



City of Santa Barbara California

PLANNING COMMISSION STAFF REPORT

REPORT DATE: January 3, 2008
AGENDA DATE: January 10, 2008
PROJECT ADDRESS: 3455 Marina Drive (MST2007-00221; CDP2007-00013)
TO: Planning Commission
FROM: Planning Division, (805) 564-5470
 Jan Hubbell, AICP, Senior Planner
 Tony Boughman, Planning Technician II

I. PROJECT DESCRIPTION

The project consists of the construction of a 6,218 square foot one-story single-family residence, including a 469 square foot two-car attached garage and a 256 square foot one-car attached garage, on a vacant lot. The project includes a swimming pool, patio, a 27 square foot half-bath structure, septic system, site walls, and landscaping. Total grading would be 1,151 cubic yards. The lot has street frontage on Marina Drive to the north and Cliff Drive to the south. Access to the house would be from Marina Drive. The vacant lot is reduced from 1.34 to 1.17 acres by a public right-of-way easement along Cliff Drive. The southern portion of the development is located within the Appealable Jurisdiction of the Coastal Zone.

Other components include a 600 square foot permeable synthetic putting green and a pool equipment enclosure.

II. REQUIRED APPLICATIONS

The discretionary application required for this project is a Coastal Development Permit to allow the proposed development in the Appealable Jurisdiction of the City's Coastal Zone (SBMC §28.44.050).

III. RECOMMENDATION

The proposed project conforms to the City's Zoning and Building Ordinances, General Plan and policies of the Local Coastal Plan. In addition, given the one the one-story nature of the project and the grade reductions made to lower the finish floor levels of the building site, the massing of the project can be considered consistent with the surrounding neighborhood and the Single Family Residence Design Guidelines. Staff is recommending minor adjustments to the project design to maintain a public ocean view corridor and a possible reduction in the height of the front perimeter walls to improve the project design. Therefore, Staff recommends that the Planning Commission approve the project, making the findings outlined in Section VII of this report, and subject to the conditions of approval in Exhibit A.



Vicinity Map for 3455 Marina Drive

APPLICATION DEEMED COMPLETE:
DATE ACTION REQUIRED:

November 5, 2007
February 3, 2008

IV. SITE INFORMATION AND PROJECT STATISTICS

A. SITE INFORMATION

Applicant/Property Owner: Mike Silva	
Parcel Number: 047-022-004	Gross Lot Area: 58,342 square feet / 1.34 acres Net Lot Area: 51,077 square feet / 1/17 acres
General Plan: Residential, 1 unit/acre	Zoning: A-1/SD-3, Single-Family Residence and Coastal Overlay Zone
Existing Use: Vacant lot	Topography: 2% average slope
Adjacent Land Uses: North – Single-Family Residential East – Single-Family Residential South – Single-Family Residential West – Single-Family Residential	

B. PROJECT STATISTICS

	Proposed
Living Area	5,467
Garage	725
Total (net)	6,192

V. ZONING ORDINANCE CONSISTENCY

Standard	Requirement	Proposed
Setbacks		Front: Marina Dr. 67' Front: Cliff Dr. 107'
-Front	35'	West: 15'
-Interior	15'	East: 35'
Building Height	30'	20'
Parking	2 covered	3 covered
Open Yard	1,250	1,849
Lot Coverage		
-Building	N/A	6,740 sq. ft. 13%
-Pool/Paving/ Driveway	N/A	11,118 sq. ft. 22%
-Landscaping	N/A	33,219 sq. ft 65%

The proposed project is consistent with the regulations of the A-1, single-family residence zone related to building height, solar access, open yard requirements and parking.

VI. ISSUES

A. ENVIRONMENTAL REVIEW

Staff has determined that the project is exempt from further environmental review pursuant to the California Environmental Quality Act Guidelines Section 15303, new construction of small structures. The staff environmental analyst considered the potential for environmental impact to views along Cliff Drive and concluded that because the primary views are to and along the ocean, the project would result in no significant view impacts.

B. DESIGN REVIEW

This project was reviewed by the Architectural Board of Review (ABR) on May 29, 2007, and June 18, 2007 (meeting minutes are attached as Exhibit D). The project was continued indefinitely to the Planning Commission and will return to the Single Family Design Board (SFDB). The ABR appreciated the size, the one-story height, and the setback of the project. The ABR worked with the applicant towards reducing the finish floor height of the proposed residence to the lowest grade level possible without creating drainage problems for the site. The ABR found the proposed grading plan, style and massing of the project to be appropriate. A landscape plan was also reviewed by the ABR with the comment that the landscaping should preserve views of the ocean while providing privacy between adjacent residences. Preliminary and final approvals with Neighborhood Preservation Ordinance findings by the SFDB will be required following Planning Commission approval of the project.

Staff generally agrees with the ABR and believes that the overall design of the project would be compatible with the surrounding neighborhood, which is a mix of one- and two-story houses with a variety of Ranch and Spanish architectural styles. One-story houses over 17 feet in height on lots of 15,000 square feet or more are subject to floor to lot area (FAR)/maximum size guidelines. The guideline maximum home size square footage for the subject property's lot size is 5,094 square feet. This proposal has 1,125 square feet of construction above the maximum square footage guideline for the property's lot size. A 20 Closest Homes FAR survey shows the proposal to be second largest in floor area and largest in terms of FAR. Although the proposed house is one-story, the roof ridge is 20 feet in height. Although the proposed house is larger than most others in the neighborhood, the one-story nature of the proposal could be considered to be compatible with the neighborhood.

C. COASTAL AND PUBLIC VIEWS

The project site is located in an area of the City where protection of public scenic views of the coast is important to residents. The Local Coastal Plan Policy 9.1 requires consideration to, from and along the ocean. The Conservation Element also discusses the importance of preserving public views of the ocean. The project site is located inland of a public vista point along Cliff Drive and on the ocean side of Marina Drive. The project front yard is adjacent to a portion of Marina Drive used frequently by members of the community who access an off-road trail connecting Marina Drive through to Braemar Drive. Neighbors requested the ABR to consider how the proposed residence design would impact public views and the existing active

equestrian easement connection that exists along Marina Drive. Staff is concerned that the proposed project design does not adequately maintain a view corridor from Marina Drive toward the ocean. The cumulative impact of existing, proposed new walls and vegetation may block the existing neighborhood ocean views. There are only two vacant properties in the neighborhood where the ocean can be viewed across the lots from Marina Drive. If the current development pattern to permit tall perimeter walls and driveway entry gates along Marina Drive continues, there could be no quality public views of the ocean remaining from the eastern end of Marina Drive. Ideally, the last two lots would feature adjacent interior property line view corridors so that a modest public view of the ocean would remain even after the entire street is built out. As proposed, the project includes a six foot height wall along the entire property frontage at the front yard setback line.

In addition, the applicant and ABR were advised by staff at the first Concept hearing that the proposed wall height and design along the front property would be inconsistent with Single Family Design Guidelines 13.2, 17.1 and 17.3 which discourage front house entries from being blocked with tall walls, screens or hedges. The guidelines encourage "neighborhood friendly" entries. The ABR sometimes allows private gated homes for some areas of the City. However, in this case, given the additional issue of Coastal views, the need for adherence to these guidelines should be carefully considered. The Planning Commission may direct the SFDB to further consider this front yard wall height issue.

