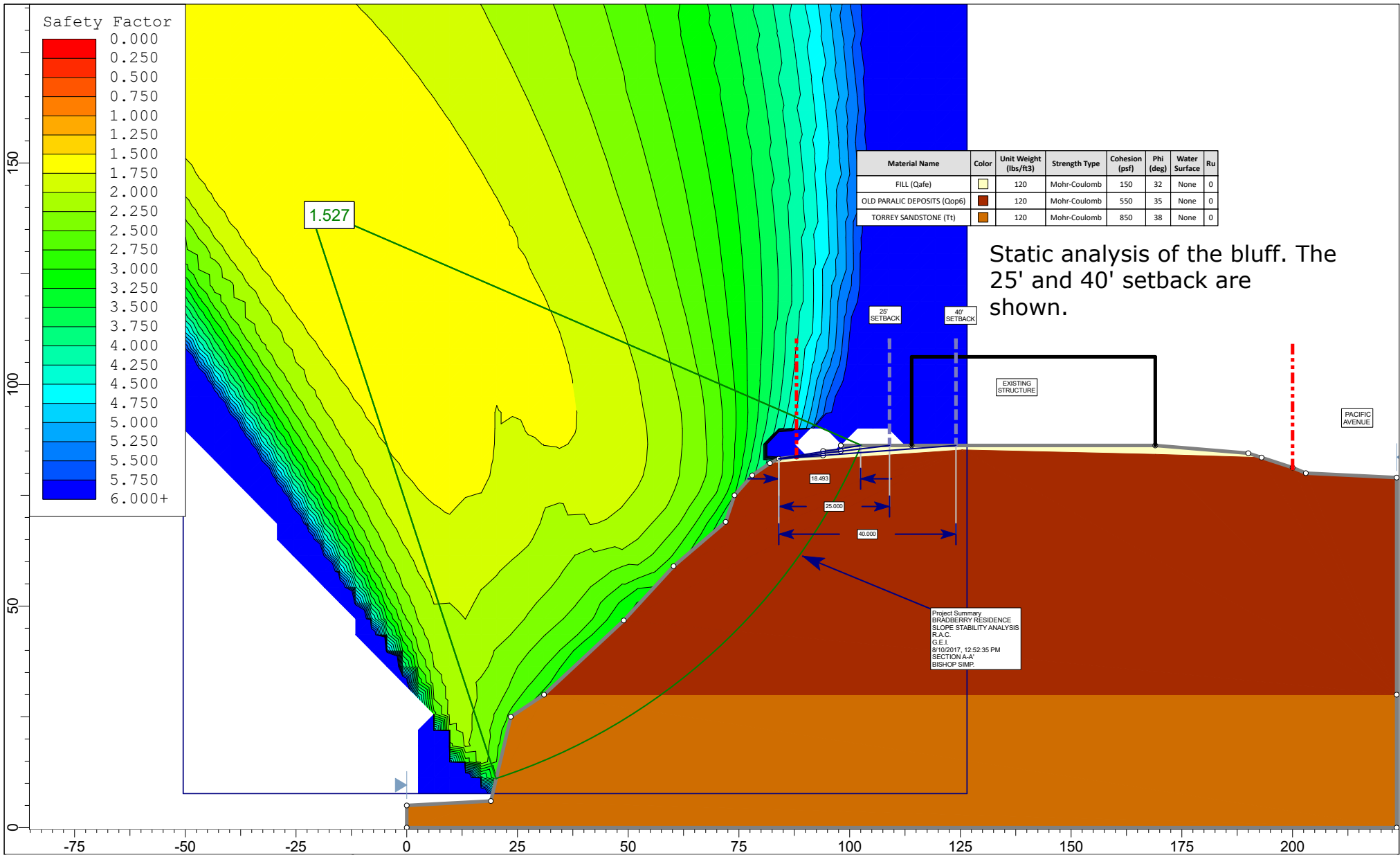
*SLOPE STABILITY CALCULATIONS WITH SLIDE 6 COMPUTER PROGRAM*  
*Bradberry Residence*  
**G.E.I. Job No. 17-11545**

We have performed gross slope stability calculations using the *SLIDE 6* program by Roc Science. The program is a limit equilibrium slope stability program that allows the use of several slope stability methods to calculate the factors of safety against shear failure. On this project, we used the Bishop Simplified method as a basis for calculations by using circular slide planes for analysis through the site geological cross sections.

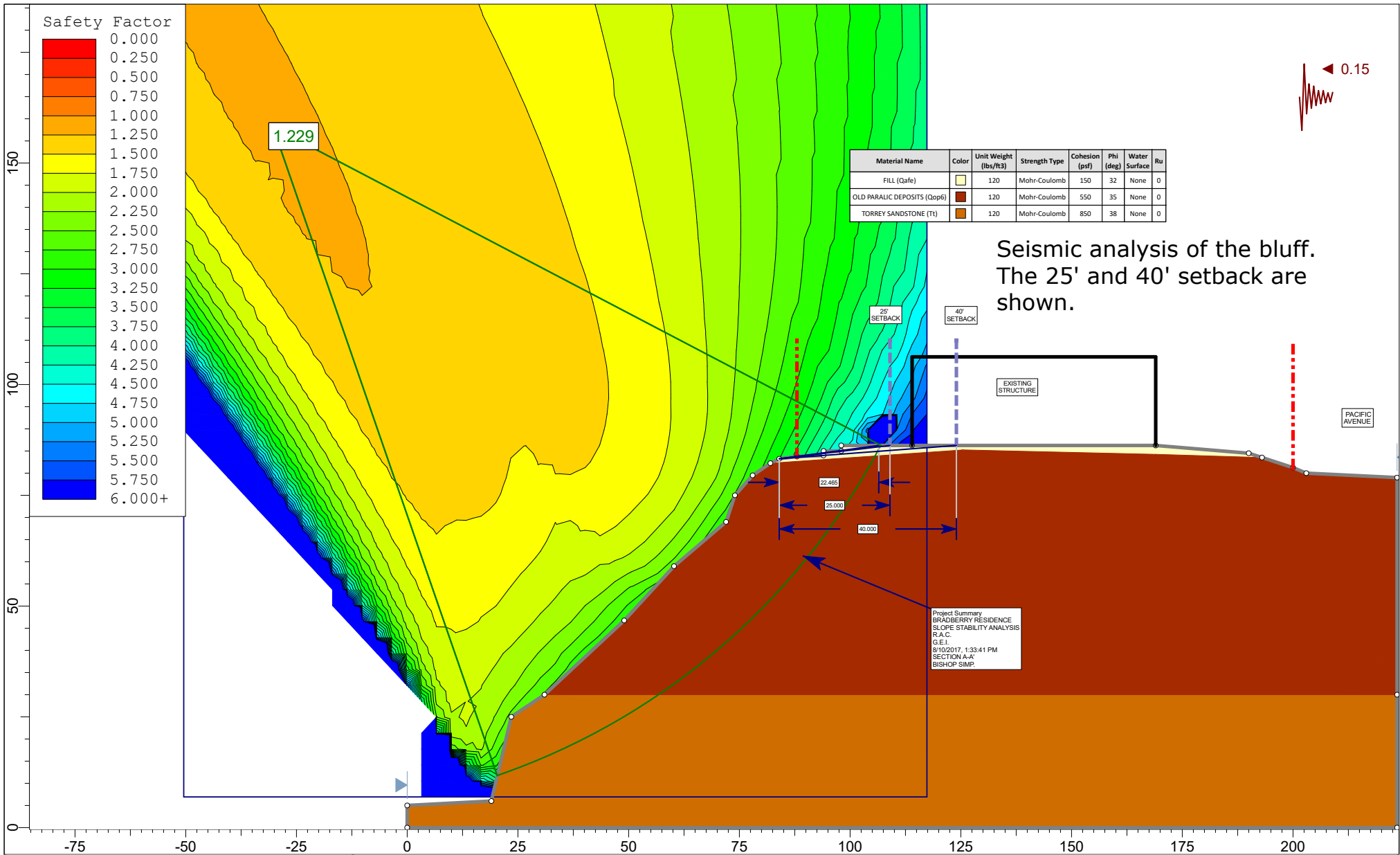
The program calculates the factor of safety against shear failure on potential slide surfaces for different range of locations that were specified. We chose the range of slide surfaces where shear failures appear most likely to occur. The program output displays the factor of safety for the analyzed surface range. The printout shows a geologic cross-section with different colored layers, with each layer corresponding to their respective soil strength parameters. A contour block with different colors and shades corresponds to different ranges of factors of safety within a calculated specified analyzed range of slide surfaces (see attached printouts for Section A-A' in the attached report. The program displays numbers inside the contour box representing the factor of safety for that surface. The green circle represents the lowest possible factor of safety that was calculated out of all possible calculated surfaces within the contour block. Soil strength values, geometry, and water conditions (no water encountered) used in the program were based on geological information at the site obtained by our project geologist. Soil strength values were obtained from shear strength tests performed by **Geotechnical Exploration Inc.** in remolded soil samples, however, the soil cohesion of formational soils cannot be fully reproduced in remolded soils samples, we have adjusted those values based on our experience and observations at the site and slopes in the vicinity.

Once the static gross stability of different slide planes was calculated, we analyzed the same sections including a seismic lateral force of 0.15g to obtain the factor of safety for seismic conditions. The calculated factors of safety for both static and seismic analysis yielded values that are considered acceptable, i.e., 1.5 or higher for static load analysis, and 1.15 for seismic analysis.

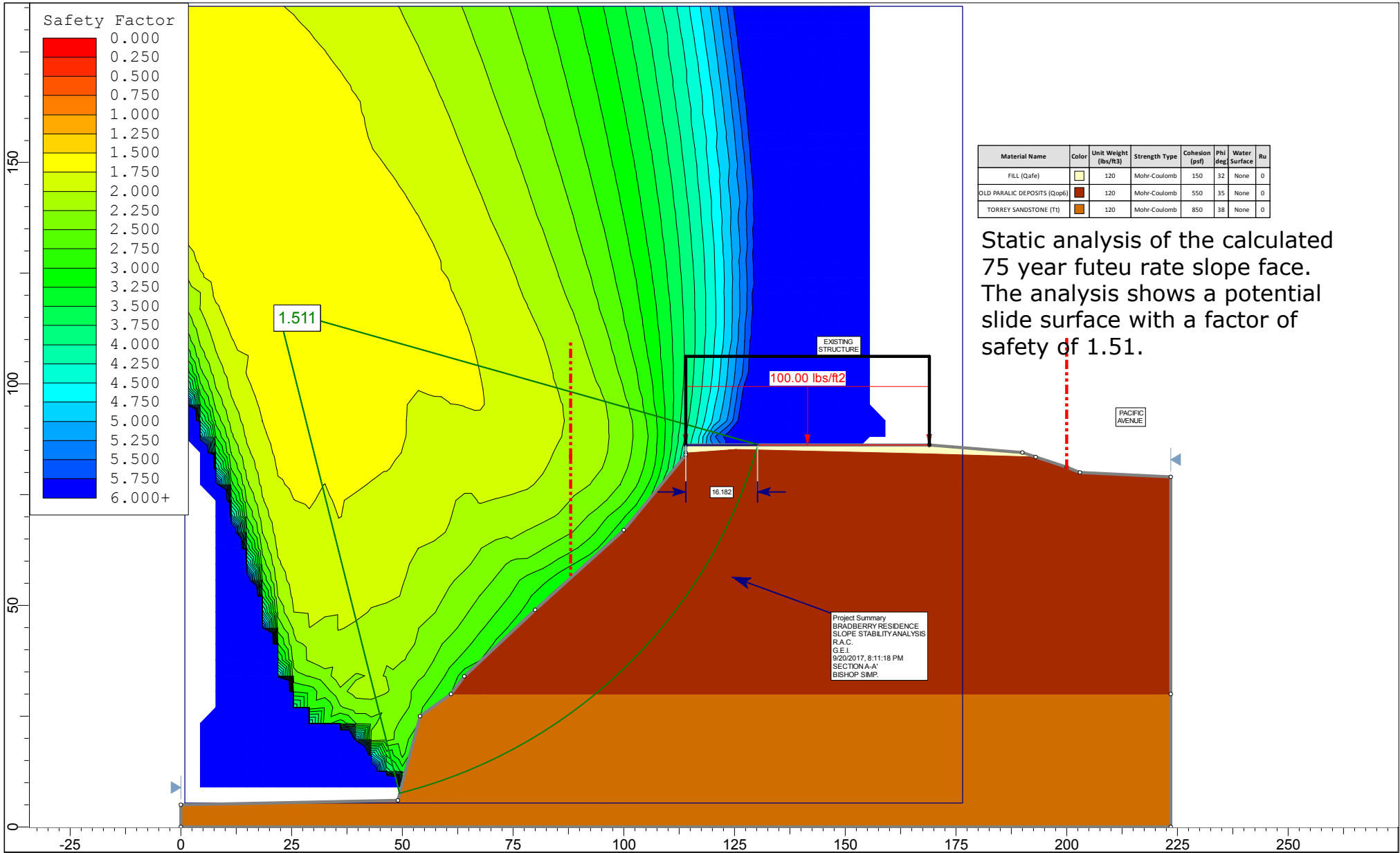
The shallow slope stability calculations were performed on the different slope segments measured on the slope faces of sections along the different slopes by using geotechnically accepted equation for infinite slopes with a saturated upper layer. The calculations were performed by assuming that the upper 3 feet of those soils were saturated and the slope segment analyzed had infinite length. The calculations yielded the factor of safety against shear failure of a sliding block 3 feet high against the soil shear strength frictional and cohesion strength opposing the driving force. The calculated factors of safety also yielded factors of safety that are equal or higher than the minimum acceptable of 1.5.



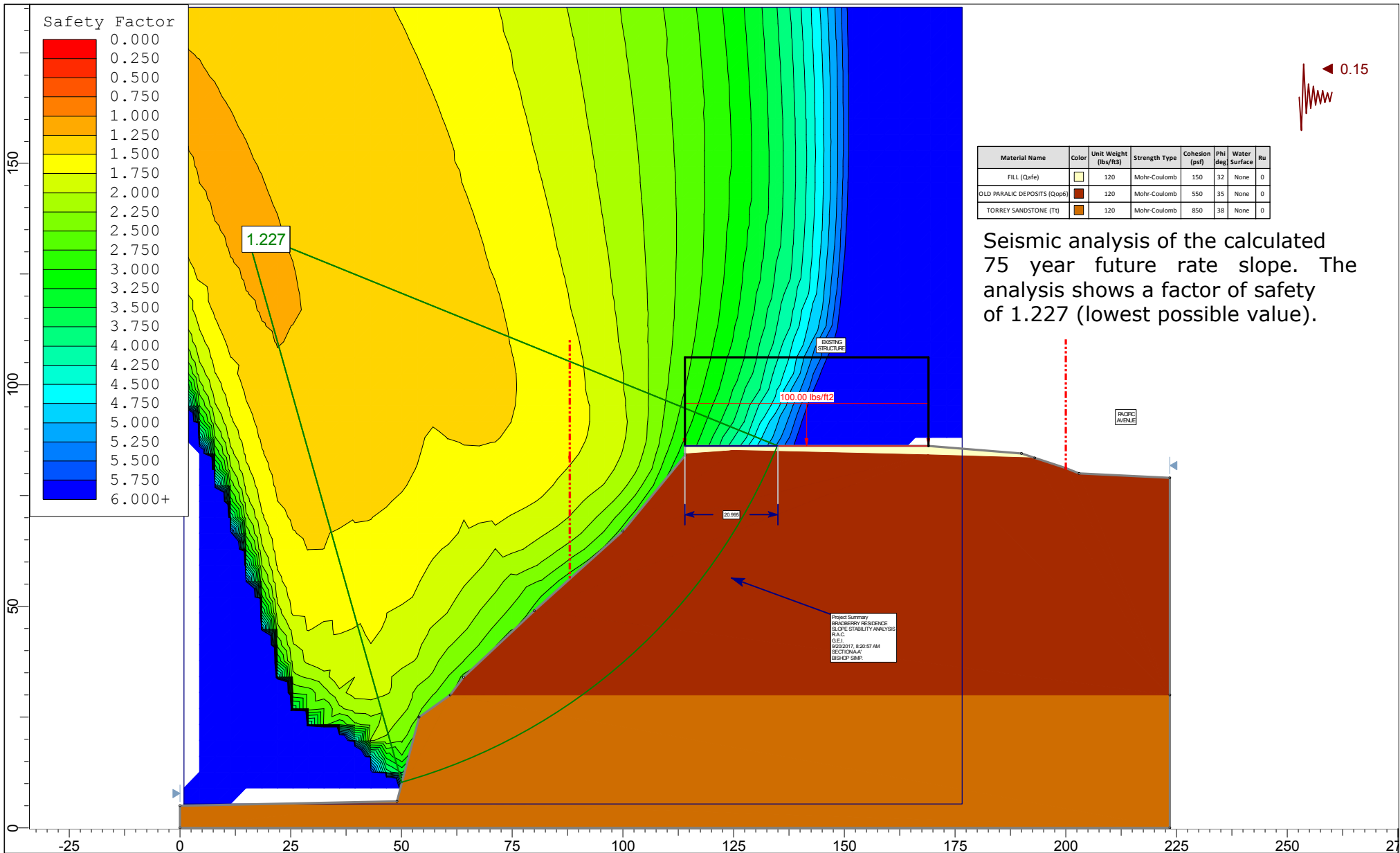
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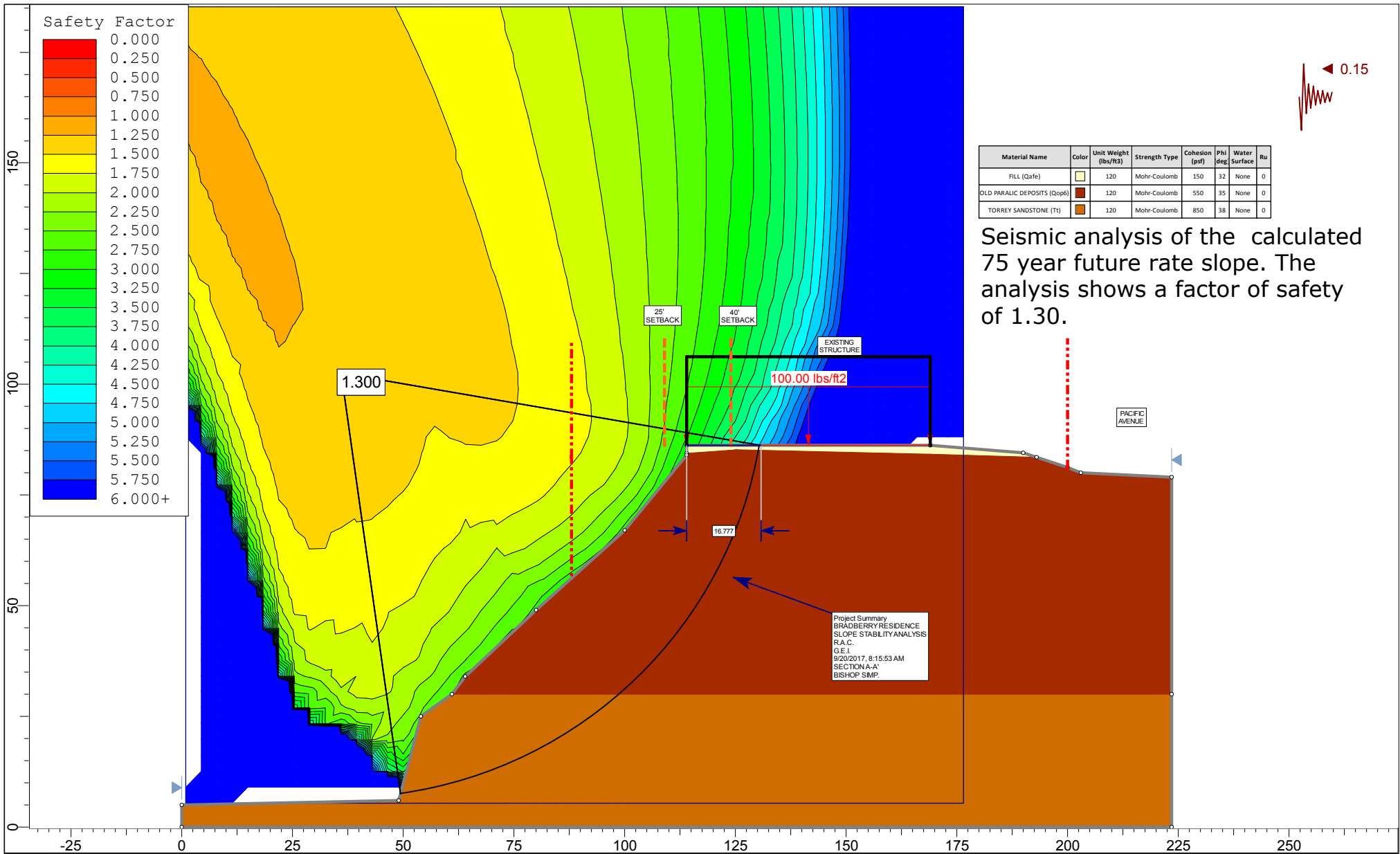
 <b>Geotechnical Exploration, Inc.</b> <small>SLIDEINTERPRET 6.039</small>	Project		BRADBERRY RESIDENCE	
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	Drawn By	R.A.C.	Scale	1:360
	Date	8/10/2017, 1:33:41 PM	Company	G.E.I.
		File Name	JOB NO. 17-11545A01w_0.15gSHAKE.slim	



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	Analysis Description			SLOPE STABILITY ANALYSIS		
	Drawn By	R.A.C.	Scale	1:360	Company	G.E.I.
	Date	9/20/2017, 8:11:18 PM		File Name	JOB NO. 17-11545A02.slim	



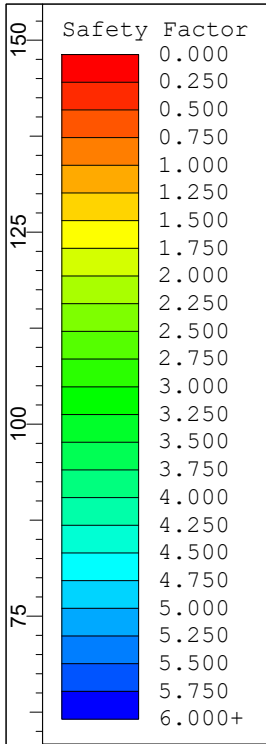
	Project <b>BRADBERRY RESIDENCE</b>		
	Analysis Description <b>SLOPE STABILITY ANALYSIS</b>		
	Drawn By <b>R.A.C.</b>	Scale <b>1:360</b>	Company <b>G.E.I.</b>
	Date <b>9/20/2017, 8:20:57 AM</b>		File Name <b>JOB NO. 17-11545A02w_0.15gSHAKE.slim</b>



Seismic analysis of the calculated 75 year future rate slope. The analysis shows a factor of safety of 1.30.

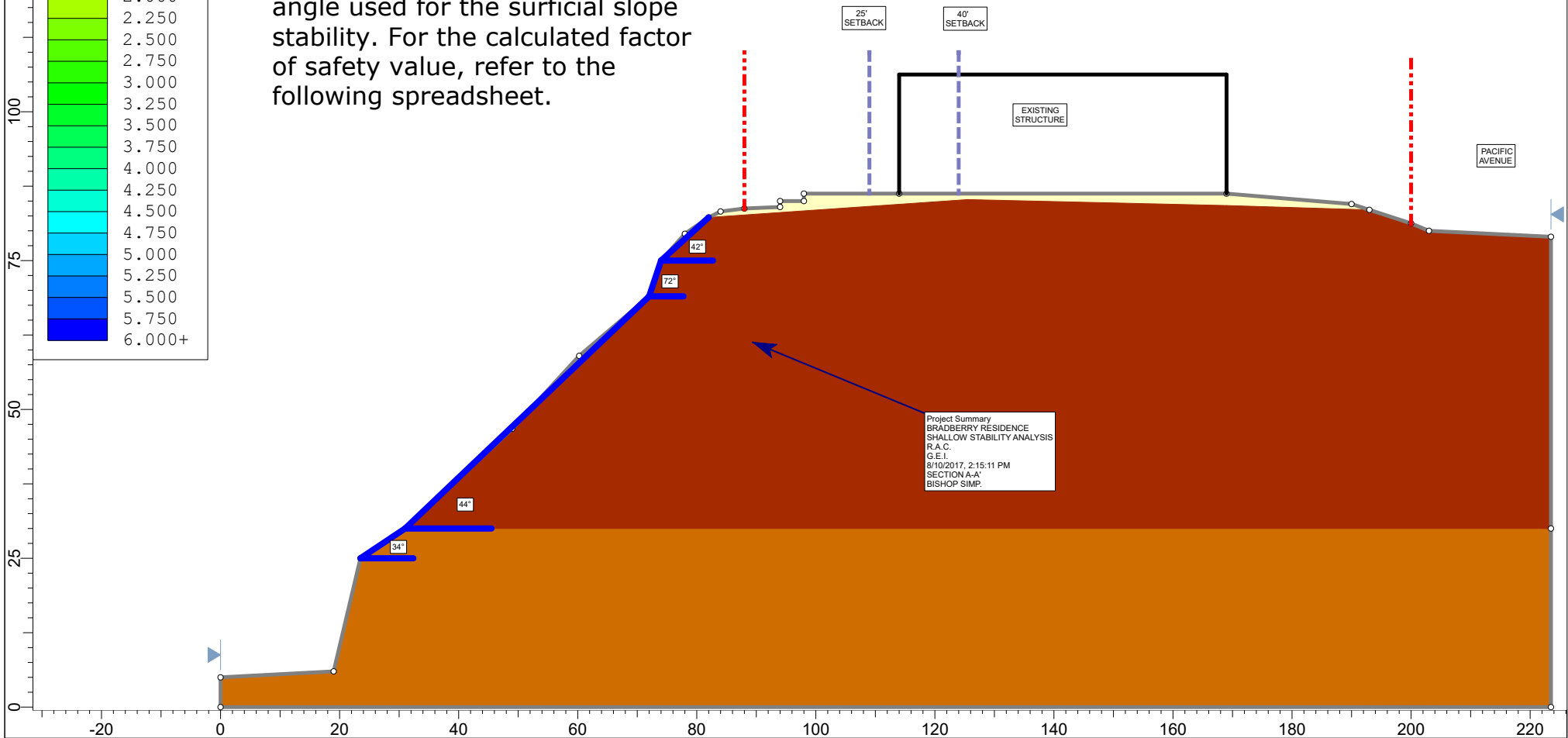
Project Summary  
BRADBERRY RESIDENCE  
SLOPE STABILITY ANALYSIS  
R.A.C.  
G.E.I.  
9/20/2017, 8:15:53 AM  
SECTION A-A  
BISHOP SMP.

	Project			BRADBERRY RESIDENCE		
	Analysis Description			SLOPE STABILITY ANALYSIS		
	Drawn By	R.A.C.	Scale	1:360	Company	G.E.I.
	Date	9/20/2017, 8:15:53 AM		File Name	JOB NO. 17-11545A03w_0.15gSHAKE.slim	



Material Name	Color	Unit Weight (lbs/ft <sup>3</sup> )	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
FILL (Qaf)	Light Yellow	120	Mohr-Coulomb	150	32	None	0
OLD PARALIC DEPOSITS (Qop6)	Dark Red	120	Mohr-Coulomb	550	35	None	0
TORREY SANDSTONE (T1)	Orange	120	Mohr-Coulomb	850	38	None	0

This analysis shows the inclination angle used for the surficial slope stability. For the calculated factor of safety value, refer to the following spreadsheet.



