



# City of Santa Barbara California

## PLANNING COMMISSION STAFF REPORT

**REPORT DATE:** July 14, 2008  
**AGENDA DATE:** July 24, 2008  
**PROJECT ADDRESS:** 2545 Medcliff Road (MST2007-00423, CDP2008-00010)

**TO:** Planning Commission  
**FROM:** Planning Division, (805) 564-5470  
 Jan Hubbell, AICP, Senior Planner *JMH*  
 Dan Gullett, Associate Planner *DAG*

### I. PROJECT DESCRIPTION

The project consists of as-built replacement of six windows and one sliding glass door with windows and a door in the same openings; as-built removal of an interior wall between the kitchen and dining area; replacement of an as-built sliding glass door with a new window in the same opening as the previous window; as-built picket fence in the rear yard; as-built six foot tall wood fence along western property line; replacement and reconfiguration of the fence in the front yard; new 241 square foot pergola; new 290 square foot wood deck over an existing concrete patio; two new rain barrels; and landscaping changes, including replacement of the existing rear lawn with drought tolerant, bluff stabilizing plants on an 11,039 square foot lot located within the Hillside Design District and the Appealable Jurisdiction of the Coastal Zone. The project would abate violations identified in enforcement case ENF2007-00570. Existing development on site includes a 1,538 square foot single-family residence with a 518 square foot attached garage.

### II. REQUIRED APPLICATION

The discretionary application required for this project is:

1. A Coastal Development Permit (CDP2008-00010) to allow the proposed development in the Appealable Jurisdiction of the City's Coastal Zone (SBMC §28.44).

### III. RECOMMENDATION

The proposed project is consistent with the policies of the California Coastal Act, the applicable policies of the City's Local Coastal Plan, all implementing guidelines, and all applicable provisions of the Municipal Code. Therefore, Staff recommends that the Planning Commission approve the Coastal Development Permit subject to the Conditions of Approval in Exhibit A making the findings outlined in Section VII of this report.



Figure 1: Project Vicinity

**APPLICATION DEEMED COMPLETE:** June 11, 2008  
**DATE ACTION REQUIRED:** September 9, 2008

**IV. SITE INFORMATION AND PROJECT STATISTICS**

**A. SITE INFORMATION**

|                                   |                            |                                  |  |
|-----------------------------------|----------------------------|----------------------------------|--|
| Applicant:                        | Bryan Pollard              | Property Owner:                  | Andrew Erickson / Felicia Kashevaroff                        |
| Parcel Number:                    | 041-362-001                | Lot Area:                        | 11,039 sf  |
| General Plan:                     | Residential – 5 units/acre | Zoning:                          | E-3/SD-3<br>(Single Family Residential/Coastal Zone Overlay) |
| Existing Use:                     | Single family residential  | Topography:                      | 3% average slope   |
| Adjacent Land Uses:               |                            |                                  |  |
| North - Single family residential |                            | East - Single family residential |  |
| South - Single family residential |                            | West - Single family residential |  |

**B. PROJECT STATISTICS**

|             | Existing | Proposed  |
|-------------|----------|-----------|
| Living Area | 1,538 sf | No change |

|                 |        |           |
|-----------------|--------|-----------|
| Garage          | 518 sf | No change |
| Accessory Space | 0 sf   | No change |

**V. ZONING ORDINANCE CONSISTENCY**

| Standard         | Requirement/ Allowance | Existing       | Proposed  |
|------------------|------------------------|----------------|-----------|
| Setbacks         |                        |                |           |
| -Front           | 20 ft                  | 48 ft          | No change |
| -Interior        | 6 ft                   | 5.3 ft         | No change |
| Building Height  | 30 ft                  | 16.2 ft        | No change |
| Parking          | 2 spaces               | 2 spaces       | No change |
| Open Yard        | 1,250 sf               | 1,250 sf       | No change |
| Lot Coverage     |                        |                |           |
| -Building        | N/A                    | 2,138 sf 19.4% | No change |
| -Paving/Driveway | N/A                    | 1,904 sf 17.2% | No change |
| -Landscaping     | N/A                    | 6,997 sf 63.4% | No change |

The proposed project would meet the requirements of the E-3 and SD-3 Zones.

**VI. ISSUES**

**A. VIOLATION ABATEMENT**

A Notice of Violation was provided to the property owner by the City July 17, 2007 for identified code violations including: installation of new windows at the sides and rear of the house, installation of new fencing in the front yard, interior yard and rear yard, and the removal of vegetation and the installation of an irrigation system on the bluff. Subsequent to the Notice of Violation letter, an inspection noted that structural alterations were performed in the kitchen area without the benefit of permits. Approval of the proposed project would abate the existing violations on site.

**B. DESIGN REVIEW**

The proposed project is located in the Hillside Design District; however, design review and approval by the Single Family Design Board is not required since the average slope of the lot and building site is less than 20%, no alteration to the existing roof form is proposed, the proposed improvements do not exceed seventeen feet in height, and the proposed front yard fence is less than six feet in height.

**C. COMPLIANCE WITH THE LOCAL COASTAL PROGRAM**

The project site is located in Component 2 of the City's Coastal Plan, which extends from Arroyo Burro Creek to the westerly boundary of Santa Barbara City College. The Coastal Plan recognizes the primary land use of Component 2 as single-family residential, with a few areas of multiple family residential, neighborhood commercial, and La Mesa and Shoreline Parks. Major coastal issues identified in Component 2 include: hazards related to bluff retreat,

protection of archaeological resources, and maintenance of existing coastal views and open space.

The Seismic Safety/Safety Element of the General Plan requires new development to be placed a distance from the edge of the cliff such that normal rates of erosion or material loss will not seriously affect the structure during its expected lifetime (75 years). The proposed project includes four elements located within the 75 year bluff retreat area, as defined in the Earth Systems report dated February 2008: the replacement of an as-built sliding door with a window in the same opening as the previous condition; the as-built replacement of six windows and a sliding glass door with new windows and a door of the same in the same openings; the as-built construction of fences along the western and southwestern property lines; the construction of a 290 sf wood deck over an existing concrete patio; and the addition of a rain barrel to catch roof rainwater runoff. With the project conditions contained in Exhibit A, staff is supportive of the proposed development within the 75 year retreat area. The six as-built window replacements and the replacement of the sliding door with a window as previously permitted do not constitute new development, but repair and maintenance of existing development. The construction and reconstruction of fences is typically allowed in the 75 year geologic setback area as a safety precaution. The proposed wood deck would be located above and tied to the existing concrete patio and would not significantly affect the lifetime of the patio structure or the stability of the cliff. Finally, the rain barrel, while adding some weight to the bluff top area, would contain roof runoff that would previously have infiltrated into the bluff top or run over the bluff during large storm events. If maintained properly as required in Condition A.5, the rain barrel would reduce the rate of seacliff retreat on the property. The Seismic Safety-Safety Element also notes that the addition of water to the seacliff can significantly lower cliff stability and the application of excess water to the top of cliffs for lawn irrigation. The introduction of the two rain barrels, removal of bluff top irrigation, and the replacement of the grassy lawn with drought tolerant groundcover would benefit the stability of the cliff.

As proposed, the development, subject to conditions in Exhibit A, is consistent with the Coastal Act and the City's Local Coastal Program.

#### **D. ENVIRONMENTAL REVIEW**

Planning Staff determined that the project is categorically exempt from further environmental review pursuant to California Environmental Quality Act Guidelines Section 15301, which exempts projects involving minor alterations to private structures and topographical features with negligible or no expansion of an existing use. The applicant submitted an archaeological letter report prepared for the project by David Stone dated November 5, 2007, that concluded that the proposed project was not considered to have the potential to impact unknown, intact, significant or important prehistoric cultural remains. The applicant also submitted a seacliff retreat study prepared by Earth Systems dated February 20, 2008 that determined the 75-year setback line shown on the project plans.