Regarding views, Staff has included a condition of approval that would require the landscaping, accessory structures and any walls to be lowered or designed to maintain a minimum total of 30 feet of width in a view corridor or view corridors to the ocean. The view corridor would be designed to accommodate pedestrians walking along Marina Drive. The 30 feet of viewing corridor(s) could be provided on one or both sides of the house. The front property line is 155' wide. Also, the required interior yard setbacks are 15' for each interior property line. Given the total property frontage and standard interior yard requirements, the 30' view corridor condition width appears reasonable to maintain consistency with LCP and Single Family Design Guidelines policies.

D. LOCAL COASTAL PLAN COMPLIANCE

The project site is located within the Coastal Zone and thus must be found consistent with the City's Local Coastal Plan (LCP), which implements the California Coastal Act. The project is in Component One of the Local Coastal Plan which is located between the City's Westerly Boundary adjacent to Hope Ranch, east of Arroyo Burro Creek and extending about 1,000 yards to the north, and is a low density residential area. The LCP acknowledges that this area is almost entirely developed with single-family residences. LCP Policy 9.1 requires consideration of coastal views. The project site is located inland of a public vista point along Cliff Drive and on the ocean side of Marina Drive. The inland views of the mountains from Cliff Drive are blocked by Campanil Hill. Views of Campanil Hill are already obstructed in a number of ways throughout the area. Further reduction of this project's proposed 20' height would not appear to have substantial benefit for preserving hillside views from Cliff Drive. A condition for natural landscaping at the southern perimeter of the property, compatible with existing natural landscaping to the South of Cliff Drive will maintain an appropriate viewing ambience

immediately adjacent to Cliff Drive. With the southern perimeter landscaping provision and provision of a view corridor from Marina Drive toward the ocean, the proposed one-story house would be consistent with Policy 9.1. Policy 5.3 requires new construction to be compatible with the neighborhood. The proposed house is compatible in architecture. Although the proposed house is larger than most others in the neighborhood, the one-story nature of the project could be considered to be compatible with the neighborhood. The site is not located on a coastal bluff or in an archaeological sensitivity zone. Therefore, the project is consistent with the applicable policies of the California Coastal Act and Local Coastal Plan, and all implementing guidelines.

VII. FINDINGS

Planning Staff recommends that the Planning Commission approve the Coastal Development Permit subject to the findings outlined below and the conditions of approval contained in Exhibit A.

COASTAL DEVELOPMENT PERMIT (SBMC §28.45.009)

The project is consistent with the policies of the California Coastal Act, the City's Local Coastal Plan, all implementing guidelines, and applicable provisions of the Code because the new residence would be compatible with the existing neighborhood, would not be visible from the beach, would not significantly impact views from public view corridors, would not impact public access, and would not contribute to safety or drainage hazards on the site and is not located on a coastal bluff or in an archaeological sensitivity zone.

Exhibits:

- A. Conditions of Approval
- B. Site Plan
- C. Applicant's letter, December 20, 2006
- D. Architectural Board of Review Minutes, May 29, 2007, and June 18, 2007
- E. 20 Closest Homes Survey
- F. Preliminary Storm Drainage Report

PLANNING COMMISSION CONDITIONS OF APPROVAL

3455 MARINA DR (MST2007-00221, CDP2007-00013)

COASTAL DEVELOPMENT PERMIT

JANUARY 10, 2008

- I. In consideration of the project approval granted by the Planning Commission and for the benefit of the owner(s) and occupant(s) 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 (s) Prior to Permits.** Prior to the issuance of any Public Works permit or Building permit for the project on the Real Property, the following conditions shall be imposed on the use, possession and enjoyment of the Real Property, shall be executed by the Owner in a written instrument which shall be reviewed and approved as to form and content by the City Attorney and recorded by the City. Said agreement(s) shall be recorded in the Office of the County Recorder:
1. **Uninterrupted Water Flow.** The Owner shall provide for the uninterrupted flow of water through the Real Property including, but not limited to, swales, natural water courses, conduits and any access road, as appropriate. 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.
 2. **Recreational Vehicle Storage Limitation.** No recreational vehicles, boats or trailers shall be stored on the Real Property unless enclosed or concealed from view as approved by the Single Family Design Board (SFDB).
 3. **Landscape Plan Compliance.** The Owner shall comply with the Landscape Plan approved by the Single Family Design Board (SFDB). Such plan shall not be modified unless prior written approval is obtained from the SFDB. The landscaping on the Real Property shall be provided and maintained in accordance with said landscape plan.
 4. **Lighting.** Exterior lighting, where provided, shall be consistent with the City's Lighting Ordinance and most currently adopted Energy Code. No floodlights shall be allowed. Exterior lighting shall be shielded and directed toward the ground.
 5. **Approved Development.** The development of the Real Property approved by the Planning Commission on January 10, 2008, is limited to approximately 6,219 square feet of building and the 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.
 6. **Cliff Drive Sewer Connection Requirement.** As a condition of approval of this project, Owner agrees to connect to the City sewer system when a sewer main is constructed in Cliff Drive at a point adjacent to Owner's Real Property, per Santa Barbara Municipal Code Chapter 14.44. Owner shall, at Owner's sole expense, connect to the City sewer system within one year of being advised in writing that the City sewer main is operable and available for such a connection. In the event

Owner fails to comply with this condition of approval, City may enter the Real Property and make such a sewer connection with the cost of the connection becoming a lien on the real property to be paid in connection with property taxes and assessments imposed on Owner's Real Property.

7. **Swimming Pool Discharge.** The owner shall truck out any water discharged from the swimming pool in the event the pool is completely or partially drained. No water from the pool shall be discharged into a City storm drain or to the private septic system on the real property.
- B. **Design Review.** The following is subject to the review and approval of the Single Family Design Board (SFDB) prior to the issuance of a building permit or public works permit:
1. **View Corridor.** The project shall provide a view corridor or two view corridors from Marina Drive to the ocean to total at least 30 feet in width. The view corridor(s) may be provided on one or both sides of the house. Structures, walls, and plants must be installed and maintained at a low height within the view corridor. Trees are prohibited in the view corridor.
 2. **Pedestrian Path.** A pedestrian path at least four feet in width shall be provided outside the wall along Cliff Drive. The pedestrian path shall align with the path along the adjacent property to the west and be constructed of decomposed granite or other similar material subject to approval. The materials used shall be approved by the Parks Department and Public Works Department.
 3. **Permeable Paving.** Incorporate a permeable paving system for the project driveway that will allow a portion of the paved area runoff to percolate into the ground, except as necessary to meet Fire Department weight requirements. Materials in driveways and parking areas must be approved by the Transportation Manager.
 4. **Screened Check Valve/Backflow.** The check valve or anti-backflow devices for fire sprinkler and/or irrigation systems shall be provided in a location screened from public view or included in the exterior wall of the building.
 5. **Southern Perimeter Landscaping.** The use of native shrubs and plants to soften the appearance of the southern property line wall and blend with the natural setting to the south is encouraged. This landscaping will be highly visible from the Cliff Drive scenic vista immediately to the south, and therefore should be compatible in character with the natural landscape setting existing to the south of Cliff Drive.
- C. **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. **Street Improvement Plans.** The Owner shall submit building plans for construction of improvements along the subject property road frontage on Marina

Drive. Public Works Improvement Plans shall be submitted with Building Permit plans. *As determined by the Public Works Department, the improvements shall include new, and/or remove and replace to City standards:* underground service utilities, connection to City/private water and sewer mains, drainage system (curb drain outlets, slot/trench drain, drop inlet, detention, erosion protection, etc.), preserve and/or reset survey monuments, and provide adequate positive drainage from site. The public improvement/building plans shall be prepared by a registered civil engineer or licensed architect and reviewed and signed by the City Engineer.