Project		BRADBERRY RESIDENCE	
Analysis Description		SHALLOW STABILITY ANALYSIS	
Drawn By	R.A.C.	Scale	1:300
Date	8/10/2017, 2:15:11 PM	Company	G.E.I.
		File Name	JOB NO. 17-11545A_SHALLOW.slim



**SHALLOW FAILURE**

EQUATION 1

$$F. S. = \left( \frac{C}{\gamma_{sat} \times H \times \cos(\beta) \times \sin(\beta)} \right) + \left( \frac{\gamma' \tan(\phi)}{\gamma_{sat} \tan(\beta)} \right)$$

$\gamma_{sat}$	$\gamma_{water}$	$\gamma'$	H
pcf	pcf	pcf	ft
130	62.4	67.6	3

SHALLOW SLOPE STABILITY ANALYSIS IS BASED ON EQUATION (1) FOR THE CALCULATED VALUES.

CROSS-SECTION A-A'				
SOIL TYPE	C (psf)	$\phi$ (°)	$\beta$ (°)	F.S.
OLD PARALIC DEP. (Qafc)	550	35	42	3.240
OLD PARALIC DEP. (Qafc)	550	35	72	4.917
OLD PARALIC DEP. (Qafc)	550	35	44	3.199
TORREY SANDST. (Tt)	850	38	34	5.304

$\beta$	Slope inclination with respect to the horizontal plane
$\phi$	Friction angle of the soil
C	Cohesion of the soil
$\gamma_{sat}$	Saturated unit weight of the soil
$\gamma'$	Submerged unit weight of the soil
H	Thickness of the saturated soil layer

Factors of Safety **ABOVE** 1.5 are adequate.

# **A P P E N D I X D**

Coastal Hazard Report  
by Geosoils, Inc.

September 15, 2017





**Geotechnical • Geologic • Coastal • Environmental**

5741 Palmer Way • Carlsbad, California 92010 • (760) 438-3155 • FAX (760) 931-0915 • [www.geosoilsinc.com](http://www.geosoilsinc.com)

September 15, 2017

W.O. S7336-SC

**Mr. and Mrs. Bradberry**

141 Pacific Avenue  
Solana Beach, California 92075

Subject: Coastal Hazard Discussion for Proposed Single-Family Residential Remodel  
141 Pacific Avenue, Solana Beach, San Diego County, California

Dear Mr. and Mrs. Bradberry:

GeoSoils, Inc. (GSI) is pleased to provide this coastal hazard discussion for the proposed remodel at 141 Pacific Avenue, Solana Beach, CA. The analysis is based upon the discussion of the preliminary project plan, the California Coastal Commission (CCC) Sea Level Rise (SLR) guidance document, our site inspection, and knowledge of local coastal conditions. This report is intended to provide the City of Solana Beach and the CCC the necessary coastal hazard information for the project.

**INTRODUCTION**

The property, located at 141 Pacific Avenue, Solana Beach, California, lies on top of a sea cliff just north of Fletcher Cove in Solana Beach. This section of shoreline is fronted by a narrow (intertidal) sand beach, and backed by the sea cliff and Pacific Avenue. Figure 1 is a 2016 bird's eye photograph showing the site and adjacent properties downloaded with permission from Pictometry International Corp. Figure 1 shows that the southern portion of the site is fronted by a bluff that is almost perpendicular to the shoreline. There is currently an existing residential structure on the site. It is our understanding that the proposed project is a remodel. The lowest habitable finished floor (FF) of the existing development is above elevation +80 feet Mean Sea Level (MSL). The beach near the site has been nourished in the past with sand as part of a regional beach nourishment program.



Figure 1. Subject site and adjacent properties in 2016.

### DATUM

The datum used in this report is Mean Sea Level (MSL). In the open ocean of the San Diego County coast, Mean High Water (MHW) is ~1.87 feet above MSL, and MSL is 2.54 feet above NAVD88. The units of measurement in this report are feet (ft), pounds force (lbs), and second (sec). A site topographic survey, was prepared by Sowards & Brown Engineering, Inc., and site plans were provided by Dean Meredith, the project architect. The Federal Emergency Management Agency (FEMA) will be issuing a new Flood Insurance Rate Map (FIRM) in late 2018. As shown in Figure 2, the existing structure is proposed to be entirely within unshaded FEMA Zone X. The shaded FEMA Zone X has less than 0.2% annual chance of flood hazard, and no base flood elevations (BFE) are shown within the shaded X Zone. The BFE in the adjacent VE Zone is +23 feet NAVD88 (+20.5 feet MSL). This roughly corresponds to the FEMA estimate of wave runoff on the bluff. This FEMA BFE does not include SLR over the life of the project. The CCC Sea-Level Rise Policy Guidance provides a SLR range, over the time period from 2000 to 2100, of 16.56 inches to 65.76 inches.

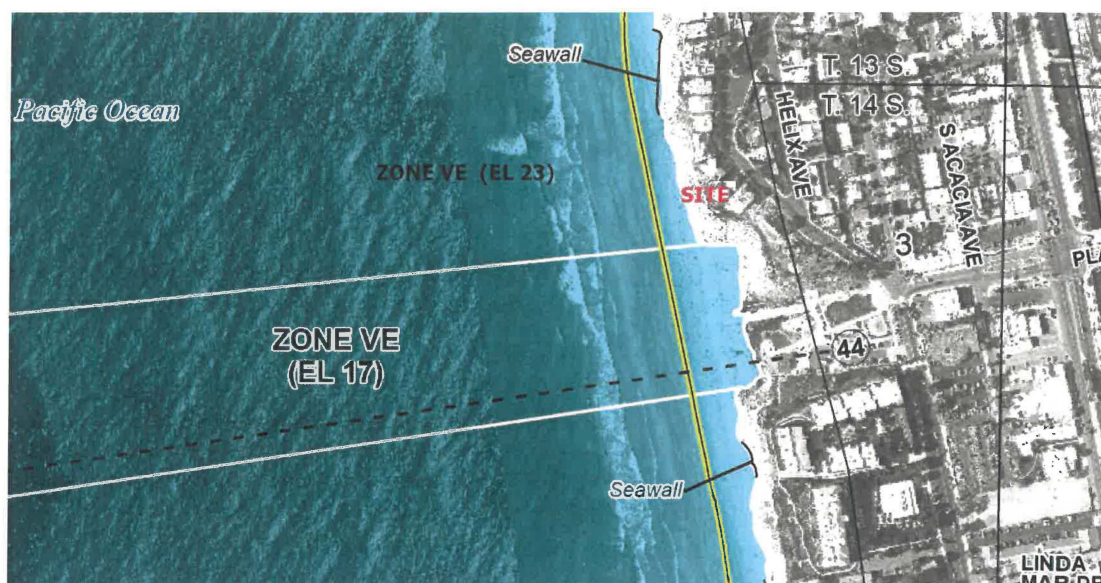


Figure 2. Proposed 2018 FEMA panel and flood zones for the site.

### COASTAL HAZARDS

There are three different potential oceanographic hazards identified at this site: wave runup, shoreline erosion, and flooding. For ease of review, each of these hazards will be analyzed and discussed separately followed by a summary of the analysis including conclusions and recommendations as necessary.

### WAVE RUNUP ANALYSIS

As waves encounter the beach in front of this section of shoreline, the water rushes up the beach as well as the bluff. Often, wave runup strongly influences the design and the cost of coastal projects. Wave runup is defined as the vertical height above the still water level to which a wave will rise on a structure of infinite height. Overtopping is the flow rate of water over the top of a finite height structure as a result of wave runup. The elevation of the top of the bluff is about +83 feet MSL.

Wave runup on the existing bluff is calculated using the US Army Corps of Engineers (USACOE) Automated Coastal Engineering System, ACES. The methods to calculate runup implemented within this ACES application are discussed in greater detail in the Coastal Engineering Manual (2004). The runup estimate calculated herein are corrected for the effect of onshore winds. The runup analysis will consider the maximum credible SLR over the project design life (75 years) to determine if wave runup will exceed the top of the bluff elevation. Figure 3 from the ACES manual shows some of the variables involved in the runup analysis.

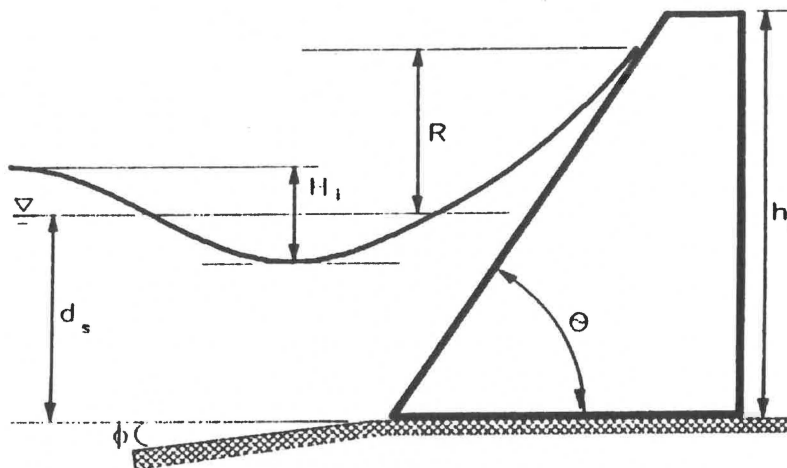


Figure 3. Wave runup terms from ACES analysis.

- $d_s$  is the depth of the water at the toe of the bluff.
- $H_i$  is the breaking wave height at the toe not to be confused with the deep water wave height  $H_0$
- $R$  is the height of the wave runup above the still water elevation
- $h_s$  is the height of the bluff above the toe
- $\Theta$  is the slope of the bluff
- $\phi$  is the nearshore slope or slope from the shoreline to beyond the breakers

### Oceanographic Design Parameters

The wave, wind, and water level data used as input to the ACES runup analysis was taken from the historical data reported in USACOE CCSTWS report #88-6, and updated, as necessary. The San Diego North County shoreline has experienced a series of storms over the years. These events have impacted coastal property and beaches depending upon the severity of the storm, the direction of wave approach and the local shoreline orientation. The ACES analysis was performed on oceanographic conditions that represent a typical 75- to 100-year recurrence storm.

### Project SLR

The California Coastal Commission (CCC) SLR Guidance document recommends that a project designer determine the range of SLR using the “best available science.” When the SLR Guidance document was adopted by the CCC in 2015, it stated that the best available science for quantifying future SLR was the 2012 National Research Council (NRC) report (NRC, 2012). The NRC (2012) is no longer considered the state of the art for assessing the magnitude of SLR in the marine science communities. The April 2017 “Rising Seas in California” by the California Ocean Protection Council (COPC) provides more current SLR estimates within a probability frame work. The COPC provides SLR estimates based

upon various carbon emission scenarios known as a “representative concentration pathway” or RCP. The La Jolla estimates are valid throughout southern California. Figure 4 provides the April 2017 COPC table of latest SLR estimates (in feet) and the probabilities of those estimate to meet or exceed the 1991-2009 mean, based upon the best available science.

(c) La Jolla

<i>Feet above 1991-2009 mean</i>	<b>MEDIAN</b>	<b>LIKELY RANGE</b>	<b>1-IN-20 CHANCE</b>	<b>1-IN-200 CHANCE</b>
<b>Year / Percentile</b>	<i>50% probability SLR meets or exceeds...</i>	<i>67% proba- bility SLR is between...</i>	<i>5% probability SLR meets or exceeds...</i>	<i>0.5% probability SLR meets or exceeds...</i>
2030	0.5	0.4 – 0.6	0.7	0.9
2050	0.9	0.7 – 1.2	1.4	2.0
2100 (RCP 2.6)	1.7	1.1 – 2.5	3.3	5.8
2100 (RCP 4.5)	2.0	1.3 – 2.8	3.6	6.0
2100 (RCP 8.5)	2.6	1.8 – 3.6	4.6	7.1
2100 (H++)	10			
2150 (RCP 2.6)	2.5	1.5 – 3.9	5.7	11.1
2150 (RCP 4.5)	3.1	1.9 – 4.8	6.5	11.8
2150 (RCP 8.5)	4.3	3.0 – 6.1	7.9	13.3
2150 (H++)	22			

Figure 4. Table from COPC (2017), providing current SLR estimates and probabilities.

The purpose of providing this is to illustrate that SLR in the year 2100 for the likely range, considering the most onerous RCP (8.5), is 1.8 feet to 3.6 feet above the 1991-2009 mean. This can be interpolated to be about 3.3 feet above the 2017 mean over the next 75 years. Based upon this 2017 COPC SLR report, the maximum SLR for the project is estimated to be 3.3 feet. The maximum historical water elevation in the Oceanside area is elevation ~+5 feet MSL on January 11, 2005. This actual high water record period includes the 1982-83 severe El Niño, and the 1997 El Niño events, and is therefore consistent with the methodology outlined in the CCC Sea-Level Rise Policy Guidance document. Per the Guidance, this elevation includes all short-term oceanographic effects on sea level, but not the long-term sea level rise prediction. If 3.3 feet are added to this 5 feet MSL elevation, then future design maximum water level of 8.3 feet is determined.

The wave that has the greatest runup is the wave that has not yet broken when it reaches the toe of the structure (bluff). It is not the largest wave to come into the area. The larger waves break offshore of the bluff and lose much of their energy before reaching the shoreline. The maximum scour at the bluff toe is about elevation -2 feet MSL. If the total water depth for the maximum SLR case is the water elevation minus the scour depth, then water depth is 10.3 feet. The maximum wave runup is from the wave that breaks just at

the toe of the bluff. This is a depth limited case where the breaker height is 78% of the water depth. Therefore, the design wave heights are 5.6 feet and 8.1 feet with a chosen period of 16 seconds (a peak period for storm waves at the site). This design wave determination is consistent with the guidelines in the current FEMA specifications. Because our analysis uses conservative oceanographic design conditions (largest wave, highest still water elevation, and scoured beach), the longshore transport rate and the seasonal beach profile changes are not relevant. **Table I** is the ACES output for these design conditions.

**Table I**

ACES		Mode: Single Case		Functional Area: Wave - Structure Interaction	
Application: Wave Runup and Overtopping on Impermeable Structures					
Item		Unit	Value	Smooth Slope Runup and Overtopping	
Incident Wave Height	Hi:	ft	8.100	141 Pacific Ave, Solana Beach	
Wave Period	T:	sec	16.000		
COTAN of Nearshore Slope	COT( $\theta$ ):		50.000		
Water Depth at Structure Toe	ds:	ft	10.400		
COTAN of Structure Slope	COT( $\theta$ ):		0.100		
Structure Height Above Toe	hs:	ft	84.000	Maximum Wave runup + SLR	
Wave Runup	R:	ft	25.237		
Onshore Wind Velocity	U:	ft/sec	50.634		
Deepwater Wave Height	H0:	ft	5.346		
Relative Height	ds/H0:		1.946		
Wave Steepness	H0/(gT <sup>2</sup> ):		0.000649		
Overtopping Coefficient	$\alpha$ :		0.070000		
Overtopping Coefficient	Qstar $\theta$ :		0.050000		
Overtopping Rate	Q:	ft <sup>3</sup> /s-ft	0.000		

The maximum wave runup with 3.3 feet of SLR is elevation +33.5 feet MSL (25.24 + 8.3 feet MSL). Wave runup will not exceed the top of the bluff in the future with consideration of SLR.

### SITE-SPECIFIC HISTORICAL BLUFF RETREAT RATE

#### GEI

Geotechnical Exploration, Inc. (GEI), the project geotechnical engineer, has provided a site-specific historical bluff retreat rate analysis. This included reviews of historical aerial photographs, physical surveys, and photogrammetry. The methodology GEI used exactly conforms to the "Guidelines for establishing long-term retreat rates" provided in Johnsson (2005), which states, "**historic data currently are our best indicators of future erosion at any given site.**" In addition, Johnsson (2005) states, "**The best data are those**



***compiled photogrammetrically, whereby distortions inherent to aerial photography. . .are corrected. . .***” GEI determined a site specific historical retreat rate of 0.24 ft/yr.

#### United States Geological Survey (USGS)

The USGS produced a report in 2007 concerning cliff retreat along the California coast, including the Solana Beach area (Hapke and Reid, 2007), which clearly states that, ***“Rates of change are being published for the purpose of regional characterization. The results and products prepared by USGS are not intended for comprehensive detailed site specific analysis of cliff retreat.”*** Furthermore, the analysis was based upon two data points (historical bluff tops). The first data point was 1933 NOS Topographic Maps (T-Sheets), which included significant uncertainties. For instance, the measurement uncertainties (see page 9 of Hapke and Reid [2007]) of the bluff top location in 1933 had a total position uncertainty of 10.8 meters or approximately 35 feet. The second data point was 1998 Lidar data with a total position uncertainty of 1.4 meters or roughly 5 feet. The annualized retreat rate uncertainly is reported to be 0.2 m/yr (0.656 ft/yr). What this means is that the retreat rate can be  $\pm 0.65$  ft/yr. This uncertainty is greater than the site-specific retreat rate of 0.24 ft/yr calculated by GEI.

### **Future Bluff Retreat Rate Modeling**

#### United States Army Corps of Engineers (USACOE)

The USACOE and the cities of Encinitas and Solana Beach prepared a joint Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) in 2015 to evaluate potential options for reducing storm damage related coastal erosion over a 50-year period anticipated to occur from 2018 through 2068. This included cost assessments of damages caused by bluff erosion and shoreline restoration for the cities. In order for the cities to receive federal funding for shoreline restoration, the USACOE report needed to demonstrate that the benefit to cost ratio was significant, or somewhat greater than 1.0. While the subject site is located within a reach of the Solana Beach shoreline examined by the USACOE, their findings are **NOT** specific to the subject property. The 2015 USACOE reported a historical (Pre-Anthropogenic) retreat rate at Fletcher Cove of 0.116 ft/yr. In addition, for the section of shoreline from Table Tops Reef to Fletcher Cove the estimated future bluff retreat rate ranging between 0.4 ft/yr to 1.2 ft/yr. These are estimates for a length of shoreline that is roughly 3,500 feet long and has varying geologic profiles and geologic structures. It clearly states in USACOE (2015) that the bluff top erosion rates will be less where a partially cemented cap is present. This cemented cap condition exists at the subject property and can be easily seen in Figure 5.

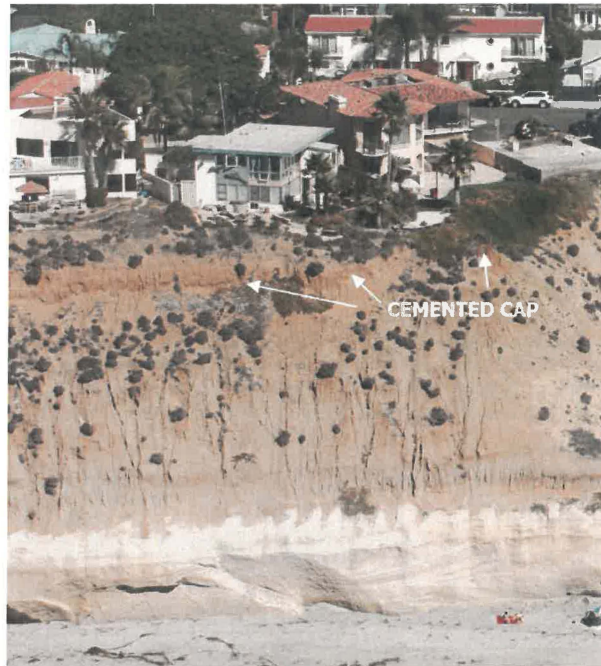


Figure 5. Cemented cap at 141 Pacific Avenue

The future bluff erosion rate reported in the EIR/EIS were determined using bluff erosion modeling. To achieve erosion rates that justified the federal funding, the assumptions and inputs for the modeling were unrealistically onerous. For example:

- There is **NO** historical data provided that shows an erosion rate of 1 ft/yr or greater over any time period greater than 10 years. The modeling was not calibrated to past conditions.
- The model used the absolute weakest soil strength parameters.
- The model assumes **NO** beach at all over the 50-year time period.
- The model does not account for the change in littoral materials from sand to cobbles where cobbles do provide some armoring of the bluff.
- The model did not account for the impact of sand placed during RBSP2, which has significantly and is still significantly reducing beach erosion.

### USGS

The USGS developed the CoSMoS computer application (Barnard, et al., 2014) to predict coastal flooding. The USGS then expanded upon the computer models therein to include shoreline evolution using data from the Hapke and Reid (2007) and Hapke, et al. (2006) studies. GSI points out that the CoSMoS website contains a disclaimer stating that, “***This interactive mapping tool, including its data and other information ('tool and data') are***

***provided for informational purposes. The tool and data are not for the purpose of providing advice or guidance on issues or activities related to its content including, but not limited to, navigation, investment, development or permitting.”***

As previously stated, neither the Hapke and Reid (2007) nor the Hapke, et al. (2006) reports are intended for comprehensive, detailed site-specific analysis of cliff retreat and the annualized retreat rate. In addition, the Hapke and Reid (2007) study explicitly reports a retreat rate uncertainty of 0.2 m/yr (0.656 ft/yr), which is the greater than the bluff retreat rate GEI calculated for the subject property. *CoSMoS 3.0 provides detailed predictions (meter-scale) of coastal flooding due to both future sea level rise and storms integrated with long-term coastal evolution (i.e., beach changes and cliff/bluff retreat) for the southern California region, from Point Conception (in Santa Barbara County) to Imperial Beach, CA.* However, since all of the coastal evolution models rely on a past rate to predict the future rate, if the past rate is incorrect, then the future rate would be intuitively incorrect, regardless of the accuracy of the erosion model. It is not clear as to what model the USGS used to predict cliff retreat for a given SLR amount by the year 2100. More importantly, the use of the CoSMoS model is limited with the following disclaimer.

***Disclaimer***

*Inundated areas shown should not be used for navigation, regulatory, permitting, or other legal purposes. The U.S. Geological Survey provides these data “as is” for a quick reference, emergency planning tool but assumes no legal liability or responsibility resulting from the use of this information.*

The USGS modeling should not be used as supporting documentation for a future site-specific bluff retreat rate. In addition, we have reviewed third-party electronic communication between Dr. Ben Benumof and Mr. Patrick Limber of the USGS. In their correspondence, Mr. Limber states, ***“The Cosmos cliff projections are large-scale, long-term estimates of cliff behavior -- they project the long-term rate that results from multiple cliff failures accumulating through time, rather than the exact timing of individual cliff failure events. If you're looking at 1) short-term site-specific behavior, as in ‘how soon is this cliff likely to fail?’, or 2) how a site-specific cross-shore cliff profile might evolve through time, Cosmos-cliffs is probably not the right tool and should be supplemented by local, more geotechnically-detailed, investigations.”*** Thus, CoSMoS is clearly not the appropriate tool for assigning site-specific rates of future coastal bluff retreat.

Calculated Future Bluff Retreat

A recent peer reviewed paper provides a methodology for predicating the change in cliff retreat rate for a given future SLR (Young, et al., 2014). The paper provides the following equation for predicating future bluff retreat. Future cliff retreat as a function of mean sea level rise (SLR) can be written as:

$$R_2 = R_1 (S_2/S_1)^m$$

Where  $R_1$ ,  $R_2$  represent past and future cliff retreat (or retreat rate) and  $S_1$ ,  $S_2$  are past and future SLR respectively (or SLR rates). The exponent  $m$  may be assumed to be 0.5 (Walkden and Dickson, 2006).

- $R_1$  = the GEI calculated retreat rate over ~83 years of 0.24 ft/yr.
- $S_1$  = the SLR from 1932 to 2014 = 0.21 m or 21 cm per 83 years (see Figure 6).
- $S_2$  = the SLR in the year 2100 (2017 + ~83 years = 2100) which is conservatively estimated to be 125 cm (see Figure 7).
- $R_2$  = the calculated retreat rate in 2100, if SL was 125 cm, is 0.97 ft/yr.

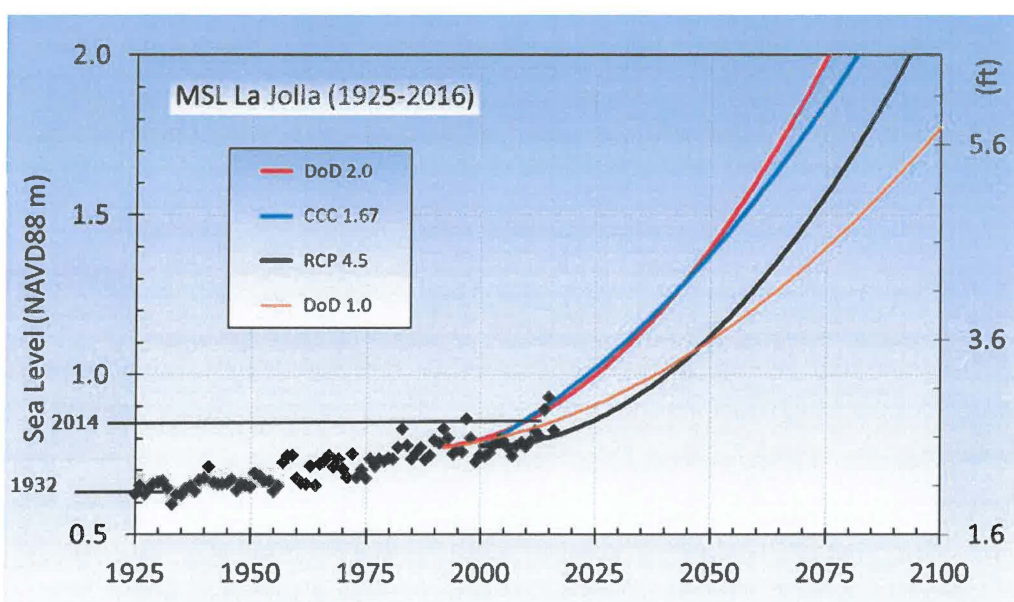


Figure 6. From Dr. Flick, Scripps Institution of Oceanography.

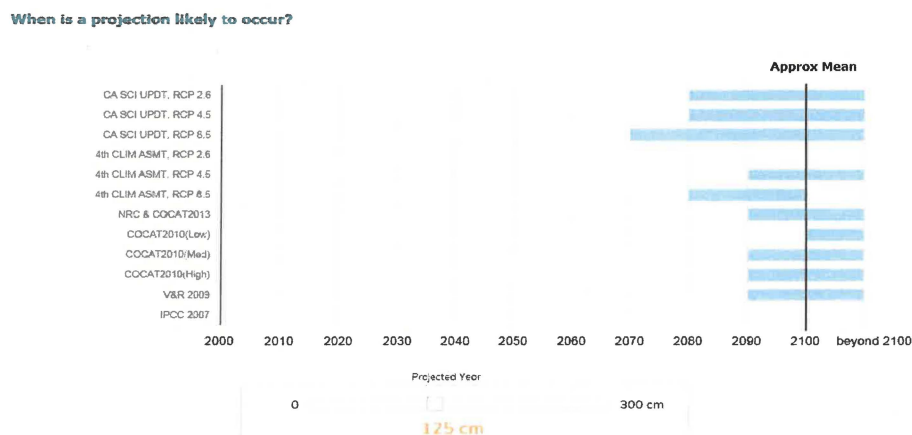


Figure 7. Estimate likely SLR projection in the year 2100 = 125 cm from COSMOS.

It should be noted that the retreat rate will transition from the current rate to the future rate. The retreat rate from 1932 to 2014 is calculated to be 0.24 ft/yr. The retreat rate in the year 2100 with 125 cm SLR will be 0.58 ft/yr. To determine an average retreat rate from today to the year 2092, it is the average of 0.24 ft/yr and 0.58 ft/yr or 0.41 ft/yr. Over the 75 year life this translates to a total bluff retreat of about 30.75 feet.

This analysis uses site specific calculated historical bluff retreat, justified and probable SLR over the next 75 years, and scientifically reviewed methodology to calculate the potential annualized retreat rate over the project life.