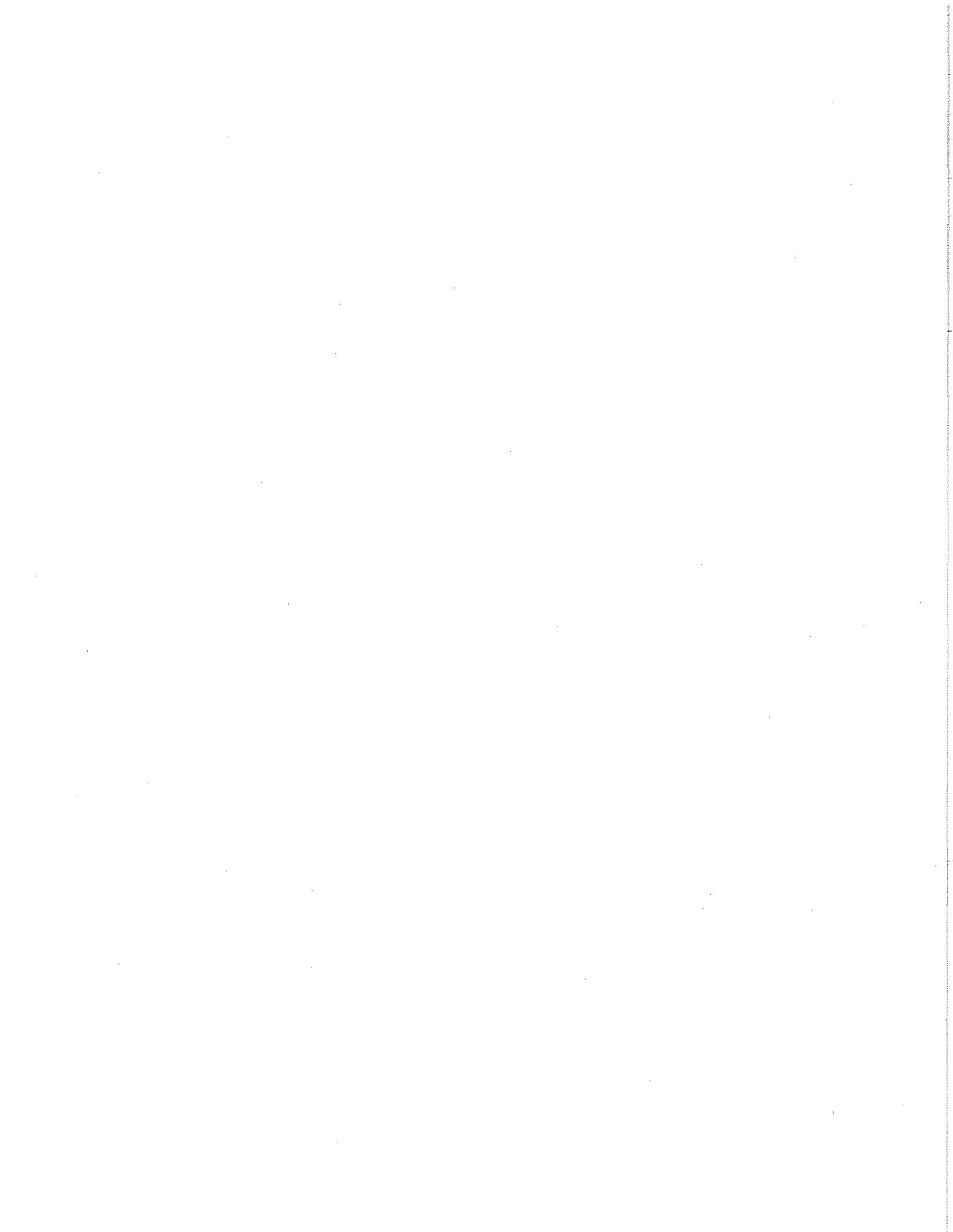
**VII. FINDINGS**

The Planning Commission finds the following:

- A. COASTAL DEVELOPMENT PERMIT (SBMC §28.44.150)**
  - 1. The project is consistent with the policies of the California Coastal Act; and
  - 2. The project is consistent with all applicable policies of the City's Local Coastal Plan, all applicable implementing guidelines, and all applicable provisions of the Code.

Exhibits:

- A. Conditions of Approval
- B. Site Plan, Floor Plan, Elevations, Landscape Plan
- C. Earth Systems Seacliff Retreat Report dated February 20, 2008



PLANNING COMMISSION CONDITIONS OF APPROVAL

2545 MEDCLIFF ROAD  
COASTAL DEVELOPMENT PERMIT  
JULY 24, 2008

In consideration of the project approval granted by the Planning Commission and for the benefit of the owners and occupants of the Real Property, the owners and occupants of adjacent real property and the public generally, the following terms and conditions are imposed on the use, possession, and enjoyment of the Real Property:

- A. **Recorded Agreement.** Prior to the issuance of any Public Works Permit or Building Permit for the project on the Real Property, the Owner shall execute a written instrument, which shall be reviewed as to form and content by the City Attorney, Community Development Director and Public Works Director, recorded in the Office of the County Recorder, and shall include the following:
1. **Approved Development.** The development of the Real Property approved by the Planning Commission on July 24, 2008 is limited to as-built replacement of six windows and one sliding glass door with windows and a door in the same openings; as-built removal of an interior wall between the kitchen and dining area; replacement of an as-built sliding glass door with a new window in the same opening as the previous window; as-built picket fence in the rear yard; as-built six foot tall wood fence along western property line; replacement and reconfiguration of the fence in the front yard; new 241 square foot pergola; new 290 square foot wood deck over an existing concrete patio; two new rain barrels; and landscaping changes, including replacement of the existing rear lawn with drought tolerant, bluff stabilizing plants; and all other improvements shown on the plans signed by the chairman of the Planning Commission on said date and on file at the City of Santa Barbara.
  2. **Uninterrupted Water Flow.** The Owner shall provide for the uninterrupted flow of water through the Real Property including, but not limited to, swales, natural watercourses, conduits and any access road, as appropriate.
  3. **Storm Water Pollution Control and Drainage Systems Maintenance.** Owner shall maintain the drainage system and storm water pollution control devices intended to intercept siltation and other potential pollutants (including, but not limited to, hydrocarbons, fecal bacteria, herbicides, fertilizers, etc. ) in a functioning state (and in accordance with the Operations and Maintenance Procedure Plan approved by the Building Official). Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat, or result in increased erosion, the Owner shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the applicant shall submit a repair and restoration plan to the Community Development Director to determine if an amendment or a new Coastal Development Permit is required to authorize such work. The Owner is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will

preclude any hazard to life, health, or damage to the Real Property or any adjoining property.

4. **Coastal Bluff Liability Limitation.** The Owner understands and is advised that the site may be subject to extraordinary hazards from waves during storms and erosion, retreat, settlement, or subsidence and assumes liability for such hazards. The Owner unconditionally waives any present, future, and unforeseen claims of liability on the part of the City arising from the aforementioned or other natural hazards and relating to this permit approval, as a condition of this approval. Further, the Owner agrees to indemnify and hold harmless the City and its employees for any alleged or proven acts or omissions and related cost of defense, related to the City's approval of this permit and arising from the aforementioned or other natural hazards whether such claims should be stated by the Owner's successor-in-interest or third parties.

B. **Public Works Requirements Prior to Building Permit Issuance.** The Owner shall submit the following, or evidence of completion of the following to the Public Works Department for review and approval, prior to the issuance of a Building Permit for the project.

1. **Water Rights Assignment Agreement.** The Owner shall assign to the City of Santa Barbara the exclusive right to extract ground water from under the Real Property in an "Agreement Assigning Water Extraction Rights." Engineering Division Staff will prepare said agreement for the Owner's signature.
2. **Medcliff Road Public Improvements.** The Owner shall submit building plans for construction of improvements along the property frontage on Medcliff Road. As determined by the Public Works Department, the improvements shall include removal and replacement of one sidewalk panel to City standards, and the provision of adequate positive drainage from the site. Any work in the public right-of-way requires a Public Works Permit.

C. **Building Permit Plan Requirements.** The following requirements/notes shall be incorporated into the construction plans submitted to the Building and Safety Division for Building permits.

1. **Unanticipated Archaeological Resources Contractor Notification.** Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts associated with past human occupation of the parcel. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the applicant shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc.

If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

2. **Conditions on Plans/Signatures.** The final Planning Commission Resolution shall be provided on a full size drawing sheet as part of the drawing sets. Each condition shall have a sheet and/or note reference to verify condition compliance. If the condition relates to a document submittal, indicate the status of the submittal (e.g., Final Map submitted to Public Works Department for review). A statement shall also be placed on the above sheet as follows: The undersigned have read and understand the above conditions, and agree to abide by any and all conditions which is their usual and customary responsibility to perform, and which are within their authority to perform.

Signed:

|                |      |             |
|----------------|------|-------------|
| <hr/>          |      |             |
| Property Owner |      | Date        |
| <hr/>          |      |             |
| Contractor     | Date | License No. |
| <hr/>          |      |             |
| Architect      | Date | License No. |
| <hr/>          |      |             |
| Engineer       | Date | License No. |

- D. **Prior to Certificate of Occupancy.** Prior to issuance of the Certificate of Occupancy, the Owner of the Real Property shall complete the following:

1. **Repair Damaged Public Improvements.** Repair any damaged public improvements (curbs, gutters, sidewalks, roadways, etc.) caused by construction subject to the review and approval of the Public Works Department per SBMC §22.60.090. Where tree roots are the cause of the damage, the roots shall be pruned under the direction of a qualified arborist.
2. **Complete Public Improvements.** Public improvements, as shown in the building plans, including utility service undergrounding and installation of street trees.

- E. **Litigation Indemnification Agreement.** In the event the Planning Commission approval of the Project is appealed to the City Council, Applicant/Owner hereby agrees to defend the City, its officers, employees, agents, consultants and independent contractors ("City's Agents") from any third party legal challenge to the City Council's denial of the appeal and approval of the Project, including, but not limited to, challenges filed pursuant to the California Environmental Quality Act (collectively "Claims"). Applicant/Owner further agrees to indemnify and hold harmless the City and the City's Agents from any award of attorney fees or court costs made in connection with any Claim.