2. **Drainage Calculations.** The Owner shall submit simple drainage calculations justifying that the existing on-site and proposed on-site drainage system adequately conveys a minimum of a 25-year storm event.
3. **Fire Sprinkler System.** A fire sprinkler system shall be provided.
4. **Agreement Assigning Water Extraction Rights.** Owner shall assign to the City of Santa Barbara the exclusive right to extract ground water from under the Real Property. This assignment of rights does not include a right of surface entry on or from the Real Property.

D. **Community Development Requirements Prior to Building or Public Works Permit Application/Issuance.** The following shall be finalized prior to, and/or submitted with, the application for any Building or Public Works permit:

1. **Soils Report.** Submit to the Building and Safety Division a soils report.
2. **Final Planning Commission Resolution Submittal.** The final Planning Commission Resolution shall be submitted, indicating how each condition is met with drawing sheet and/or note references to verify condition compliance. If the condition relates to a document submittal, describe the status of the submittal (e.g., Final Map submitted to Public Works Department for review), and attach documents as appropriate.
3. **Green Building Techniques Required.** Owner shall design the project to meet Santa Barbara Built Green Two-Star Standards and strive to meet the Three-Star Standards.
4. **Recycling, Green Waste and Trash Enclosure.** Owner shall designate an appropriately sized, screened and accessible area for recycling, green waste and trash container storage outside of required yard setbacks.

E. **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. **Design Review Requirements.** Plans shall show all design, landscape and tree protection elements, as approved by the Single Family Design Board, outlined in Section B above.

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:

Property Owner	Date	
Contractor	Date	License No.
Architect	Date	License No.
Engineer	Date	License No.

- F. **Construction Implementation Requirements.** All of these construction requirements shall be carried out in the field by the Owner and/or Contractor for the duration of the project construction.

1. **Demolition/Construction Materials Recycling.** Recycling and/or reuse of demolition/construction materials shall be carried out to the extent feasible, and containers shall be provided on site for that purpose, in order to minimize construction-generated waste conveyed to the landfill. Indicate on the plans the location of a container of sufficient size to handle the materials, subject to review and approval by the City Solid Waste Specialist, for collection of demolition/construction materials.
2. **Construction Hours.** Construction (including preparation for construction work) is prohibited Monday through Friday before 7:00 a.m. and after 5:00 p.m., and all day on Saturdays, Sundays and holidays observed by the City of Santa Barbara, as shown below:

New Year's Day	January 1st*
Martin Luther King's Birthday	3rd Monday in January
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th*

Labor Day..... 1st Monday in September
Thanksgiving Day 4th Thursday in November
Following Thanksgiving Day..... Friday following Thanksgiving Day
Christmas Day December 25th*

*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday, respectively, shall be observed as a legal holiday.

When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the Chief of Building and Safety to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out night construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.

3. **Sprinkling During Grading.** During site grading and transportation of fill materials, regular water sprinkling shall occur. During clearing, grading, earth moving or excavation, sufficient quantities of water, through use of either water trucks or sprinkler systems, shall be applied to prevent dust from leaving the site. Each day, after construction activities cease, the entire area of disturbed soil shall be sufficiently moistened to create a crust.

Throughout construction, water trucks or sprinkler systems shall also be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this will include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency will be required whenever the wind speed exceeds 15 mph.

4. **Covered Truck Loads.** Trucks transporting fill material to and from the site shall be covered from the point of origin.
5. **Construction Parking/Storage/Staging.** Construction parking and storage shall be provided as follows:
 - a. During construction, free parking spaces for construction workers and construction shall be provided on-site or off-site in a location subject to the approval of the Public Works Director. Construction workers are prohibited from parking within the public right-of-way, except as outlined in subparagraph b. below.
 - b. Parking in the public right of way is permitted as posted by Municipal Code, as reasonably allowed for in the 2006 Greenbook (or latest reference), and with a Public Works permit in restricted parking zones. No more than three (3) individual parking permits without extensions may be issued for the life of the project.

- c. Storage or staging of construction materials and equipment within the public right-of-way shall not be permitted, unless approved by the Transportation Manager.
6. **Expeditious Paving.** All roadways, driveways, sidewalks, etc., shall be paved as soon as possible. Additionally, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used, as directed by the Building Inspector.
7. **Gravel Pads.** Gravel pads shall be installed at all access points to the project site to prevent tracking of mud on to public roads.
8. **Construction Best Management Practices (BMPs).** Construction activities shall address water quality through the use of BMPs, as approved by the Building and Safety Division.
9. **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 an archaeologist from the most current City Qualified Archaeologists List shall be retained by the applicant. 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.

- G. **Prior to Certificate of Occupancy.** Prior to issuance of a Temporary Certificate of Occupancy, or Certificate of Occupancy, the Owner of the Real Property shall complete the following:
1. **Repair Damaged Public Improvements.** Repair any damaged public improvements along subject property frontage (curbs, gutters, sidewalks, etc.), subject to the review and approval of the Public Works Department. Where tree roots are the cause of the damage, the roots are to be pruned under the direction of the City Arborist.
 2. **Complete Public Improvements.** Public improvements as shown on the public improvement/building plans.
 3. **Cross Connection Inspection.** The Owner shall request a cross connection inspection by the Public Works Water Reclamation/Cross Connection Specialist.
- H. **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.

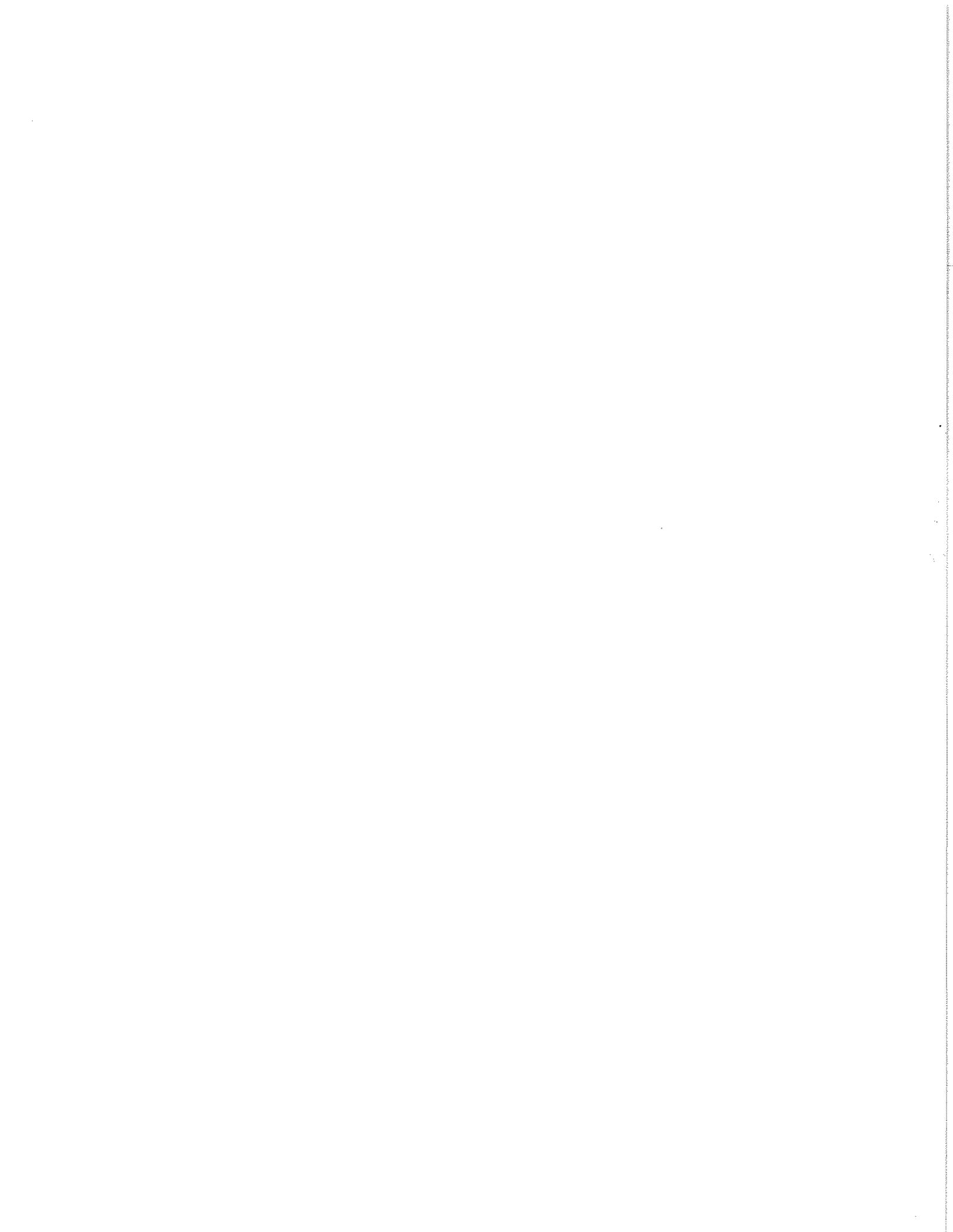
Applicant/Owner shall execute a written agreement, in a form approved by the City Attorney, evidencing the foregoing commitments of defense and indemnification within thirty (30) days of the City Council denial of the appeal and approval of the Project. These commitments of defense and indemnification 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.

