MONTEREY COUNTY PLANNING COMMISSION

Meeting: June 10, 2009 Time: 9:00 A.M	**Agenda Item No.:** 2
Project Description: Map Amendment request to move Homeland Boundary on Lot 5, as shown on Recorded Map, Volume 20 Cities and Towns, Page 8.	
Project Location: 14 Rancho San Carlos Road, Carmel	**APN:** 239-021-004-000
Planning File Number: PLN090032	**Owner:** Charles Tate **Agent:** Maureen Wruck Planning Consultants, LLC
Planning Area: Greater Monterey Peninsula	**Flagged and staked:** Yes
Zoning Designation: : "RC/40-D-S" [Resource Conservation, 40 acres per unit with Design Control, and Site Plan Review Overlays]	
CEQA Action: Addendum to EIR No. 94-005 prepared pursuant to Article 11, Section 15164	
Department: RMA - Planning Department	

RECOMMENDATION:

Staff recommends that the Planning Commission adopt a resolution **(Exhibit C)** to:

1) Consider the Addendum to the Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005); and
2) Recommend approval of PLN090032 to the Board of Supervisors, based on the findings and evidence and subject to the conditions of approval (**Exhibit C**):

PROJECT OVERVIEW:

The project applicant is requesting the amendment of the *Santa Lucia Preserve Phase A* Subdivision Map, filed as *Volume 20, Cities and Towns, Page 8.* The amendment is required because the applicant is proposing to move the "Homeland Boundary" (commonly referred to as a building envelope) on Lot 5 of this Map. Lot 5 is 55.80 acres in size with a current homeland boundary of 3.336 acres. The proposal would shift the homeland boundary southerly and reduce the size of the boundary to 3 acres. The purpose for moving the location of the boundary is to provide a geologically suitable building area situated away from areas underlain by landslide. The applicant has submitted comprehensive geological studies which recommend that the proposal be done. The report states that the current boundary is potentially unstable and the development of habitable structures within the current homeland boundary cannot be recommended. The report further states, "Development of habitable structures within the current homeland would place them at an unacceptable level of risk." A biological study and an archaeological report prepared for the proposal found the amendment suitable. The biological report states that the proposed boundary relocation "unquestionably will benefit sensitive biological resources," when compared to the current boundary. See **Exhibit B** for a more detailed discussion of the proposed project.

Standard Subdivision Committee

The Monterey County Subdivision Ordinance (Title 19), Section 19.08.015.A.7, requires that the modifications to a final map be considered at consecutive public hearings by the appropriate decision making bodies that approved or recommended approval on the original subdivision map. The subject Map Amendment first requires a recommendation by the Standard Subdivision Committee and second, a recommendation by the Planning Commission and finally, the approval by the Board of Supervisors. The Map Amendment was considered by the Standard Subdivision Committee on May 14, 2009, where it received a unanimous recommendation to the Planning

Commission for approval. See **Exhibit B** for a more detailed discussion of the Standard Subdivision Committee Hearing.

OTHER AGENCY INVOLVEMENT: The following agencies and departments reviewed this project:

√ RMA - Public Works Department
√ Environmental Health Division
√ Water Resources Agency
√ Carmel Valley Fire Protection District
√ Parks

Agencies that submitted comments are noted with a check mark ("√"). Conditions recommended by RMA- Planning and the Public Works Departments have been incorporated into the Condition Compliance/Mitigation Monitoring and Reporting Plan attached as Exhibit 1 to the draft resolution **(Exhibit C)**.

The project was not referred to a Land Use Advisory Committee (LUAC) because no LUAC exists for the Santa Lucia Preserve area.

Nadia Amador

Nadia Amador, Associate Planner
(831) 755-5114, amadorn@co.monterey.ca.us
May 28, 2009

cc: Front Counter Copy; Planning Commission Members; Carmel Valley Fire Protection District; Public Works Department; Parks Department; Environmental Health Division; Water Resources Agency; Jacqueline Onciano, Planning Services Manager; Nadia Amador, Project Planner; Carol Allen, Senior Secretary; Charles Tate, Owner; Maureen Wruck Planning Consultants, LLC, Attn: Joel Panzer, Agent; Planning File PLN090032.