### COASTAL FLOODING

Due to the project elevation there is no coastal flooding hazard at the site. Site drainage is designed by the project civil engineer.

### CALIFORNIA COASTAL COMMISSION SLR POLICY GUIDANCE INFORMATION

**Step 1. Establish the projected sea level rise range for the proposed project's planning horizon using the best available science, which is currently the 2012 NRC Report.**

Using the CCC SLR estimate, over the project design life that range in the year ~2092 is between 1.8 feet and 3.3 feet. This is the sea level rise range for the proposed project.

**Step 2. Determine how physical impacts from sea level rise may constrain the project site, including erosion, structural and geologic stability, flooding, and inundation.**

This report demonstrates that the site is reasonably safe from SLR related coastal hazards.

**Step 3. Determine how the project may impact coastal resources, considering the influence of future sea level rise upon the landscape as well as potential impacts of sea level rise adaptation strategies that may be used over the lifetime of the project.**

As sea level rises, the beach will get narrower, but in time will re-establish itself at a higher elevation. Rather than being inundated by sea level rise, the beach and the nearshore will readjust to the new ocean level over time, such that waves and tides will see the same profile that exists today, albeit with the berm at a higher elevation. This is the principle of beach equilibrium and is the reason why we have beaches today, even though sea level has risen over 200 feet in the last 10,000 years.

**Step 4. Identify alternatives to avoid resource impacts and minimize risks throughout the expected life of the development.**

The impact of SLR on the narrowing beach and lateral access cannot be mitigated at this site alone. With this in mind, it is reasonable that the applicant agrees to participate in whatever City-wide plan is developed and approved.

**Step 5. Finalize project design and submit CDP application.**

GSI is the coastal engineer for the project and not the project designer nor the applicant.

In conclusion, coastal hazards, which include shoreline erosion, wave and wave runup attack, and flooding, will not significantly impact this property over the life of the proposed remodel development. There are no additional recommendations necessary for wave runup protection and it is likely that no additional shore protection will be needed in the future over the life of the structure.

The opportunity to be of service is greatly appreciated. If you have any questions concerning this report, or if we may be of further assistance, please do not hesitate to contact any of the undersigned.

Respectfully Submitted,



GeoSoils Inc.  
David W. Skelly, MS,  
RCE #47857



## REFERENCES

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# Geotechnical Exploration, Inc.

SOIL AND FOUNDATION ENGINEERING • GROUNDWATER • ENGINEERING GEOLOGY

---

21 June 2024

Smith Brothers Construction  
P.O. Box 1068  
Solana Beach, CA 92075  
Attn: Mr. Jeff Smith

**Job No. 23-14438**

Subject: **Response to City of Solana Beach Comments**  
Bates Residence  
403 Pacific Avenue  
Solana Beach, California

Dear Mr. Smith:

At the request of Mr. Reggie Reyes and as required by the City of Solana Beach reviewer, we are responding to the following comments presented in the Geotechnical Review by Universal Engineering Sciences, Job No. 4830.2400013 dated March 1, 2024, for the subject project.

*Comment No. 1: In response to Geotechnical Exploration, Inc.'s (GEI's) response to UES Comment 1, GEI provides a GEI 2017 geotechnical report from 141 Pacific Street, Solana Beach, California (Bradberry Residence) which GEI indicates was used to inform their selection of soil strength parameters for their provided slope stability analysis. (141 Pacific Street is located approximately 0.25-mile south of the applicant's property). The report contained soil strength testing reports (direct shear laboratory testing results) that indicate soil strength parameters significantly lower than those used in GEI's slope stability analysis. GEI indicates that their selection of soil strength parameters was based on soil classification and standard penetration test (SPT) blow counts.*

*It is requested that the consultant provide the rationale for their assignment of soil strength parameters based on soil classification and SPT blow counts, and the rationale for these values superseding provided laboratory results that indicate lower soil strength parameters than used in the analysis.*

**GEI Response:** We performed a deep boring (B-1) at the subject site to obtain soil samples representative of the bluff materials for our revised slope stability analysis. We included the shear strength values based on the results of the boring and



laboratory testing for use in our slope stability analysis. See Figure Nos. IIIa-b for boring logs and SPT blow counts, and Figure Nos. IVa-e for laboratory test results.

Comment No. 2: *In response to GEI's response to UES Comment 2, UES noted that the submitted slope stability analysis included a pseudo-static analysis. However, this analysis, like the static analysis, was based on field and laboratory data from another site. The intent of UES Comment 2 was for the consultant to perform a new pseudo-static analysis based on revised (if necessary) soil strength parameters obtained from samples collected at the subject site. Please refer to Comment 1 above as to whether this revised analysis is necessary, and as to whether soil strength parameters must be derived from samples collected from the subject site.*

**GEI Response:** Our slope stability analysis in this response includes a revised static slope stability analysis as well as a revised pseudo-static slope stability analysis based on the on-site soil strength tests and laboratory results. See attached slope stability calculations, Appendix A.

The findings and opinions presented here have been made in accordance with generally accepted principles and practice in the field of geotechnical engineering within the City of Solana Beach. No warranty, either expressed or implied, is made.

If you have any questions regarding this letter, please contact our office. Reference to our **Job No. 23-14438** will help expedite a response to your inquiry.

Respectfully submitted,

**GEOTECHNICAL EXPLORATION, INC.**

Jaime A. Cerros, P.E.  
R.C.E. 34422/G.E. 2007  
Senior Geotechnical Engineer

Jay K. Heiser  
Senior Project Geologist

Leslie D. Reed, President  
C.E.G. 999/P.G. 3391



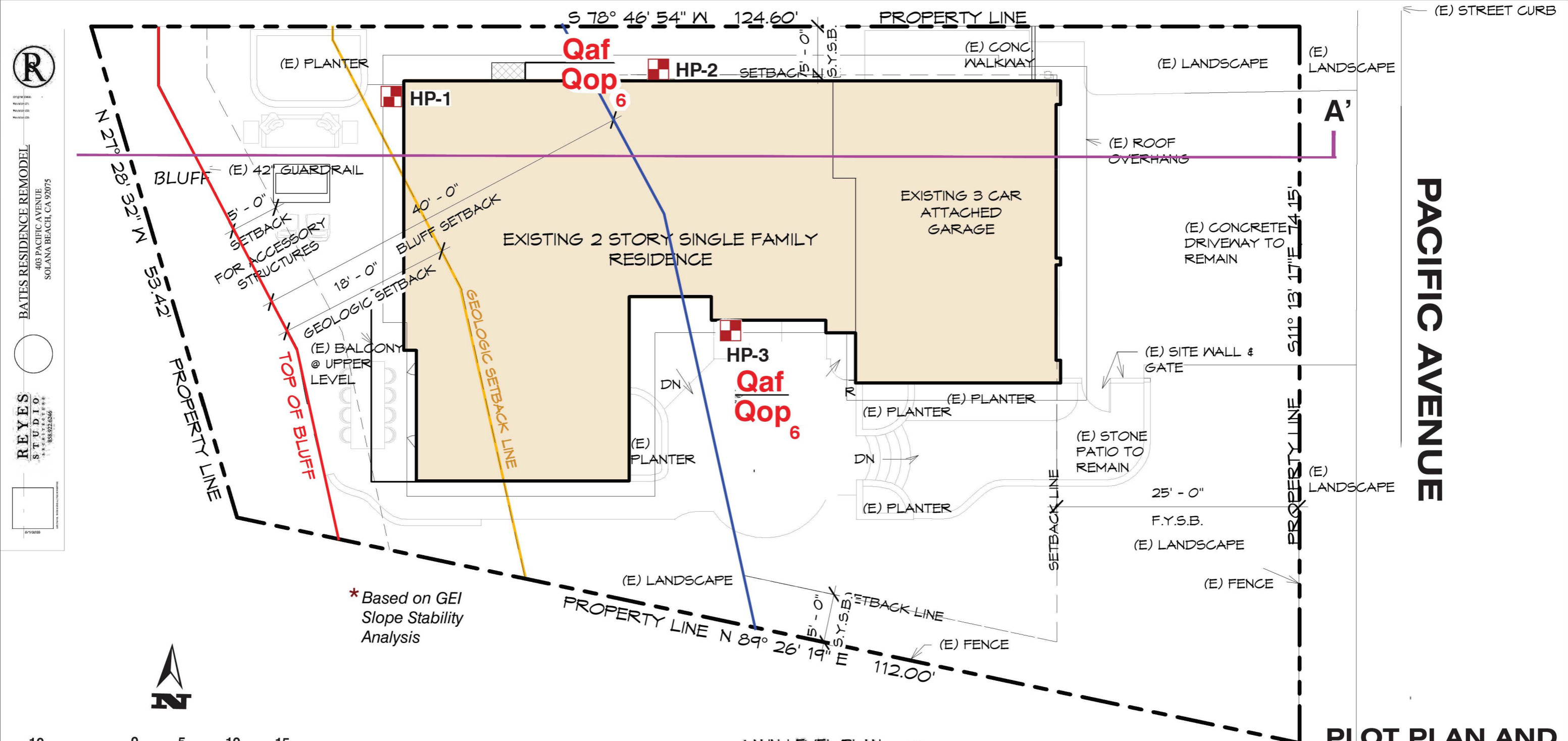
# VICINITY MAP



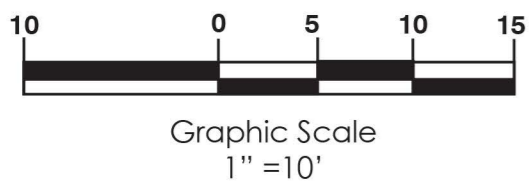
Thomas Bros. Guide San Diego County pg 1167-E6

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.

Figure No. 1  
Job No. 23-14438



\* Based on GEI Slope Stability Analysis



**GEOLOGIC LEGEND**

- Qaf** Artificial Fill
- Qop 6** Old Paralic Deposits, Unit 6

**LEGEND**

- HP-3** Approximate Location of Exploratory Handpit
- Bates Residence
- Cross Section Location

MAIN LEVEL PLAN ①

**PACIFIC AVENUE**

**PLOT PLAN AND SITE SPECIFIC GEOLOGIC MAP**

Bates Residence  
 403 Pacific Avenue  
 Solana Beach, CA.  
 Figure No. II  
 Job No. 23-14438





REYES STUDIO  
 403 PACIFIC AVENUE  
 SOLANA BEACH, CA 92075  
 858.522.0546







BATES RESIDENCE REMODEL  
 403 PACIFIC AVENUE  
 SOLANA BEACH, CA 92075


6/1/2023  
 BATES RESIDENCE REMODEL

REFERENCE: This Plot Plan is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.







 <b>Geotechnical Exploration, Inc.</b>	<b>EQUIPMENT:</b> Truck Mounted Drill-Rig
	<b>DIMENSION &amp; TYPE OF EXCAVATION:</b> 8-inch diameter; hollow stem auger
	<b>DATE LOGGED:</b> 5/29/2024
	<b>LOGGED BY:</b> JKH
	<b>REVIEWED BY:</b> JAC/LDR
	<b>GROUND SURFACE ELEVATION:</b> ± 75 feet above mean sea level
	<b>GROUNDWATER/SEEPAGE DEPTH:</b> Not Encountered
	<b>ADDITIONAL INFORMATION:</b>


DEPTH (feet)	SYMBOL	SAMPLE	U.S.C.S. CLASSIFICATION, FIELD DESCRIPTION AND GEOLOGIC UNIT (Grain Size, Relative Density/Consistency, Moisture, Color, Other)	FINES CONTENT (%)	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	RELATIVE COMPACTION (% of MDD)	EXPANSION INDEX	BLOW COUNTS (1.5) 6" INCREMENTS	N-VALUE	SAMPLE O.D. (inches)	
1			<i>SILTY SAND (SM); fine to medium grained; medium dense, slightly moist, red brown</i>											
2			<b>FILL (Qaf)</b>											
3			<i>SILTY SAND (SM); fine to medium grained; medium dense, slightly moist, red brown; moderately cemented</i>											
4														
5						4.2	105.1					10		
6				<b>Old Paralic Deposits, Unit 6 (Qop6)</b>								13	29	3"
7												16		
8												7		
9												7	14	2"
10				<i>SAND (SM); fine to medium grained; medium dense, slightly moist, light gray-red brown; poorly cemented</i>								7		
11						2.7	101.5					11		
12												17	38	3"
13				<b>Old Paralic Deposits, Unit 6 (Qop6)</b>								21		
			LOG CONTINUED ON NEXT PAGE								7			
											9	21	2"	
											12			




 GROUNDWATER  BULK SAMPLE  CARVED BLOCK (CHUNK) SAMPLE  MODIFIED CALIFORNIA SAMPLE (ASTM D3550/D3550-17)  STANDARD PENETRATION TEST (ASTM D1586/D1586M-18)  HAND DRIVEN BARREL SAMPLE (ASTM D4700-15)	<b>JOB NUMBER:</b> 23-14438	<b>EXPLORATORY TEST PIT LOG</b>
	<b>JOB NAME:</b> Bates Residence	
		<b>SITE LOCATION:</b> 403 Pacific Avenue, Solana Beach, CA







 <b>Geotechnical Exploration, Inc.</b>	<b>EQUIPMENT:</b> Truck Mounted Drill Rig
<b>DATE LOGGED:</b> 5/29/2024	<b>DIMENSION &amp; TYPE OF EXCAVATION:</b> 8-inch diameter; hollow stem auger
<b>LOGGED BY:</b> JKH	<b>GROUND SURFACE ELEVATION:</b> ± 75 feet above mean sea level
<b>REVIEWED BY:</b> JAC/LDR	<b>GROUNDWATER/SEEPAGE DEPTH:</b> Not Encountered
	<b>ADDITIONAL INFORMATION:</b>


DEPTH (feet)	SYMBOL	SAMPLE	U.S.C.S. CLASSIFICATION, FIELD DESCRIPTION AND GEOLOGIC UNIT (Grain Size, Relative Density/Consistency, Moisture, Color, Other)	FINES CONTENT (%)	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	RELATIVE COMPACTION (% of MDD)	EXPANSION INDEX	BLOW COUNTS (1) 6" INCREMENTS	N-VALUE	SAMPLE O.D. (inches)
13			SAND (SM); fine to medium grained; medium dense, slightly moist, light gray-red brown; poorly cemented								9	21	2"
14											12		
15			Old Paralic Deposits, Unit 6 (Qop6)								11	36	3"
16											17		
17											19		
18											8		
19			Old Paralic Deposits, Unit 6 (Qop6)								11	26	2"
20											15		
21											11		
22											17		
23											21		
24			Old Paralic Deposits, Unit 6 (Qop6)								7	21	2"
25											9		
											12		
LOG CONTINUED ON NEXT PAGE													





 GROUNDWATER	<b>JOB NUMBER:</b> 23-14438	<b>EXPLORATORY TEST PIT LOG</b> <b>B-1</b>
 BULK SAMPLE	<b>JOB NAME:</b> Bates Residence	
 CARVED BLOCK (CHUNK) SAMPLE	<b>SITE LOCATION:</b> 403 Pacific Avenue, Solana Beach, CA	<b>FIGURE NO. IIIb</b>
 MODIFIED CALIFORNIA SAMPLE (ASTM D3550/D3550-17)		
 STANDARD PENETRATION TEST (ASTM D1586/D1586M-18)		
 HAND DRIVEN BARREL SAMPLE (ASTM D4700-15)		







 <b>Geotechnical Exploration, Inc.</b>	<b>EQUIPMENT:</b> Truck Mounted Drill Rig
<b>DATE LOGGED:</b> 5/29/2024	<b>DIMENSION &amp; TYPE OF EXCAVATION:</b> 8-inch diameter; hollow stem auger
<b>LOGGED BY:</b> JKH	<b>GROUND SURFACE ELEVATION:</b> ± 75 feet above mean sea level
<b>REVIEWED BY:</b> JAC/LDR	<b>GROUNDWATER/SEEPAGE DEPTH:</b> Not Encountered
	<b>ADDITIONAL INFORMATION:</b>


DEPTH (feet)	SYMBOL	SAMPLE	U.S.C.S. CLASSIFICATION, FIELD DESCRIPTION AND GEOLOGIC UNIT (Grain Size, Relative Density/Consistency, Moisture, Color, Other)	FINES CONTENT (%)	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	RELATIVE COMPACTION (% of MDD)	EXPANSION INDEX	BLOW COUNTS (1.5" 6" INCREMENTS)	N-VALUE	SAMPLE O.D. (inches)
25			<i>SAND (SM); fine to medium grained; medium dense, slightly moist, light gray-red brown; poorly cemented</i>										
26			<b>Old Paralic Deposits, Unit 6 (Qop)</b>										
27			<i>SAND (SM); fine to medium grained; medium dense, slightly moist; red brown; moderately cemented</i>										
28													
29													
30											11		
31			<b>Old Paralic Deposits, Unit 6 (Qop)</b>		4.1	111					17	38	3"
32											21		
33											7		
34											9	21	2"
35											12		
36													
37													
LOG CONTINUED ON NEXT PAGE													

 GROUNDWATER	<b>JOB NUMBER:</b> 23-14438	<b>EXPLORATORY TEST PIT LOG</b> <b>B-1</b>
 BULK SAMPLE	<b>JOB NAME:</b> Bates Residence	
 CARVED BLOCK (CHUNK) SAMPLE	<b>SITE LOCATION:</b> 403 Pacific Avenue, Solana Beach, CA	<b>FIGURE NO. IIIc</b>
 MODIFIED CALIFORNIA SAMPLE (ASTM D3550/D3550-17)		
 STANDARD PENETRATION TEST (ASTM D1586/D1586M-18)		
 HAND DRIVEN BARREL SAMPLE (ASTM D4700-15)		







 <b>Geotechnical Exploration, Inc.</b>	<b>EQUIPMENT:</b> Truck Mounted Drill Rig
<b>DATE LOGGED:</b> 5/29/2024	<b>DIMENSION &amp; TYPE OF EXCAVATION:</b> 8-inch diameter; hollow stem auger
<b>LOGGED BY:</b> JKH	<b>GROUND SURFACE ELEVATION:</b> ± 75 feet above mean sea level
<b>REVIEWED BY:</b> JAC/LDR	<b>GROUNDWATER/SEEPAGE DEPTH:</b> Not Encountered
	<b>ADDITIONAL INFORMATION:</b>

DEPTH (feet)	SYMBOL	SAMPLE	U.S.C.S. CLASSIFICATION, FIELD DESCRIPTION AND GEOLOGIC UNIT (Grain Size, Relative Density/Consistency, Moisture, Color, Other)	FINES CONTENT (%)	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	RELATIVE COMPACTION (% of MDD)	EXPANSION INDEX	BLOW COUNTS (1.5) 6" INCREMENTS	N-VALUE	SAMPLE O.D. (inches)
37			<i>SILTY SAND (SM); fine to medium grained; medium dense, slightly moist; red brown; moderately cemented</i>										
38			<b>Old Paralic Deposits, Unit 6 (Qop6)</b>										
39			<i>SAND (SM); fine to medium grained; medium dense, slightly moist; light-gray red brown; poorly cemented</i>										
40											15		
41			<b>Old Paralic Deposits, Unit 6 (Qop6)</b>								40	80	3"
42											40		
43											25		
44											30	80	2"
45											50		
46													
47													
48													
49													
LOG CONTINUED ON NEXT PAGE													

 GROUNDWATER	<b>JOB NUMBER:</b> 23-14438	<b>EXPLORATORY TEST PIT LOG</b> <b>B-1</b>
 BULK SAMPLE	<b>JOB NAME:</b> Bates Residence	
 CARVED BLOCK (CHUNK) SAMPLE	<b>SITE LOCATION:</b> 403 Pacific Avenue, Solana Beach, CA	<b>FIGURE NO. III d</b>
 MODIFIED CALIFORNIA SAMPLE (ASTM D3550/D3550-17)		
 STANDARD PENETRATION TEST (ASTM D1586/D1586M-18)		
 HAND DRIVEN BARREL SAMPLE (ASTM D4700-15)		

 <b>Geotechnical Exploration, Inc.</b>	<b>EQUIPMENT:</b> Truck Mounted Drill Rig
<b>DATE LOGGED:</b> 5/29/2024	<b>DIMENSION &amp; TYPE OF EXCAVATION:</b> 8-inch diameter; hollow stem auger
<b>LOGGED BY:</b> JKH	<b>GROUND SURFACE ELEVATION:</b> ± 75 feet above mean sea level
<b>REVIEWED BY:</b> JAC/LDR	<b>GROUNDWATER/SEEPAGE DEPTH:</b> Not Encountered
	<b>ADDITIONAL INFORMATION:</b>

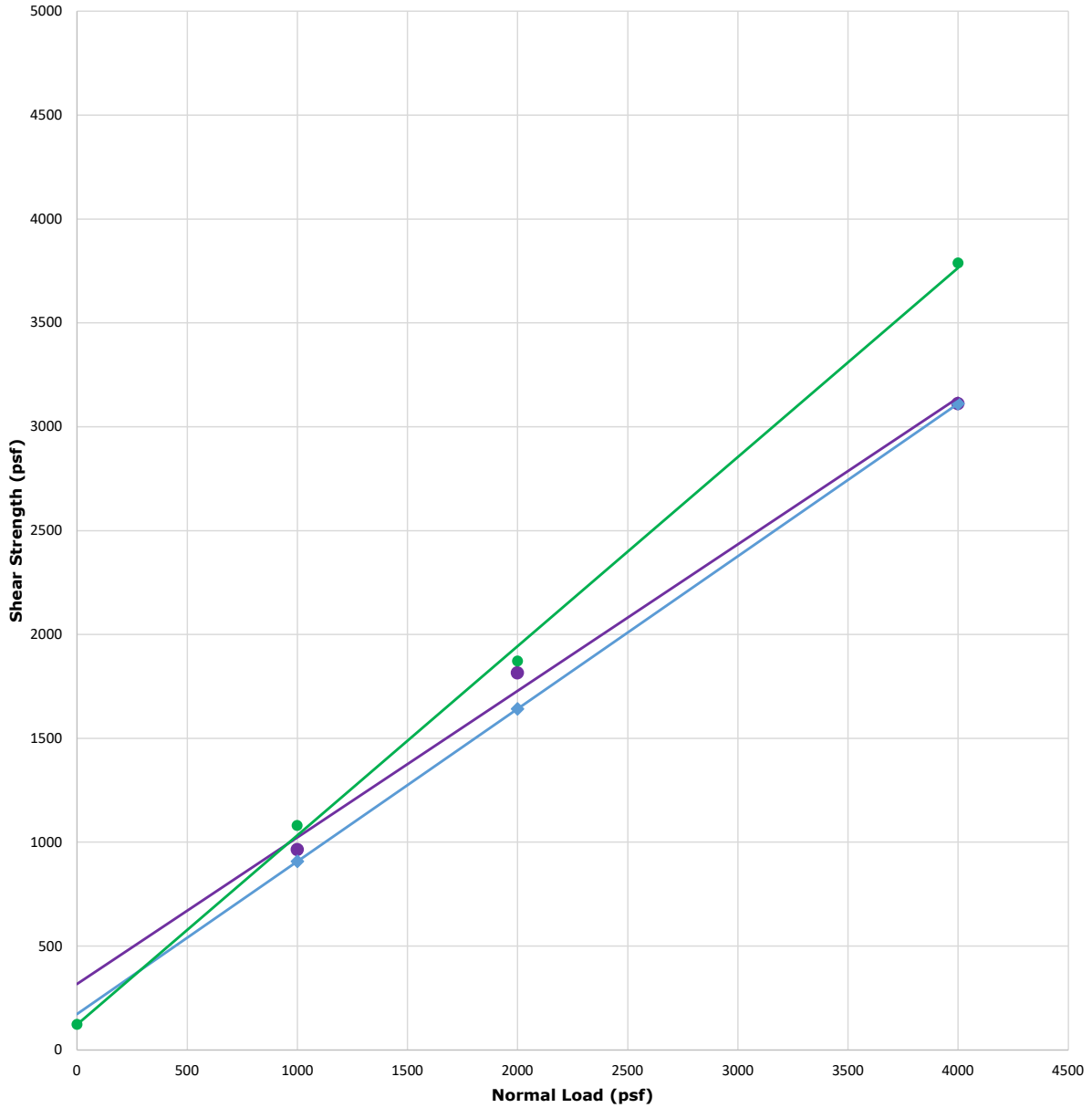
DEPTH (feet)	SYMBOL	SAMPLE	U.S.C.S. CLASSIFICATION, FIELD DESCRIPTION AND GEOLOGIC UNIT (Grain Size, Relative Density/Consistency, Moisture, Color, Other)	FINES CONTENT (%)	IN-PLACE MOISTURE (%)	IN-PLACE DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)	MAXIMUM DRY DENSITY (pcf)	RELATIVE COMPACTION (% of MDD)	EXPANSION INDEX	BLOW COUNTS (1) 6" INCREMENTS	N-VALUE	SAMPLE O.D. (inches)
49			SAND (SM); fine to medium grained; medium dense, slightly moist; light-gray red brown; poorly cemented  <b>Old Paralic Deposits, Unit 6 (Qop6)</b>										
50			SAND (SM); fine to medium grained; dense, slightly moist; yellow brown; well cemented  <b>Torrey Sandstone (Tt)</b>								50/4"	50	3"
51												50/6"	50
52													
53													
54			-Gravel Layer										
55											50/4"	50	3"
56											50/6"	50	
			Bottom of boring at 56'. No groundwater encountered, no caving. Backfilled with on-site soils.										