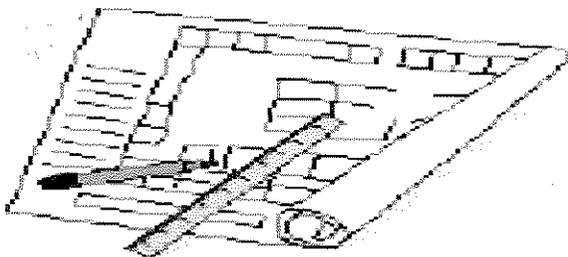
NOTICE OF COASTAL DEVELOPMENT PERMIT TIME LIMITS:

The Planning Commission's action approving the Coastal Development Permit shall expire two (2) years from the date of approval, per Santa Barbara Municipal Code §28.45.009.q, unless:

1. Otherwise explicitly modified by conditions of approval of the development permit, or unless construction or use of the development has commenced.
2. A Building permit for the work authorized by the coastal development permit is issued prior to the expiration date of the approval.

3. A one (1) year time extension may be granted by the Planning Commission if the construction authorized by the permit is being diligently pursued to completion and issuance of a Certificate of Occupancy. Not more than three (3) extensions may be granted.





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January 3, 2008

Planning Department
Case Planner

I am seeking a Coastal Development Permit and need SHO approval of the project to move on to the next level of Architectural approvals. We have previously gone to two ABR Conceptual Meetings with very favorable comments from the board in the second meeting. The following are the dates of those meetings.

1. Architectural Board of Review Meeting Dated May 29, 2007
2. Architectural Board of Review Meeting Dated June 18, 2007

The background of this project is that the design team (Owner and Designers) attacked this project with the intent on designing a home that keeps in mind the neighborhood compatibility along with the wishes of me the Owner. We decided to only propose a one story residence even though there are two story residences very close to ours. We also tried to design it holding back from the side property lines to maximize the views of the neighbors. Both of these items are not requirements but as the ABR recognized, it was a very positive first effort. Following the first meeting we went away with a set of tasks given to us by the ABR. On our return meeting, we did 100 percent of what was asked of us and again, recognized by the board as a very good and desirable project. We do have opposition to the project and have offered to meet continuously with all parties. Other than the obvious development critics, I believe we have gotten good feedback from the majority of the neighborhood.

The significant problem issues by the neighbors behind us are the ocean views. We have done what is believed by the board as a very good job with the structure in this matter. We are starting with a lower grade, ending with a lower roof line in comparison. We have a proposed landscape plan and are continuing to work with the vegetation that would be installed in the side yard setback areas.

The project consists of a new single family residence on a vacant lot. The residence is 5,493 s.f. in size. It also has two garages that are split up to keep the design deep and not wide. The combined size of the garages are 725 s.f. The accessory areas are serving two purposes. First, the obvious is the storages space but more

importantly to extend the garages out from the residence so to make them accessible and help the design.

The site is a vacant lot of 58,370 gross s.f. The only vegetation is one plant that we will re-use in the landscaping. The lot drainage will use the designed storm drain that runs through the lot. Placement of the structure has been specific as to the easement of the storm drain in regards to both placement and level. My engineer on my project is the same as the designing engineer of the storm system. The on site parking is provided for in a circular driveway and the rest of the site is completed with spa, pool, and water tolerant landscaping. We plan on being below the suggested quantity of high use water landscaping.

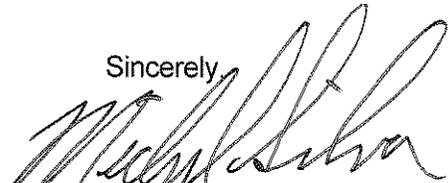
The grading for the site is minimal. Under the raised floor construction is 150 yds. of cut. Due to the request of the ABR, we lowered the finish floor to grade on the front side creating the need for 359 c.y.'s of cut to slope in the grade to Marina Dr. The only other cut is 133 c.y.'s of pool construction. With the site being so large, we plan to balance onsite. All surrounding properties are residential on large properties with Bluff top residences and Hope Ranch very close.

The architectural design is Spanish with typical exterior residential lighting. Typically on exterior walls at about six to eight feet in height. The project would not create any smoke, noise, or odors.

A preliminary soil report to show septic compatibility has been done and successfully shows the ability for the site to handle a septic system.

Construction of this project should not extend longer than one year. We hope that you see that we have taken in to consideration neighborhood preservation. If we can be of any further help, please contact me at any time.

Sincerely,



Michael Silva

CONCEPT REVIEW - NEW ITEM**5. 3825 STATE ST**

C-2/SD-2 Zone

Assessor's Parcel Number: 051-010-014
 Application Number: MST2007-00290
 Owner: Patricia S. Nettleship Trustee
 Applicant: Conceptual Motion Company

(Proposal to construct two monument towers at La Cumbre Plaza. Located a buildings E and F, the towers will serve as way finding design elements marking major entries into the interior plaza. The tower interiors are open circulation spaces at the ground floor level with faux second floors.)

(Action may be taken if sufficient information is provided.)

(5:14)

Present: Angie Westfall, Conceptual Motion Company.

Motion: Continued indefinitely to the Full Board with the following comments:

- 1) The Board supports the use of the proposed towers as a positive replacement for the archways. Provide further refinement of the towers to add an element of pedestrian interest.
- 2) Provide a floor plan showing all tower openings.
- 3) Provide a reflected ceiling plan.
- 4) Provide building sections to aid in the understanding of the towers.
- 5) One Board member suggested increasing the tower pitch as a way finding element.
- 6) Show any proposed lighting for the interior or exterior of the towers.
- 7) Show the proposed floor finish with any patterns of the tower area and its connection to the plaza. Study the potential of changing the floor surface inside versus outside of towers.