Attachments:
- Exhibit A — Project Data Sheet
- Exhibit B — Project Discussion
- Exhibit C — Draft Resolution, including:
  1. Conditions of Approval
  2. Map Amendment
  3. Zone Map of Revised Building Envelope
- Exhibit D — Vicinity Map
- Exhibit E — Addendum to the Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005) (Note: EIR is available for review at the RMA-Monterey County Planning Dept., Salinas Office)
- Exhibit F — Technical Reports
  1. Supplemental Biological Letter Report, dated May 18, 2009, (Library No. 090284)
  2. Biological Analysis and Report, dated December 1, 2007 (Library No. 090243)
  3. Summary Letter of Geologic Hazard Investigation, dated March 14, 2008 (Library No. 090245)
  4. Draft Preliminary Geologic Hazards Investigation, dated November 29, 2007 (Library No. 090246)
- Exhibit G — Volume 20, Cities and Towns, Page 8, Sheet 9 of 33 (Lot 5)

Exhibit H	Letter from the Santa Lucia Preserve Design Review Board, dated December 19, 2008
Exhibit I	Standard Subdivision Hearing Resolution No. 09005, May 14, 2009
Exhibit J	Letter from the Santa Lucia Conservancy, dated May 13, 2009

This report was reviewed by Taven Kinison Brown, Planning Services Manager.

EXHIBIT A

PROJECT DATA SHEET

PLN090032 – Charles Tate
Planning Commission
June 10, 2009

Exhibit A
Project Information for File090032

Project Title:	CHARLES TATE	**Primary APN:**	239-021-004
Location:	14 Rancho San Carlos Rd, Carmel	**Coastal Zone:**	No
Applicable Plan:	Greater Monterey Peninsula	**Zoning:**	RC/40-D-S
Permit Type:	Map Amendment	**Plan Designation:**	RC
Environmental Status:	Addendum to previous EIR	**Final Action Deadline:**	N/A
Advisory Committee:	None for this area		

Project Site Data:

Lot Size:	55.80 Acres	**Coverage Allowed:**	25%
		Coverage Proposed:	N/A
Existing Structures (sf):	None		
Proposed Structures (sf):	None	**Height Allowed:**	30 feet
		Height Proposed:	N/A
Total Square Feet:	None		
		FAR Allowed:	N/A
		FAR Proposed:	N/A

Resource Zones and Reports

Environmentally Sensitive Habitat:	**LIB090243**	**Erosion Hazard Zone:**	
Botanical Report #:	**LIB090243**	**Soils/Geo. Report #**	**LIB090245**
Forest Mgt. Report #:	**N/A**	**Geologic Hazard Zone:**	IV; undermined
		Geologic Report #:	LIB090246
Archaeological Sensitivity Zone:	High/Moderate		
Archaeological Report #:	**LIB090244**	**Traffic Report #:**	**N/A**
Fire Hazard Zone:	State Responsibility		

EXHIBIT B

PROJECT DISCUSSION

PLN090032 – Charles Tate
Planning Commission
June 10, 2009

EXHIBIT B
Project Discussion

Project Description, Setting and Historical Background

The project applicant is seeking an amendment to the recorded *Santa Lucia Preserve Phase A* Subdivision Map filed as Volume 20, Cities and Towns, Page 8. The proposed change involves undeveloped Lot 5 by relocating its current Homeland Boundary (building envelope). Lot 5 is 55.80 acres in size with a current homeland boundary of 3.336 acres. The proposal would shift the homeland boundary southerly and reduce the size of the boundary to 3 acres. The purpose for moving the location of the boundary is to provide a geologically suitable building area situated away from areas underlain by landslide.

The project site is located at 14 Rancho San Carlos Road, Carmel in the Greater Monterey Peninsula area of Monterey County. The site is zoned Resource Conservation, 40 acres per unit with Design Control, and Site Plan Review Overlays (RC/40-D-S). The site has an existing driveway approach but has no structures on site. The purpose of the Resource Conservation zoning designation is to allow development in the more remote and mountainous areas in the County of Monterey while protecting the significant and substantial resources of those areas.