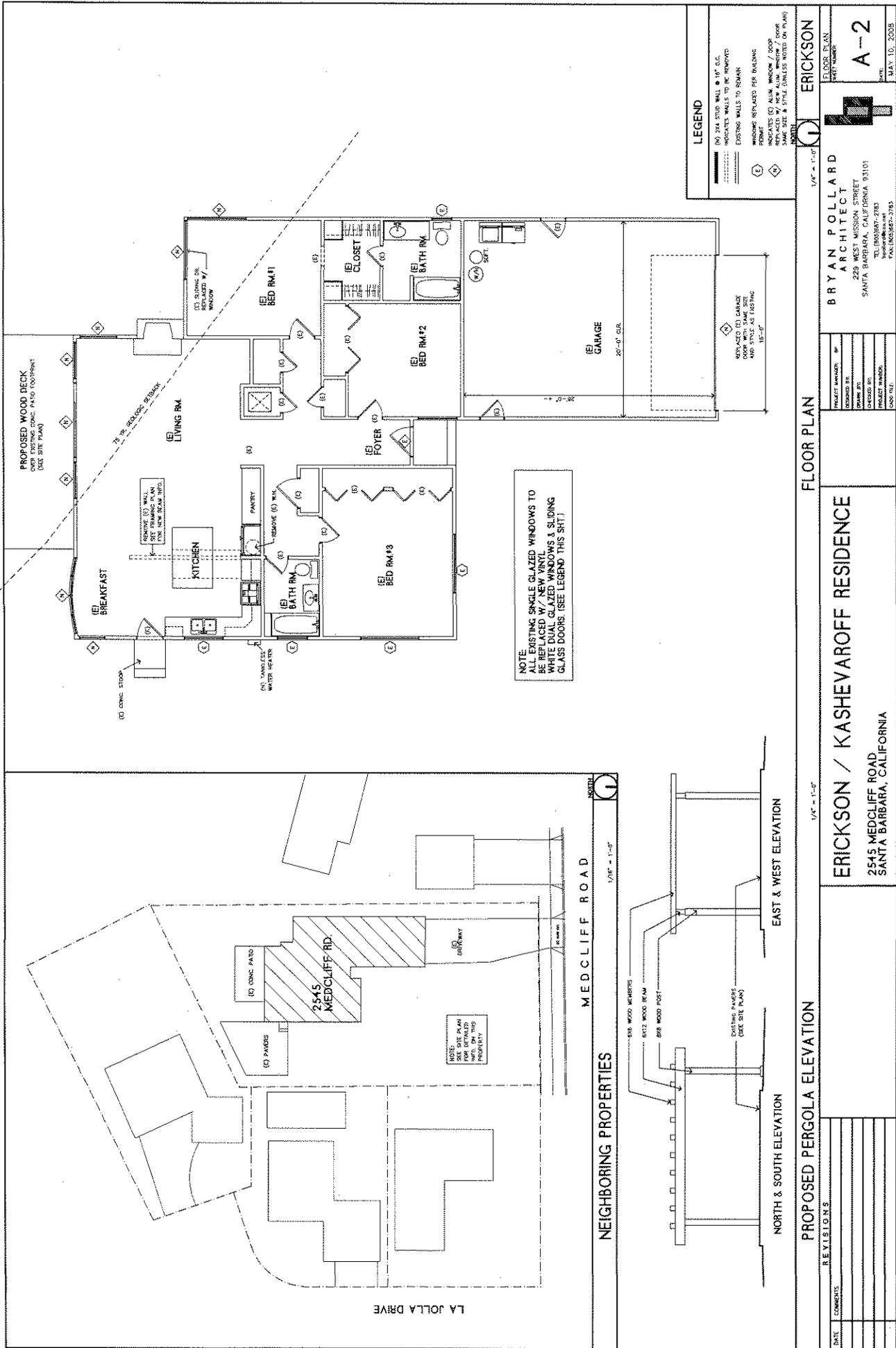
Applicant/Owner shall execute a written agreement, in a form approved by the City Attorney, evidencing the foregoing commitments of defense and indemnification within thirty (30) days of the City Council denial of the appeal and approval of the Project. These commitments of defense and indemnification are material conditions of the approval of the Project. If Applicant/Owner fails to execute the required defense and indemnification agreement within the time allotted, the Project approval shall become null and void absent subsequent acceptance of the agreement by the City, which acceptance shall be within the City's sole and absolute discretion. Nothing contained in this condition shall prevent the City or the City's Agents from independently defending any Claim. If the City or the City's Agents decide to independently defend a Claim, the City and the City's Agents shall bear their own attorney fees, expenses, and costs of that independent defense.

#### **NOTICE OF COASTAL DEVELOPMENT PERMIT TIME LIMITS:**

The Planning Commission's action approving the Coastal Development Permit shall expire two years from the date of final action upon the application, per Santa Barbara Municipal Code §28.44.230, unless:

1. Otherwise explicitly modified by conditions of approval of the Coastal Development Permit.
2. Construction or use of the development has commenced.
3. A Building Permit for the work authorized by the Coastal Development Permit is issued prior to the expiration date of the approval, and such Building Permit remains valid.
4. A time extension is granted prior to Coastal Development Permit expiration. A one year time extension may be granted by the Community Development Director upon findings provided in Santa Barbara Municipal Code §28.44.230.B. Time extension applications must be submitted to the Community Development Director for consideration prior to Coastal Development Permit expiration. Not more than three time extensions may be granted.





PROPOSED WOOD DECK  
 OVER EXISTING PAVED TERRACE  
 (SEE SITE PLAN)

REPLACE (E) WALL  
 WITH NEW BEAM INFO

REMOVE (E) WALL  
 WITH NEW BEAM INFO

NOTE:  
 ALL EXISTING SINGLE GLAZED WINDOWS TO  
 BE REPLACED W/ NEW UNTIL  
 WHITE DOOR SIZES & SLIDING  
 GLASS DOORS (SEE LEGEND THIS SET)

**LEGEND**

(E) 1/4" = 1'-0" WALL & 1/4" = 1'-0" FLOOR PLAN  
 INDICATES WALLS TO BE REMOVED  
 EXISTING WALLS TO REMAIN

(E) WINDOWS REPLACED PER RAISING  
 INDICATES (E) ALUM. WINDOW / DOOR  
 REPLACED BY NEW A.C.M. WINDOW / DOOR  
 SAME SIZE & STYLE (UNLESS NOTED ON PLAN)

**FLOOR PLAN**  
 1/4" = 1'-0" ERICKSON  
 FLOOR PLAN  
 SHEET NUMBER  
**A-2**  
 DATE  
 MAY 10, 2008

**BRYAN POLLARD  
 ARCHITECT**  
 229 WEST MISSION STREET  
 SANTA BARBARA, CALIFORNIA 93101  
 TEL: (805) 967-2783  
 FAX: (805) 967-2783

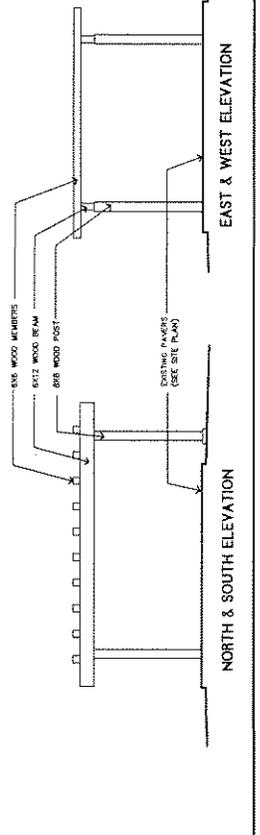
|                 |     |
|-----------------|-----|
| PROJECT MANAGER | SR. |
| DESIGNER        | SR. |
| DRAWING DATE    |     |
| ISSUED FOR      |     |
| PROJECT NUMBER  |     |
| ISSUE DATE      |     |

**ERICKSON / KASHEVAROFF RESIDENCE**  
 2545 MEDCLIFF ROAD  
 SANTA BARBARA, CALIFORNIA

**PROPOSED PERGOLA ELEVATION**  
 1/4" = 1'-0"

| DATE | REVISIONS | COMMENTS |
|------|-----------|----------|
|      |           |          |
|      |           |          |
|      |           |          |
|      |           |          |

**NEIGHBORING PROPERTIES**  
 1/8" = 1'-0"



**MEDCLIFF ROAD**  
 1/8" = 1'-0"

LA JOLLA DRIVE

USE THIS SITE PLAN FOR DETAILS FOR THIS PROPERTY

(E) CONCRETE PAVED

(E) PAVED

2545 MEDCLIFF RD.

DRIVEWAY

SOUTH

1/8" = 1'-0"

NEIGHBORING PROPERTIES

6x12 WOOD BEAM

6x6 WOOD POST

EXISTING PAVED (SEE SITE PLAN)

EAST & WEST ELEVATION

1/4" = 1'-0"

PROPOSED PERGOLA ELEVATION

1/4" = 1'-0"

NORTH & SOUTH ELEVATION

1/4" = 1'-0"

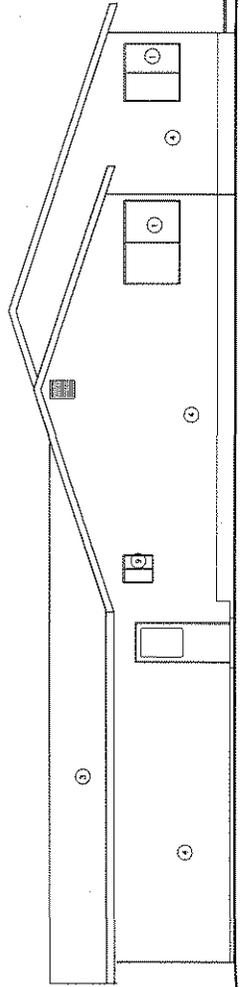
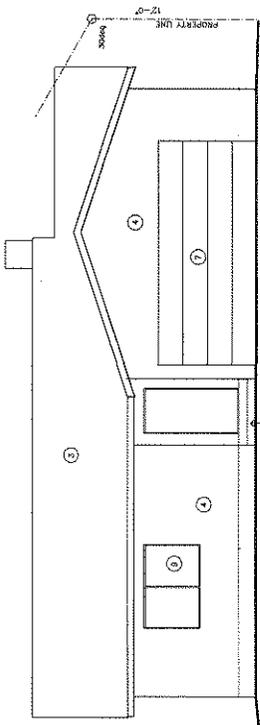
ERICKSON / KASHEVAROFF RESIDENCE