Action: Sherry/Zink, 5/0/0. Motion carried. (Aurell, Mudge and Wienke absent.)

***** THE BOARD RECESSED FROM 5:39 P.M. TO 5:59 P.M. *****

CONCEPT REVIEW - CONTINUED ITEM**6. 3455 MARINA DR**

A-1/SD-3 Zone

Assessor's Parcel Number: 047-022-004
 Application Number: MST2007-00221
 Owner: Silva Family Trust
 Architect: Bryan Pollard

(Revised proposal for a new one-story 6,099 square foot single-family residence including two attached garages on a 58,370 square foot vacant lot. The project includes a swimming pool, patio, walls, and landscaping. The proposal has a floor-to-lot-area ratio of 0.10. Planning Commission approval of a Coastal Development Permit is requested.)

(Second Concept Review.)

(COMMENTS ONLY; PROJECT REQUIRES ENVIRONMENTAL ASSESSMENT,

EXHIBIT D

APPROVAL OF A COASTAL DEVELOPMENT PERMIT, AND SINGLE FAMILY DESIGN BOARD APPROVAL.)

(5:59)

Present: Michael Silva, Owner; Bryan Pollard, Architect; Sam Maphis, Landscape Architect.

Public comment opened at 6:19 p.m. The following individuals spoke with concerns about the project:

Ronald Green: neighborhood compatibility, public views; submitted petition requesting compliance with "Hillside Housing Design Techniques" and "Good Neighbor Policies."

Kitch Wilson, lose of public views; proposed landscaping.

Lisa Moore, aesthetics, size, lose of public views, neighborhood compatibility.

Chair Manson-Hing read three letters of concern: Jean Shuyler; Patricia Foley, President, BRHA; and Kitch and Eva Wilson. Mr. Manson-Hing read one letter in support: Steve and Marion Blick.

Public comment closed at 6:34 p.m.

Jaime Limon clarified that the ABR's purview regarding private views is whether the applicant generally complied with the Good Neighbor Guidelines and if the design has considered impacts to private views.

Motion: Continued indefinitely to the Planning Commission and continued to the Single Family Design Board with the following comments:

- 1) The proposal as presented, with the reduction in floor level, overall square footage, overall building height, and the generous setback from the property lines is appreciated, and makes a good project for the development of the empty lot.
- 2) The Board feels the size of the lot is able to accommodate the proposed size of the project and appreciates the applicant's concession to remain a single-story and provide ample interior yard setback.
- 3) The Board would prefer to see a landscaping plan of the placement, species, and size of vegetation within the interior yard setbacks which accommodates the applicant's need for privacy and provides view space towards the ocean.
- 4) Study the wall facing Cliff Drive to be styled in a rural character yet have continuity with the neighbor's wall to the west. The vegetation should be of a quality that will provide a continuity that is expected between the public street and the rural site.
- 5) The amount of grading in the proposed finished floor appears appropriate especially since the finished floor has been lowered.
- 6) The Board would like to pass on to the SFDB that the ABR finds the style and massing to be appropriate, and looks for the SFDB to continue the design development of the building.

Action: Sherry/Zink, 5/0/0. Motion carried. (Aurell, Mudge and Wienke absent.)

CONCEPT REVIEW - NEW ITEM: PUBLIC HEARING**7. 3455 MARINA DR**

A-1/SD-3 Zone

Assessor's Parcel Number: 047-022-004
Application Number: MST2007-00221
Owner: Silva Family Trust

(Proposal for a new one-story 6,443 square foot single-family residence including two attached garages on a 58,370 square foot vacant lot. The project includes a swimming pool, patio, walls, and landscaping. The proposal has a floor-to-lot-area ratio of 0.11. Planning Commission approval of a Coastal Development Permit is requested.)

(COMMENTS ONLY; PROJECT REQUIRES PLANNING COMMISSION APPROVAL OF A COASTAL DEVELOPMENT PERMIT, ENVIRONMENTAL ASSESSMENT, AND SINGLE FAMILY DESIGN BOARD APPROVAL.)

(7:03)

Present: Mike Silva, Owner; Brian Pollard, Architect.

Ms. Baker presented suggestions for potentially relevant Single Family Design Guidelines for this project. Ms. Baker added that project is 1200 square feet over the maximum FAR guidelines for its lot size, and stated the SFDG and recommended that ABR carefully consider the NPO Finding regarding preservation of public views for this project.

Public comment opened at 7:31 p.m. The following individuals spoke with concerns about the project:

Ronald Green: size, bulk, and scale, loss of views, compatibility.

Kitch Wilsa: height, loss of public views, compatibility.

Art Schwartz: height, compatibility.

Lisa Moore: size and height, excess grading, story poles, compatibility.

Susan Zalon: size, loss of public views.

Chair Wienke read three letters concerning the project: Lisa Moore, Kitch and Eva Wilson, Patricia Foley.

Public comment closed at 7:52 p.m.

Motion: Continued indefinitely to the Single Family Design Board with the following comments:

- 1) The Board is happy to see that the exterior elevation appears diminutive. Study lowering the finished floor further, a minimum of one foot.
- 2) A majority of the Board prefers reducing the fill grading.
- 3) Relocate the dog run to prevent from disturbing neighbors, consistent with Good Neighbor Guidelines.
- 4) Study lessening the landscape height between property lines and the main structure to allow public ocean views from Marina Drive.
- 5) Story poles should be installed, and show floor heights and ridge lines.
- 6) The Board suggested breaking up the roof ridge.
- 7) Provide a drainage solution that directs runoff away from the house.
- 8) Study reducing some roof pitches and breaking up the long central ridgeline to mitigate the height.

- 9) Confirm the feasibility of installing photovoltaics on a flat roof area.
- 10) Provide a street elevation silhouette showing the proposed project and the neighboring residence.
- 11) Staff is directed to investigate and ensure that the fence wall at the neighboring property was built in accordance with previous ABR comments.

Action: Mosel/Sherry, 6/0/0. Motion carried. (Aurell and Mudge absent.)

CONCEPT REVIEW - NEW ITEM

8. 3890 LA CUMBRE PLAZA LN

C-2/SD-2 Zone

(6:30) Assessor's Parcel Number: 051-010-016
 Application Number: MST2007-00228
 Owner: Kayser Edwin E. Trustee
 Applicant: Michael Holliday
 Architect: Michael Holliday

(Proposal for complete exterior renovation of an existing 11,950 square foot commercial building on a 13,320 square foot site. The parking will be slightly reconfigured to accommodate a new more functional layout but parking count will remain the same. A new front and rear entry are proposed as well as a renovated exterior patio areas and a new trash dumpster enclosure.)

(Action may be taken if sufficient information is provided.)

(8:23)

Present: Michael Holiday, Architect; Lane Goodkind, Landscape Architect.