Between 1991 and 1994 extensive archaeological, biological and geological reconnaissance work was done in the Rancho San Carlos area as part of the process for what became to be the Santa Lucia Preserve Subdivision. As a result of this reconnaissance work, homeland boundaries (building envelopes) were designed to avoid impacts to the archaeological and biological resources and to determine suitable geological building areas. Subject Lot 5 and its current homeland boundary, was one of the resulting parcels of the Santa Lucia Preserve Subdivision.

Geological Conditions for Existing and Proposed Homeland Boundary

Existing Homeland Boundary

Geologic Reports prepared by Cleary Consultants in 1994 identified a large area of nested landslide deposits in their study for the vesting tentative map that resulted in the creation of subject Lot 5. This landslide mass was named Animus Landslide Complex. They prepared a reconnaissance level slope stability analysis of the landslide complex as a whole, but did not perform local stability analysis for individual landslide masses. The Cleary report indicated that the landslide mass, as a whole, was stable. However, the report also recommended that site specific studies be performed to support the development of individual lots.

Recently, Nolan Associates prepared a Draft Preliminary Geologic Hazards Investigation dated November 29, 2007 (LIB090246) and a Letter of Recommendations for Building Site and Driveway dated March 14, 2008 (LIB090245), for subject Lot 5. The investigation by Nolan and Associates determined that the boundaries of the Animus Landslide Complex extend farther uphill on Lot 5, than previously identified in previous reports. They also determined, "the landslide mass consists of several different, individual landslides, ostensible of different ages, any one of which could be unstable at the present time."

The Nolan report discusses the two means of evaluating the landslide under the homeland boundary as it exists today. The two means would be: 1) a quantitative slope stability analysis or 2) an age of movement study of landslide mass. These methods are not just extremely expensive

to the applicant, but at the end, the analysis would be untenable because of the size and complexity of the landslide and the inconclusive results of the age movement study.

The Nolan report explains how they are "unable to recommend a habitable building site situated on any portion of the landslide mass without performing a stability assessment of the landslide, which is conventionally unattainable." The Nolan report references a previous report prepared by Grice Engineering in 1998, where Grice Engineering assumes that the landslide is potentially unstable and offers mitigation measures that would reduce potential damage to future development, should the landslide reactivate. Nolan's opinion of the mitigations by Grice Engineering is that the "mitigations fall short in light of the new, larger geometry of the landslide".

The Nolan report describes that the only reliable mitigation of the landslide hazard posed to the homeland boundary area would be the replacement of the landslide materials under the homeland with engineered fill. What this translates to is creating a fill area with a depth of 60 feet under the current homeland boundary and an actual area of grading of 400 feet wide by 500 feet long, involving removal and replacement of 300,000 to 500,000 cubic yards of soil. The Nolan report describes that they do not consider such mitigation to be tenable for a single family residence. As far as the current homeland boundary on subject Lot 5, the Nolan report concludes that "due to potential instability, development of habitable structures within the current homeland envelope cannot be recommended. Development of habitable structures within the current homeland would place them at an unacceptable level of risk."

Proposed Homeland Boundary

In contrast to the current homeland boundary on Lot 5, Nolan and Associates and Haro, Kusinich Associates recommend approval of the proposal to relocate the homeland boundary on Lot 5. The relocation of the homeland boundary includes an area that is safe for construction of a single family residence. The Geological experts recommend that the proposed homeland boundary be partitioned into three zones: *Zone 1* and *Zone 2 and a Sub-area in Zone 2* (see **Exhibit C-3**).

Zone 1: *Zone 1* would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure;

Zone 2: *Zone 2* would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. These non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities.

The Nolan report dated March 14, 2008, describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may possible to reduce or eliminate that setback.

Sub-area Zone 2: Subsequently, the Nolan report designates a *sub-area* in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation. This area is described in **Exhibit C-3** and it's situated between Zone 1 and the mapped landslide boundary and is cross-hatched in **Exhibit C-3**.