2545 MEDCLIFF ROAD

SANTA BARBARA, CALIFORNIA

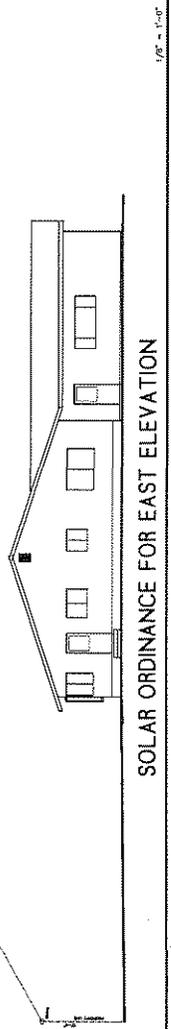
**KEY NOTES (FOR PLAN SHEETS ONLY)**

- 1) REPLACE (R) WINDOW WITH NEW SLATE SIZE WITH WINDOW
- 2) REPLACE (R) WALL SLABING OR WITH NEW WALL WINDOW
- 3) (R) ROOF
- 4) (R) STUCCO FINISH
- 5) (R) GING TRIM
- 6) NEW WING REAR (SEE SITE PLAN)
- 7) REPLAZED EXISTING GARAGE DOOR WITH NEW GARAGE DOOR
- 8) REPLAZED (R) SLABING GROUND WITH NEW WING SLABING GROUND
- 9) EXISTING WINDOW AND DOOR REPLAZED FOR FINISH

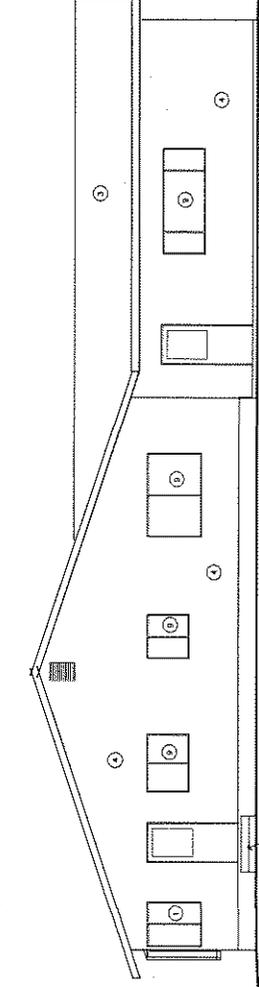


**NORTH ELEVATION**

**WEST ELEVATION**



**SOLAR ORDINANCE FOR EAST ELEVATION**



**EAST ELEVATION**

**SOUTH ELEVATION**

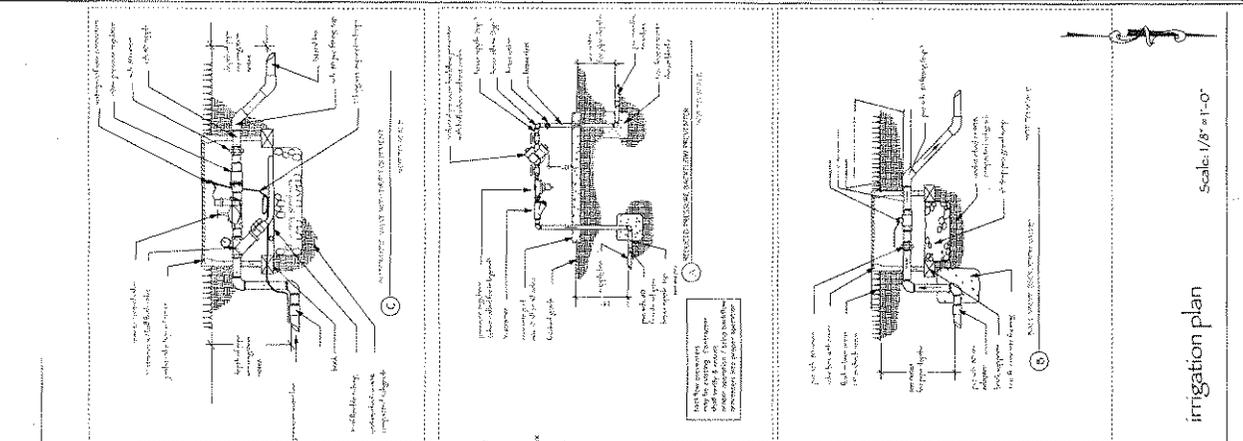
| DATE | COMMENTS |
|------|----------|
|      |          |
|      |          |
|      |          |

**ERICKSON / KASHEVAROFF RESIDENCE**  
 2545 MEDCLIFF ROAD  
 SANTA BARBARA, CALIFORNIA

**BRYAN POLLARD ARCHITECT**  
 228 WEST MISSION STREET  
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 TEL: (805) 967-7793  
 bpollard@bpa.net  
 FAX: (805) 967-5078

**ERICKSON**  
 ELEVATIONS  
 SHEET NUMBER  
**A-3**  
 DATE  
 MAY 10, 2008





### Irrigation Legend

**EMITTERS:** Radius per gpm note

- Circle with arrow: 1/2" pop up emitter
- Circle with arrow: 3/4" pop up emitter
- Circle with arrow: 1" pop up emitter
- Circle with arrow: 1 1/2" pop up emitter
- Circle with arrow: 2" pop up emitter
- Circle with arrow: 3" pop up emitter
- Circle with arrow: 4" pop up emitter
- Circle with arrow: 6" pop up emitter
- Circle with arrow: 8" pop up emitter
- Circle with arrow: 10" pop up emitter
- Circle with arrow: 12" pop up emitter
- Circle with arrow: 15" pop up emitter
- Circle with arrow: 20" pop up emitter
- Circle with arrow: 25" pop up emitter
- Circle with arrow: 30" pop up emitter
- Circle with arrow: 36" pop up emitter
- Circle with arrow: 42" pop up emitter
- Circle with arrow: 48" pop up emitter
- Circle with arrow: 54" pop up emitter
- Circle with arrow: 60" pop up emitter
- Circle with arrow: 72" pop up emitter
- Circle with arrow: 84" pop up emitter
- Circle with arrow: 96" pop up emitter
- Circle with arrow: 108" pop up emitter
- Circle with arrow: 120" pop up emitter
- Circle with arrow: 144" pop up emitter
- Circle with arrow: 168" pop up emitter
- Circle with arrow: 180" pop up emitter
- Circle with arrow: 210" pop up emitter
- Circle with arrow: 240" pop up emitter
- Circle with arrow: 270" pop up emitter
- Circle with arrow: 300" pop up emitter
- Circle with arrow: 360" pop up emitter
- Circle with arrow: 420" pop up emitter
- Circle with arrow: 480" pop up emitter
- Circle with arrow: 540" pop up emitter
- Circle with arrow: 600" pop up emitter
- Circle with arrow: 720" pop up emitter
- Circle with arrow: 840" pop up emitter
- Circle with arrow: 960" pop up emitter
- Circle with arrow: 1080" pop up emitter
- Circle with arrow: 1200" pop up emitter
- Circle with arrow: 1440" pop up emitter
- Circle with arrow: 1680" pop up emitter
- Circle with arrow: 1800" pop up emitter
- Circle with arrow: 2100" pop up emitter
- Circle with arrow: 2400" pop up emitter
- Circle with arrow: 2700" pop up emitter
- Circle with arrow: 3000" pop up emitter
- Circle with arrow: 3600" pop up emitter
- Circle with arrow: 4200" pop up emitter
- Circle with arrow: 4800" pop up emitter
- Circle with arrow: 5400" pop up emitter
- Circle with arrow: 6000" pop up emitter
- Circle with arrow: 7200" pop up emitter
- Circle with arrow: 8400" pop up emitter
- Circle with arrow: 9600" pop up emitter
- Circle with arrow: 10800" pop up emitter
- Circle with arrow: 12000" pop up emitter
- Circle with arrow: 14400" pop up emitter
- Circle with arrow: 16800" pop up emitter
- Circle with arrow: 18000" pop up emitter
- Circle with arrow: 21000" pop up emitter
- Circle with arrow: 24000" pop up emitter
- Circle with arrow: 27000" pop up emitter
- Circle with arrow: 30000" pop up emitter