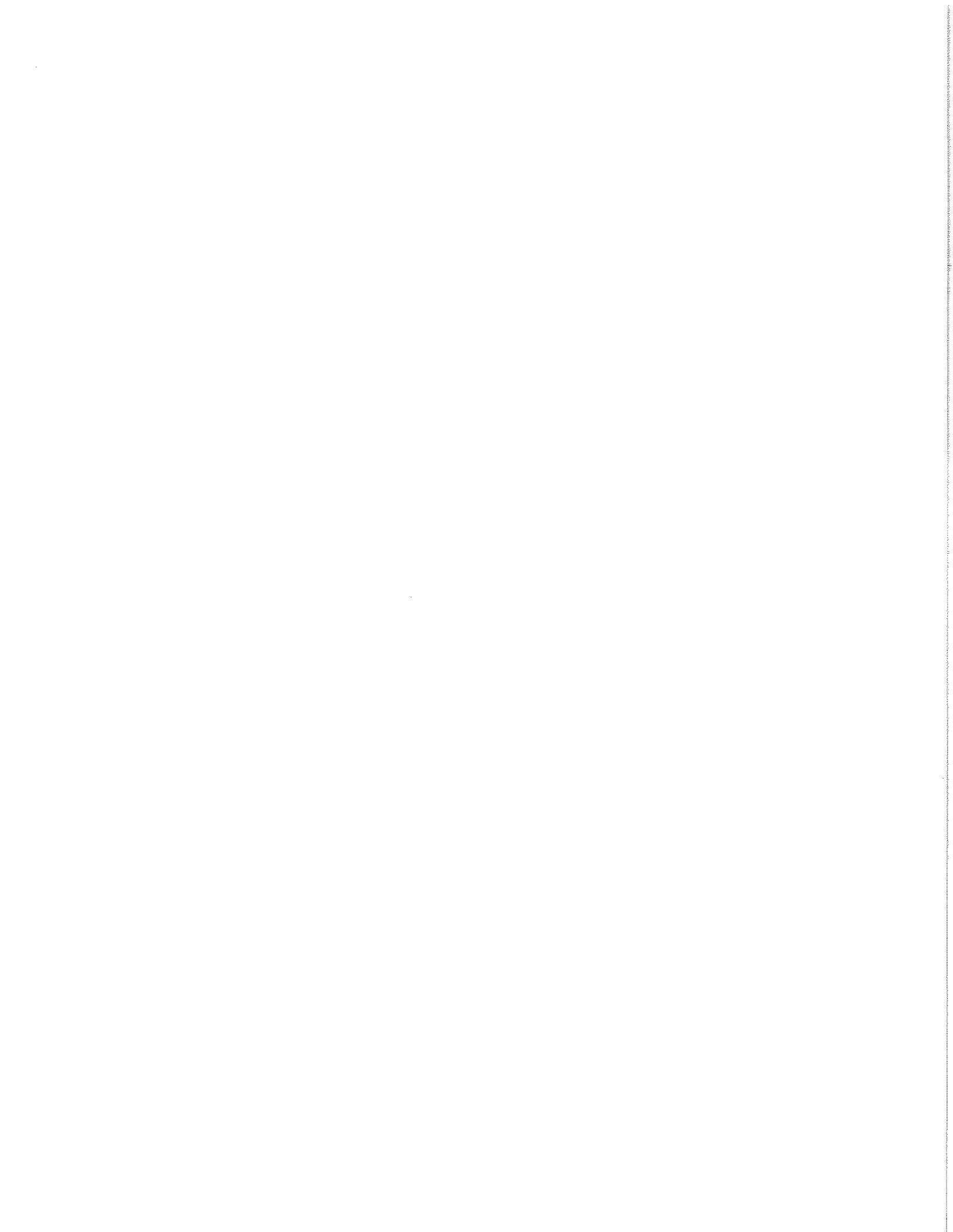
Public comment opened at 8:35 p.m. As no one wished to speak, public comment was closed.

Motion: Continued indefinitely to the Full Board with the following comments:

- 1) The Board conceptually approves the site planning.
- 2) Applicant to study using a garden fence element at the corner outdoor seating location.
- 3) Study using a copper gutter and downspouts at the west elevation.
- 4) The Board is happy with the proposed size, bulk, scale, and articulation of elements on all three facades.
- 5) The Board looks forward to the "green roof" and photovoltaics.
- 6) Provide studies and renderings of the tower dome area. Study further detailing of the entry element with relation to compatibility to the other design elements.
- 7) The board appreciates having as much landscaping as possible, continue in that direction.
- 8) Detail the eaves of the structure.

Action: Zink/Manson-Hing, 6/0/0. Motion carried. (Aurell and Mudge absent.)

<u>A.P.N.</u>	<u>Address</u>	<u>Acres</u>	<u>Lot Size</u>	<u>Residence</u>	<u>Ratio Net</u>	<u>Garage</u>	<u>Ratio Total</u>	<u>Source</u>
063-233-022	4015 Bajada Ln	1.69	73616	5851	0.079	N/A	#VALUE!	City Building Department
063-233-023	4025 Bajada Ln	1.46	63598	5767	0.091	N/A	#VALUE!	City Building Department
047-022-003	3475 Marina Dr	1.22	53143	5520	0.104	925	0.121	County Assessor's Office
047-022-004	3455 Marina Dr	1.17	51000	5493	0.108	725	0.122	Project
047-082-007	3429 Sea Ledge Ln	0.92	40075	4385	0.109	506	0.122	County Assessor's Office
063-233-020	4055 Marina Dr	1.3	56628	4375	0.077	736	0.090	County Assessor's Office
047-082-005	3443 Sea Ledge Ln	1	43560	4353	0.100	594	0.114	County Assessor's Office
063-233-021	4045 Marina Dr	1.64	71438	4269	0.060	N/A	#VALUE!	City Building Department
047-082-003	3511 Sea Ledge	1.12	48787	4211	0.086	N/A	#VALUE!	City Building Department
063-233-024	4035 Bajada Ln	1.73	75359	3884	0.052	746	0.061	County Assessor's Office
047-082-006	3433 Sea Ledge	1.14	49658	3882	0.078	N/A	#VALUE!	City Building Department
047-021-022	421 Calle Las Caleras	1.1	47916	3821	0.080	N/A	#VALUE!	City Building Department
047-082-004	3501 Sea Ledge Ln	1.03	44867	3587	0.080	576	0.093	County Assessor's Office
047-082-001	4005 Bajada Ln	1.26	54886	3572	0.065	912	0.082	County Assessor's Office
047-023-002	425 Sea Ranch Dr	1.2	52272	3424	0.066	N/A	#VALUE!	City Building Department
047-021-023	415 Calle Las Caleras	1	43560	3399	0.078	480	0.089	County Assessor's Office
047-082-002	3410 Sea Ledge	1.5	65340	3233	0.049	N/A	#VALUE!	City Building Department
047-081-001	3416 Marina	1.15	50094	3081	0.062	506	0.072	County Assessor's Office
047-023-001	415 Sea Ranch Dr	1.04	45302	3009	0.066	518	0.078	County Assessor's Office
047-021-012	414 Sea Ranch Dr	1.3	56628	2513	0.044	N/A	#VALUE!	City Building Department
047-082-009	3427 Sea Ledge Ln	0.74	32234	2510	0.078	620	0.097	County Assessor's Office
047-021-013	424 Sea Ranch Dr	1.2	52272	2364	0.045	N/A	#VALUE!	City Building Department
047-021-011	3424 Marina Dr	1.1	47916	2020	0.042	N/A	#VALUE!	City Building Department
047-081-002	3408 Cliff Dr	1.58	68825	1654	0.024	441	0.030	County Assessor's Office
047-082-008	3405 Sea Ledge Ln	1.39	60548	1651	0.027	500	0.036	County Assessor's Office



MIKE GONES
C I V I L E N G I N E E R

PRELIMINARY
STORM DRAINAGE REPORT

FOR

SILVA RESIDENCE
3455 MARINA DR.
SANTA BARBARA, CA

SEPTEMBER 2007

EXHIBIT F



INTRODUCTION

Mike Silva proposes to construct a new residence in a vacant 1.34 acre parcel of land known as A.P.N. 047-022-004 located at 3455 Marina Drive near the southwestern boundary of the city of Santa Barbara.