Visual Analysis and Approval by the Santa Lucia Design Review Board
Staff performed a site visit of the property, in part, to verify that the proposed homeland boundary relocation would not result in any potential visual impacts when viewed from common public viewing areas. Because the subject lot is screened by ridges, Staff determined that the proposal would not result in any potential visual impacts when viewed from common public viewing areas. Also, the re-location of the homeland boundary was approved by the Santa Lucia Design Review Board (DRB). A letter from the Santa Lucia DRB dated December 19, 2008, describing their conditions, is attached as **Exhibit H.**

Development Standards and Slope Analysis
The proposed homeland boundary relocation will meet the development standards of the Resource Conservation zoning designation (Title 21) as it relates to setbacks. The adjusted boundary would meet the minimum setbacks required of Main Structures, Habitable Accessory Structures, Non-Habitable Accessory Structures and the minimum required setbacks for accessory structures used as barns, stables or farm outbuildings. The Planning Department will have the opportunity to review exact Development Standards for the respective zoning, once an application for development is filed for this proposed Lot. The proposed homeland boundary has areas of 6% to 28% slopes.

Archaeological and Biological Assessments
Archaeological Assessment- An Archaeological Letter was prepared for the project. The Archaeological Letter concluded that since the area for Lot 5 had been previously surveyed without any findings of cultural resources, the parcel did not require additional reconnaissance and the Archaeological Report offered a standard Condition of Approval, which has been incorporated to the project (See Condition 3 in **Exhibit C-1**).

Biological Assessments- The project site was thoroughly assessed by biologist, Jeffrey B. Froke, Ph.D, responsible for all the site surveys and analyses from 1991 for the creation of the Santa Lucia Preserve Subdivision. These 1991 surveys identified a pond in Lot 5 as a receptor for sensitive species including the California Tiger Salamander and the California Red-legged Frog. These were contributing factors for the establishment of the Homeland Boundary for Lot 5. Dr. Froke surveyed and reviewed the subject Tate property in December of 2007 and again in May of 2009. The first report (Library No. 090243) was completed on December 1, 2007 (See **Exhibit F-2**) but this analysis was done on a previous rendition of the homeland relocation. A supplemental biological field review (See **Exhibit F-1,** Library No. 090284) was conducted on May 13, 2009 by Dr. Froke, on the present proposal of the homeland boundary relocation and the findings were "virtually identical" to the previous report in that the proposed relocation of the homeland boundary would be a "definitive and advantageous result" for the identified resources on Lot 5, the California Red-legged Frog and the California Tiger Salamander. The report identifies that the proposed southward shift of the homeland boundary would increase the separation (approximately 400 feet) between the pond and the homeland. The report concluded "that the proposed change of homeland boundary will not adversely affect any onsite or adjacent resources". Furthermore, the site is void of trees and therefore, no tree removal will be proposed for the future construction of a single family home and/or related improvements.

Environmental Review/Addendum to Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005)
In 1996, the Board of Supervisors passed and adopted the following resolutions:

- Resolution No. 96-059 certified the EIR for the Santa Lucia Preserve Project (EIR #94-005).

- Resolution No. 96-060 approved the Santa Lucia Combined Development Permit (PC94067) that included: a Vesting Tentative Subdivision Map to create 266 lots and 31 open space parcels, a Use Permit for the removal of approximately 1,480 trees (451 for homesites and 1,029 for roads and driveways), a Use Permit for Development on Slopes in Excess of 30 percent, a Use Permit for Wastewater Treatment Facility, a General Development Plans to allow a 110 Room Hotel, a 40 Room Hotel, Commercial and Public/Quasi/Public Uses, an Employee Recreation Center, and a Ranch Operations Center.

Subject Lot 5, was part of the Certified EIR and Vesting Tentative Subdivision Map. The analysis of the Certified EIR indicates that the reason for the creation of the homeland boundaries was a compilation of analyzed resources and constraints, such as archaeology, biology and geology.

The geology investigations that were performed for the EIR were reconnaissance level slope stability analysis of the landslide complex as a whole, but there were was not a local stability analysis for individual landslide masses. The EIR geology report indicated that the landslide mass, as a whole, was stable. However, the report also recommended that site specific studies be performed to support the development of individual lots. In the case of this project, a site specific study has been prepared for Lot 5 and the results have indicated that the relocation of the homeland boundary is geologically suitable for building area as opposed to the current boundary.

At the same time, the archaeological and biological reports prepared for this project have indicated that the project is appropriate and would not impact archaeological or biological resources. For these reasons, an Addendum to Certified EIR 94005, the Environmental Impact Report for the Santa Lucia Preserve has been prepared (**Exhibit E**), in accordance with Article 11, Section 15164 of the California Environmental Quality Act.