 GROUNDWATER	<b>JOB NUMBER:</b> 23-14438	<b>EXPLORATORY TEST PIT LOG</b> <b>B-1</b>
 BULK SAMPLE	<b>JOB NAME:</b> Bates Residence	
 CARVED BLOCK (CHUNK) SAMPLE	<b>SITE LOCATION:</b> 403 Pacific Avenue, Solana Beach, CA	<b>FIGURE NO. IIIe</b>
 MODIFIED CALIFORNIA SAMPLE (ASTM D3550/D3550-17)		
 STANDARD PENETRATION TEST (ASTM D1586/D1586M-18)		
 HAND DRIVEN BARREL SAMPLE (ASTM D4700-15)		



# LABORATORY TEST RESULTS

Standard Test Method for Direct Shear Tests of Soils



Symbol			
Sample No.	B-1	S-1	S-1
Sample Location Depth	5-6.5'	10-11.5'	30-31.5'
U.S.C.S. / Description	SILTY SAND (SM) / Red Brown	SILTY SAND (SM) / Light Gray-Red Brown	SILTY SAND (SM) / Red Brown
Test Method	Undisturbed Drive Sample- Unsaturated-Peak Stress	Undisturbed Drive Sample- Unsaturated-Residual Stress	Undisturbed Drive Sample- Saturated-Peak Stress
Friction Angle $\phi$ (degrees)	35.2	36.3	42.3
Cohesion (psf)	316.8	172.8	122.4

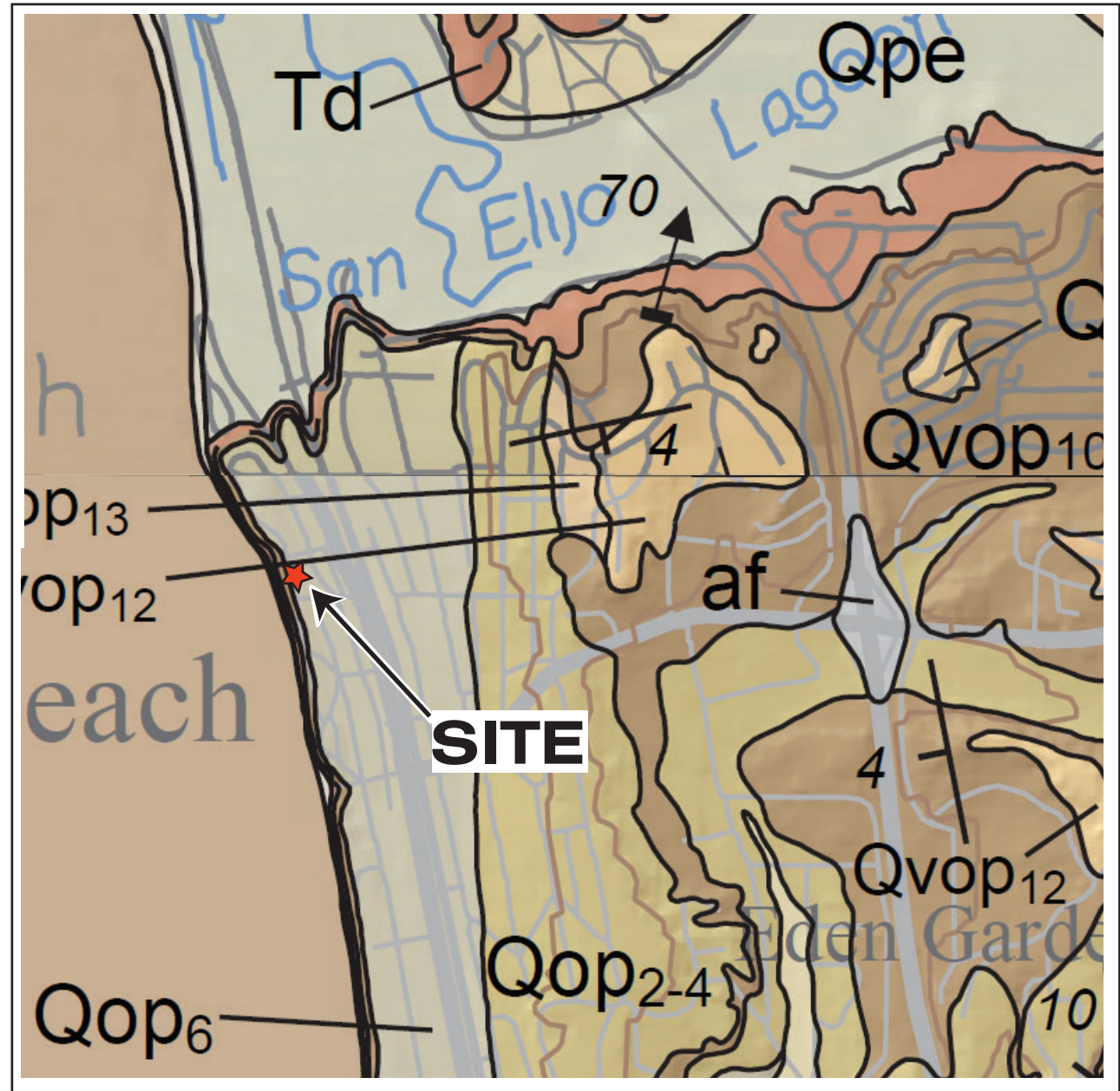


**Geotechnical  
Exploration, Inc.**

**JOB NUMBER: 23-14438**  
**JOB NAME: Bates Residence**  
**SITE LOCATION: 403 Pacific  
 Avenue, Solana Beach, CA**

**DIRECT SHEAR**

**FIGURE NO. IV**



Bates Residence  
403 Pacific Avenue  
Solana Beach CA.

EXCERPT FROM  
GEOLOGIC MAP OF THE OCEANSIDE 30' x 60' QUADRANGLE, CALIFORNIA

Compiled by  
Michael P. Kennedy<sup>1</sup> and Siang S. Tan<sup>1</sup>  
2007

Digital preparation by  
Kelly R. Bovard<sup>2</sup>, Rachel M. Alvarez<sup>2</sup>, Michael J. Watson<sup>2</sup>, and Carlos I. Gutierrez<sup>1</sup>

<sup>1</sup> Department of Conservation, California Geological Survey  
<sup>2</sup> U.S. Geological Survey, Department of Earth Sciences, University of California, Riverside

ONSHORE MAP SYMBOLS

DESCRIPTION OF MAP UNITS

	Contact - Contact between geologic units; dotted where concealed.
	Fault - Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
	Anticline - Solid where accurately located; dashed where approximately located; dotted where concealed. Arrow indicates direction of axial plunge.
	Kgp - Granite pegmatite dike.
	Syncline - Solid where accurately located; dotted where concealed. Arrow indicates direction of axial plunge.
	Landslide - Arrows indicate principal direction of movement. Quired where existence is questionable
Strike and dip of beds	
	Inclined
	Overturned
	Vertical
	Horizontal
Strike and dip of igneous foliation	
	Inclined
	Vertical
Strike and dip of igneous joints	
	Inclined
	Vertical
Strike and dip of metamorphic foliation	
	Inclined
Strike and dip of sedimentary joints	
	Vertical

Qop<sub>6</sub> Old Paralic Deposits, Unit 6

Base Map  
Onshore base (hypsography, hydrography, and transportation) from U.S.G.S. digital line graph (DLG) data, Oceanside 30' x 60' metric quadrangle. Shaded topographic base from U.S.G.S. digital elevation models (DEM's). Offshore bathymetric contours and shaded bathymetry from N.O.A.A. single and multibeam data. Projection is UTM, zone 11, North American Datum 1927.



This map was funded in part by the U.S. Geological Survey National Cooperative Geologic Mapping Program, STATEMAP Award no. 01NQA0092.

Prepared in cooperation with the U.S. Geological Survey, Southern California Areal Mapping Project.

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The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

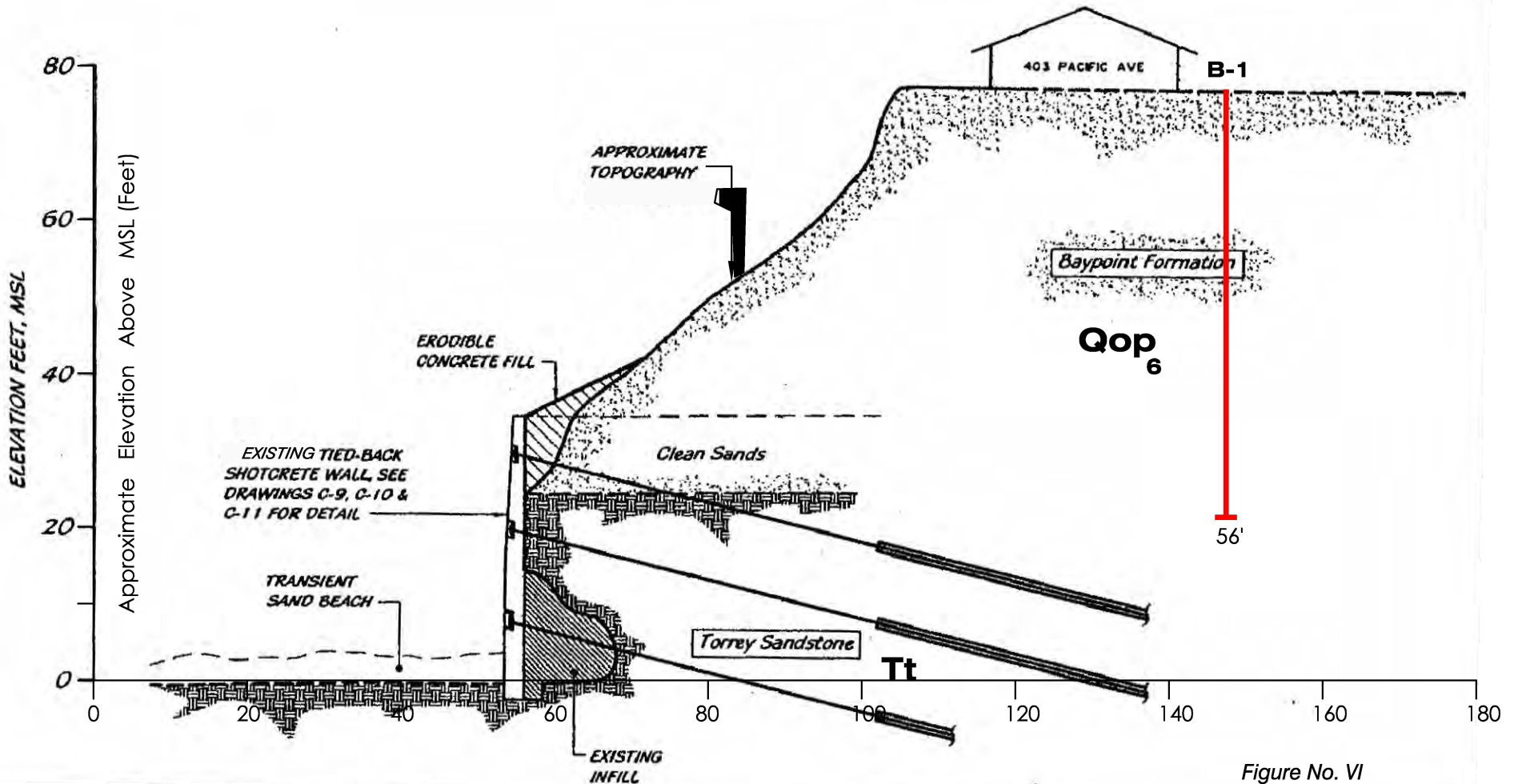
Figure No. V  
Job No. 23-14438



# GEOLOGIC CROSS SECTION A-A'

Bates Residence  
403 Pacific Avenue  
Solana Beach, CA.

A'



NOTE: This Cross Section is not to be used for legal purposes. Locations and dimensions are approximate. Actual property dimensions and locations of utilities may be obtained from the Approved Building Plans or the "As-Built" Grading Plans.

Relative Horizontal Distance (feet)  
Scale: 1" = 20'  
(Horizontal and Vertical)

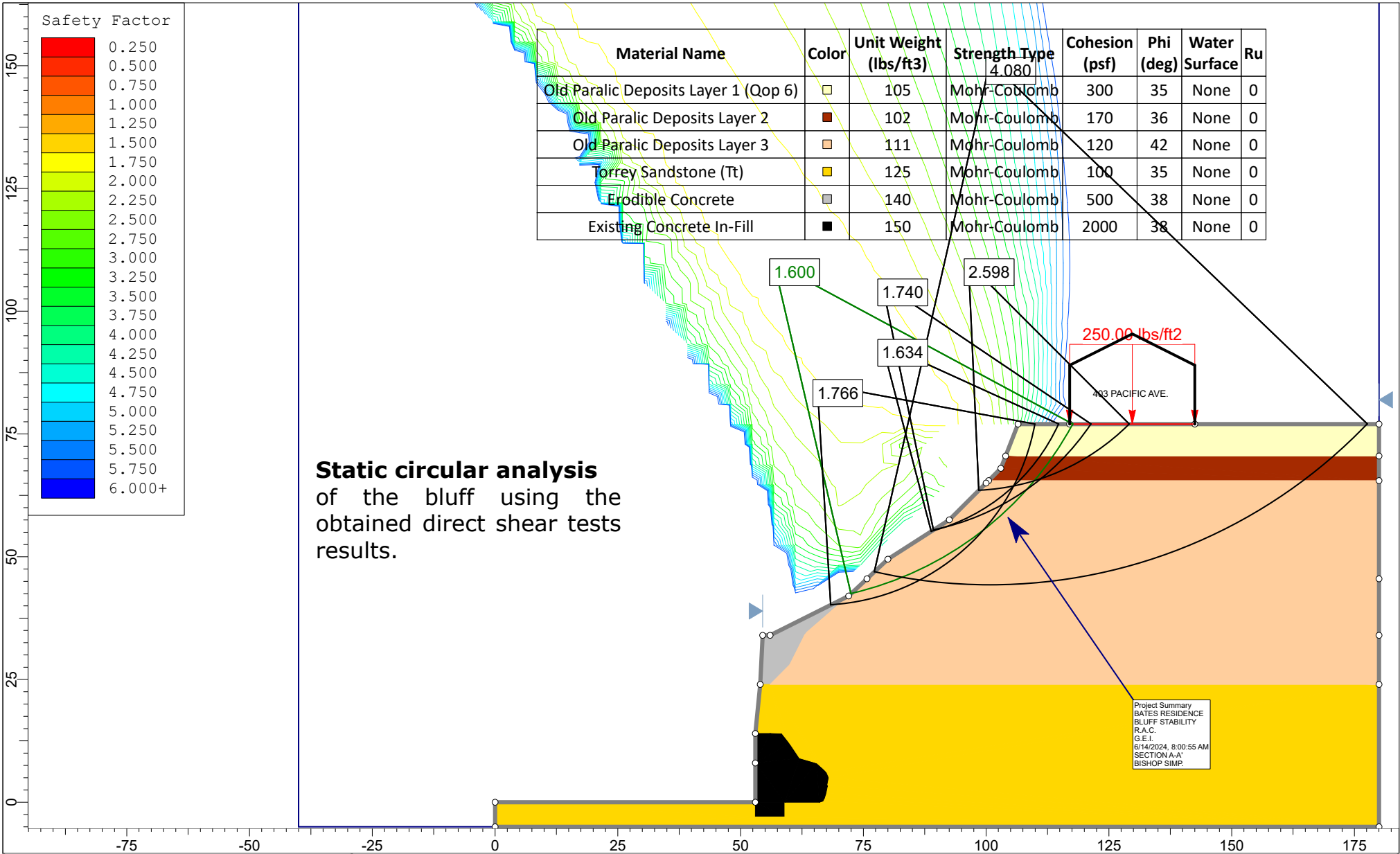
Figure No. VI  
Job No. 23-14438



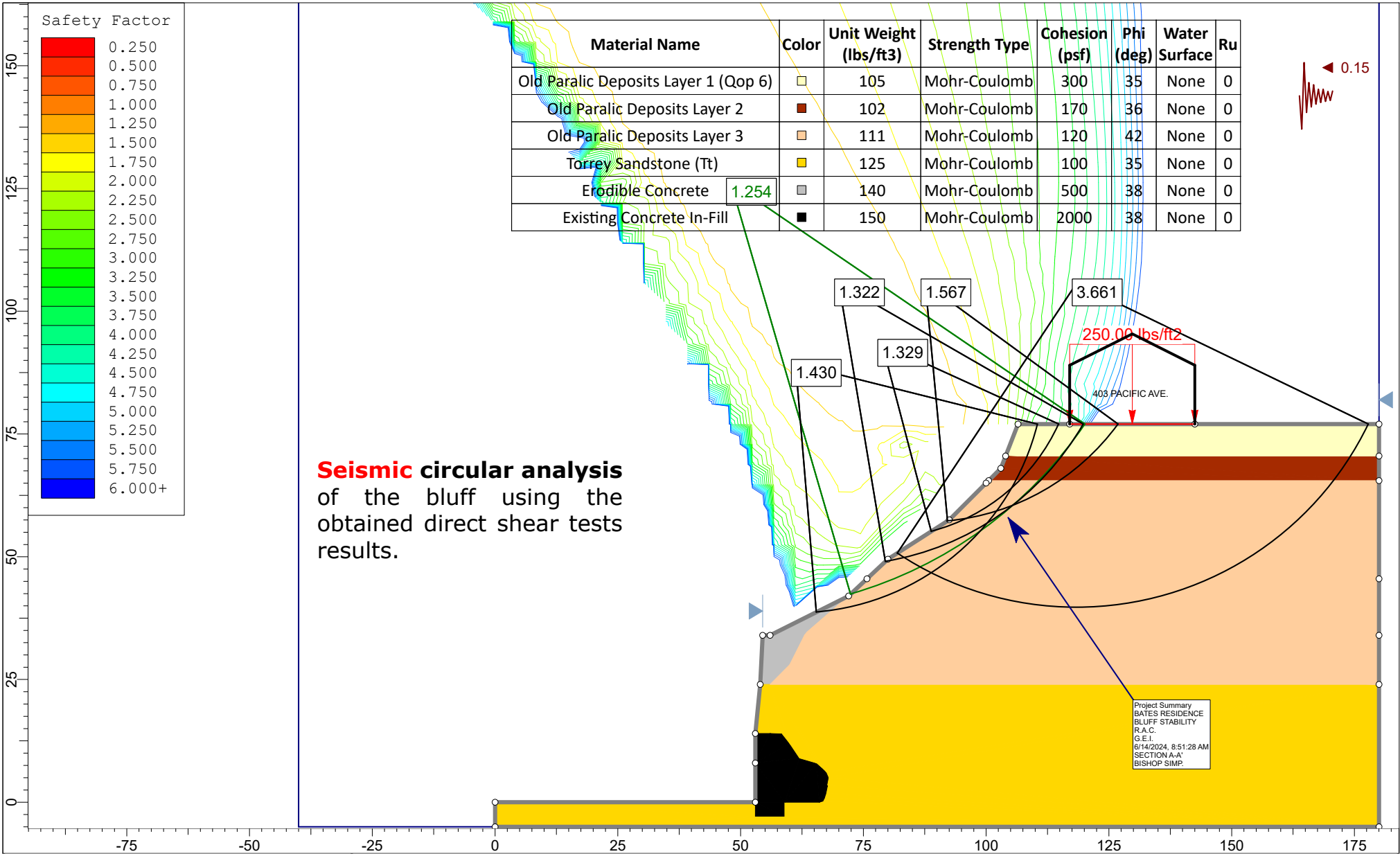
# **A P P E N D I X A**

## **Slope Stability Analysis**





<p><b>Geotechnical Exploration, Inc.</b></p> <p>SLIDEINTERPRET 6.039</p>	Project		BATES RESIDENCE		SECTION A-A'	
	Analysis Description		BLUFF STABILITY			
	Drawn By	R.A.C.	Scale	1:325	Company	G.E.I.
	Date	6/14/2024, 8:00:55 AM	File Name	JOB NO. 23-14438_S(A)_01.slim		

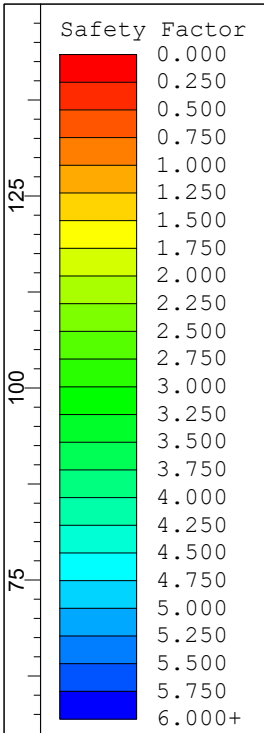


**Seismic circular analysis** of the bluff using the obtained direct shear tests results.

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Old Paralac Deposits Layer 1 (Qop 6)		105	Mohr-Coulomb	300	35	None	0
Old Paralac Deposits Layer 2		102	Mohr-Coulomb	170	36	None	0
Old Paralac Deposits Layer 3		111	Mohr-Coulomb	120	42	None	0
Torrey Sandstone (Tt)		125	Mohr-Coulomb	100	35	None	0
Erodible Concrete		140	Mohr-Coulomb	500	38	None	0
Existing Concrete In-Fill		150	Mohr-Coulomb	2000	38	None	0

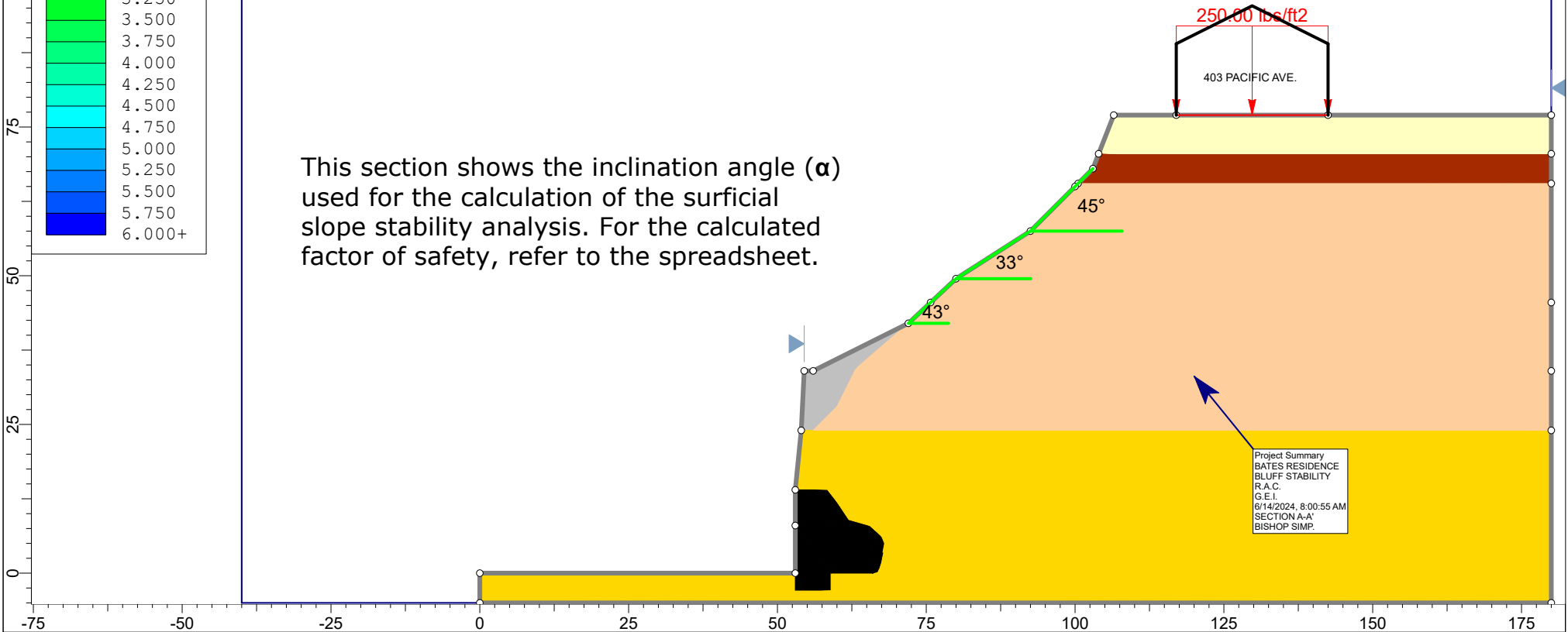
Project Summary  
 BATES RESIDENCE  
 BLUFF STABILITY  
 R.A.C.  
 G.E.I.  
 6/14/2024, 8:51:28 AM  
 SECTION A-A'  
 BISHOP SIMP.

	Project		BATES RESIDENCE		SECTION A-A'	
	Analysis Description		BLUFF STABILITY			
	Drawn By	R.A.C.	Scale	1:325	Company	G.E.I.
	Date	6/14/2024, 8:51:28 AM		File Name	JOB NO. 23-14438_S(A)_01w_0.15gSHAKE.slim	



Material Name	Color	Unit Weight (lbs/ft <sup>3</sup> )	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Old Paralic Deposits Layer 1 (Qop 6)	□	105	Mohr-Coulomb	300	35	None	0
Old Paralic Deposits Layer 2	■	102	Mohr-Coulomb	170	36	None	0
Old Paralic Deposits Layer 3	□	111	Mohr-Coulomb	120	42	None	0
Torrey Sandstone (Tt)	■	125	Mohr-Coulomb	100	35	None	0
Erodible Concrete	□	140	Mohr-Coulomb	500	38	None	0
Existing Concrete In-Fill	■	150	Mohr-Coulomb	2000	38	None	0

This section shows the inclination angle ( $\alpha$ ) used for the calculation of the surficial slope stability analysis. For the calculated factor of safety, refer to the spreadsheet.



Project Summary  
 BATES RESIDENCE  
 BLUFF STABILITY  
 R.A.C.  
 G.E.I.  
 6/14/2024, 8:00:55 AM  
 SECTION A-A'  
 BISHOP SIMP.



**Geotechnical  
 Exploration, Inc.**

Project		BATES RESIDENCE		SECTION A-A'	
Analysis Description		BLUFF STABILITY			
Drawn By	R.A.C.	Scale	1:300	Company	G.E.I.
Date	6/14/2024, 8:00:55 AM	File Name	JOB NO. 23-14438_S(A)_02.slim		



**SURFICIAL FAILURE**

$$FOS = \frac{c' + (\gamma_T - \gamma_w)z_w \cos(\alpha)^2 \tan \phi'}{\gamma_T z_w \sin \alpha \cos \alpha}$$

EQUATION 1

SURFICIAL SLOPE STABILITY ANALYSIS IS BASED ON EQUATION (1) FOR THE CALCULATED VALUES. Reference: Abramson L.W., Lee T.S., Sharma S., Boyce G.M., 2002, Slope Stability and Stabilization Methods, 2nd Edition, John Wiley and Sons, Inc.,

SECTION A-A'				
SOIL TYPE	c (psf)	φ' (°)	α (°)	F.O.S.
OLD PARALIC LAYER 2 (Q <sub>opb</sub> )	170	36	45	1.298
OLD PARALIC LAYER 3 (Q <sub>opb</sub> )	120	42	45	1.053
OLD PARALIC LAYER 3 (Q <sub>opb</sub> )	120	42	33	1.329
OLD PARALIC LAYER 3 (Q <sub>opb</sub> )	120	42	43	1.090

Special Publication 117A (2008, page 27): for infinite slope analysis, the minimum assumed depth of soil saturation is the smaller of either a depth of one meter or depth to firm bedrock.

The Factor of Safety values are **BELOW** 1.50 and are inadequate. Surface drains should be provided near the bluff and all runoff should be diverted away from the bluff and footings into proper drainage facilities.

F.O.S.	Factor of Safety
α	The slope angle; (inclination angle) with respect to the horizontal plane
φ'	The effective friction angle of the soil
c'	The effective cohesion of the soil
γ <sub>t</sub>	The total unit weight (Soil with moisture)
γ <sub>w</sub>	The unit weight of the water
γ'	Submerged unit weight of the soil (Saturated unit weight - unit weight of water)
z <sub>w</sub>	Vertical depth of the saturated soil

γ <sub>t</sub>	γ <sub>w</sub>	γ'	z <sub>w</sub>
pcf	pcf	pcf	ft
105	62.4	42.6	3.28
102	62.4	39.6	
111	62.4	48.6	

1 meter = 3.28 feet



July 17, 2024

UES Job No. 4830.2400013

City of Solana Beach  
635 South Highway 101  
Solana Beach, California 92075

Attention: Ms. Corey Andrews  
(858) 720-2434  
[candrews@cosb.org](mailto:candrews@cosb.org)

Subject: 3<sup>rd</sup> Application Submittal Geotechnical Review  
Bates Residence Remodel  
403 Pacific Avenue, Solana Beach, California

References: At End of Document

Ms. Andrews:

As requested, Universal Engineering Sciences (UES) has reviewed the provided submittal application documents referenced at the end of this letter. The purpose of our review was to assess whether the proposed project is in substantial compliance with the City of Solana Beach's (City) Local Coastal Plan (LCP) policies.

Based on review of the submitted and referenced documents, the proposed project appears to be in general conformance with the City's LCP policies, and no exceptions were noted.

UES's review is based on the referenced and provided submittal documents. If the proposed improvements or referenced documents are revised or updated, or new documents are provided, they should be provided to UES for additional review and comment, as warranted.