This parcel was created in 1998 as part of a 3 way subdivision of a large vacant parcel. The adjacent parcel to the west has been built upon while the parcel to the right is vacant. Please see Plate 1.

HYDROLOGIC CONDITIONS

Subject parcel is bordered by Marina Drive to the north and Cliff Drive to the south. The parcel gently slopes and drains toward the south east property corner. During the 1998 subdivision process, a complete neighborhood storm drainage study was preformed by this author and was reviewed and approved by the city and resulted in approximately \$250,000 of storm drainage improvements. These improvements were completed and accepted by the city. That report has been attached to subject report.

That design and the subsequent storm drainage improvements provide for the collection and transmission of storm water surrounding and including subject site to be conveyed by an underground pipe through the subject parcel. A large overland escape path for the 100 year storm was also constructed around the easterly perimeter of the subdivision.

A large culvert in the south-easterly portion of the subdivision was upgraded. This culvert eventually outlets to the beach below Seacliff Lane. Please see Plate 1.

DESIGN CONSIDERATIONS

Due to the previous improvements, the site drains very well. At the time of the improvements there was no requirement for on-site detention or filtration of storm runoff.

According to the City letter of August 17, 2007 items III A 9, 10, 11, 12 are required to provide a drainage study, which calculates the increase in runoff from the proposed project and provides the capture and treating of the runoff for a 1 inch storm event. Item III E3 requires similar study and design.

Marina Drive serves as an intersection for drainage from above. Only a small insignificant contribution of runoff comes from the adjacent parcel to the west. This adjacent parcel has its own storm drainage system which results in insignificant



contribution to subject project. Accordingly, this study only needs to address runoff from subject project.

The parcel is not located in a flood zone.

HYDRAULIC CALCULATIONS

Storm runoff quantities for the 25 and 100 year storms were calculated using the Rational Formula based on aerial photography and runoff intensities determined by County Flood Control.

Plate 2 shows the current and proposed runoff quantities for subject project. Plate 1 shows the overall hydrologic condition. Additionally, a more detailed grading and drainage plan prepared by this author has been submitted with the DART application.

The result of the calculations indicates an increase in runoff of approximately 10% or 0.28 cfs for the 25 year storm and 8.1% or 0.30 cfs for the 100 year storm.

We have also included Plate 3 showing soil percolation rates for the raw land. The percolation rate can handle the 1 inch storm which reduces runoff from the land, treatment from the roofs and patios is generally very clean water and does not require treatment.

We have included site area statistics as plate 4.

Plate 5 shows the storage requirement for the difference in runoff for the 24 hour – 25 year storm and one method of providing on site storage for this volume. More detailed calculation and detail of construction will be provided after planning commission approval.

PROPOSED STORM DRAINAGE DESIGN

As shown on the detailed preliminary grading and drainage plan, the storm drainage plan consists of the following.

- A. The large motorcourt will be constructed of permeable paving that will provide natural treatment through direct percolation.
- B. Area drains and downspouts will be collected to get water away from the home.
- C. This collected drainage will be carried to bioswale / dry stream beds south of the home and parallel to the property lines. This will allow for natural treatment and percolation.



- D. The bioswales will be under laid with gravel filled trench type drains or infiltrators that will store the difference in runoff.
- E. Overflow from this storm drain system will overflow into the existing earth swale along Cliff Drive that was previously designed to collect the entire site runoff.

SUMMARY

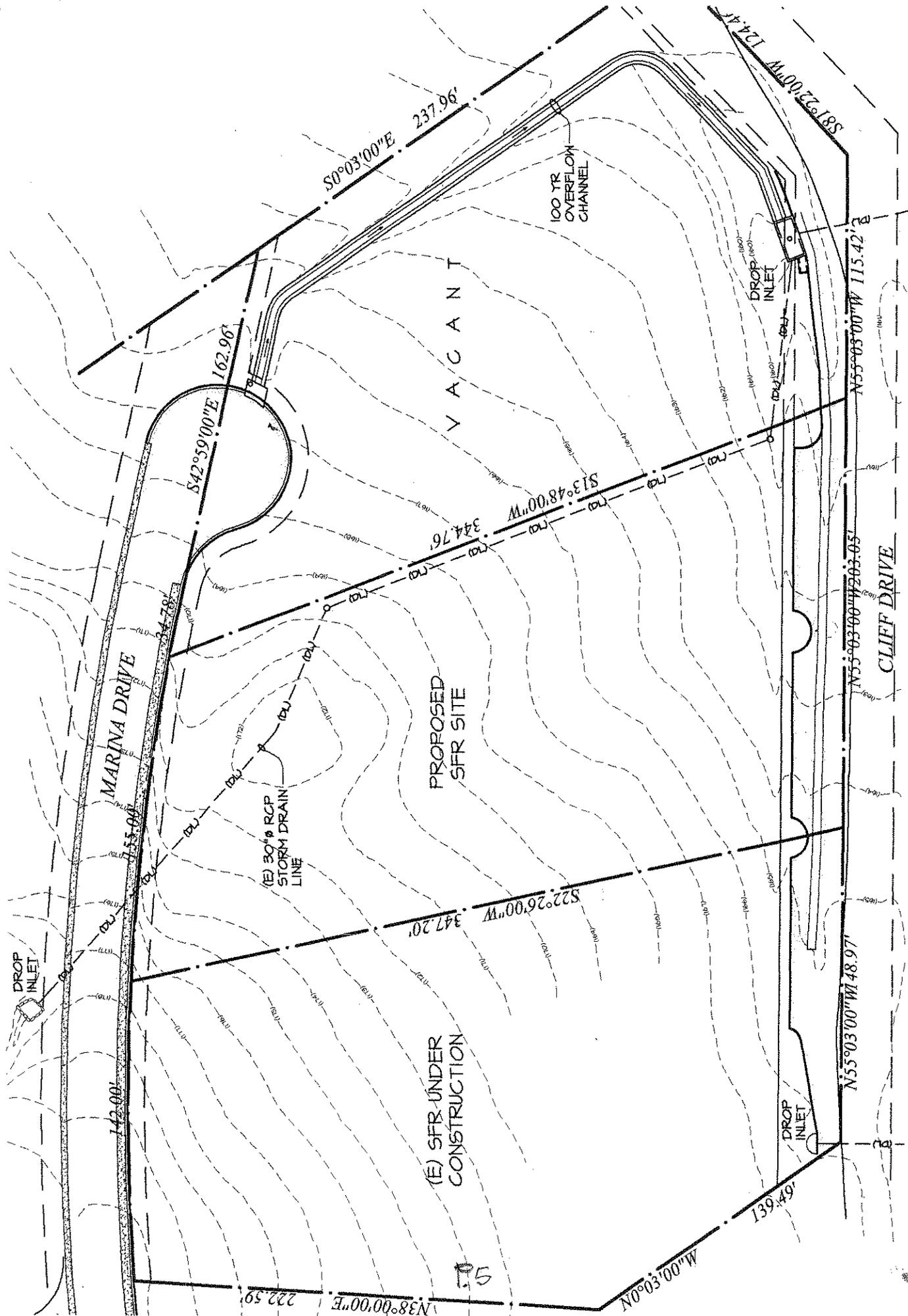
The generous size of this parcel provides for adequate space in which to construct a very natural method of collecting, storing, and treating storm runoff; while honoring the existing topography and utilizing the existing storm drain system for overflow events.

The proposed plan will have no effect on adjacent properties nor, will it have any impact on the public drainage facility.