Results of the Standard Subdivision Committee Hearing on May 14, 2009

The Map Amendment was considered by the Standard Subdivision Committee on May 14, 2009, where it received a unanimous recommendation to the Planning Commission for approval. The Standard Subdivision Committee received oral testimony by Jeffrey B. Froke, PhD, biologist for the project. Dr. Froke testified that the project's site is suitable for the proposed homeland relocation and that no biological impacts exist with this proposed location. A written analysis of this oral testimony was received on May 18, 2009 (See **Exhibit F-1**).

Also at the hearing, the applicant presented a letter from the Santa Lucia Conservancy, dated May 13, 2009 (see **Exhibit J**). According to this letter, the Santa Lucia Conservancy Board of Governors considered the Homeland adjustment on March 1, 2009. The Governors conceptually approved the proposed Homeland adjustment because they recognized the proposal would create conservation benefits for the Preserve. The benefits were outlined as follows:

- The result of the change would move the homeland boundary farther away from the historic stock pond known to be active breeding site for California Tiger Salamander and California Red-legged Frog;
- The result of the homeland boundary amendment would reduce the homeland site on Lot 5 by 10 percent when compared to the existing Final Map. "From a biological perspective, the reduced area and modified configuration of the Homeland would likely protect and improve higher quality upland habitat conditions important to the California tiger salamanders, and;"

- The owner on Lot 5 is willing to extinguish the equestrian rights in the Openlands (the area outside of the Homeland boundary). This action "would likely contribute positively to the long term conservation values of the Lot and Santa Lucia Preserve".

Staff analyzed this information after the Standard Subdivision Hearing on May 14, 2009 and found that a separate entitlement was warranted. The separate entitlement that is required as part of this Map Amendment is an Amendment to the Conservation Easement. A Deed of Conservation Easement is recorded with the Monterey County Recorder's Office, as Document No. 9882397. This Deed of Conservation Easement explains that Condition No. 109 of PC94-067, the Combined Development Permit and Vesting Tentative Map for the Santa Lucia Preserve, Phase A, required that conservation easements over the Openlands areas of each phase of the Santa Lucia Preserve Maps be granted to the Santa Lucia Conservancy. The Openlands area for Lot 5 is the area outside of the Homeland boundary. Because the subject project was noticed for the Planning Commission Hearing without the Amendment to the Conservation Easement entitlement, staff has incorporated a condition of approval (Condition No. 11) that would allow for the Board of Supervisors to consider and approve this added entitlement.

Conclusion

Staff has determined, based on the analysis in this report, that the Map Amendment of the Santa Lucia Preserve, Phase A Map, should be approved in order to relocate the homeland boundary on Lot 5, and provide a geologically suitable building area situated away from areas underlain by landslide. The project does not interfere with archaeological, biological or visual resources. With the incorporation of the geologist's recommendations, staff finds that the project would not have a significant effect on the environment.

EXHIBIT C

DRAFT RESOLUTION, INCLUDING:

1) Conditions of Approval

2) Map Amendment

3) Zone Map of Revised Building Envelope

PLN090032 – Charles Tate
Planning Commission
June 10, 2009

EXHIBIT C
DRAFT RESOLUTION

Before the Standard Subdivision Committee in and for the County of Monterey, State of California

In the matter of the application of:
Charles Tate (PLN090032)
RESOLUTION NO.
Resolution by the Monterey County Planning Comission

1) Consider the Addendum to the Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005)
2) Recommend approval of PLN090032 to the Board of Supervisors for the Tate Map Amendment of the Santa Lucia Preserve Phase A Subdivision Map, filed as Volume 20, Cities and Towns, Page 8.

(PLN090032, Charles Tate, 14 Rancho San Carlos Road, Carmel, Greater Monterey Peninsula Area Plan (APN: 239-021-004-000)

The Map Amendment application (PLN090032) came on for public hearing before the Monterey County Planning Commission on June 10, 2009. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Planning Commission finds and decides as follows:

FINDINGS

1. **FINDING:** **CONSISTENCY** – The Project, as conditioned, is consistent with the applicable plans and policies which designate this area as appropriate for development.