We appreciate this opportunity to be of service on this project. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Respectfully submitted,

UNIVERSAL ENGINEERING SCIENCES (UES)



Colm J. Kenny, GE #3201  
Senior Engineer



REVIEWED DOCUMENTS:

Response to City of Solana Beach Comments  
Bates Residence  
403 Pacific Avenue  
Solana Beach, California  
GEI Job No. 23-14438, dated June 21, 2024

2<sup>nd</sup> Application Submittal Geotechnical Review  
Bates Residence Remodel  
403 Pacific Avenue, Solana Beach, California  
UES Job No. 4830.2400013, dated April 28, 2024

Application Submittal Geotechnical Review  
Bates Residence Remodel  
403 Pacific Avenue, Solana Beach, California  
UES Job No. 4830.2400013, dated March 1, 2024



# STAFF REPORT

## CITY OF SOLANA BEACH

**TO:** Honorable Mayor and City Councilmembers  
**FROM:** Alyssa Muto, City Manager  
**MEETING DATE:** September 25, 2024  
**ORIGINATING DEPT:** Community Development Department – Joseph Lim,  
Community Development Director  
**SUBJECT:** **Wildcoast Petition to Change Swami’s Marine Protected Area (MPA) Boundaries**

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### **BACKGROUND:**

Wildcoast submitted a petition to the California Department of Fish and Wildlife (CDFW) to modify the existing boundaries of the Swami’s State Marine Conservation Area (SMCA) (Attachment 1) as part of a decadal review process for Marine Protected Areas (MPAs) in California. The initial Wildcoast proposal would keep the Swami’s MPA the same size but would generally shift of the entire MPA boundaries 300 to 600 feet to the south that would encompass all of the tidepools up to the mean high tide line at Tabletops, or Tide Park, near the City’s northern boundary with Encinitas. Based on an initial Staff review of the Wildcoast proposal, there does not appear to be a scientific rationale or justification for a boundary change as outlined in the City’s comment letter included as Attachment 2. This proposal is similarly opposed by the City of Encinitas as outlined in their letter included as Attachment 3. State Parks also submitted a letter raising concerns about a boundary shift as noted in their comment letter which is included as Attachment 4.

Wildcoast notes in their petition an enforcement and compliance concern regarding tide pooling at the reef and indicates enforcement for taking of lobster is difficult at the southern boundary. Since Wildcoast is neither responsible for MPA compliance nor enforcement, the basis of these statements is unclear. Currently the southern boundary of the MPA is readily visually identifiable as it is co-terminus with the south end of a seawall located at 637 West Circle Drive, which is technically in the City of Encinitas’ jurisdiction. Wildcoast requests that the southern boundary be shifted approximately 300 - 600 feet further south and into the City of Solana Beach near Tide Park.

This is an informational item intended to educate the Council and public regarding this proposal. Staff is seeking direction from the City Council to consider facilitating additional public outreach meetings on this topic with CDFW, State Parks and the City of Encinitas,

COUNCIL ACTION:

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as well as other interested stakeholders to address any concerns regarding the Wildcoast proposal.

**DISCUSSION:**

The protection of valued coastal resources, coastal access and protection of the public beach are paramount priorities in the City of Solana Beach. City Staff learned of the proposed boundary change for the Swami's MPA only a few weeks before the item was scheduled for consideration by the California Fish and Game (CFG) Commission, Marine Resources Subcommittee, as part of their prioritization or "binning" process.

City Staff has raised concerns that the Wildcoast petition fails to site any specific compliance and/or management problems within the MPA as currently configured or how it would be remedied by a boundary change. In follow-up meetings and discussions with Wildcoast and staff from CDFW, no scientific rationale for a boundary change has been provided to date. Rather, there has been general reference to enforcement issues but those have similarly also not been substantiated to date.

City Staff notes that there is a single sign at the south end of the parking lot of Cardiff State Beach informing and educating the public regarding the existence of the Swami's MPA and the importance of responsible tide pooling. At a minimum, additional signage, education and outreach will be a valuable tool for helping beach visitors to understand the existing rules and boundary of the MPA. City Staff has offered to place additional signage at the Tide Park beach access stairway to ensure beach visitors are aware of the presence of the existing MPA.

Based on Staff's current understanding of the petition process for changing existing rules, regulations and boundaries, petitioners were invited to submit proposals to CDFW for consideration. However, there has been no formal vetting of the proposals on their merits or substance to date by CDFW. Instead, CDFW, through the Marine Resources Subcommittee of the CFG Commission, grouped the various petitions into "bins." There are three bins for the MPA petitions with Bin 1 being the first group of petitions to be reviewed.

Petitions targeted to be included in Bin 1 were identified as having essentially no controversy; however, due to the lack of general community, or City Staff, outreach on the proposed MPA boundary changes, the binning process did not have the benefit of stakeholder input, so the true level of controversy was not measured nor accurately portrayed.

Both the City of Solana Beach and the City of Encinitas as well as California State Parks raised formal concerns regarding the proposed boundary shift of the Swami's MPA. These concerns were raised in a public forum (at the CDFW Marine Resources Subcommittee meeting of July 17<sup>th</sup>) and in writing (see Attachments 2, 3 and 4) and indicate lack of concurrence on the Wildcoast proposal to change the boundaries of the Swami's MPA.

There is a lack of alignment/consensus because the Wildcoast petition is not supported by the public agencies most likely to be affected and responsible for education, outreach and potential future enforcement efforts and actions. In addition, it is likely that the general beach going public is wholly unaware of the proposal to change the boundaries which would essentially make the entire rocky reef and tidepools off limits to beach visitors including children on educational field trips. Thus, the Wildcoast petition should not have been included in “Bin 1” due to the existence of controversy as noted by the City (see Attachment 2).

Regardless, the City has continued to coordinate with all parties and met in the field on August 1<sup>st</sup> to walk the MPA boundaries and discuss the Wildcoast proposal. Today's meeting and presentation by Wildcoast is an outgrowth of our efforts to raise awareness of the potential changes to the existing Swami's MPA. Wildcoast will also be presenting to the Encinitas City Council on October 23, 2024, to solicit community input and feedback.

Due to the lack of transparency on the process to date and the lack of scientific rationale for the boundary change being requested by Wildcoast, the City believes the petition is without merit and should be rejected by the CFG Commission. However, City Staff proposes that an educational outreach effort be initiated, and additional signs be posted to inform beach goers of the existing rules, regulations, and boundaries of the Swami's MPA established in 2014, and that the issue of approving a boundary adjustment is without merit and should be revisited after the conclusion of the educational outreach campaign.


**CEQA COMPLIANCE STATEMENT:**

A boundary change to an existing MPA would be subject to review under the California Environmental Quality Act (CEQA). The California Department of Fish and Game would be the CEQA Lead Agency for the preparation of the CEQA documentation pursuant to the 2024 State CEQA Guidelines.

**FISCAL IMPACT:** N/A

**CITY STAFF RECOMMENDATION:**

This is an informational item. Staff is requesting direction from the City Council on next steps, if any, for community outreach and involvement.



Alyssa Muto, City Manager

**Attachments:**

1. Wildcoast Petition to Change Swami's MPA Boundaries
2. City of Solana Beach Letter to the California Fish and Game Commission
3. City of Encinitas Letter to the California Fish and Game Commission
4. California State Parks Letter to the California Fish and Game Commission



Tracking Number: (2023-26MPA )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Lisa Gilfillan

Address: 2120 Jimmy Durante Blvd #106, Del Mar, CA 92014

Telephone number: [REDACTED]

Email address: [lisa@wildcoast.org](mailto:lisa@wildcoast.org)

2. **Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

3. **Overview (Required)** - WILDCOAST is an international non-profit that conserves coastal and marine ecosystems and addresses climate change through natural solutions. We often work in partnership with the MPA Collaborative Network and serve as co-chairs for the San Diego MPA Collaborative group. We will reference the Collaborative Network's [Vetted Regulation Recommendations](#) for this petition. Given the complete consensus received within the San Diego MPA Collaborative, we are proposing four changes (one boundary change, and three other changes) across four MPAs. The proposed changes are as follows:

- Line/Row #162- affecting Swami's SMCA: Our Reg recommendation= Shifting the entire shape South (from the lifeguard tower to State/Solana Beach line to cover tidepool on South side)
- Line/Row #160, #164, & #170- affecting Batiquitos Lagoon No-Take SMCA, San Elijo Lagoon No-Take SMCA, & Famosa Slough No-Take SMCA: Our Reg recommendation= changing the purple to red for outreach purposes only, if boundaries remain the same

4. **Rationale (Required)** -



The above proposed recommendations are based on WILD COAST’s extensive MPA work in San Diego County and also through our collaboration with the MPA Collaborative Network (as a long-standing co-chair for San Diego County). These proposed recommendations came about after a robust discussion with local San Diego stakeholders on June 26, 2023, at the last San Diego MPA Collaborative meeting.

Line/Row #162- Swami’s SMCA: There is a compliance concern here regarding harmful tidepooling, especially at Seaside reef. Enforcement for take of lobster is difficult at the southern boundary since it splits two jurisdictions and the reef (hard to know where they are actually taking from and who is responsible for enforcing what). This proposed change keeps the same size MPA but covers the impacted tidepool area on the Southern boundary. Additionally, the Lifeguard tower would serve as a clear boundary at the North end.

Line/Row #160, #164, & #170- affecting Batiquitos Lagoon No-Take SMCA, San Elijo Lagoon No-Take SMCA, & Famosa Slough No-Take SMCA: The compliance concerns in these locations are all the same- there is confusion amongst the general public around the purple No-Take SMCA designation versus a red SMR. It is therefore easier for the public to understand the regulations when there are fewer designations. It would simplify the rules if all No-Take areas were red for education and outreach purposes. It is anticipated that other MPA Collaborative members will be submitting similar petitions across the South Coast region. Additionally, this change supports Decadal Review Prioritized Recommendation #15.

## SECTION II: Optional Information

5. **Date of Petition:** November 28, 2023
  
6. **Category of Proposed Change**
  - Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632.
  
7. **The proposal is to:** (*To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>*)
  - Amend Title 14 Section(s): [Westlaw regulations](#).
  - Add New Title 14 Section(s): [Click here to enter text](#).
  - Repeal Title 14 Section(s): [Click here to enter text](#).
  
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text](#).  
Or  Not applicable.
  
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: N/A





10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
- MPA Collaborative Network [Vetted Regulation Recommendations](#)
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: N/A
12. **Forms:** If applicable, list any forms to be created, amended or repealed:  
N/A

**SECTION 3: FGC Staff Only**

Date received: 1/1/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
  - Denied - same as petition
  - Granted for consideration of regulation change
- Tracking Number \_\_\_\_\_



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## CITY OF SOLANA BEACH

[www.cityofsolanabeach.org](http://www.cityofsolanabeach.org)

635 SOUTH HIGHWAY 101 • SOLANA BEACH, CA 92075 • (858) 720-2400 • Fax (858) 720-2455

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June 25, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition Number 2023-26MPA; Lisa Gilfillan, WILD COAST and San Diego MPA Collaborative; July 17, 2024, Marine Resources Committee Meeting**

Dear Commissioners:

The purpose of this letter is to request that you move this Item into "Bin 2" to allow for further review and study by affected jurisdictions including the City of Solana Beach. The City learned of this request to shift the boundary of the Swami's Marine Protected Area (MPA) less than one month before it was scheduled to be considered. Learning about this proposal at this late date deprives the City of a meaningful opportunity to review and provide comment on this proposal.

We suggest that the Commission convene a stakeholder outreach meeting and request the Petitioner, WILD COAST, meet with representatives of the City of Solana Beach (City) and Encinitas, California State Parks, and other interested stakeholders to discuss the rationale, justification and impacts for the proposed "shift" or boundary adjustments and rule changes. As coastal stewards and managers, it is important the City have a full and complete understanding of how this proposal could affect our day-to-day operations as it relates to the management of the beach in the area of the proposed boundary change.

Further, this area has been a source for sand nourishment – both as an offshore sand resource site and on-shore receipt location. As a resiliency measure, sand nourishment is a critical tool that cities have up and down the coast to directly mitigate global effects of climate change. While we have climate action plans to reduce, or avoid, the emissions of greenhouse gases, nourishment is an essential adaptation measure to combat the already occurring effects of sea level rise (SLR) as a result of climate change.

This area is also used for fishing by community members, some who have fished in this area for generations. The proposal should include analysis of any potential impact on historical fishing uses, including Indigenous native American populations. This rulemaking could have the unintended consequence of denying Indigenous or multi-generational community members access to sustainable fishing resources.

The City also requests a complete mete and bounds survey showing the limits of the boundary adjustment or proposed "shift" of the Swami's MPA so that the City, along with other stakeholders, can evaluate the potential effects of this proposed change on the ground including locating the proposed boundary as it relates to the City's municipal limits, Encinitas municipal limits, State Lands, State Parks and CDFW jurisdiction.

This area of coastline is very popular for school groups and visitors to the region due in part to its proximity to a large public parking lot that provides important coastal access for visitors to the City and region. It is an important coastal resource that serves a vital educational role, including historically underserved populations, in the City and region and is well known for tide pooling, fishing, including spearfishing. In reaching out to our community members, it appears that no one in the community is aware of this pending proposal by WILD Coast. Due to the limited engagement with the City of Solana Beach to this point, we would like to request that prior to any further consideration of this stakeholder proposal, additional coordination with the City should be conducted, along with community outreach and education. This includes coordination on the specific area delineated, restrictions on use, signage, and on-going monitoring and enforcement.

Additional considerations with regard to education and enforcement are required from City resource managers and our Marine Safety staff to ensure compliance with any adopted changes. The City is requesting more considerations and input on the time period for implementation; warning system (prior to fines); and defining the responsible entity for enforcement (e.g., State Parks and/or California Department of Fish and Wildlife (CDFW)). Given the popularity of this beach and reef, there would likely be an increase in the need for patrolling and enforcement if the SMCA is expanded further south.

The City requests that a recent marine biological survey be completed for the areas south of the current limits (proposing to be expanded) that we and other stakeholders may review. If a recent survey has already been completed, please forward it to the City for review.

We reiterate our concern that any changes would have an adverse effect on coastal public use and access, and due to lack of stakeholder outreach and the potential effects on existing City operations, and the long-term SLR resiliency mitigation needs, that such a boundary change could have on local jurisdictions, this item is more appropriately moved into "Bin 2" to allow for further review and study by all interested parties.

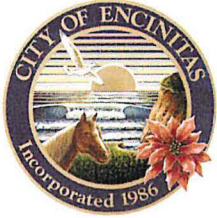
We appreciate the opportunity to learn more about the stakeholder proposal and provide our comments. We are committed to collaborating to ensure the protection of coastal resources and the resilience of our shorelines in the face of climate change. We are available to meet

with you either in person at the site or virtually. Please contact me via email at [amuto@cosb.org](mailto:amuto@cosb.org) or by phone at (858) 720-2431 to arrange a meeting time..

Sincerely,



Alyssa Muto  
City Manager



# City of Encinitas

Development Services Department

505 S. Vulcan Avenue, Encinitas, California 92024-3633

June 20, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition Number 2023-26MPA; Lisa Gilfillan, WILDCOAST and San Diego MPA Collaborative; July 17, 2024, Marine Resources Committee meeting**

Dear Fish and Game Commissioners,

My name is Todd Mierau. I am the Coastal Zone Program Administrator for the City of Encinitas. I am responsible for managing six miles of coastline that front our jurisdiction within our city limits. This includes portions of the Batiquitos Lagoon State Marine Conservation Area (SMCA) and Ecological Reserve at the northern boundary, the San Elijo Lagoon SMCA and Ecological Reserve at our southern boundary, and the Swami's SMCA that spans 3.5 miles of our coastline, reaching from Moonlight State Beach, south to South Cardiff State Beach.

Attached is the petition information (Attachment A) and the general map (Attachment B) outlining the request to be heard at the Marine Resources Committee meeting on July 17, 2024. I would like to recommend a modification of the proposed "shift" to the Swami's SMCA boundary south towards the City of Solana Beach for the following reasons:

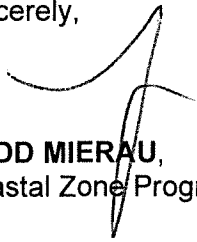
- The City of Encinitas manages the northern portion of the Swami's SMCA from the Cottonwood Creek outfall, south to the Swami's Marine Lifeguard Tower at the public stair accessway. Our lifeguards and other related city staff would have to help enforce the Marine Protected Area (MPA) rules that change with the northerly boundary adjustment. Just south of Cottonwood Creek, there are some sensitive cultural resources that are currently protected under the sand and cobble. It is important that the "**No Collecting**" and "**No Take**" provisions that apply to geologic or culturally sensitive resources found within the Swami's SMCA remain in place at this location.
- Cottonwood Creek, a riparian waterway that outfalls at the northern most portion of Moonlight State Beach, is a clear delineation marker as the current northern boundary for the Swami's SMCA for those wishing to fish within the MPA's shore limits. It is easy for the public to understand the limits as the creek separates the MPA limits from the non-MPA limits.
- The city requests that a complete mete and bounds survey showing the complete limits of the boundary adjustment or "shift" so that we (along with other stakeholders) can evaluate how this could change the existing MPA limits. Additionally, the city requests that a recent marine biological survey be completed in the areas south of the current limits (proposing to be expanded) that we and other stakeholders may review. Finally, the city requests that

a current cultural resources study be completed in the MPA area overall prior to requesting this change.

Based on the incomplete information noted above, I request that the Commissioners move this Item into “Bin 2” to allow for further review and study. Additionally, I suggest that the Commission have the Petitioner, WILDCOAST, meet with the City of Encinitas, City of Solana Beach, California State Parks, Nature Collective, manager of the San Elijo Lagoon SMCA, and California Department of Fish and Wildlife to see how these proposed “shifts” or boundary adjustments and rule changes would impact all jurisdictions that manage these facilities and maintain this sensitive geographic marine area.

Thank you all for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'TODD MIERAU', written over the typed name.

**TODD MIERAU,**  
Coastal Zone Program Administrator

**ATTACHMENT A**  
**PETITION NO. 2023-26MPA**



Tracking Number: (2023-26MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Lisa Gilfillan

Address: 2120 Jimmy Durante Blvd #106, Del Mar, CA 92014

Telephone number: [REDACTED]

Email address: [lisa@wildcoast.org](mailto:lisa@wildcoast.org)

**2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

**3. Overview (Required)** - WILDCOAST is an international non-profit that conserves coastal and marine ecosystems and addresses climate change through natural solutions. We often work in partnership with the MPA Collaborative Network and serve as co-chairs for the San Diego MPA Collaborative group. We will reference the Collaborative Network's Vetted Regulation Recommendations for this petition. Given the complete consensus received within the San Diego MPA Collaborative, we are proposing four changes (one boundary change, and three other changes) across four MPAs. The proposed changes are as follows:

- Line/Row #162- affecting Swami's SMCA: Our Reg recommendation= Shifting the entire shape South (from the lifeguard tower to State/Solana Beach line to cover tidepool on South side)
- Line/Row #160, #164, & #170- affecting Batiquitos Lagoon No-Take SMCA, San Elijo Lagoon No-Take SMCA, & Famosa Slough No-Take SMCA: Our Reg recommendation= changing the purple to red for outreach purposes only, if boundaries remain the same

**4. Rationale (Required) -**





The above proposed recommendations are based on WILD COAST's extensive MPA work in San Diego County and also through our collaboration with the MPA Collaborative Network (as a long-standing co-chair for San Diego County). These proposed recommendations came about after a robust discussion with local San Diego stakeholders on June 26, 2023, at the last San Diego MPA Collaborative meeting.

Line/Row #162- Swami's SMCA: There is a compliance concern here regarding harmful tidepooling, especially at Seaside reef. Enforcement for take of lobster is difficult at the southern boundary since it splits two jurisdictions and the reef (hard to know where they are actually taking from and who is responsible for enforcing what). This proposed change keeps the same size MPA but covers the impacted tidepool area on the Southern boundary. Additionally, the Lifeguard tower would serve as a clear boundary at the North end.

Line/Row #160, #164, & #170- affecting Batiquitos Lagoon No-Take SMCA, San Elijo Lagoon No-Take SMCA, & Famosa Slough No-Take SMCA: The compliance concerns in these locations are all the same- there is confusion amongst the general public around the purple No-Take SMCA designation versus a red SMR. It is therefore easier for the public to understand the regulations when there are fewer designations. It would simplify the rules if all No-Take areas were red for education and outreach purposes. It is anticipated that other MPA Collaborative members will be submitting similar petitions across the South Coast region. Additionally, this change supports Decadal Review Prioritized Recommendation #15.

## SECTION II: Optional Information

5. **Date of Petition:** November 28, 2023
6. **Category of Proposed Change**
  - Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632.
7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
  - Amend Title 14 Section(s): Westlaw regulations.
  - Add New Title 14 Section(s): Click here to enter text.
  - Repeal Title 14 Section(s): Click here to enter text.
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** Click here to enter text.  
Or  Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: N/A



- 10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
  - MPA Collaborative Network Vetted Regulation Recommendations
  
- 11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: N/A
  
- 12. **Forms:** If applicable, list any forms to be created, amended or repealed:  
 N/A

**SECTION 3: FGC Staff Only**

Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

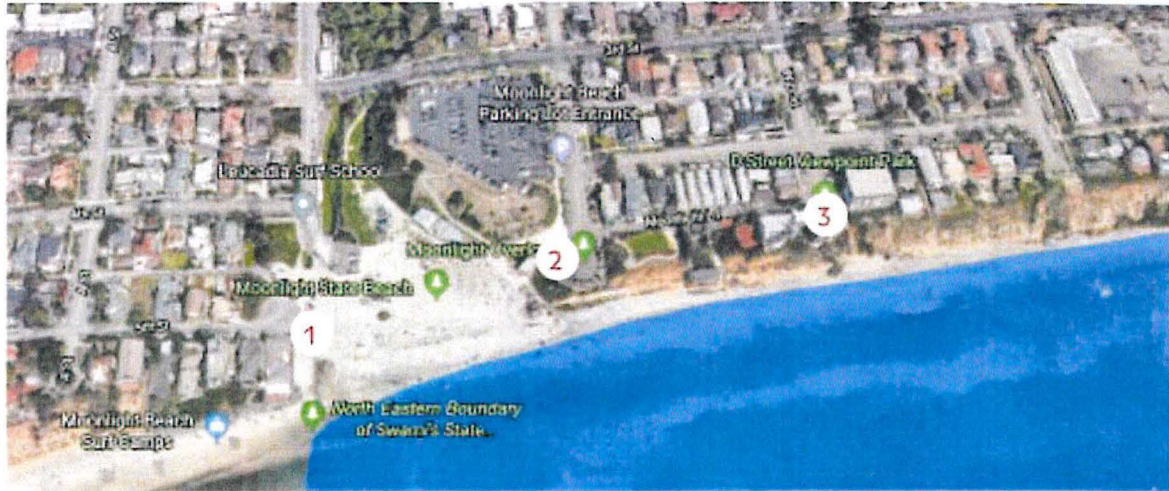
Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

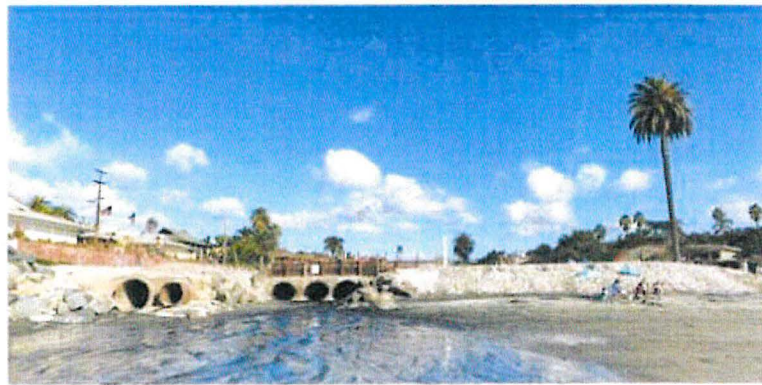
- Denied by FGC
- Denied - same as petition \_\_\_\_\_  
 Tracking Number
- Granted for consideration of regulation change

**ATTACHMENT B  
EXISTING NORTHERLY BOUNDARY AND SIGNAGE AT COTTONWOOD CREEK  
OUTFALL**

**MOONLIGHT BEACH ACCESS**



**Northern Boundary**



(Left), sign indicating northern boundary at outfall; (right), looking back toward outfall (pt. 1)

**EXISTING SOUTHERN BOUNDARY OF CITY OF ENCINITAS IN GREEN.**



**PROPOSED SHIFT IN SWAMI'S SMCA SOUTHERN BOUNDARY**





DEPARTMENT OF PARKS AND RECREATION

Armando Quintero, Director

San Diego Coast District

4477 Pacific Highway  
San Diego, CA 92110  
(619) 688-3260 FAX (619) 688-3229

July 5, 2024

California Fish and Game Commission  
Marine Resources Committee  
P.O. Box 944209  
Sacramento, CA 94244-2090  
[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)

**RE: PETITION NO. 2023-26MPA ON JULY 17-18 FISH AND GAME COMMISSION MARINE RESOURCES COMMITTEE AGENDA**

Dear Marine Resources Committee,

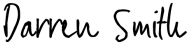
Thank you for the opportunity to comment on the proposed binning of petition number 2023-26MPA to amend the boundary of Swami's State Marine Conservation Area (SMCA). The mission of the California Department of Parks and Recreation (State Parks) is to preserve the state's extraordinary biological diversity, protect its most valued natural and cultural resources, and create opportunities for high-quality outdoor recreation. This mission aligns well with the goals of California's Marine Protected Area system and is particularly reflected in State Parks' management of lands adjacent to and within Swami's SMCA.

Swami's SMCA currently extends three nautical miles from the mean high tide line beginning in the north at Moonlight State Beach (managed by the City of Encinitas), extending south through City beaches and San Elijo State Beach, and terminating in the south adjacent to Cardiff State Beach. San Elijo and Cardiff State Beaches are very popular and offer a variety of high-quality recreational activities, including surfing, swimming, tide pooling, spearfishing, and surf fishing. Due to this high visitation by a variety of beachgoers, State Parks staff interact daily with the public. This often includes communicating about the SMCA's purpose and boundaries and enforcing SMCA regulations both on the beach and in the water.

It is our understanding that part of the proposed petition would shift the boundaries of Swami's SMCA to the south so that the southern boundary would align with the southern boundary of Cardiff State Beach, which borders the City of Solana Beach. State Parks supports the petition's overall goal of enhancing protection at the southern end of Cardiff State Beach and clarifying the southern boundary of Swami's for enforcement purposes. However, more review and discussion are needed to develop an effective alternative boundary; as proposed, the new boundary would still bisect the reef and not necessarily eliminate confusion over where the SMCA ends. Therefore, the review should include extensive stakeholder outreach to affected land managers (State Parks, City of Encinitas, and City of Solana Beach) as well as the public (including inland residents who visit the beach to fish) and tribes. The review should also include biological surveys and recreational fishing surveys to help inform these discussions.

We appreciate the opportunity to comment on this item and look forward to engaging on this as it moves through the review process.

Sincerely,

DocuSigned by:  
  
73DBA4CF21F44C5...

Darren Smith, Senior Environmental Scientist

CC'd

Sean Homer, Sector Superintendent  
Erik Burgan, Peace Officer Lifeguard Supervisor  
Timothy Gunther, Lifeguard / Peace Officer  
Carrie Benner, Environmental Scientist



# STAFF REPORT CITY OF SOLANA BEACH

**TO:** Honorable Mayor and City Councilmembers  
**FROM:** Alyssa Muto, City Manager  
**MEETING DATE:** September 25, 2024  
**ORIGINATING DEPT:** Engineering Department  
**SUBJECT:** **Update on Utility Underground Districts and Adopting District Boundary Maps for the Glenmont/Mar Vista/Marview UUD and the Nardo/Granados/Rios UUD**

## **BACKGROUND:**

The City of Solana Beach has been working to take a major step toward enhancing public safety and preserving its coastal views with the creation of Utility Undergrounding Districts, aimed at relocating overhead utility lines underground. Staff has been working with the neighborhood coordinators on three separate utility underground districts, all west of Interstate 5. The three districts and the corresponding boundaries are summarized below. An update was last provided to the City Council at the January 24, 2024, City Council meeting.