**PIPE SIZING CHART**

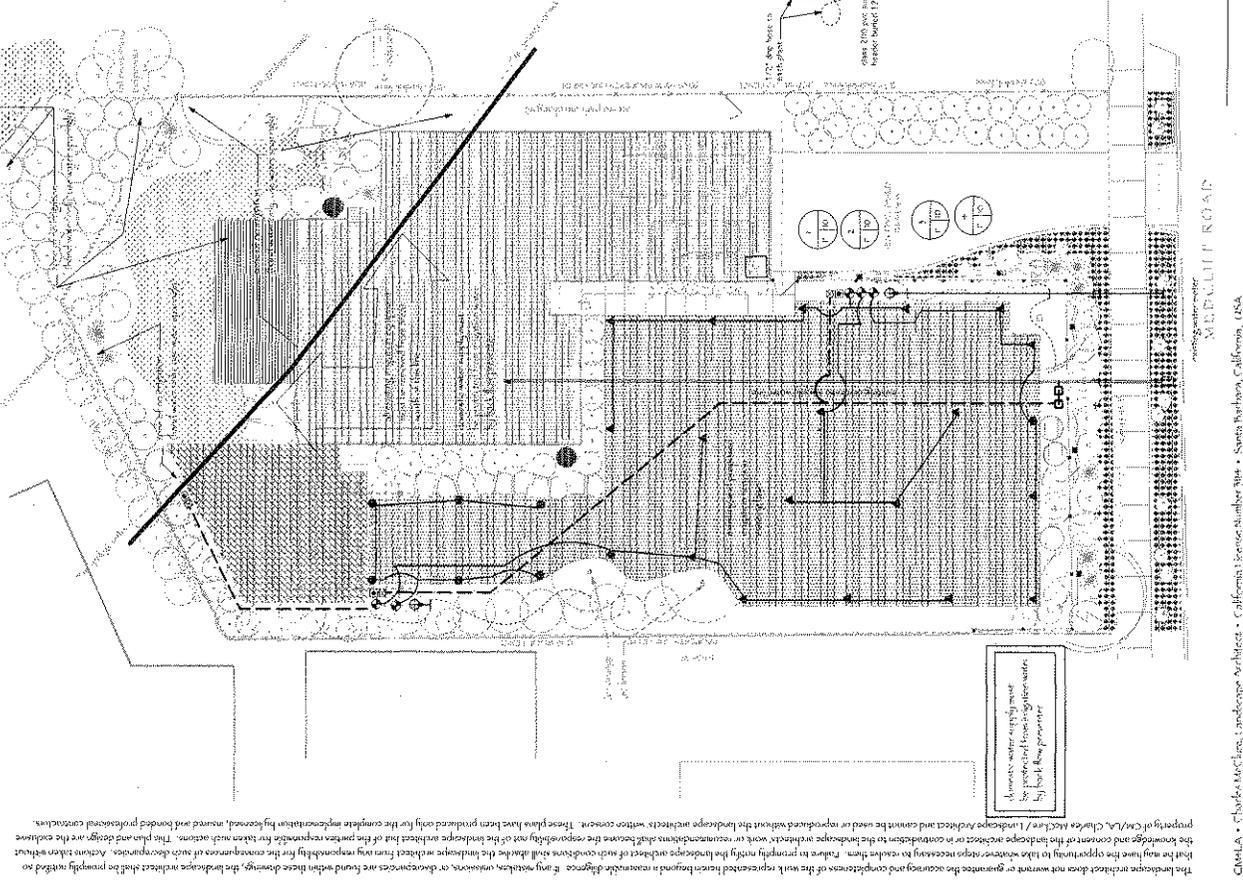
Flow rate (gpm) vs. Pipe size (inches)

| Flow rate (gpm) | 1/2" pipe | 3/4" pipe | 1" pipe | 1 1/2" pipe | 2" pipe |
|-----------------|-----------|-----------|---------|-------------|---------|
| 10              | OK        | OK        | OK      | OK          | OK      |
| 20              | OK        | OK        | OK      | OK          | OK      |
| 30              | OK        | OK        | OK      | OK          | OK      |
| 40              | OK        | OK        | OK      | OK          | OK      |
| 50              | OK        | OK        | OK      | OK          | OK      |
| 60              | OK        | OK        | OK      | OK          | OK      |
| 70              | OK        | OK        | OK      | OK          | OK      |
| 80              | OK        | OK        | OK      | OK          | OK      |
| 90              | OK        | OK        | OK      | OK          | OK      |
| 100             | OK        | OK        | OK      | OK          | OK      |
| 120             | OK        | OK        | OK      | OK          | OK      |
| 140             | OK        | OK        | OK      | OK          | OK      |
| 160             | OK        | OK        | OK      | OK          | OK      |
| 180             | OK        | OK        | OK      | OK          | OK      |
| 200             | OK        | OK        | OK      | OK          | OK      |
| 220             | OK        | OK        | OK      | OK          | OK      |
| 240             | OK        | OK        | OK      | OK          | OK      |
| 260             | OK        | OK        | OK      | OK          | OK      |
| 280             | OK        | OK        | OK      | OK          | OK      |
| 300             | OK        | OK        | OK      | OK          | OK      |
| 320             | OK        | OK        | OK      | OK          | OK      |
| 340             | OK        | OK        | OK      | OK          | OK      |
| 360             | OK        | OK        | OK      | OK          | OK      |
| 380             | OK        | OK        | OK      | OK          | OK      |
| 400             | OK        | OK        | OK      | OK          | OK      |
| 420             | OK        | OK        | OK      | OK          | OK      |
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| 1000            | OK        | OK        | OK      | OK          | OK      |

**PIPE SIZING CHART**

Flow rate (gpm) vs. Pipe size (inches)

| Flow rate (gpm) | 1/2" pipe | 3/4" pipe | 1" pipe | 1 1/2" pipe | 2" pipe |
|-----------------|-----------|-----------|---------|-------------|---------|
| 10              | OK        | OK        | OK      | OK          | OK      |
| 20              | OK        | OK        | OK      | OK          | OK      |
| 30              | OK        | OK        | OK      | OK          | OK      |
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| 70              | OK        | OK        | OK      | OK          | OK      |
| 80              | OK        | OK        | OK      | OK          | OK      |
| 90              | OK        | OK        | OK      | OK          | OK      |
| 100             | OK        | OK        | OK      | OK          | OK      |
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| 380             | OK        | OK        | OK      | OK          | OK      |
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**RECEIVED**

MAR 20 2008

CITY OF SANTA BARBARA  
PLANNING DIVISION

**LIMITED SEACLIFF RETREAT REPORT  
FOR  
2545 MEDCLIFF ROAD  
SANTA BARBARA, CALIFORNIA**

VT-24043-01  
FEBRUARY 20, 2008

PREPARED FOR  
FELICIA KASHEVAROFF  
C/O BRYAN POLLARD ARCHITECT, INC.

BY  
**EARTH SYSTEMS  
SOUTHERN CALIFORNIA  
1731-A WALTER STREET  
VENTURA, CALIFORNIA**

**EXHIBIT C**



**Earth Systems**  
**Southern California**

1731-A Walter Street  
Ventura, CA 93003  
(805) 642-6727  
FAX (805) 642-1325

February 20, 2008

VT-24043-01  
08-2-43

Felicia Kahevaroff  
c/o Bryan Pollard Architect, Inc.  
229 West Mission Street  
Santa Barbara, California 93101

Project: 2545 Medcliff Road  
Santa Barbara, California  
Subject: Limited Sea Cliff Retreat Study

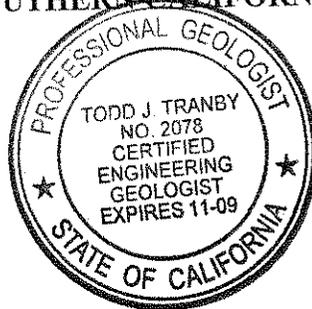
As authorized, we have performed a limited sea cliff retreat study for 2545 Medcliff Road in Santa Barbara, California. The accompanying Limited Sea Cliff Retreat Study presents the results of our research, as well as our conclusions and recommendations pertaining to geologic aspects of the project design.

We have appreciated the opportunity to be of service to you on this project. Please call if you have any questions, or if we can be of further service.

Respectfully submitted,

**EARTH SYSTEMS SOUTHERN CALIFORNIA**

Todd J. Tranby  
Engineering Geologist



Attached: Vicinity Map  
Regional Geology Maps (Dibblee, USGS, CDMG, and Gurrola)  
Site Plan

Copies: 6 - Felicia Kashevaroff c/o Bryan Pollard Architect, Inc.  
1 - Project File

## INTRODUCTION

This report presents findings and recommendations from a limited sea cliff retreat study performed for 2545 Medcliff Road in Santa Barbara, California (see attached Vicinity Map). The purpose of this study was to determine a 75-year setback line in regards to bluff top erosion for proposed improvements to the existing one-story residence and adjacent yard areas. The proposed improvements will include a remodel of the existing house and a proposed exterior wood-framed deck. The subject site is currently occupied by an existing single family residence with exterior hardscape/landscape. The site is located near the top edge of an approximately 150-foot high sea cliff. Landsliding has occurred on the slope face below the subject site. The following report documents our recent aerial photograph study and literature review pertaining to the subject site and provides findings and recommendations pertaining to the proposed improvements.

## AERIAL PHOTOGRAPH STUDY

An aerial photograph study was performed at the University of California Santa Barbara Map and Imagery Laboratory by a subcontracted geologist. The following photographs that included the subject site were reviewed:

| <u>Date</u> | <u>Flight and Frame Numbers</u>     | <u>Scale</u> |
|-------------|-------------------------------------|--------------|
| 1928        | C-311, C-Section, Frames, A9 & A10  | 1:18,000     |
| 1929        | C-430, C-Section, Frames, A12 & A13 | 1:24,000     |
| 1938        | C-4950, Frames SF73 & 74            | 1:24,000     |
| 1943        | BTM-1943, Frames 4B-147 & 148       | 1:24,000     |
| 1954        | BTM-1953, Frames 7K-66 & 67         | 1:20,000     |
| 1962        | HA-O1, Frames 81 & 82               | 1:12,000     |
| 1964        | HA-VX, Frames 65 & 66               | 1:12,000     |
| 1977        | PW-6247, Frame 21                   | 1:24,000     |
| 1983        | PW-SB-5, Frames 4 & 5               | 1:24,000     |
| 1986        | PW-SB-6, Frames 2 & 3               | 1:24,000     |
| 1989        | PW-SB-7, Frames 6 & 7               | 1:24,000     |
| 1992        | PW-SB-8, Frames 3 & 4               | 1:24,000     |
| 1997        | PW-SB-10, Frame 8                   | 1:24,000     |
| 2001        | PW-SB-14, Frames 16 & 17            | 1:12,000     |

The 1928 photographs have good resolution with evidence of landsliding on the sea cliff below the subject property. Unable to estimate erosion rate because of lack of geographic landmarks.