EVIDENCE: a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:

- the Monterey County General Plan,
- Greater Monterey Peninsula Area Plan,
- Monterey County Zoning Ordinance (Title 21)
- Monterey County Subdivision Ordinance (Title 19)
- the Comprehensive Development Plan for the Santa Lucia Preserve

No conflicts were found to exist. No communications were received during the course of review of the project indicating any inconsistencies with the text, policies, and regulations in these documents.

b) The property is located at 14 Rancho San Carlos Road, Carmel (Assessor's Parcel Number 239-021-004-000), Greater Monterey Peninsula Area Plan. The parcel is zoned Resource Conservation, 40 acres per unit with Design Control, and Site Plan Review zoning district overlays or "RC/40-D-S". The subject property complies with all the

rules and regulations pertaining to zoning uses and any other applicable provisions of Title 21. The proposal is to amend the Santa Lucia Preserve Phase A Subdivision Map, filed as Volume 20, Cities and Towns, Page 8 in order to relocate the homeland boundary on Lot 5 for the future construction of a single family residence and related structures. These uses are consistent with the RC/40-D-S zoning regulations, and therefore the site is suitable for the proposed development.

c) The project is consistent with the Regulations of the Monterey County Subdivision Ordinance, Title 19, pursuant to Section 19.08. See Finding 6.

d) The project planner conducted a site inspection on February 24, 2009 to verify that the project on the subject parcel conforms to the plans listed above.

e) Site Plan Review or "S" zoning requires review of development in those areas of the County of Monterey where development, by reason of its location has the potential to adversely affect or be adversely affected by natural resources or site constraints, without imposing undue restrictions on private property. The project does not include the construction of any structures, but in the future, any proposed structures proposed on the homeland boundary would be subject to the regulations of Chapter 21.45 in order to assure protection of the resources described previously in this paragraph.

f) The proposed homeland boundary has areas of 6% to 28% slopes. Development on slopes that exceed 30% is prohibited unless there is no feasible alternative that would allow development to occur on slopes of less than 30%, or the proposed development better achieves the goals, policies and objectives of the Monterey County General Plan and applicable area plan than other development alternatives. A Use Permit is required, if development occurs in areas in excess of 30% slope. Although, this project does not involve the construction of any structures, the relocation of the homeland boundary would facilitate building areas with slopes less than 30%. Any future structures proposed on the homeland boundary would be subject to the regulations of Chapter 21.64.230. *Development in Slopes in Excess of 30%.*

g) The project was not referred to a Land Use Advisory Committee (LUAC) for review because no LUAC exists for this area.

h) Although no LUAC exists for this area of the County, the applicants, pursuant to their CC& R's, were required to present their proposal to the Santa Lucia Preserve Design Review Board for review and approval. The Santa Lucia Preserve Design Review Board approved the proposal, subject to conditions outlined in the Santa Lucia Preserve letter dated, December 19, 2008, found in Project File PLN090032. The letter is addressed to Mr. Joel Panzer, applicant's representative. The applicant has agreed to the conditions contained in this letter.

i) The project was considered by the Standard Subdivision Committee on May 14, 2009, where it received a unanimous recommendation to the Planning Commission for approval.

j) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project File PLN090032.

2. **FINDING:** **SITE SUITABILITY** – The site is physically suitable for the use proposed.

EVIDENCE: a) The project has been reviewed for site suitability by the following departments and agencies: RMA - Planning Department, Carmel Valley Fire Protection District, Parks, Public Works, Environmental Health Division, and Water Resources Agency. There has been no indication from these departments/agencies that the site is not suitable for the proposed development. Conditions recommended have been incorporated.

b) Staff identified potential impacts to Biological Resources, Archaeological Resources and Soil/Slope Stability. Technical reports by outside consultants indicated that there are no physical or environmental constraints that would indicate that the site is not suitable for the use proposed. County staff independently reviewed these reports and concurs with their conclusions. The following reports have been prepared:

- "Santa Lucia Preserve Lot 5, APN 239-021-004" (LIB090244) prepared by Archaeological Consulting, Salinas, CA, on October 30, 2007.
- "Supplemental Biological Field Review (Tate-PLN090032) Letter Report" (LIB090284) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on May 18, 2009.
- "Biological Analysis and Report for a Revised Homeland and Driveway" (LIB090243) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on December 1, 2007.
- "Recommendations for Building Site and Driveway Proposed Single Family Residence Lot 5, Santa Lucia Preserve, Carmel Valley (LIB090245) prepared by Nolan Associates, Santa Cruz, CA, on March 14, 2008.
- "Draft Preliminary Geologic Hazards Investigation for Proposed Single Family Residence Site Lot 5 Santa Lucia Preserve Monterey County, California" (LIB090246) prepared by Nolan Associates, Santa Cruz, CA, on November 29, 2007.

c) Staff conducted a site inspection on February 24, 2009 to verify that the site is suitable for this use.

d) Oral testimony on May 14, 2009 at the Standard Subdivision Committee Hearing by Jeffrey B. Froke, PhD, biologist for the project. Dr. Froke testified that the project's site is suitable for the proposed homeland relocation and that no biological impacts exist.

e) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project File PLN090032.

3. **FINDING:** **HEALTH AND SAFETY** - The establishment, maintenance, or operation of the project applied for will not under the circumstances of this particular case be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general

welfare of the County.

EVIDENCE: a) The project was reviewed by the RMA-Public Works Department, Carmel Valley Fire Protection District, Environmental Health, Water Resources and Parks Department. The respective departments/agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood. The applicant has agreed to these conditions as evidenced by the application and accompanying materials and conditions (**Exhibit 1**).

b) The purpose for moving the location of the boundary is to provide a geologically suitable building area situated away from areas underlain by landslide. The applicant has submitted comprehensive geological studies which recommend that the proposal be done. The report states that the development of habitable structures within the current homeland boundary cannot be recommended because the soils are unstable. The report further states, "Development of habitable structures within the current homeland would place them at an unacceptable level of risk." Therefore, the proposed Map Amendment to relocate the homeland boundary on Lot 5 would result in the solution to health and safety issues posed by the current homeland boundary.

c) Preceding and following findings and supporting evidence for PLN090032.

4. **FINDING:** **NO VIOLATIONS** - The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County's zoning ordinance. No violations exist on the property.

EVIDENCE: a) Staff reviewed Monterey County RMA - Planning Department and Building Services Department Monterey County records and is not aware of any violations existing on the subject property.

b) Staff conducted a site inspection on February 24, 2009 and researched County records to assess if any violation exists on the subject property.

c) The application, plans and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project File PLN090032.

5. **FINDING:** **CEQA (Addendum): -** An Addendum to a previously certified EIR was prepared pursuant to State of California Code of Regulations, Title 14, Section 15164 to reflect changes or additions in the project that do not cause substantial changes or new information that would require major revisions to the adopted EIR.

EVIDENCE: a) An EIR for Santa Lucia Preserve was prepared and certified by the Board of Supervisors on February 6, 1996 (Board Resolution No. 96059)

b) Pursuant to Section 15162 of the CEQA Guidelines, there is no new information of substantial importance that was not known at the time the EIR was adopted. Staff's analysis of the Santa Lucia EIR indicates that the reason for the creation of the homeland boundaries was a compilation of analyzed resources and constraints, such as archaeology, biology and geology. The result of this analysis created the location of the current homeland boundary for Lot 5. Archaeological (LIB090244) and biological reports (LIB090243 and LIB090284), along with the oral

testimony by Jeffrey B. Froke, PhD, biologist for the project on May 14, 2009, at the Standard Subdivision Committee Hearing (See **Finding 2, Evidence d**), have indicated that the revised boundary would not impact archaeological or biological resources beyond what was anticipated in the Certified EIR. The geology investigations that were performed for the EIR were reconnaissance level slope stability analysis of the landslide complex as a whole, but there were was not a local stability analysis for individual landslide masses. The EIR geology report indicated that the landslide mass, as a whole, was stable. However, the report also recommended that site specific studies be performed to support the development of individual lots. In the case of this project, a site specific study has been prepared for Lot 5 (Library No. LIB090245 and LIB090246) and the results have indicated that the relocation of the homeland boundary is necessary in order to provide a geologically suitable area for building. The current homeland boundary is not geologically suitable for the construction of a single family residence. The site specific information found through current geology reports on Lot 5 is not a sufficient reason to prepare a subsequent EIR because the previous EIR recommended site specific geological information be performed on each parcel at the time of residential construction. All impacts (biological, archeological and geological) of the revised boundary are equal to, or less than the boundary evaluated under the Certified EIR.

c) The Addendum attached as Exhibit E to the June 10, 2009 Staff Report to the Planning Commission reflects the County's independent judgment and analysis.

d) The independent analysis of the materials for Project File No. PLN090032.