- **Pacific Avenue – Phase II Utility Underground District (UUD)** – Pacific Avenue from North Helix Avenue to Solana Vista Drive (this District includes the Fletcher Cove Community Center).
- **Glenmont/Mar Vista/Marview UUD** – Glenmont Drive (entire street), Mar Vista Drive (entire street), Rawl Place (entire street), Marview Drive (entire street), Ford Avenue (entire street) and Canyon Drive (from Rawl Place to Ford Avenue).
- **Nardo/Granados/Rios UUD** – Nardo Avenue from Lomas Santa Fe Drive (LSF) to just south of Lirio Street, South Granados Avenue from LSF to south end of the street, South Rios Avenue from LSF to south end of the street, Rosa Street (east end of street), Palmitas Street (entire street), Lirio Street (entire street) Corto Street (entire street) and the south end of Via de Vista.

This item is before the City Council for the consideration of Resolution 2024-006 (Attachment 1), which would approve a revised district boundary map and authorize payment of \$18,647 to SDG&E from the City’s share of CPUC Rule 20A allocation for the redesign of the Glenmont/Mar Vista/Marview Utility Underground District. This item

CITY COUNCIL ACTION:

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also includes for Council consideration Resolution 2024-007 (Attachment 2) which would approve a revised district boundary map and authorize payment of \$24,979 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the Nardo/Granados/Rios Utility Underground District.

## **DISCUSSION:**

Below are updates for each of the three UUDs along with action/recommendations for the City Council's consideration for each District. Staff has been meeting routinely with SDG&E and other utility companies (i.e., phone, cable) to further the undergrounding designs, easements, and utility coordination in an effort to move the projects forward for future consideration by residents and the City for implementation. At the end of the update summary provided below for each District, the update and action items are provided in an outline format.

While the Pacific Avenue – Phase II District is in the final stages of design (pre-construction bid), the information provided at this time is still in the design phase for each of the three UUDs. For each district, once the design is completed, the project has been put out for construction bids, and all costs for the district is known, the property owners for that district will vote to decide if their district should be formed and construction move forward. Property owners will have the opportunity to know the costs that they will be required to pay prior to voting. Each district will have a separate vote for that district only, making each district independent of the others so that it will be possible for individual districts to move forward while others are under design and/or should one or more others do not move forward.

### **Pacific Avenue – Phase II (Pacific) UUD**

The Pacific UUD was the first of the three UUDs that was submitted to the City and it is also the furthest along in the process. The second petition was completed and met the 70% threshold as detailed in the "Steps to Forming a Private Residential Utility Underground District" brochure. It is important to note that the City-owned Fletcher Cove Community Center and the adjacent Overlook Park are included in this District. SDG&E is working with the other utility providers (phone and cable) to determine construction costs for this project.

As part of the January 2024 update, the City Council approved payment in the amount of \$45,360 to AT&T for the design of their underground system from the CIP Fund - Engineering Design Account. If the UUD is ultimately approved, the money the City paid to AT&T for this design cost would be included in the total UUD cost and would be reimbursed to the City. Once the total project cost is determined and if the district is formed, the City will have to pay its fair share of the undergrounding cost for the Fletcher Cove Community Center and the Overlook Park.

City Council also approved the District Boundary Map (Attachment 3) allowing AT&T to sign a joint trench agreement (JTA) with SDG&E. The JTA allows AT&T to include their facilities and corresponding construction costs in the SDG&E construction documents for the competitive bidding process as one project. SDG&E is still coordinating with AT&T to execute the JTA for this District.

There are six streetlights within the boundaries of this District that are attached to wood utility poles. Since the wood utility poles would be removed as part of the undergrounding project, the streetlights would be replaced by the City using proceeds from the City of Solana Beach Lighting Maintenance District. Service points for the new streetlights would be included with the undergrounding work so that future trenching will not be required. The pole and light styles and mounting height will be consistent with the City Standard design, similar to the exposed aggregate concrete poles with LED fixtures installed as part of the UUD on the north end of Pacific Avenue and Circle Drive. Please see Attachment 4 for a comprehensive, detailed update on the current activities and future action items.

#### Glenmont/Mar Vista/Marview (Glenmont) UUD

As part of the SDG&E design of this District, SDG&E identified several locations where easements are required to place pad-mounted transformers and certain overhead utility lines underground. All required easements are for the undergrounding of overhead facilities located along private roads or within private properties. Since these locations where transformers or overhead utility lines would be placed underground are not within public streets, the utility companies do not have pre-existing rights for undergrounding their utility lines. The overhead utility lines have easements for the overhead placement of the lines, but these easements do not extend the rights for underground placement of the utility lines. As such, new easements are required for the underground placement of the utility lines.

In the boundaries of the Glenmont UUD, there are properties along the private street Marview Lane for which easements are required. Extensive outreach has been conducted but the necessary easements for the majority of the properties have not been obtained. In order to move forward, the initial District boundary has been adjusted to remove Marview Lane from the UUD since the majority of the properties are not willing to grant easements and the original design needs to be revised. The revised District boundary is included as Exhibit A to Resolution 2024-006. This redesign will remove the properties along Marview Lane as indicated in Exhibit A to Resolution 2024-006. SDG&E requires an additional fee for the redesign of their infrastructure in the amount of \$18,647 so that the District can be built without obtaining easements.

Per Council Policy No. 13, the City Council may approve seed money to be used for the preparation of preliminary plans and a preliminary cost estimate by SDG&E. SDG&E has stated that the redesign fees are eligible to be paid out of the City's Rule 20A allocations. If the District is ultimately formed, then the redesign fees would be paid

back to the City's share of Rule 20A account from the proceeds collected from the property owners within the District. If the District is not approved, the Rule 20A funds would be lost. In either case, no General Fund money is proposed for this redesign work at this time. In anticipation of this item being presented at this Council meeting, Staff sent out letters to all residents within the Glenmont and Nardo District boundaries. This includes properties that are identified as being removed from the District due to easement issues. All correspondences received in response to the letters sent from the City are included with this Staff Report as Attachment 5.

Please see Attachment 4 for a comprehensive, detailed update on the current activities and future action items.

#### Nardo/Granados/Rios (Nardo) UUD

Similar to the Glenmont UUD, the Nardo UUD also has overhead utility lines within a private street (Via de Vista) and on private properties. Although extensive outreach was conducted by SDG&E staff and City Staff, the necessary easements along Via de Vista have not been obtained. The revised District boundary is included as Exhibit A to Resolution 2024-007. This redesign will remove the properties along Via de Vista as indicated in Exhibit A to Resolution 2024-007. Therefore, this also necessitates the redesign of the UUD to remove some properties from the District. SDG&E requires an additional fee for the redesign of their infrastructure in the amount of \$24,979. These funds can be allocated from the City's Rule 20A funds. All correspondences received in response to the letters sent from the City are included with this Staff Report as Attachment 5. Please see Attachment 4 for a comprehensive, detailed update on the current activities and future action items.

#### **CEQA COMPLIANCE STATEMENT:**

UUD projects are exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15302(d) of the State CEQA Guidelines. Notices of Exemption were filed for each of the three UUDs in December 2022.

#### **FISCAL IMPACT:**

There are not any specific fiscal impacts associated with this Staff Report. The amount of seed money requested to pay SDG&E for the preliminary design plans and cost estimate for the Glenmont UUD is \$18,647 and for the Nardo UUD is \$24,979. These costs would be paid from the City's CPUC Rule 20A funds allocation pursuant to City Council Policy No. 13. If either of the Districts is ultimately formed, then the Rule 20A funds would be paid back to the City Rule 20A account with the proceeds collected from the property owners within that District. If either of the District fails, the Rule 20A funds would be lost for that District. In either case, no General Fund money is proposed to be used at this time.

**WORK PLAN:**

This project is not identified in the Fiscal Year (FY) 2024/25 Work Plan.

**OPTIONS:**

- Approve revised District boundaries and seed money from the CPUC Rule 20A allocation in the amount of \$18,647 for the Glenmont UUD and \$24,979 for the Nardo UUD.
- Do not approve the seed money request.
- Provide further direction to the City Manager and City Engineer for this project.

**CITY STAFF RECOMMENDATION:**

Staff recommends that the City Council consider the following:

1. Adopt Resolution 2024-006:
  - a. Authorizing payment of \$18,647 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the Glenmont/Mar Vista/Marview Utility Underground District.
  - b. Approving the Revised District Boundary Map for the Glenmont/Mar Vista/Marview Utility Underground District subject to final voting approval from the District property owners as outlined in the "Steps to Forming a Private Residential Utility Underground District" brochure.
2. Adopt Resolution 2024-007:
  - a. Authorizing payment of \$24,979 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the of the Nardo/Granados/Rios Utility Underground District.
  - b. Approving the Revised District Boundary Map for the Nardo/Granados/Rios Utility Underground District subject to final voting approval from the District property owners as outlined in the "Steps to Forming a Private Residential Utility Underground District" brochure.

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Alyssa Muto, City Manager

Attachments:

1. Resolution 2024-006 (Glenmont/Mar Vista/Marview UUD)
2. Resolution 2024-007 (Nardo/Granados/Rios UUD)
3. Boundary Map for Pacific Avenue – Phase II UUD
4. Undergrounding Utility District Detailed Update on Current Activities and Future Action Items
5. Correspondences received from property owners with the Glenmont and Nardo UUDs

## RESOLUTION 2024-006

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, AUTHORIZING PAYMENT TO SDG&E FOR REDESIGN WORK AND REVISIONS TO BOUNDARY MAP ASSOCIATED WITH THE GLENMONT/MAR VISTA/MARVIEW UTILITY UNDERGROUND DISTRICT

**WHEREAS**, Staff has been working with the neighborhood coordinators on the Glenmont/Mar Vista/Marview Utility Underground District (UUD), which includes properties on Glenmont Drive (entire street), Mar Vista Drive (entire street), Rawl Place (entire street), Marview Drive (entire street), Ford Avenue (entire street) and Canyon Drive (from Rawl Place to Ford Avenue); and

**WHEREAS**, as part of the SDG&E design of this District, SDG&E identified locations where easements are required to place the utilities underground. All easements required are for properties along private roads or driveways. Since the location along private roads where the overhead utility lines would be placed underground are not public streets, the utility companies do not have pre-existing rights for their utility lines. The overhead utility lines have easements for the overhead placement of the lines but these easements do not extend to underground placement of the utility lines. As such, new easements are required for the underground placement of the utility lines; and

**WHEREAS**, in the boundaries of the Glenmont/Mar Vista/Marview UUD, there are properties along the private street Marview Lane for which easements are required. Extensive outreach has been conducted but the necessary easements for the majority of the properties have not been obtained. In order to move forward, the initial District boundary has been adjusted to remove Marview Lane from the UUD since the majority of the properties are not willing to grant easements and the original design needs to be revised. The revised Boundary Map is attached to this resolution as Exhibit A; and

**WHEREAS**, SDG&E requires an additional fee for the redesign of their infrastructure in the amount of \$18,647 so that the District can be built without obtaining easements. Per Council Policy No. 13, the City Council may approve seed money to be used for the preparation of preliminary plans and a preliminary cost estimate by SDG&E. If the District is ultimately formed, then the Rule 20A funds would be paid back to the City's share of Rule 20A allocation from the proceeds collected from the property owners within the District. If the District is not approved, the Rule 20A funds would be lost. In either case, no General Fund money is proposed to be used at this time.

**NOW, THEREFORE**, the City Council of the City of Solana Beach does resolve as follows:

1. That the foregoing recitations are true and correct.
2. That the City Council authorizes payment of \$18,647 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the Glenmont/Mar Vista/Marview Utility Underground District.
3. That the City Council approves the Revised District Boundary Map for the Glenmont/Mar Vista/Marview Utility Underground District subject to final voting approval from the District property owners as outlined in the "Steps to Forming a Private Residential Utility Underground District" brochure.

**PASSED AND ADOPTED** this 25th day of September 2024, at a regularly scheduled meeting of the City Council of the City of Solana Beach, California by the following vote:

AYES: Councilmembers –  
NOES: Councilmembers –  
ABSTAIN: Councilmembers –  
ABSENT: Councilmembers –

\_\_\_\_\_  
LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

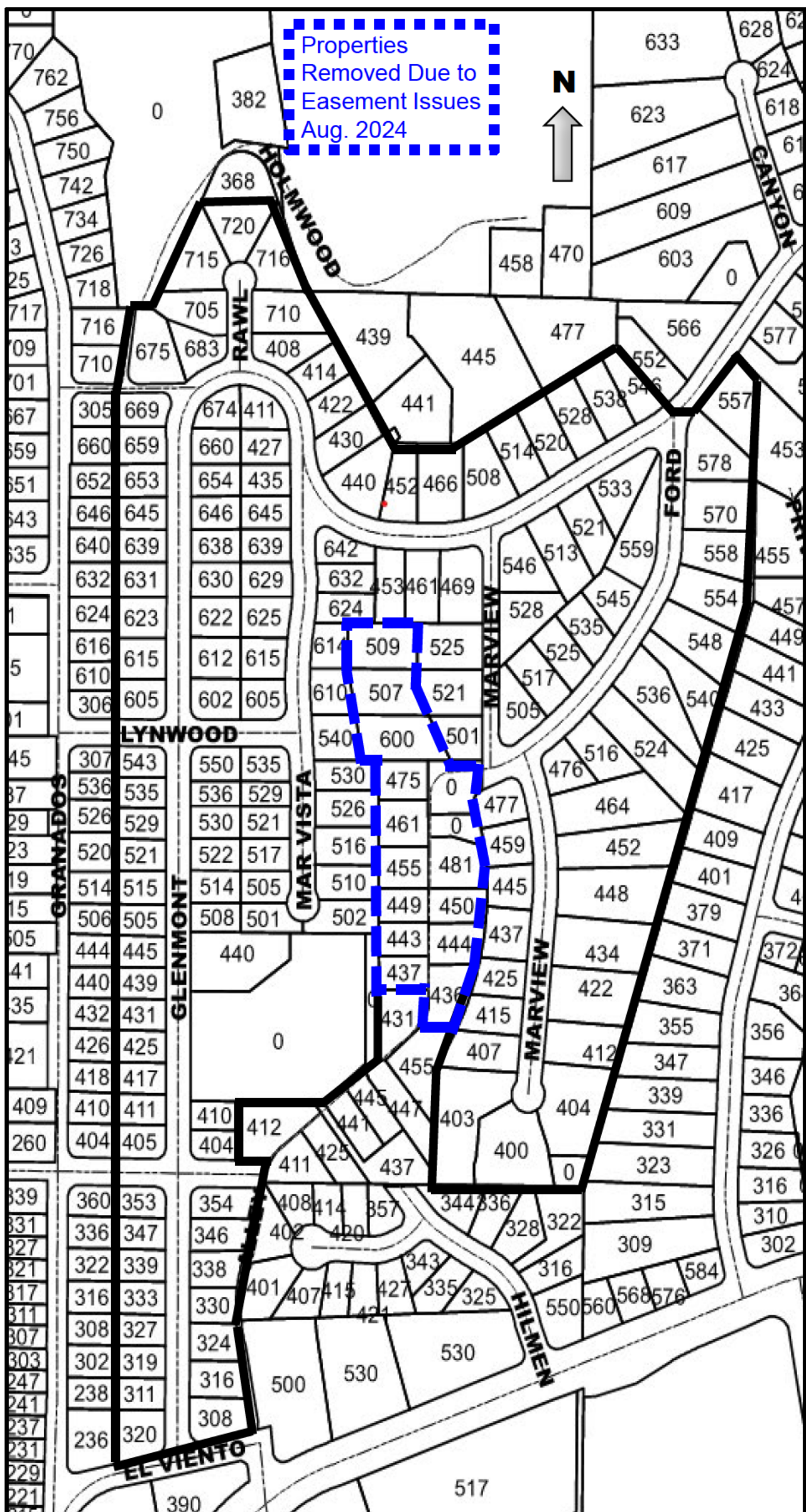
\_\_\_\_\_  
JOHANNA N. CANLAS, City Attorney

\_\_\_\_\_  
ANGELA IVEY, City Clerk

Exhibits:

- A. Revised Boundary Map for Glenmont/Mar Vista/Marview UUD

■ Properties  
■ Removed Due to  
■ Easement Issues  
■ Aug. 2024



**GLENMONT ET AL UNDERGROUND UTILITY DISTRICT**



## RESOLUTION 2024-007

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, AUTHORIZING PAYMENT TO SDG&E FOR REDESIGN WORK AND REVISIONS TO BOUNDARY MAP ASSOCIATED WITH THE NARDO/GRANADOS/RIOS UTILITY UNDERGROUND DISTRICT

**WHEREAS**, Staff has been working with the neighborhood coordinators on the Nardo/Granados/Rios Utility Underground District (UUD), which includes properties on Nardo Avenue from Lomas Santa Fe Drive (LSF) to just south of Lirio Street, South Granados Avenue from LSF to south end of street, on South Rios Avenue from LSF to south end of street, Rosa Street (east end of street), Palmitas Street (entire street), Lirio Street (entire street) Corto Street (entire street) and the south end of Via de Vista; and

**WHEREAS**, As part of the SDG&E design of this District, SDG&E identified locations where easements are required to place the utilities underground. All easements required are for properties along private roads or driveways. Since the location along private roads where the overhead utility lines would be placed underground are not public streets, the utility companies do not have pre-existing rights for their utility lines. The overhead utility lines have easements for the overhead placement of the lines but these easements do not extend to underground placement of the utility lines. As such, new easements are required for the underground placement of the utility lines; and

**WHEREAS**, in the boundaries of the Nardo/Granados/Rios UUD, there are properties along the private street Via de Vista for which easements are required. Extensive outreach has been conducted but the necessary easements for the majority of the properties have not been obtained. In order to move forward, the initial District boundary has been adjusted to remove Via de Vista from the UUD since the majority of the properties are not willing to grant easements and the original design needs to be revised. The revised Boundary Map is attached to this resolution as Exhibit A; and

**WHEREAS**, SDG&E requires an additional fee for the redesign of their infrastructure in the amount of \$24,979 so that the District can be built without obtaining easements. Per Council Policy No. 13, the City Council may approve seed money to be used for the preparation of preliminary plans and a preliminary cost estimate by SDG&E. If the District is ultimately formed, then the Rule 20A funds would be paid back to the City's share of Rule 20A allocation from the proceeds collected from the property owners within the District. If the District is not approved, the Rule 20A funds would be lost. In either case, no General Fund money is proposed to be used at this time.

**NOW, THEREFORE**, the City Council of the City of Solana Beach does resolve as follows:

1. That the foregoing recitations are true and correct.
2. That the City Council authorizes payment of \$24,979 to SDG&E from the City's share of CPUC Rule 20A allocation for the redesign of the of the Nardo/Granados/Rios Utility Underground District.
3. That the City Council approves the Revised District Boundary Map for the Nardo/Granados/Rios Utility Underground District subject to final voting approval from the District property owners as outlined in the "Steps to Forming a Private Residential Utility Underground District" brochure.

**PASSED AND ADOPTED** this 25th day of September 2024, at a regularly scheduled meeting of the City Council of the City of Solana Beach, California by the following vote:

AYES: Councilmembers –  
NOES: Councilmembers –  
ABSTAIN: Councilmembers –  
ABSENT: Councilmembers –

\_\_\_\_\_  
LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

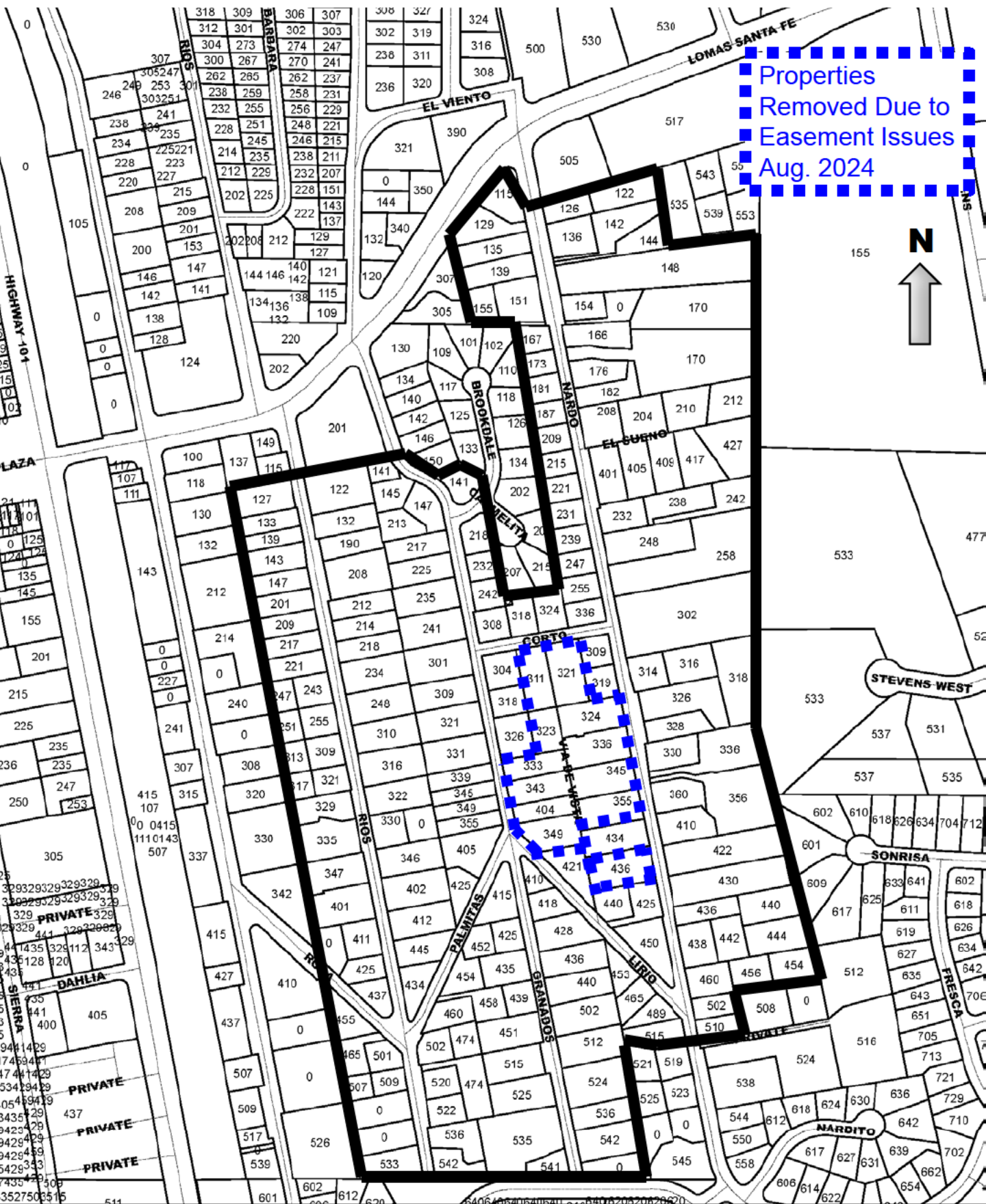
\_\_\_\_\_  
JOHANNA N. CANLAS, City Attorney

\_\_\_\_\_  
ANGELA IVEY, City Clerk

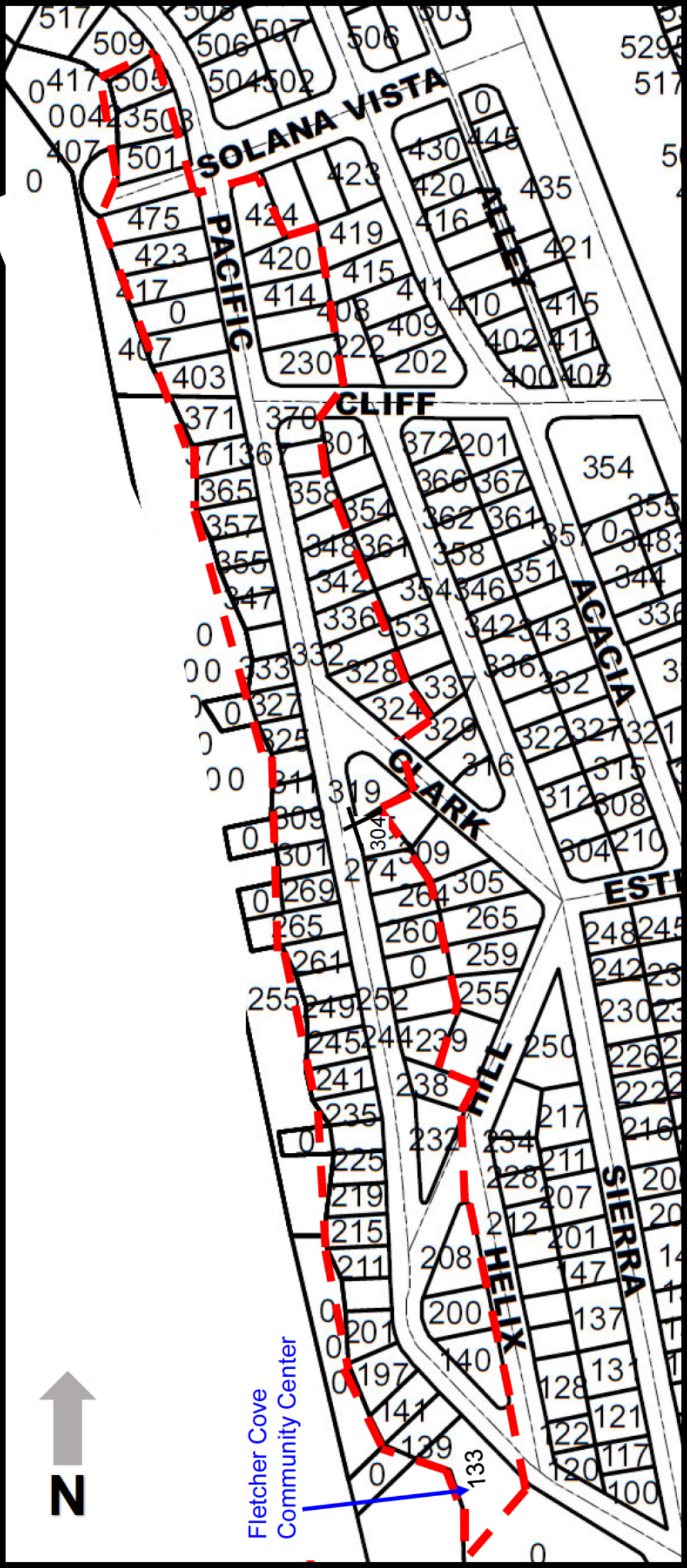
Exhibits:

- A. Revised Boundary Map for Nardo/Granados/Rios UUD

Properties  
Removed Due to  
Easement Issues  
Aug. 2024



**NARDO/GRANADOS/RIOS UNDERGROUND UTILITY DISTRICT**



# Pacific Utility Underground District – Boundary Map

12/19/2023

## **DETAILED UPDATE ON THE CURRENT ACTIVITIES AND FUTURE ACTION ITEMS**

### **Pacific Avenue – Phase II Utility Underground District**

#### 1. Communication Companies

- AT&T – plans have been provided from AT&T to SDG&E and SDG&E completed their review of the plans on 8/14/2024.
  - AT&T to provide to City information on billable costs. Trenching costs will be included in the billable value to be sent by SDG&E. If District is ultimately approved by a vote of the District, these costs will be included in the total assessed value of the District.
  - AT&T to sign the JTA. As of the writing of this report, the JTA has not been signed and returned to SDG&E.
- Cox Communications – the JTA has been signed and returned to SDG&E. Although Cox has submitted design plans to SDG&E, the plans are based on the SDG&E design plans from 2021 not the more current version prepared in 2023. Cox will update their plans and submit to SDG&E. All Cox trenching costs will be submitted to SDG&E and included to the City in the overall costs that SDG&E provides to the City.
- Costs provided from all communication companies will be included in the overall District cost and apportioned out by the assessment engineer as part of the District vote.