The 1929 photographs have fair resolution but the previously discussed landslide is less recognizable.

The 1938 photographs have very good resolution with evidence of re-activation of the landsliding on the sea cliff below the subject site. The landslide mass has a "broken up" morphology. The toe of the slide appears to be under wave attack and has been pushed out farther than the base of the sea cliff on adjacent properties.

The 1943 photographs have fair resolution, but the landsliding is less recognizable than the 1938 photographs. The toe of the slide at the beach is more linear than in the previous 1938 photographs. Some minor to significant surface erosion is apparent across the slide.

The 1954 photographs have very good resolution with no evidence of re-activation of the landsliding. A strongly expressed embayment defines the location of the previous landsliding. The landslide mass appears to be partially removed by erosion, and wave action.

The 1962 photographs have very good resolution with no evidence of re-activation of the landsliding. Incised gully on sea cliff coincides with storm drain culvert. No geographic landmarks to determine a base line for retreat estimations. No development west of La Jolla Drive.

The 1964 photographs have very good resolution. The subject residence is observed along with surrounding houses.

The 1977 and 1983 photographs indicate no significant changes from the 1964 photographs.

The 1986 photographs have good resolution and there is no evidence of re-activation of the landsliding. It appears that most of the previous landslide deposits have been removed by natural processes.

The 1989, 1992, 1997, and 2001 photographs have fair to good resolution with no evidence of re-activation of the landsliding.

## LITERATURE REVIEW

Dibblee (Geologic Map of the Santa Barbara 7.5-Minute Quadrangle, 1986) indicates that the site is underlain by a veneer of Older Alluvium overlying Mioocene-aged Monterey Formation bedrock with no mapped landslides on the subject slope. Bedrock units in the general area of the subject site are mapped as striking approximately northeast-southwest and dipping to the southwest at about 27 to 45 degrees.

The United States Geologic Survey (USGS, Geologic Map, S.A. Minor et. al., 2006) indicates that the subject site is underlain by a veneer of Quaternary-aged Marine Terrace deposits overlying Miocene-aged Monterey Formation bedrock with no mapped area of landsliding located on the slope below the subject site. Bedrock units are mapped as striking approximately northwest-southeast and dipping to the southwest at about 37 to 50 degrees.

The California Division of Mines and Geology (CDMG, S. Bezore and C. J. Wills, Landslide Inventory Map of Southeastern Santa Barbara County, 2000) indicates a mapped area of landsliding located on the slope below the subject site.

Gurrola (Geologic Map of the Western Santa Barbara Fold Belt, 2004) indicates that the subject site is underlain by Miocene-aged Monterey Formation bedrock with no mapped areas of landsliding located on the slope below the subject site.

## CALCULATION OF SEACLIFF RETREAT SETBACK LINE

The City of Santa Barbara Coastal Plan addresses seacliff retreat by presenting a formula to define a seacliff setback line for new construction. The intent of using the formula is defined as "*New development on the top of the cliff shall be placed at such a distance away from the edge of the cliff that normal rates of erosion and cliff material loss will not seriously affect the structure during its expected lifetime*". The formula is as follows:

$$\text{Setback} = \frac{\text{height of the shale seacliff}}{\text{tangent of dip}} + (\text{thickness of terrace}) (2) + (8"/\text{yr}) (75 \text{ yrs})$$

The City Indicates "*This formula assumes that unsupported bedding planes are unstable, the average rate of seacliff retreat is eight inches per year, terrace deposits (soil material deposited on top of shale) stabilizes at a 2 (H) : 1 (V), and the design of life of project is 75 years. This setback line is only a*

*preliminary line and must be verified on a site specific investigation of the property in question by a registered geologist".*

The City-formula assumes that an erosion rate of 8 inches should be used unless a site specific study is performed to determine actual erosion retreat rates. For the subject site, the erosional retreat rate was determined based on interpretations and measurements from the previously discussed aerial photograph review. The retreat rate was estimated to be 7.6 inches per year.

Although a subsurface study has not been performed, the bedrock bedding planes are anticipated to daylight on the slope face based on the regional geology maps discussed in the Literature Review section of this report. A conservative dip value of 37 degrees has been assumed for the setback calculation.

The thickness of terrace deposits is estimated to be 6 feet based on a drilled boring performed by this office at a site (157 La Jolla) located several hundred feet to the east.

The City setback formula applied to the subject site is as follows:

$$\text{Setback} = \frac{153 \text{ ft.} + (6 \text{ ft.}) (2)}{\tan (37^\circ)} + \frac{(7.6 \text{ in./yr}) (75 \text{ yrs})}{12 \text{ in./1 ft.}} = 262.5 \text{ feet}$$

This setback line plots north of the property and Medcliff Road. This does not seem to be a reasonable setback line for the proposed remodel and deck. Even a more favorable assumption about the bedrock dip angle (50°) yields a setback of 188 feet.

Because the footprint of the existing residence will not change after the remodel and the proposed deck will cover an area with existing concrete patio, it is not anticipated that the setback line will be used to alter the locations of the any structures or hardscape. Therefore, a line representing 75 years of erosional retreat (approximately 47.5 feet from the current top of slope) is plotted on the attached Site Plan. We have also plotted the 50-year and 25-year erosional retreat lines for planning purposes.

## CONCLUSIONS

As previously discussed in this report; the 75-year, 50-year, and 25-year erosional retreat lines are plotted on the attached Site Plan for use in project planning. These lines can be used to site the proposed improvements based on County approval.

It is our understanding that the property owners are planning on removing the existing grass lawn near the bluff top and replacing it with drought tolerant planting with a minimal drip irrigation system. This should reduce the potential for subsurface water to accumulate and surcharge the top of the sea cliff. The site appears to have surface drainage to the street, so no area drains appear necessary.

#### LIMITATIONS AND UNIFORMITY OF CONDITIONS

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater or air, on, below, or around this site. Any statements in this report regarding odors noted, unusual or suspicious items or conditions observed, are strictly for the information of our client.

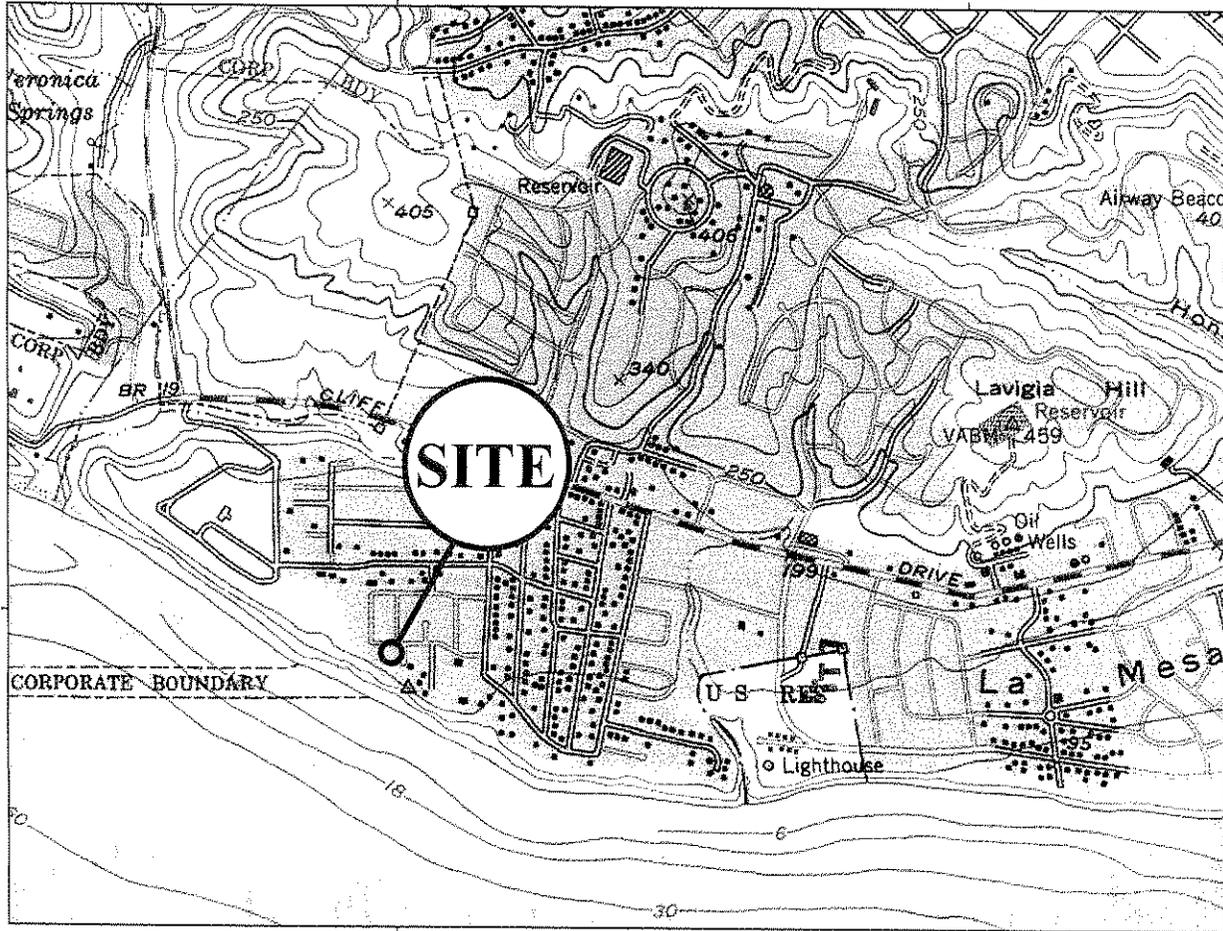
Findings of this report are valid as of this date; however, changes in conditions of a property can occur with passage of time whether they be due to natural processes or works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur whether they result from legislation or broadening of knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of one year.