Mike Gones



END OF REPORT



TOPOGRAPHY SHOWING EXISTING DRAINAGE

SCALE: 1" = 60'



RUNOFF CALCULATIONS

RATIONAL FORMULA (Q=CIA)

PRE-DEVELOPMENT

	Q ₂₅	Q ₁₀₀
RAW LAND (1.23 Ac.)	0.71 x 2.9 x 1.23 2.53 CFS	0.75 x 3.7 x 1.23 3.41 CFS
TOTAL	2.53 CFS	3.41 CFS

POST-DEVELOPMENT

IMPERVIOUS (0.40 Ac.)	0.95 x 2.9 x 0.40 1.10 CFS	0.95 x 3.7 x 0.40 1.41 CFS
LANDSCAPE (0.83 Ac.)	0.71 x 2.9 x 0.83 1.71 CFS	0.75 x 3.7 x 0.83 2.30 CFS
TOTAL	2.81 CFS	3.71 CFS
% INCREASE	10.0 %	8.1 %

Q = CIA
I₂₅ = 2.9 in/hr
I₁₀₀ = 3.7 in/hr
C₂₅ = 0.71
C₁₀₀ = 0.75
C_{impermeable} = 0.95

PLATE 2

**Pacific
Materials
Laboratory, Inc.**

35 S. La Patera Ln.
P.O. Box 96
Goleta, Ca. 93116
Ph: 964-6901 or
967-2218

Santa Ynez
Ph: 688-7587

Fax No. 964-6239

July 2, 1992

Lab No: 22578-2

File No: 92-7778-2

Ed Lein
c/o Marcus and Millichap
One World Trade Center, Suite 1900
Long Beach, CA 90831-1900

SUBJECT: Percolation Tests, Blinn Property, 3421 Marina Dr.
APN 47-022-02, Santa Barbara, California

Dear Mr. Lein:

In accordance with your request, this Laboratory conducted nine (9) percolation tests by the leach line method. The percolation tests were conducted at a depth of 3.0 feet below the present ground surface in order to determine the suitability of the existing surface soils to accept sewage effluent disposal by the leach line method.

The percolation tests were supplemented by three (3) borings which extended to depths of up to 20 feet below the present ground surface in order to verify that no impervious bedrock formation is within 8 feet of the proposed leach lines or no free groundwater table is present within 8 feet of the proposed leach lines. The excavations are presented graphically on Enclosures B-1 thru B-3.

The existing ground surface at the test location is covered by scattered weeds and slopes range from 3 to 6 percent. The soil profile consists of a 12-foot layer of grayish brown sandy silty clay.

The tests were conducted in a 12-inch diameter boring using a 6-inch waterhead. The results are tabulated below:

<u>LOT NO.</u>	<u>TEST NO.</u>	<u>DEPTH OF TEST (feet)</u>	<u>PERCOLATION RATE (inches/per hour)</u>
1	1	3.0	3.0
	2	3.0	3.0
	3	3.0	4.0
2	4	3.0	2.0
	5	3.0	1.0
	6	3.0	3.0
3	7	3.0	2.0
	8	3.0	2.0
	9	3.0	3.0

PLATE 3

P.7

Area Calculation Worksheet

Job Name: Silva Residence
Job #: 07180
Address: 3455 Marina Dr.
 Santa Barbara, CA
A.P.N.: 047-022-004
Land Use Zone: A-1

Lot Areas:

Gross Lot Area **58,342 sq.ft. / 1.34 acres**
 Net Lot Area #1 **53,702 sq.ft. / 1.23 acres**
 (not including paved Right-of-Way @ Cliff Dr.)
 (for Storm Drainage calculation)
 Net Lot Area #2 **51,077 sq.ft. / 1.17 acres**
 (not including Public Road Easements)
 (not including Public Right-of-Way areas)
 (for Floor Area Ratio puposes)

Proposed Floor Areas:

	GROSS	NET
Main Residence	5521 sq.ft.	5141 sq.ft.
(not including covered loggia)		
(not including covered terrace)		
(not including covered breeze ways)		
Garage #1	511 sq.ft.	469 sq.ft.
Garage #2	291 sq.ft.	256 sq.ft.
Accessory Storage	185 sq.ft.	157 sq.ft.
Accessory Work Shop	198 sq.ft.	169 sq.ft.
Detached W.C. Structure	35 sq.ft.	27 sq.ft.
TOTAL Proposed Net Floor Area	6740 sq.ft.	6218 sq.ft.

Proposed Hardscape Areas:

Terrace (including front entry)	2572 sq.ft.
Driveway	3558 sq.ft.
Trash / Storage	197 sq.ft.
Master Terrace	223 sq.ft.
Covered Loggia	656 sq.ft.
Patio (incl. pool and spa)	3296 sq.ft.
Breeze Ways (sum of both)	198 sq.ft.
Pool Equip. Structure Pathway	215 sq.ft.
Detached Pool Equip. Structure	204 sq.ft.
TOTAL Other Significant Areas	11,118 sq.ft.

Proposed Landscape Area:

Gross Lot Area minus Gross Bldg & Hardscape	40,484 sq.ft. / 0.93 acres
Net Lot Area #1 minus Gross Bldg & Hardscape	35,844 sq.ft. / 0.82 acres
Net Lot Area #2 minus Net Bldg & Hardscape	33,741 sq.ft. / 0.77 acres

Site Area Percents:

	Gross	Net #1	Net #2 (FAR)
Building (gross)	11.6%	12.6%	
Building (net)			12.2%
Hardscape	19.1%	20.7%	21.8%
Landscape	69.4%	66.7%	66.1%
TOTAL	100.0%	100.0%	100.0%



STORAGE QUANTITIES
FOR 25YR - 24 HOUR STORM

	EXISTING	PROPOSED
1. PROJECT LOT AREA (SQ. FT). (1.23 AC)	53,579	53,579
2. CONTRIBUTING LOT AREA (SQ. FT).	0	0
TOTAL	53,579	53,579
3. RUNOFF VOLUME (Cu. Ft.) c,d,e,f,g,h	15,207	17,490
4. WATER STORAGE VOL. REQ (CU. FT) PROPOSED VOL-EXISTING VOL		2283
5. *INFILTRATOR STORAGE CAPACITY PER UNITS		16.3 Cu Ft PER MANUFAC
6. NO. OF INFILTRATORS REQUIRED	2283/16.3	140
7. NO. OF INFILTRATORS PROVIDED		140

See next page for subscript notes

Note: Infiltrators are hollow, arch shaped chambers installed on a bed of gravel, that may be used in lieu of gravel filled trench.

PLATE 5



NOTES TO PLATE 5

a. not used

b. Runoff coefficient	25 year	100 year
Bldg paving areas	.95	.95
Landscape	.65	.71

c. Runoff volume $V = \frac{5.24 \text{ in}^d}{12/\text{in.ft}} \times \text{land area} \times C$

d. Per County Flood Control downtown rain gauge inches in 24 hours

e. No credit taken for infiltrator

f. $V_{\text{existing}} = 5.24 \times [(.65 \times 1.23 \times 43,560)] / 12 = 15,207 \text{ cu. Ft.}$

g. $V_{\text{dev}} = 5.24 [(.65 \times 0.83 \times 43,560) + (.95 \times 0.40 \times 43,560)] / 12 = 17,490 \text{ cu. Ft.}$

h. AREAS (acres) PROJECT SITE	<u>EXISTING</u>	<u>PROPOSED</u>
1. Permeable	1.23	0.40
2. Impermeable	+ <u>0</u>	+ <u>0.83</u>
3. Total	1.23	1.23

PLATE 5A