#### 2. Permitting Update – the City has approved an encroachment permit with SDG&E for the construction of the District. The encroachment permit is valid until December 2026 but can be extended if needed.

#### 3. Replacement of Streetlights

- There are six streetlights within the District that are attached to poles that will be removed as part of this project.
- The City intends to replace the streetlights as a separate CIP (CIP) project after the wood utility poles are removed so that the asset is owned and managed by the City moving forward. The City will provide documentation to SDG&E as to the exact location of the existing streetlights so service points can be provided during the undergrounding project. This will eliminate the need for further trenching to install the streetlights after the undergrounding work is completed. There will be short period of time when streetlights will not be present until the District is complete and the City can install new streetlight poles.

## Glenmont/Mar Vista/Marview (Glenmont) UUD

### 1. Design Status

- Updated Boundary Map & Resolution will need to be issued before redesign can commence. The revised District boundaries are shown in the map provided as Exhibit A to Resolution 2024-006, which is included with this Staff Report as Attachment 1.

### 2. Communication Companies

- AT&T, Cox Communications, Crown Castle and Spectrum/Charter all have facilities within the Glenmont Utility Underground District.
- SDG&E needs to finalize their plans before sending out their plans to these communication companies.
- Communication companies will use SDG&E design as a basis for their designs. It is anticipated that the JTA will be executed by all communication companies so that one construction contract and one trench can accommodate all underground utilities.

### 3. Replacement of Streetlights

- The City will provide SDG&E locations of existing streetlights that will need to be replaced once the wood utility poles are removed.
- This information will be used by SDG&E to provide service points in their design plans for the future streetlights.

### 4. Santa Fe Irrigation District (SFID) Easement

- SDG&E currently has an easement across SFID property for existing utility lines. This easement allows for both overhead and underground power lines. SDG&E has stated that a new, additional easement is needed because safety issues preclude them from placing new power lines underneath active overhead power lines.
- SFID has many underground water lines within their property at 440 Glenmont Drive. A new easement could limit their ability to provide future upgrades at this site.
- The language of the proposed SDG&E easement prevents grading inside the easement. This restriction could impact the planned neighborhood park the City is designing for this site.

## Nardo/Granados/Rios (Nardo) Utility Underground District

### 1. Design Status

- Updated Boundary Map & Resolution will need to be issued before redesign can commence. The revised District boundaries are shown in the map

provided as Exhibit A to Resolution 2024-007, which is included with this Staff Report as Attachment 2.

- SDG&E was able to adjust the boundaries so that three properties on the south end of Via de Vista can remain in the District without the need for easements.

## 2. Communication Companies

- AT&T, Cox Communications and Spectrum/Charter all have facilities within the Nardo Utility Underground District.
- SDG&E needs to finalize their plans before sending out their plans to these communication companies.
- Communication companies will use SDG&E design as a basis for their designs. It is anticipated that the JTA will be executed by all communication companies so that one construction contract and one trench can accommodate all underground utilities.
- It is anticipated that Charter needs six to eight weeks and AT&T needs approximately eight weeks to complete their designs.

## 3. Replacement of Streetlights

- The City will provide SDG&E locations of existing streetlights that will need to be replaced once the wood utility poles are removed.
- This information will be used by SDG&E to provide service points in their design plans for the future streetlights

## 4. Easements

- SDG&E is working with their design team to eliminate the need for easements on private property. As noted above, this is complicated by the fact that Via de Vista is a private street. At this point, the current draft design has eliminated the need for easements. However, this is subject to change as the final design is completed.

**From:** [Mo Sammak](#)  
**To:** [Peter Brunelle](#)  
**Cc:** [Alyssa Muto](#); [Dan Goldberg](#); [Dan King](#)  
**Subject:** RE: Nardo/Granados/Rios Utility Underground District (UUD)  
**Date:** Monday, September 16, 2024 11:33:29 AM

---

Hi peter

Your parcel is correctly identified. Even though you have a Via De Vista, private street, Address, your property is being served from a public right of way. You are still in the district.

Thanks.

Mo.

-----Original Message-----

From: Peter Brunelle [REDACTED]  
Sent: Monday, September 16, 2024 9:10 AM  
To: Mo Sammak <[msammak@cosb.org](mailto:msammak@cosb.org)>  
Cc: Alyssa Muto <[amuto@cosb.org](mailto:amuto@cosb.org)>; Dan Goldberg <[dgoldberg@cosb.org](mailto:dgoldberg@cosb.org)>; Dan King <[DKing@cosb.org](mailto:DKing@cosb.org)>  
Subject: Re: Nardo/Granados/Rios Utility Underground District (UUD)

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Helo Mo,

Thank you very much for your reply, it is much appreciated.

I did receive the letter this past Saturday and have one question that I would not want to tie up the meeting with. We are at [REDACTED] Via De Vista and are wondering if our parcel has been correctly identified, can you please clarify the status of [REDACTED] Via De Vista?

Thank you again for the communications,

Peter Brunelle

> On Sep 16, 2024, at 7:25 AM, Mo Sammak <[msammak@cosb.org](mailto:msammak@cosb.org)> wrote:

>

> Good morning Peter

>

> The City Manger asked me to reply to your email.

>

> Your recollection of our efforts in obtaining easements from property owners within Via De Vista neighborhood is accurate. Since our last update to the City Council, we have been trying to work with SDG&E to revise the district boundary to exclude those property owners who are unwilling to grant easement and the corresponding additional design costs for the project. After several months of collaborative efforts with SDG&E, we have a conceptual plan for moving forward. We are currently preparing an informational and update item that will be presented to the City Council at the Council meeting that will be held on Wednesday September 25. Once the Staff Report is ready, it will be posted on the City's website. In preparation for the Council meeting, we prepared letters to everyone in the District, including those who refused to grant easements to update them know about the project and encourage them to attend the meeting. The letters were sent out last week (Thursday September 12). In the meantime, If you have any specific questions, please feel free to contact me at (858)-720-2473.

>

> Thanks.



> Mo.  
> -----Original Message-----  
> From: Peter Brunelle [REDACTED]  
> Sent: Wednesday, September 11, 2024 1:18 PM  
> To: Alyssa Muto <amuto@cosb.org>  
> Subject: Nardo/Granados/Rios Utility Underground District (UUD)  
>  
> [You don't often get email from [REDACTED] Learn why this  
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>  
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> content is safe.  
>  
>  
> Hi Alyssa,  
>  
> My name is Peter Brunelle and I live at [REDACTED] Via De Vista, part of the Nardo/Granados/Rios Utility Underground  
> District (UUD).  
> Is it possible to get an update on this project? It has been over six years since this project was initiated.  
> Last year we were told City Staff and SDG&E had been unable to obtain the necessary easements from the  
> property owners at the north end of Via De Vista and SDG&E was moving forward with the UUD that will not  
> include Via De Vista.  
> Has SDGE made any progress with a new plan? During the power outage Sunday night SDGE spent a lot of time  
> on the poles on Via De Vista, wondering if there is any news on UUD?  
>  
> Thank you very much for your help,  
>  
> Peter Brunelle

**From:** [Tjitske Zitman](#)  
**To:** [Pw-Eng](#)  
**Subject:** UUD Glenmont/MarVista/Marview Utility  
**Date:** Saturday, September 14, 2024 12:32:15 PM

---

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Dear Mr. Mohammad Sammak  
Engineering Public Works Director

Today I received a letter regarding the issue that I might be impacted by the proposed Utility underground project in my neighborhood. I live on [REDACTED] MarVista Drive. I have in the past informed the project organizer in my neighborhood that I am not willing to pay for placing the overhead vacilities underground and want to opt out and **do not give my vote.**

**I feel very strongly that this is a beautification that should be paid and done by the City of Solana Beach to beautify our town and should not be expected to be a financial burden on the property owners.**

I imagine they will need to vote and get a majority vote to get it approved. I have not even received how this will financially impact me and asked if I can afford to do this so that I may continue to live in my home and the area I love for over 35 years. My property tax is high enough and I am not willing to have them increase. My neighbors most likely have a much higher income and are not looking at the financial burden it might cause others.

The poles I have lived with for over 35 years and are not bothering me - I do have to agree it would look nicer if they are underground but again that is a project for the beautification of the city of Solana Beach.

My questions is how do I opt out and what do I need to sign that I am not part of this project. I want to opt out and how do I proceed? My voice is that **I do not support of the undergrounding project and they cannot count on my vote.**

Thanking you in advance for your attention in this matter and I hope you can inform me how to proceed,

Tjitske E. Zitman  
[REDACTED] MarVista Drive  
[REDACTED]

**From:** [Karin Esser](#)  
**To:** [Pw-Eng](#)  
**Subject:** Marview Lane Utility Undergrounding  
**Date:** Saturday, September 14, 2024 5:19:07 PM

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Dear Mr. Sammak,

Thank you for your letter referring to the City Council meeting on September 25, 2024 in regard to the Utility Undergrounding District Project.

Unfortunately we will be unable to attend this meeting but want to assure you that we are supporting the undergrounding project and would like to see it move forward. We are aware that we have to grant SDG&E the easement rights to our address at [REDACTED] Marview Lane.

We are looking forward to learn about any progress in this matter.

Sincerely,  
Alfred and Karin Esser

**From:** [Mark Robinson](#)  
**To:** [Pw-Eng](#)  
**Subject:** Nardo / Granados / Rios Utility Undergrounding District Project  
**Date:** Saturday, September 14, 2024 10:24:42 PM  
**Attachments:** [Solana Beach Utility Underground Notice .pdf](#)

---

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Hello,

I received the attached communication and plan on attending the noted City Council meeting. My residence is at [REDACTED] Via De Vista and appear to be within the "Properties removed due to easement issues Aug 2024". I wasn't sure exactly what it means to be within this "Properties removed....." area, any further explanation would be greatly appreciated.

Thanks

MARK ROBINSON  
MANAGING DIRECTOR & PARTNER – PORTFOLIO ASSET MANAGEMENT  
SOUTHWEST VALUE PARTNERS  
12770 El Camino Real, Suite 200, San Diego, CA 92130  
(858) 480-2900  
[mrobinson@swvp.com](mailto:mrobinson@swvp.com)

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**From:** [Angela Ivey](#)  
**To:** [Mo Sammak](#); [Dan Goldberg](#)  
**Cc:** [Megan Bavin](#); [Gabriela Zoguiapa](#)  
**Subject:** FW: Nardo/Granados/Rios UUD project update on September 25, 2024  
**Date:** Tuesday, September 17, 2024 10:49:33 AM

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For engineering

**Angela Ivey** | City Clerk

City of Solana Beach 635 S. Hwy 101 Solana Beach CA 92075  
858-720-2425

[aivey@cosb.org](mailto:aivey@cosb.org) [www.cityofsolanabeach.org](http://www.cityofsolanabeach.org) [city clerk services](#)



---

**From:** Marc Halpern [REDACTED]  
**Sent:** Monday, September 16, 2024 11:26 PM  
**To:** Clerk Office <clerkoffice@cosb.org>  
**Cc:** Kristi Becker [REDACTED]  
**Subject:** Nardo/Granados/Rios UUD project update on September 25, 2024

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City Council and Councilmember Becker:

I am one of the community liaisons for the Nardo/Granados/Rios UUD and a 20+ year resident of Solana Beach. Thank you for your continued attention to this important project that will improve both the UUD area and add to Solana Beach as a whole.

I received the notice of the upcoming project update at the September 25<sup>th</sup> City Council meeting. Unfortunately, I will be unable to attend in person because of prior travel arrangements. So I am writing with a brief note to continue to express my support for this project and relay the support of the neighborhood. The remarkable improvements to other parts of town and neighboring communities that have been undergrounded should continue to inspire us.

I am excited to see that the necessary adjustments to the boundary map have now been implemented to be able to proceed forward expeditiously to next steps, and look forward to reviewing the minutes of the meeting to hopefully see continued support from the City, pressure on the utility companies, and the setting of target dates to keep this moving. As you know, It has been almost 7 years since the UUD was approved on September 29, 2017. There

are still a few steps to go, but hopefully we have seen the last of any significant delays or hurdles.

Sincerely,  
Marc Halpern

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**From:** [Siegfried Reich](#)  
**To:** [Pw-Eng](#)  
**Subject:** Glenmont Mar Vista Undergrounding  
**Date:** Monday, September 16, 2024 12:04:09 PM

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Hi, I received a letter noting an upcoming SB City Counsel mtg Sept 25 to discuss undergrounding status, but no time is noted and I see nothing on the CSB website calendar for this date/topic. Can you provide more detail and can one call into the meeting to listen in?  
thanks  
Siegfried Reich  
(owner, [REDACTED] Glenmont Drive)

**From:** [Rik Floyd](#)  
**To:** [Pw-Eng](#)  
**Cc:** [Rik Floyd](#); [REDACTED]  
**Subject:** Glenmont/MarVista/Marview Utility Undergrounding District Project Update (UUD)  
**Date:** Monday, September 16, 2024 1:14:21 PM

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Dear Mr. Sammak,

Thank you for your September 11 update letter. We are Rik and Carol Floyd (Floyd Family Trust) of [REDACTED] Glenmont Drive.

Based on the map you enclosed, we believe our parcel has been property identified; in other words, [REDACTED] Glenmont Drive would like to be INCLUDED in a district to underground overhead utility lines.

If you need to reach us our contact information is given below.

Thank you for your efforts on behalf of our neighborhood and Solana Beach.

Warm regards,

Rik and Carol

Rik Floyd

[REDACTED] landline

[REDACTED] mobile

[REDACTED]

[REDACTED]

[REDACTED] (is being retired). To reach us through our shared, personal email account please update your records to: [REDACTED]



**From:** [Kelley Hall](#)  
**To:** [Pw-Eng](#)  
**Subject:** UUD Project Glenmont  
**Date:** Tuesday, September 17, 2024 7:46:50 AM

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Dear City of Solana Beach Engineering Department,

We own/reside in [REDACTED] Glenmont Drive and were very excited to receive UUD letter. We are definitely in favor and are in support of our overhead power lines being eliminated and placing them underground. What is the timing of this project?

Sincerely,

Kelley & Chris Hall

**From:** [Wendi McKenna](#)  
**To:** [Pw-Eng](#)  
**Cc:** [Neil McKenna](#)  
**Subject:** Utility Undergrounding  
**Date:** Tuesday, September 17, 2024 10:40:27 AM

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Dear Mohammad,

Neil and I received your letter from the city regarding the utility undergrounding project. To my knowledge, we did not receive an easement request for the undergrounding. I understand there are probably other parcels that are more affected than ours ([REDACTED] Via de Vista) but we would like to work with our neighbors to have this move forward in our neighborhood.

Please advise.

Thank you

Wendi and Neil McKenna

Wendi McKenna, DPT

[REDACTED] cell  
[www.WendiMcKenna.com](http://www.WendiMcKenna.com)  
[www.MovePlayGrow.com](http://www.MovePlayGrow.com)  
<https://www.facebook.com/groups/livinginleadership>

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**From:** [Carrie Greenstein](#)  
**To:** [Pw-Eng](#)  
**Cc:** [Angela Ivey](#)  
**Subject:** Fwd: Glenmont underground utility district  
**Date:** Tuesday, September 17, 2024 2:31:08 PM

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Dear Mr. Sammak,

Thank you for providing the district update letter. We are disappointed that our property will be excluded from the district.

While I understand some properties have not agreed to grant easements, my neighbor at [REDACTED] Marview Lane and us ([REDACTED] Marview Lane) have granted an easement to locate the SDG&E transformer that would allow the removal of the pole located between [REDACTED] and [REDACTED] Marview Lane.

We are requesting that [REDACTED] thru [REDACTED] Marview Lane be included in the district to allow the underground of the one utility pole located between [REDACTED] and [REDACTED] Marview Lane.

Thank you for this consideration.

Carrie and Jim Greenstein

**From:** [Angela Ivey](#)  
**To:** [Mo Sammak](#); [Dan Goldberg](#)  
**Subject:** FW: Utility Undergrounding Project  
**Date:** Tuesday, September 17, 2024 3:45:00 PM

---

**From:** John Mansdorfer [REDACTED]  
**Sent:** Tuesday, September 17, 2024 3:44 PM  
**To:** Angela Ivey <aivey@cosb.org>  
**Subject:** FW: Utility Undergrounding Project

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**From:** John Mansdorfer [REDACTED] >  
**Sent:** Tuesday, September 17, 2024 3:34 PM  
**To:** [msammak@cosb.org](mailto:msammak@cosb.org)  
**Cc:** [aivery@cosb.org](mailto:aivery@cosb.org)  
**Subject:** Utility Undergrounding Project

Dear Mr. Sammak,

I recently received a letter from you concerning the Glenmont/Mar Vista/Marview Utility Undergrounding District Project Update.

I see we at [REDACTED] Marview Lane are excluded. You may remember that we have already granted an easement to the locate an SDG&E transformer on our property as well as the property of [REDACTED] Marview Lane. This would allow for the removal of the utility pole between [REDACTED] and [REDACTED] Marview Lane.

Therefor we are requesting that the lots between [REDACTED] and [REDACTED] be re-included in the Utility Undergrounding District Project, to allow for the undergrounding of the utility pole between [REDACTED] and [REDACTED] Marview Lane.

Thank you for your prompt attention to this matter.

John & Barbara Mansdorfer



# STAFF REPORT CITY OF SOLANA BEACH

**TO:** Honorable Mayor and City Councilmembers  
**FROM:** Alyssa Muto, City Manager  
**MEETING DATE:** September 25, 2024  
**ORIGINATING DEPT:** Finance – Rachel Jacobs, Finance Director  
**SUBJECT:** **General Fund Update (Unaudited) for Fiscal Year 2024**

---

## **BACKGROUND:**

The City of Solana Beach (City) is working on the Annual Comprehensive Financial Report (ACFR) which is to be completed by mid-January. Staff is presenting preliminary financial information for the General Fund for Fiscal Year (FY) 2024 in advance of the completion of this report. In previous years, the City Council (Council) has used this information to allocate portions of the General Fund surplus to other funds with the purpose of funding future projects or reducing future liabilities. Any approved allocations will be included as part of the FY 2024 closing process.

Staff is also presenting proposed budget appropriations for all funds in which the original or amended budgets were exceeded. If approved, these budget appropriations will also be included as part of the FY 24 closing process.

This item is before the City Council (Council) to accept and file the General Fund Update (Unaudited) for Fiscal Year 2024 (FY24) and to consider adoption of Resolution 2024-100 (Attachment 1) revising appropriations in the FY24 Budget.

## **DISCUSSION:**

### **General Fund Unaudited Information**

Staff is presenting unaudited General Fund revenue and expenditure financial information for FY24. The following discussion is intended to highlight the areas of the budget – both revenues and expenditures – where the largest impacts were realized. If there are specific questions regarding any areas of the budget that Council may have, Staff will be prepared to address them.

CITY COUNCIL ACTION:

The information presented is unaudited and certain assumptions were made as to revenues and expenditures that may still be adjusted. Staff will return to Council at a later Council meeting to present the audited ACFR.

**Revenues**

Revenues (unaudited) for the General Fund are summarized in Table 1 on the next page and are provided in detail in Attachment 2.

**TABLE 1  
 GENERAL FUND REVENUES**

	2024		2024 Revised Budget	2024 Actual	Variance to Revised Budget	
	Original Budget	Xfers/Adj			\$	%
<b>GENERAL FUND REVENUE</b>						
TAXES	18,177,310	600,000	18,777,310	19,327,051	549,741	2.9%
LICENSES & PERMITS	614,750	200,000	814,750	815,647	897	0.1%
FINES & PENALTIES	320,200	-	320,200	528,722	208,522	65.1%
USE OF MONEY & PROPERTY	325,475	-	325,475	1,115,901	790,426	242.9%
INTERGOVERNMENTAL REVENUES	2,199,850	102,072	2,301,922	2,434,789	132,867	5.8%
SERVICE CHARGES	829,000	50,000	879,000	852,041	(26,959)	-3.1%
OTHER REVENUES	1,372,603	15,000	1,387,603	1,443,513	55,910	4.0%
TRANSFERS	633,730	(633,730)	-	-	-	0.0%
<b>TOTAL GENERAL FUND REVENUES</b>	<b>24,472,918</b>	<b>333,342</b>	<b>24,806,260</b>	<b>26,517,664</b>	<b>1,711,404</b>	<b>6.9%</b>
<b>MEASURE S REVENUES</b>						
TAXES	4,400,000	200,000	4,600,000	5,045,209	445,209	9.7%
USE OF MONEY & PROPERTY	-	-	-	40,143	40,143	0.0%
<b>TOTAL MEASURE S REVENUES</b>	<b>4,400,000</b>	<b>200,000</b>	<b>4,600,000</b>	<b>5,085,351</b>	<b>485,351</b>	<b>10.6%</b>
<b>TOTAL GF &amp; MEASURE S REVENUES</b>	<b>28,872,918</b>	<b>533,342</b>	<b>29,406,260</b>	<b>31,603,015</b>	<b>2,196,755</b>	<b>7.5%</b>

The revised General Fund revenue budget for FY24 was \$29,406,260. Actual revenues collected equal \$31,603,015, an increase over the revised budget of \$2,196,755 or 7.5%.

The following section contains the highlights of the FY23 General Fund Budget:

- **Short-Term Vacation Rentals TOT:** Short-Term Vacation Rental (STVR) TOT revenue was \$117,877 higher than the revised budget. The variance reflects an increase in the number of vacation rental units in the city, as well as an increase in the demand for short term vacation rentals.
- **Investment Earnings:** Investment earning revenue was \$781,950 higher than the revised budget. These revenues include the GASB requirement to record annual changes in market value of the investment portfolio, which was \$394,486 this year.

- **Measure S Tax:** Actual Measure S Tax revenue was \$445,209 higher than the revised budget projections. The increase is primarily attributed to a continued recovery and growth in restaurant, general consumer goods, and fuel sectors. Some of this increase was also due to inflationary pressure on the cost of taxable goods.

**Expenditures**

Expenditures (unaudited) for the General Fund are summarized in Table 2, below, and are provided in detail in Attachment 3 by function and Attachment 4 by object classification.

**TABLE 2  
 GENERAL FUND EXPENDITURES**

	2024 Original Budget	Xfers/Adj	2024 Revised Budget	2024 Actual	2024 Encumbered	Variance to	
						\$	%
<b>GENERAL FUND EXPENDITURES</b>							
GENERAL GOVERNMENT	4,866,049	49,614	4,915,663	4,422,599	55,827	437,237	8.9%
COMMUNITY DEVELOPMENT	1,959,533	97,140	2,056,673	1,812,282	122,965	121,426	5.9%
PUBLIC SAFETY	12,053,566	56,910	12,110,476	12,039,652	-	70,824	0.6%
PUBLIC WORKS	3,330,257	104,000	3,434,257	3,061,894	35,000	337,363	9.8%
COMMUNITY SERVICES	869,124	27,750	896,874	858,647	9,250	28,977	3.2%
TRANSFERS OUT	980,000	70,000	1,050,000	1,050,000	-	-	0.0%
<b>TOTAL GENERAL FUND EXPENDITURES</b>	<b>24,058,529</b>	<b>405,414</b>	<b>24,463,943</b>	<b>23,245,075</b>	<b>223,042</b>	<b>995,827</b>	<b>4.1%</b>
<b>MEASURE S EXPENDITURES</b>							
GENERAL GOVERNMENT	60,000	-	60,000	11,663	-	48,337	80.6%
PUBLIC WORKS	1,064,000	-	1,064,000	667,790	396,210	-	0.0%
TRANSFERS OUT	733,400	-	733,400	733,400	-	-	0.0%
<b>TOTAL MEASURE S EXPENDITURES</b>	<b>1,857,400</b>	<b>-</b>	<b>1,857,400</b>	<b>1,412,853</b>	<b>396,210</b>	<b>48,337</b>	<b>2.6%</b>
<b>TOTAL GF &amp; MEASURE S EXPENDITURES</b>	<b>25,915,929</b>	<b>405,414</b>	<b>26,321,343</b>	<b>24,657,927</b>	<b>619,252</b>	<b>1,044,164</b>	<b>4.0%</b>

The revised General Fund Expenditure budget for FY24 was \$26,321,343. Actual expenditures were \$24,657,927 and encumbered funds were \$619,252, which was \$1,044,164, or 4.0%, less than the revised expenditure budget amount.

The following section contains the expenditure highlights of the FY24 Budget:

- **Salaries and Fringe Benefit Costs:**
  - Actual salaries and benefit costs totaled \$10,606,979, which was \$250,472 less than the revised budget, primarily due to position vacancies.
- **Professional Services:**
  - The professional services category realized savings in all departments throughout City Hall. Overall professional services totaled \$8,280,504, which was \$567,203 less than the revised budget.

- **Materials, Supplies and Services:**

- All other Materials, Supplies and Services expenditure categories realized cumulative savings of \$163,186 for the fiscal year.

**Schedule of Revenues, Expenditures, and Projected Surplus**

With the unaudited revenue and expenditures reported for the FY24, the projected unaudited surplus is detailed in Table 3.

**TABLE 3  
 GENERAL FUND - PROJECTED SURPLUS**

	<b>GENERAL FUND</b>	<b>MEASURE S</b>	<b>TOTAL</b>
ACTUAL REVENUES	26,517,664	5,085,351	31,603,015
ACTUAL EXPENDITURES	(23,245,075)	(1,412,853)	(24,657,927)
ENCUMBRANCES	(223,042)	(396,210)	(619,252)
NET SURPLUS/(DEFICIT)	3,049,547	3,276,288	6,325,836

**Payment to PARS Trust Funds**

In FY 2015, the City Council approved and established a combined PARS Pension and OPEB Trust. Through FY24, Council has allocated a total of \$4,430,560 to the Trust by using a portion of each of the FY's General Fund surpluses as detailed in Table 4.

**TABLE 4  
 PARS CONTRIBUTIONS**

	<b>PROJECTED SURPLUS</b>	<b>PENSION</b>	<b>OPEB</b>	<b>TOTAL</b>
2015	907,284	500,000	-	500,000
2016	613,462	316,209	135,000	451,209
2017	1,123,432	347,094	85,376	432,470
2018	1,121,884	357,098	87,689	444,787
2019	1,768,986	623,724	253,516	877,240
2020	1,046,697	283,926	198,000	481,926
2021	1,378,485	485,075	204,000	689,075
2022	2,161,522	-	138,000	138,000
2023	1,887,905	1,517,434	137,000	1,654,434
2024			120,100	120,100
<b>TOTAL</b>	<b>12,009,657</b>	<b>4,430,560</b>	<b>1,358,681</b>	<b>5,789,241</b>



As part of the adoption of the FY24 and FY25 Budget, the City continued its funding policy for the OPEB PARS Trust (\$120,100 in FY24 and \$115,000 in FY25).

To continue funding the Pension portion of the PARS Trust, Staff is recommending that Council consider setting aside a portion of the FY24 projected surplus. Staff has prepared a resolution that will be updated to reflect the amounts that Council approves to be used to fund the PARS Pension Trust. Since the Pension Trust provides funds for employee benefits and employee benefits are paid by both General Fund and non-General Fund funds, an allocation method will be used to ensure all funds which pay employee benefits contribute to the Trust payments. The General Fund portion of the contribution will be budgeted and paid from the FY24 Unreserved General Fund balance.

### **Proposed FY 2024 Budget Appropriations – All Funds**

For FY 2024, Fund 219 and Fund 214 both had expenditures exceed the original or amended budgeted appropriations.