This report is issued with the understanding that it is the responsibility of the Owner, or of his representative to insure that the information and recommendations contained herein are called to the attention of the Architect and Engineers for the project and incorporated into the plan and that the necessary steps are taken to see that the Contractor and Subcontractors carry out such recommendations in the field.

As the Engineering Geologists and Geotechnical Engineers for this project, Earth System Southern California has striven to provide our services in accordance with generally accepted geotechnical engineering practices in this community at this time. No warranty or guarantee is expressed or implied. This report was prepared for the exclusive use of the Client and their authorized agents.

119.73333° W

WGS84 119.71667° W



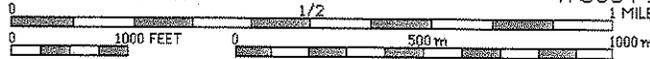
34.40000° N

34.40000° N

TN 14° MN

119.73333° W

WGS84 119.71667° W



Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)



### VICINITY MAP

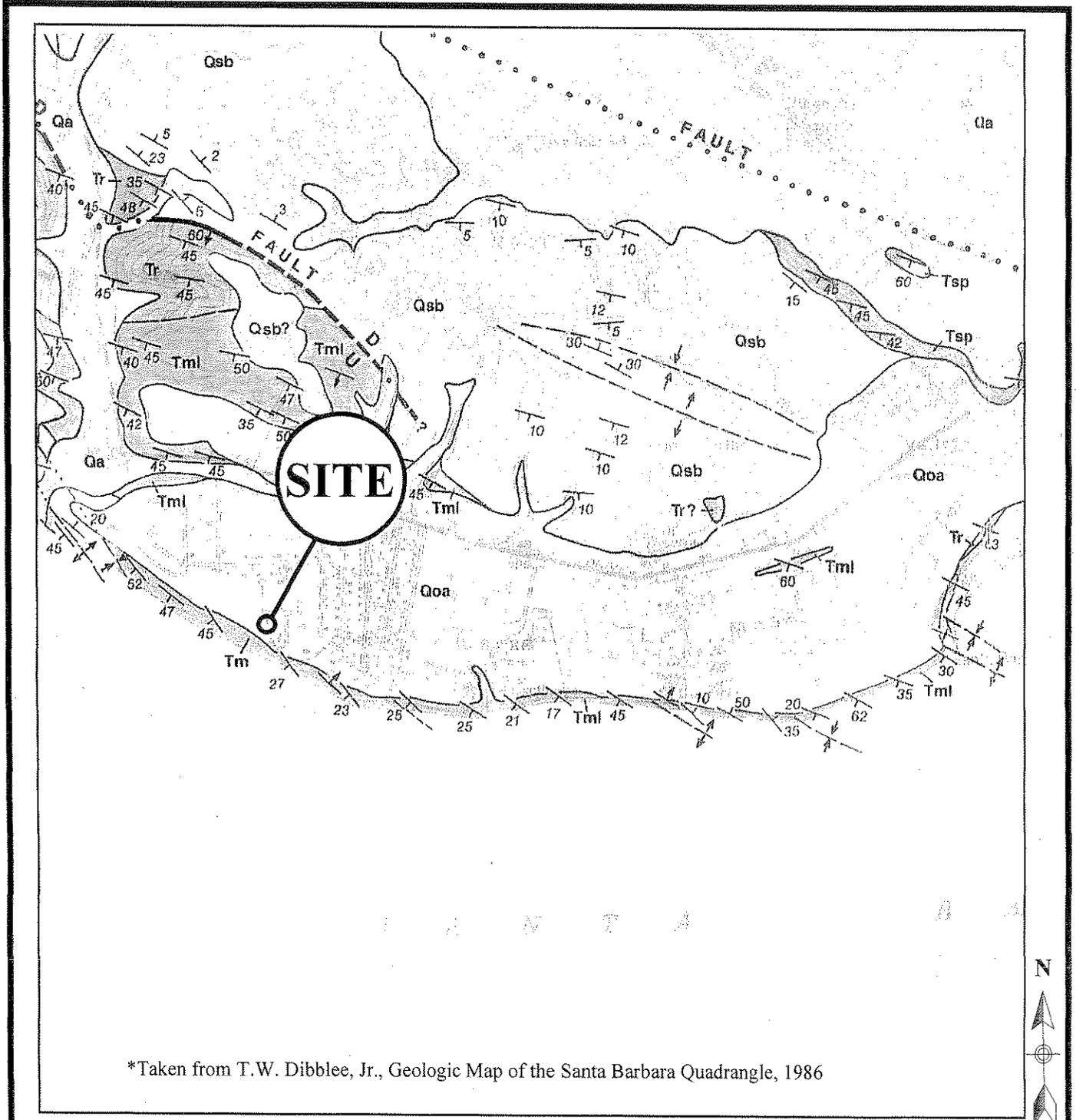
2545 MEDCLIFF ROAD  
SANTA BARBARA, CALIFORNIA