Fund 219 is used to record COPS grant funding which pays for a portion of the City's contract with the San Diego County Sheriff's Department. On January 25, 2023, Council approved the purchase and installation of License Plate Recognition Cameras and appropriated funding in the FY 2023 budget. No costs were billed in FY 2023. In FY 2024, the Sheriff's Department billed the City \$22,800 for the cameras as part of the July monthly invoice. After adding in credits to the Sheriff's Department's fees for towing and the additional \$22,800 for the License Plate Recognition Cameras, Fund 219 exceeded its budgeted appropriations by \$22,206. Fund 219 has enough fund balance to cover the additional appropriations.

Fund 214 is used to record the Fire Mitigation Impact Fees listed on the City's master fee schedule. In an effort to utilize the fund balance in Fund 214, the City's Fire Department purchased needed turnout gear for staff.

**CEQA COMPLIANCE STATEMENT:** N/A

### **FISCAL IMPACT:**

Staff is recommending the following budget appropriations be made to the FY24 Budget. These appropriations are for audit purposes only, no additional payments or charges to the City will be made as a result of these adjustments.

### **Other Funds**

- Increase of \$11,910 in the Fire Mitigation fund – Turnout gear purchases utilizing available fund balance.
- Increase of \$22,206 in the COPS fund – Professional Services for the LPR program cost utilizing available fund balance.

If authorized by Council, Staff is recommending the following budget adjustments and appropriation be made in the FY24 Budget utilizing projected surplus as follows:

**PARS Trust Funds**

- Budget appropriations, as determined by the Finance Department, if Council authorizes funds be used from the projected FY24 General Fund surplus to fund the PARS Pension and OPEB Trust.

**Asset Replacement Fund**

- Budget appropriations, as determined by the Finance Department, if Council authorizes funds be used from the projected FY24 General Fund surplus to fund asset replacement fund.

**Facilities Replacement Fund**

- Budget appropriations, as determined by the Finance Department, if Council authorizes funds be used from the projected FY24 General Fund surplus to fund facilities replacement fund.

**WORK PLAN:** N/A

**OPTIONS:**


- Approve Staff recommendation.
- Provide alternative direction.

**CITY STAFF RECOMMENDATION:**

Staff recommends that the City Council:

1. Accept and file the General Fund Update for FY24.
2. Provide direction to Staff regarding whether to use an amount of the projected General Fund surplus to fund the PARS Irrevocable Trust for Pensions as part of a budget appropriation to the General Fund Unreserved Fund Balance, and other funds as determined by the Finance Department, in FY24.
3. Provide direction to Staff regarding whether to use an amount of the projected General Fund surplus to add funding to the Asset Replacement Fund as part of a budget appropriation to the General Fund Unreserved Fund Balance in FY24.
4. Provide direction to Staff regarding whether to use an amount of the projected General Fund surplus to add funding to the Facilities Replacement Fund as part of a budget appropriation to the General Fund Unreserved Fund Balance in FY24.

5. Approve Resolution 2024-100 revising appropriations in the FY24 budget.
6. Authorize the City Treasurer to amend the FY24 budget accordingly.



Alyssa Muto, City Manager

Attachments:

1. Resolution 2024-100
2. General Fund Revenues for FY24
3. General Fund Expenditures by Function for FY24
4. General Fund Expenditures by Object Code for FY24

## RESOLUTION 2024-100

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, REVISING APPROPRIATIONS IN THE FISCAL YEAR 2024 BUDGETS AND AUTHORIZING THE CITY TREASURER TO AMEND THE BUDGETS ACCORDINGLY

**WHEREAS**, during the course of the fiscal year, new information becomes available to Staff which require adjustments to the adopted budget; and

**WHEREAS**, Section 3.08.040 of the Solana Beach Municipal Code limits the purchases by departments within the total departmental budget appropriations; and

**WHEREAS**, the City's Operating Budget Policies state that total expenditures of a particular fund may not exceed that which is appropriated by the City Council, without a budget amendment; and

**WHEREAS**, the City Manager, in coordination with the Finance Director, reviewed and analyzed the expenditures of the Fiscal Year 2024 Adopted Budget, and recommend certain amendments be made to the General Fund as well as other funds.

**NOW THEREFORE BE IT RESOLVED**, by the City Council of the City of Solana Beach, California, does hereby resolve as follows:

1. That the above recitations are true and correct.
2. That the City Treasurer is authorized to amend appropriations in the FY24 budget as follows:
  - i. Increase of \$11,910 in the Fire Mitigation Fund – Clothing for turnout gear purchases utilizing available fund balance.
  - ii. Increase of \$22,206 in the COPS Fund – Professional Services for the LPR program cost utilizing available fund balance.
3. That the City Treasurer is authorized to amend budget and appropriations in the FY24 budget utilizing projected surplus as follows:
  - iii. Appropriations from the General Fund of \$\_\_\_\_\_ from the General Fund Fiscal Year 2024 projected surplus and proportionally to other funds to fund the PARS Pension Stabilization Trust
  - iv. Appropriations from the General Fund of \$\_\_\_\_\_ from the Fiscal Year 2024 projected General Fund surplus to increase funding to the Asset Replacement Fund

- v. Appropriations from the General Fund of \$\_\_\_\_\_ from the Fiscal Year 2024 projected General Fund surplus to increase funding to the Facilities Replacement Fund

**PASSED, APPROVED AND ADOPTED** by the City Council of the City of Solana Beach, California, this 25<sup>th</sup> day of September 2024, by the following vote:

AYES: Councilmembers –  
NOES: Councilmembers –  
ABSENT: Councilmembers –  
ABSTAIN: Councilmembers –

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LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

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JOHANNA N. CANLAS, City Attorney

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ANGELA IVEY, City Clerk

**GENERAL FUND REVENUES**  
**FY 24**

Description	2024 Original Budget	Transfers/Adj	2024 Revised Budget	2024 Actual	Variance Actual to Revised	
					\$	%
PROPERTY TAXES - CURRENT	\$ 9,898,000	\$ 200,000	\$ 10,098,000	\$ 10,493,656	\$ 395,656	3.9%
PROPERTY TAXES-DELINQUENT	\$ 20,200	\$ -	\$ 20,200	\$ 7,424	\$ (12,776)	-63.2%
SALES & USE TAX	\$ 4,400,000	\$ 200,000	\$ 4,600,000	\$ 4,425,148	\$ (174,852)	-3.8%
TRANSIENT OCCUPANCY TAX	\$ 1,099,560	\$ -	\$ 1,099,560	\$ 1,184,699	\$ 85,139	7.7%
SHORT TERM VAC RENTAL TOT	\$ 800,800	\$ 200,000	\$ 1,000,800	\$ 1,033,538	\$ 32,738	3.3%
GAS & ELECTRIC FRANCH TAX	\$ 245,000	\$ -	\$ 245,000	\$ 299,166	\$ 54,166	22.1%
WASTE FRANCHISE	\$ 260,000	\$ -	\$ 260,000	\$ 310,259	\$ 50,259	19.3%
CABLE TV FRANCHISE TAX	\$ 230,000	\$ -	\$ 230,000	\$ 206,321	\$ (23,679)	-10.3%
COMMUNITY ACCESS 1%	\$ 50,000	\$ -	\$ 50,000	\$ 41,380	\$ (8,620)	-17.2%
REAL PROPERTY TRANSFR TAX	\$ 170,000	\$ -	\$ 170,000	\$ 212,911	\$ 42,911	25.2%
BENEFIT FEES	\$ 455,000	\$ -	\$ 455,000	\$ 446,999	\$ (8,001)	-1.8%
STREET SWEEPING	\$ 50,750	\$ -	\$ 50,750	\$ 52,796	\$ 2,046	4.0%
HOUSEHOLD HAZARDOUS WASTE	\$ 33,000	\$ -	\$ 33,000	\$ 35,198	\$ 2,198	6.7%
NPDES FEES	\$ 260,000	\$ -	\$ 260,000	\$ 264,762	\$ 4,762	1.8%
RDA PASS THRU PAYMENTS	\$ 205,000	\$ -	\$ 205,000	\$ 312,794	\$ 107,794	52.6%
<b>TAXES - TOTAL</b>	<b>\$ 18,177,310</b>	<b>\$ 600,000</b>	<b>\$ 18,777,310</b>	<b>\$ 19,327,051</b>	<b>\$ 549,741</b>	<b>2.9%</b>
BUSINESS REGISTRATION	\$ 250,000	\$ -	\$ 250,000	\$ 268,598	\$ 18,598	7.4%
BUILDING PERMITS	\$ 332,000	\$ 200,000	\$ 532,000	\$ 510,582	\$ (21,418)	-4.0%
OTHER PERMITS	\$ 32,750	\$ -	\$ 32,750	\$ 36,467	\$ 3,717	11.3%
<b>LICENSES &amp; PERMITS - TOTAL</b>	<b>\$ 614,750</b>	<b>\$ 200,000</b>	<b>\$ 814,750</b>	<b>\$ 815,647</b>	<b>\$ 897</b>	<b>0.1%</b>
CVC FINES	\$ 65,000	\$ -	\$ 65,000	\$ 119,367	\$ 54,367	83.6%
ADMIN CITATIONS	\$ 20,000	\$ -	\$ 20,000	\$ 86,029	\$ 66,029	330.1%
PARKING CITATIONS	\$ 110,000	\$ -	\$ 110,000	\$ 115,230	\$ 5,230	4.8%
REDFLEX CITATIONS	\$ 125,000	\$ -	\$ 125,000	\$ 208,096	\$ 83,096	66.5%
FALSE ALARM FINES	\$ 200	\$ -	\$ 200	\$ -	\$ (200)	-100.0%
<b>FINES &amp; PENALTIES - TOTAL</b>	<b>\$ 320,200</b>	<b>\$ -</b>	<b>\$ 320,200</b>	<b>\$ 528,722</b>	<b>\$ 208,522</b>	<b>65.1%</b>
INTEREST EARNINGS	\$ 249,900	\$ -	\$ 249,900	\$ 637,361	\$ 387,461	155.0%
GAIN/LOSS ON FMV OF ASSET	\$ -	\$ -	\$ -	\$ 394,489	\$ 394,489	100.0%
PROPERTY RENTAL	\$ 75,575	\$ -	\$ 75,575	\$ 84,023	\$ 8,448	11.2%
SALE OF PERSONAL PROPERTY	\$ -	\$ -	\$ -	\$ 29	\$ 29	100.0%
<b>USE OF MONEY &amp; PROPERTY - TOTAL</b>	<b>\$ 325,475</b>	<b>\$ -</b>	<b>\$ 325,475</b>	<b>\$ 1,115,901</b>	<b>\$ 790,426</b>	<b>242.9%</b>
MOTOR VEHICLE IN LIEU	\$ 2,100,000	\$ -	\$ 2,100,000	\$ 2,194,459	\$ 94,459	4.5%
STATE HOE	\$ 49,000	\$ -	\$ 49,000	\$ 47,505	\$ (1,495)	-3.1%
OFF TRACK BETTING	\$ 11,000	\$ -	\$ 11,000	\$ 11,631	\$ 631	5.7%
PALOMAR COLLEGE REIMB	\$ 7,350	\$ -	\$ 7,350	\$ 4,536	\$ (2,814)	-38.3%
FIRE REV FM OTHER AGENCES	\$ 10,000	\$ -	\$ 10,000	\$ 7,098	\$ (2,902)	-29.0%
TOWING FEE CREDIT	\$ 2,500	\$ -	\$ 2,500	\$ 2,488	\$ (12)	-0.5%
STATE GRANTS	\$ -	\$ 102,072	\$ 102,072	\$ 167,072	\$ 65,000	63.7%
MISCELLANEOUS - INTERGOV	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ (20,000)	-100.0%
<b>INTERGOVERNMENTAL REVENUE - TOTAL</b>	<b>\$ 2,199,850</b>	<b>\$ 102,072</b>	<b>\$ 2,301,922</b>	<b>\$ 2,434,789</b>	<b>\$ 132,867</b>	<b>5.8%</b>
PLANNING & ZONING FEES	\$ 241,000	\$ -	\$ 241,000	\$ 264,369	\$ 23,369	9.7%
BUILDING PLAN CHECK FEES	\$ 320,000	\$ 50,000	\$ 370,000	\$ 385,927	\$ 15,927	4.3%
PUBLIC FACILITIES FEES	\$ 70,000	\$ -	\$ 70,000	\$ 32,334	\$ (37,666)	-53.8%
ENGINEERING FEES	\$ 162,000	\$ -	\$ 162,000	\$ 128,672	\$ (33,328)	-20.6%
FIRE FEES	\$ 33,000	\$ -	\$ 33,000	\$ 40,527	\$ 7,527	22.8%
MISC. SERVICE CHARGES	\$ 3,000	\$ -	\$ 3,000	\$ 212	\$ (2,789)	-100.0%
<b>SERVICE CHARGES - TOTAL</b>	<b>\$ 829,000</b>	<b>\$ 50,000</b>	<b>\$ 879,000</b>	<b>\$ 852,041</b>	<b>\$ (26,959)</b>	<b>-3.1%</b>
GRANTS & DONATIONS	\$ 20,000	\$ 15,000	\$ 35,000	\$ 30,000	\$ (5,000)	-14.3%
MISCELLANEOUS REVENUE	\$ 20,000	\$ -	\$ 20,000	\$ 83,467	\$ 63,467	317.3%
WORKERS COMPENSATION	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ (20,000)	-100.0%
ADMINISTRATIVE CHARGES	\$ 1,173,467	\$ -	\$ 1,173,467	\$ 1,173,468	\$ 1	0.0%
REIMBURSED COSTS	\$ 139,136	\$ -	\$ 139,136	\$ 156,579	\$ 17,443	12.5%
<b>OTHER REVENUES - TOTAL</b>	<b>\$ 1,372,603</b>	<b>\$ 15,000</b>	<b>\$ 1,387,603</b>	<b>\$ 1,443,513</b>	<b>\$ 55,910</b>	<b>4.0%</b>
TRANSFERS IN	\$ 633,730	\$ (633,730)	\$ -	\$ -	\$ -	0.0%
<b>TRANSFERS IN - TOTAL</b>	<b>\$ 633,730</b>	<b>\$ (633,730)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0.0%</b>
<b>TOTAL GENERAL FUND REVENUES</b>	<b>\$ 24,472,918</b>	<b>\$ 333,342</b>	<b>\$ 24,806,260</b>	<b>\$ 26,517,664</b>	<b>\$ 1,711,404</b>	<b>6.9%</b>
<b>MEASURE S REVENUES</b>						
SALES & USE TAX	\$ 4,400,000	\$ 200,000	\$ 4,600,000	\$ 5,045,209	\$ 445,209	9.7%
<b>TAXES - TOTAL</b>	<b>\$ 4,400,000</b>	<b>\$ 200,000</b>	<b>\$ 4,600,000</b>	<b>\$ 5,045,209</b>	<b>\$ 445,209</b>	<b>9.7%</b>
INTEREST EARNINGS	\$ -	\$ -	\$ -	\$ 52,295	\$ 52,295	100.0%
GAIN/LOSS ON FMV OF ASSET	\$ -	\$ -	\$ -	\$ (12,153)	\$ (12,153)	100.0%
<b>USE OF MONEY &amp; PROPERTY - TOTAL</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 40,143</b>	<b>\$ 40,143</b>	<b>100.0%</b>
<b>TOTAL MEASURE S REVENUES</b>	<b>\$ 4,400,000</b>	<b>\$ 200,000</b>	<b>\$ 4,600,000</b>	<b>\$ 5,085,351</b>	<b>\$ 485,351</b>	<b>10.6%</b>

**TABLE 2  
GENERAL FUND EXPENDITURES**

	2024 Original Budget	Xfers/Adj	2024 Revised Budget	2024 Actual	2024 Encumbered	Variance to Revised Budget	
						\$	%
<b>GENERAL GOVERNMENT</b>							
CITY COUNCIL	351,315	16,500	367,815	363,958	0	3,857	1.0%
CITY CLERK	623,687	83,000	706,687	648,491	30,000	28,196	4.0%
CITY MANAGER	672,917	10,600	683,517	585,125	-	98,392	14.4%
CITY ATTORNEY	533,475	-	533,475	424,835	-	108,640	20.4%
FINANCE	1,261,032	1,885	1,262,917	1,197,581	25,827	39,509	3.1%
NON-DEPARTMENTAL	39,614	-	39,614	33,812	-	5,802	14.6%
HUMAN RESOURCES	660,665	(62,000)	598,665	508,332	-	90,333	15.1%
INFORMATION SERVICES	723,344	(371)	722,973	660,464	-	62,509	8.6%
<b>TOTAL GENERAL GOVERNMENT</b>	<b>4,866,049</b>	<b>49,614</b>	<b>4,915,663</b>	<b>4,422,599</b>	<b>55,827</b>	<b>437,237</b>	<b>8.9%</b>
<b>COMMUNITY DEVELOPMENT</b>							
PLANNING	1,113,292	(36,110)	1,077,182	910,370	122,965	43,847	4.1%
BUILDING SERVICES	536,794	133,250	670,044	612,607	-	57,437	8.6%
CODE/PARKING COMPLIANCE	309,447	-	309,447	289,305	-	20,142	6.5%
<b>TOTAL COMMUNITY DEVELOPMENT</b>	<b>1,959,533</b>	<b>97,140</b>	<b>2,056,673</b>	<b>1,812,282</b>	<b>122,965</b>	<b>121,426</b>	<b>5.9%</b>
<b>PUBLIC SAFETY</b>							
LAW ENFORCEMENT	4,789,738	-	4,789,738	4,789,738	-	-	0.0%
FIRE DEPARTMENT	5,951,762	(47,000)	5,904,762	5,838,589	-	66,173	1.1%
ANIMAL CONTROL	94,000	-	94,000	93,236	-	764	0.8%
CIVIL DEFENSE	34,491	-	34,491	33,395	-	1,096	3.2%
MARINE SAFETY	1,182,375	103,910	1,286,285	1,284,693	-	1,592	0.1%
SHORELINE PROTECTION	1,200	-	1,200	-	-	1,200	100.0%
<b>TOTAL PUBLIC SAFETY</b>	<b>12,053,566</b>	<b>56,910</b>	<b>12,110,476</b>	<b>12,039,652</b>	<b>-</b>	<b>70,824</b>	<b>0.6%</b>
<b>PUBLIC WORKS</b>							
ENGINEERING	624,152	101,000	725,152	584,108	30,000	111,044	15.3%
ENVIRONMENTAL SERVICES	536,626	(20,000)	516,626	477,955	-	38,671	7.5%
STREET MAINTENANCE	662,999	3,900	666,899	658,242	-	8,657	1.3%
TRAFFIC SAFETY	518,247	20,000	538,247	427,948	5,000	105,299	19.6%
STREET CLEANING	71,500	-	71,500	56,901	-	14,599	20.4%
PARK MAINTENANCE	488,013	(13,889)	474,124	437,640	-	36,484	7.7%
PUBLIC FACILITIES	428,720	12,989	441,709	419,100	-	22,609	5.1%
<b>TOTAL PUBLIC WORKS</b>	<b>3,330,257</b>	<b>104,000</b>	<b>3,434,257</b>	<b>3,061,894</b>	<b>35,000</b>	<b>337,363</b>	<b>9.8%</b>
<b>COMMUNITY SERVICES</b>							
COMMUNITY SERVICES	187,402	10,000	197,402	187,193	9,250	959	0.5%
RECREATION	681,722	17,750	699,472	671,455	-	28,017	4.0%
<b>TOTAL COMMUNITY SERVICES</b>	<b>869,124</b>	<b>27,750</b>	<b>896,874</b>	<b>858,647</b>	<b>9,250</b>	<b>28,977</b>	<b>3.2%</b>
<b>TRANSFERS OUT</b>	<b>980,000</b>	<b>70,000</b>	<b>1,050,000</b>	<b>1,050,000</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>
<b>TOTAL GENERAL FUND EXPENDITURES</b>	<b>24,058,529</b>	<b>405,414</b>	<b>24,463,943</b>	<b>23,245,075</b>	<b>223,042</b>	<b>995,827</b>	<b>28.4%</b>
<b>MEASURE S EXPENDITURES</b>							
GENERAL GOVERNMENT	60,000	-	60,000	11,663	-	48,337	80.6%
PUBLIC WORKS	1,064,000	-	1,064,000	667,790	396,210	-	0.0%
TRANSFERS OUT	733,400	-	733,400	733,400	-	-	0.0%
<b>TOTAL MEASURE S EXPENDITURES</b>	<b>1,857,400</b>	<b>-</b>	<b>1,857,400</b>	<b>1,412,853</b>	<b>396,210</b>	<b>48,337</b>	<b>2.6%</b>

**GENERAL FUND EXP BY OBJECT  
FY 2024**

	2024 Original Budget	Transfers/Adj	2024 Revised Budget	2024 Actual	2024 Encumbered	Variance Actual to Revised	
						\$	%
REGULAR SALARIES	6,184,132	(4,337)	6,179,795	6,104,502	-	75,293	1.2%
PART-TIME & TEMPS	474,479	10,225	484,704	481,125	-	3,579	0.7%
OVERTIME	770,215	(77,257)	692,958	675,982	-	16,976	2.4%
SPECIAL PAY	135,273	39,976	175,249	173,456	-	1,793	1.0%
PART TIME/TEMP:NON-SALA	-	4,120	4,120	4,120	-	-	0.0%
RETIREMENT	868,260	6,850	875,110	850,940	-	24,170	2.8%
RETIREMENT-UAL PAYMENT	977,606	-	977,606	977,606	-	-	0.0%
MEDICARE	119,930	(9,706)	110,224	103,365	-	6,859	6.2%
SOCIAL SECURITY	31,216	(7,726)	23,490	20,513	-	2,977	12.7%
HEALTH INSURANCE	1,215,811	(126,308)	1,089,503	1,008,276	-	81,227	7.5%
LT DISABILITY INSURANCE	23,634	(1,635)	21,999	14,088	-	7,911	36.0%
LIFE INSURANCE	17,482	(222)	17,260	14,129	-	3,131	18.1%
RHSA % BENEFIT	40,925	(40,925)	-	-	-	-	100.0%
CITY CONTRB FF TRUST	-	40,925	40,925	40,007	-	918	2.2%
DEFERRED COMP 457	74,185	18,031	92,216	83,974	-	8,242	8.9%
UNEMPLOYMENT INSURANCE	20,000	-	20,000	2,682	-	17,318	86.6%
AUTO ALLOWANCE	43,703	839	44,542	44,471	-	71	0.2%
UNIFORM ALLOWANCE	3,000	533	3,533	3,533	-	0	0.0%
RIDESHARE	4,000	217	4,217	4,210	-	7	0.2%
<b>TOTAL SALARIES &amp; BENEFITS</b>	<b>11,003,851</b>	<b>(146,400)</b>	<b>10,857,451</b>	<b>10,606,979</b>	<b>-</b>	<b>250,472</b>	<b>2.3%</b>
TRAVEL-MEETINGS	53,695	(18,549)	35,146	23,331	-	11,815	33.6%
TRAINING	48,800	(5,629)	43,171	33,535	-	9,636	22.3%
MEMBERSHIPS/DUE	123,010	1,838	124,848	117,984	-	6,864	5.5%
CLOTHING	53,200	1,723	54,923	53,683	-	1,240	2.3%
TUITION REIMBURSEMENT	10,000	-	10,000	8,830	-	1,170	11.7%
PRE-EMPLOYMENT	13,500	-	13,500	8,558	-	4,942	36.6%
RECRUITMENT	19,750	-	19,750	1,223	-	18,527	93.8%
FIRE PREVENTION PROGRAM	9,900	(1,175)	8,725	8,724	-	1	0.0%
ELECTIONS	1,900	-	1,900	525	-	1,375	72.4%
OFFICE SUPPLIES	16,960	(1,747)	15,213	9,208	-	6,005	39.5%
POSTAGE	8,400	-	8,400	3,000	-	5,400	64.3%
BOOKS/SUB/PRINT	60,370	(5,546)	54,824	39,103	-	15,721	28.7%
MINOR EQUIPMENT(UNDER \$	66,350	(3,691)	62,659	53,441	-	9,218	14.7%
EQUIPMENT (OVER \$5K)	-	11,950	11,950	11,922	-	28	0.2%
SPECIAL DEPT SUPPLIES	150,550	12,924	163,474	138,009	-	25,465	15.6%
SMALL TOOLS	3,500	(175)	3,325	2,962	-	363	10.9%
VEHICLE OPERATING SUPPL	57,700	4,268	61,968	59,787	-	2,181	3.5%
VEHICLE MAINTENANCE	114,700	(9,808)	104,892	96,868	-	8,024	7.7%
ADVERTISING	13,050	7,804	20,854	20,359	-	495	2.4%
COMMUNICATIONS	132,800	54,207	187,007	184,443	-	2,564	1.4%
UTILITIES - ELECTRIC	139,800	22,695	162,495	159,843	-	2,652	1.6%
RENTS/LEASES	28,714	756	29,470	25,656	-	3,814	12.9%
MAINT OF BUILDING/GROUN	442,420	(36,420)	406,000	385,559	-	20,441	5.0%
UTILITIES - WATER	65,600	448	66,048	62,972	-	3,076	4.7%
MILEAGE	3,760	(65)	3,695	1,498	-	2,197	59.5%
PROFESSIONAL SERVICES	8,176,738	409,421	8,586,159	7,878,125	223,042	484,992	5.6%
MAINTENANCE OF EQUIPMEN	200,065	1,483	201,548	167,675	-	33,873	16.8%
CONTRIBUTION TO AGENCIE	90,791	16,500	107,291	104,429	-	2,862	2.7%
COMMUNITY TV PRODUCTION	73,900	(3,569)	70,331	45,321	-	25,010	35.6%
SPECIAL EVENTS	30,300	(737)	29,563	28,452	-	1,111	3.8%
CONTINGENCY	37,500	(37,260)	240	239	-	1	0.3%
OTHER CHARGES	196,155	(1,600)	194,555	172,090	-	22,465	11.5%
PUBLIC ART EXPENDITURES	16,000	(2,232)	13,768	12,879	-	889	6.5%
<b>TOTAL MATERIALS, SUPPLIES &amp; PROFESSIONAL SERVICES</b>	<b>10,459,878</b>	<b>417,814</b>	<b>10,877,692</b>	<b>9,920,231</b>	<b>223,042</b>	<b>734,419</b>	<b>6.8%</b>
TRANSFERS OUT	980,000	70,000	1,050,000	1,050,000	-	-	0.0%
INTRNL CHRGS - CLAIMS	521,600	-	521,600	521,600	-	-	0.0%
INTRNL CHRGS - WRKRS CO	454,000	-	454,000	454,000	-	-	0.0%
ASSET REPLACEMENT CHRGS	112,500	64,000	176,500	176,500	-	-	0.0%
STEVENS	445,700	-	445,700	434,764	-	10,936	2.5%
PARS OPEB CHARGES	81,000	-	81,000	81,000	-	-	0.0%
<b>TOTAL CAPITAL, DEBT, &amp; INTERNAL SVS CHARGES</b>	<b>2,594,800</b>	<b>134,000</b>	<b>2,728,800</b>	<b>2,717,864</b>	<b>-</b>	<b>10,936</b>	<b>0.4%</b>
<b>TOTAL GENERAL FUND EXPENDITURES</b>	<b>24,058,529</b>	<b>405,414</b>	<b>24,463,943</b>	<b>23,245,075</b>	<b>223,042</b>	<b>995,826</b>	<b>4.1%</b>
<b>MEASURE S EXPENDITURES</b>							
PROFESSIONAL SERVICES	60,000	-	60,000	11,663	-	48,337	80.6%
CONSTRUCTION	1,064,000	-	1,064,000	667,790	396,210	-	0.0%
TRANSFERS OUT	733,400	-	733,400	733,400	-	-	0.0%
<b>TOTAL MEASURE S EXPENDITURES</b>	<b>1,857,400</b>	<b>-</b>	<b>1,857,400</b>	<b>1,412,853</b>	<b>396,210</b>	<b>48,337</b>	<b>2.6%</b>