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**Southern California**

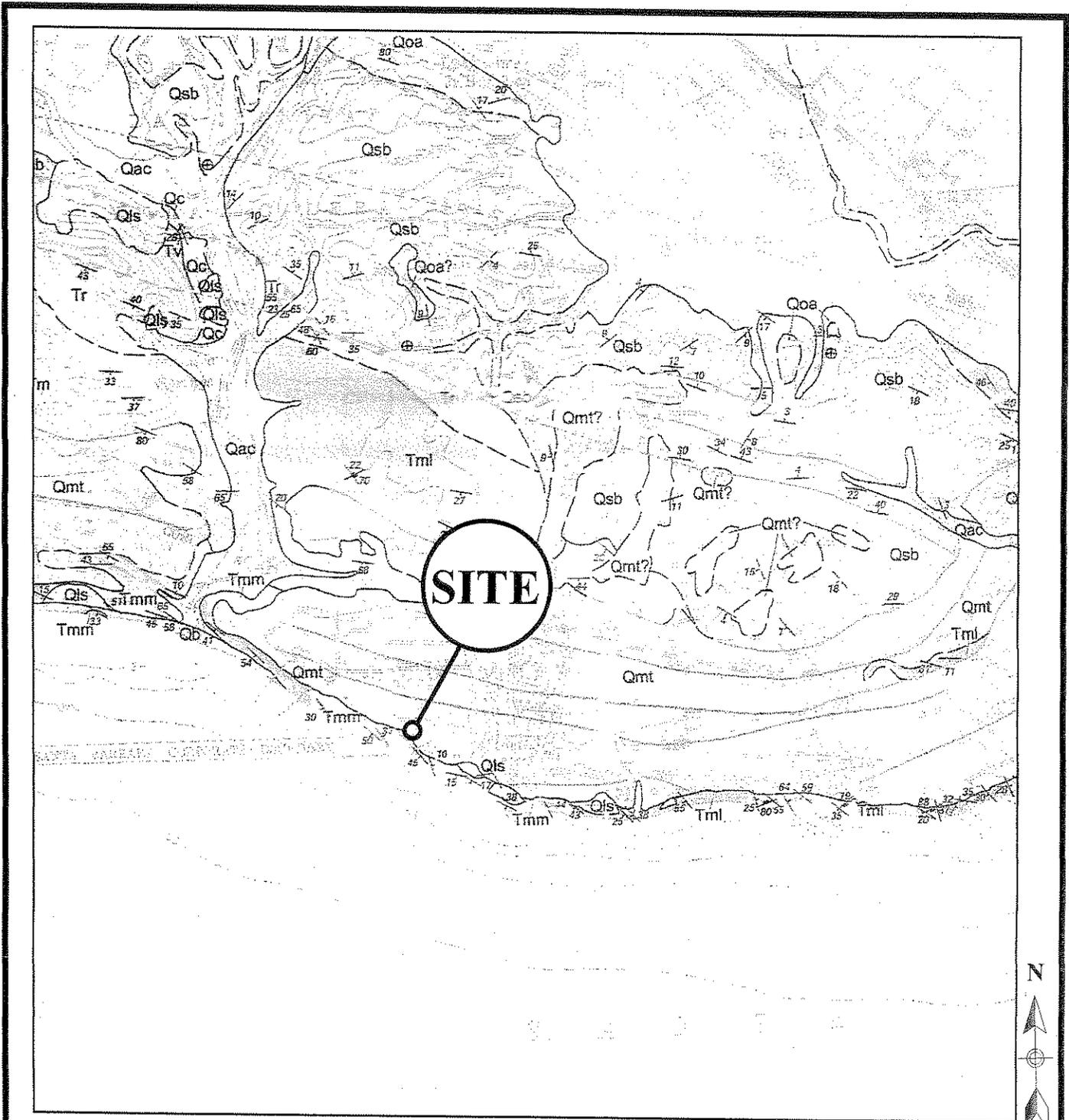
DECEMBER, 2007

VT-24043-01



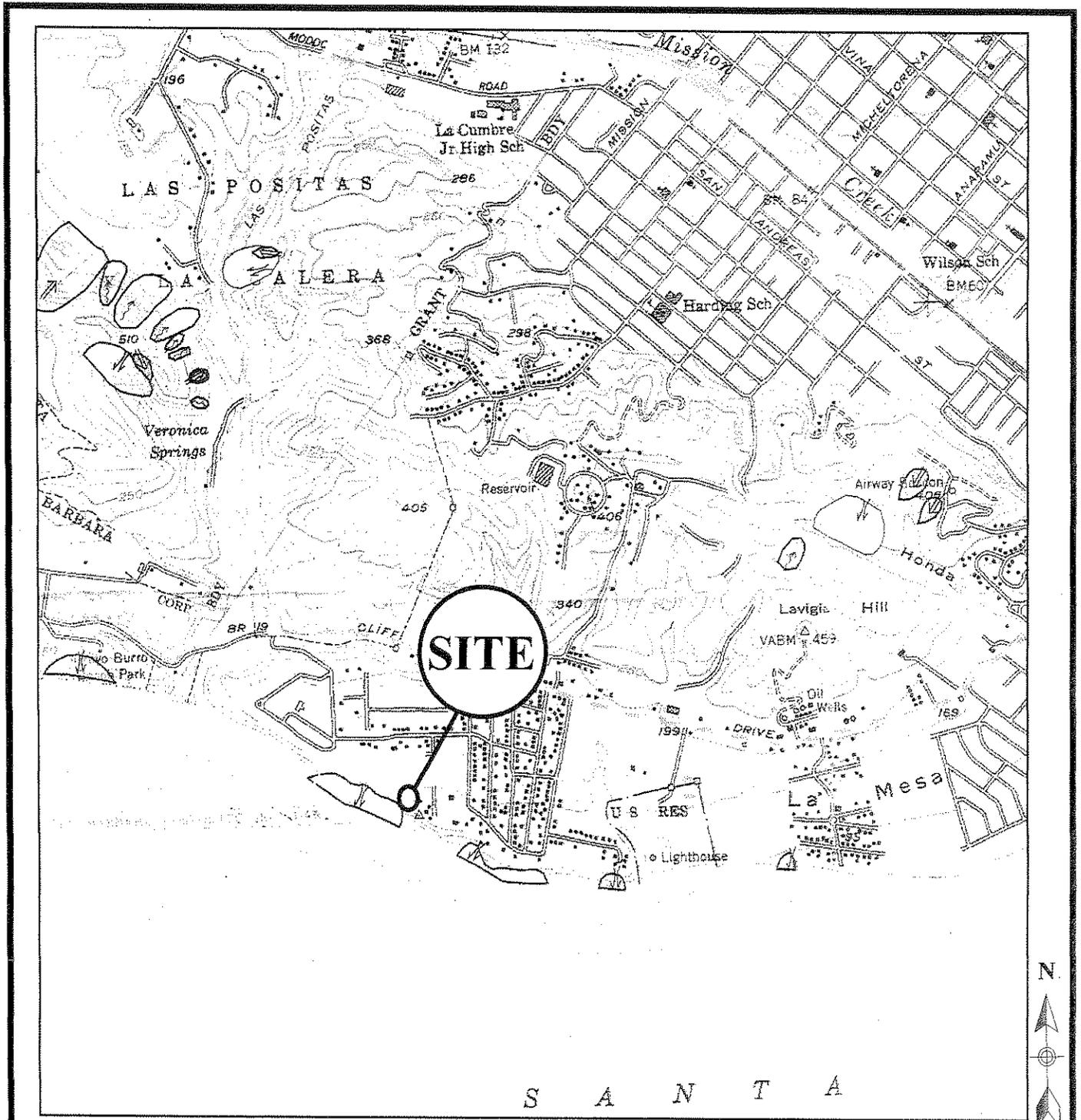
\*Taken from T.W. Dibblee, Jr., Geologic Map of the Santa Barbara Quadrangle, 1986

|   |             |
|---|-------------|
| <b>REGIONAL GEOLOGY MAP</b>   |             |
| 2545 MEDCLIFF ROAD<br>SANTA BARBARA, CALIFORNIA   |             |
|  <b>Earth Systems</b><br><b>Southern California</b> |             |
| DECEMBER, 2007  | VT-24043-01 |



\*Taken from S.A.Minor and other, Preliminary Geologic Map of the Santa Barbara Coastal Plain Area, 2002

|  |  |
|--|--|
| <b>GEOLOGY MAP-2002</b>  |  |
| 2545 MEDCLIFF ROAD<br>SANTA BARBARA, CALIFORNIA                                      |  |
|  | <b>Earth Systems</b><br><b>Southern California</b> |
| DECEMBER, 2007   | VT-24043-01  |



\*Taken from S. Bezore and C.J. Wills Landslide Inventory Map of the Southeastern Santa Barbara County, California, 2000

## LANDSLIDE HAZARD MAP

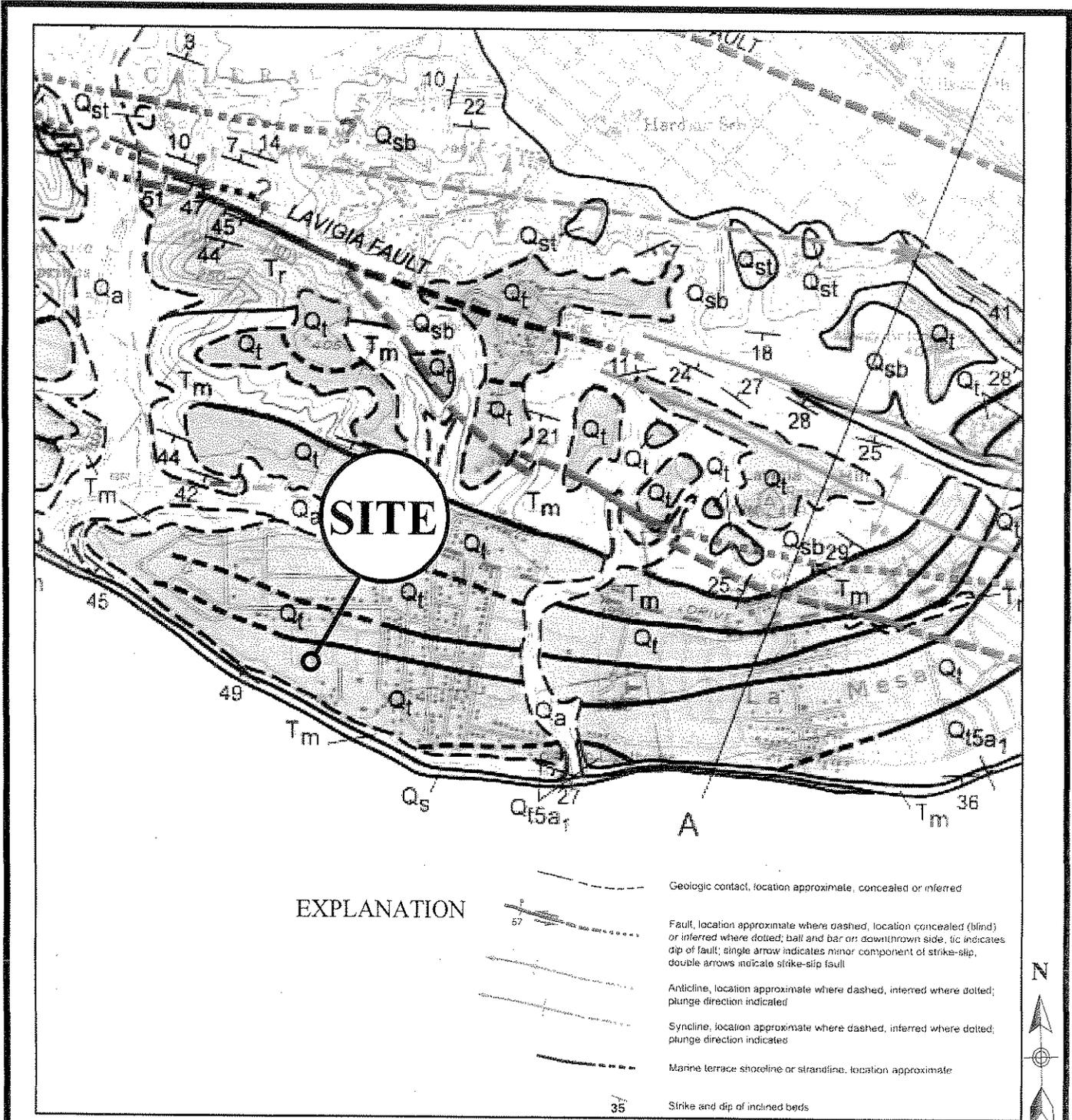
2545 MEDCLIFF ROAD  
SANTA BARBARA, CALIFORNIA



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**Southern California**

DECEMBER, 2007

VT-24043-01



\*Taken from Larry D. Gurrola Geologic Map of the Western Santa Barbara Fold Belt, Santa Barbara, 2004

|  |             |
|--|-------------|
| <b>GEOLOGY MAP</b>   |             |
| 2545 MEDCLIFF ROAD<br>SANTA BARBARA, CALIFORNIA  |             |
|  <b>Earth Systems</b><br>Southern California |             |
| DECEMBER, 2007   | VT-24043-01 |