6. **FINDING:** **MAP AMENDMENT** – There is evidence in the record to support the required findings under Section 66472.1 of the Subdivision Map Act to amend the recorded Final Map.

EVIDENCE: a) A Map Amendment is required to amend a recorded homeland boundary (building envelope) pursuant to Monterey County's Subdivision Ordinance (Chapter 19.08.015 County Code) and the Subdivision Map Act (Section 66469 and 66472.1 Government Code).

b) The subject application (PLN090032) consists of an amendment to the *Santa Lucia Preserve Phase A* Subdivision Map, filed as *Volume 20, Cities and Towns, Page 8.* The amendment is required because the applicant is proposing to move the "Homeland Boundary" (commonly referred to as a building envelope) on Lot 5 of this Map. Lot 5 is 55.80 acres in size with a current homeland boundary of 3.336 acres. The proposal would shift the homeland boundary southerly and reduce the size of the boundary to 3 acres. The purpose for moving the location of the boundary is to provide a geologically suitable building area situated away from areas underlain by landslide.

c) The applicant has submitted comprehensive geological studies which recommend that the proposal be done. The report states that the current boundary is potentially unstable and the development of habitable structures within the current homeland boundary cannot be recommended. The relocation of the homeland boundary includes an area that is safe

for construction of a single family residence. The Geological experts recommend that the proposed homeland boundary be partitioned into two zones: *Zone 1* and *Zone 2* (see **Exhibit C-3** of the May 14, 2009 Staff Report). *Zone 1* would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure; *Zone 2* would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. These non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities.

d) The Nolan and Associates geological report dated March 14, 2008, describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may be possible to reduce or eliminate that setback. Subsequently, the Nolan report designates a sub-area in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation. This area is described in **Exhibit C-3** of the June 10, 2009 Staff report for the Planning Commission.

e) With the results of site specific geological studies on Lot 5, the Standard Subdivision Committee has determined that the current homeland boundary location on Lot 5 is not geologically suitable for the construction of a single family residence due to a landslide mass consisting of several different, individual landslides, ostensible of different ages, any one of which could be unstable at the present time.

f) The geologist (Nolan Associates) that performed the site-specific studies on Lot 5, describes that the only reliable mitigation of the landslide hazard posed to the homeland boundary area would be the replacement of the landslide materials under the homeland with engineered fill. This would result in the creation of fill area with a depth of 60 feet under the current homeland boundary and an actual area of grading of 400 feet wide by 500 feet long, involving removal and replacement of 300,000 to 500,000 cubic yards of soil. The Nolan report describes that they do not consider such mitigation to be tenable for a single family residence. As far as the current homeland boundary on subject Lot 5, the Nolan report concludes that "due to potential instability, development of habitable structures within the current homeland envelope cannot be recommended. Development of habitable structures within the current homeland would place them at an unacceptable level of risk." For this reason, the geologist recommends the relocation of the homeland boundary as presented in **Exhibit C-2** and **3** of the June 10, 2009 Staff Report.

g) There are changes in circumstances that make the originally recorded building envelope, as previously modified, no longer necessary. Staff's analysis of the Santa Lucia EIR indicates that the reason for the creation of the homeland boundaries was a compilation of analyzed resources and constraints, such as archaeology, biology and geology. The result of this analysis created the location of the current homeland boundary for Lot 5. Archaeological (LIB090244) and biological reports

(LIB090243 and LIB090284), including the oral testimony on May 14, 2009 at the Standard Subdivision Committee Hearing by Jeffrey B. Froke, PhD, biologist for the project (See *Finding 2, Evidence d*), have indicated that the project is appropriate and would not impact archaeological or biological resources beyond what was anticipated in the Certified EIR. The Archaeological Letter concluded that since the area for Lot 5 had been previously surveyed without any findings of cultural resources, the parcel did not require additional reconnaissance and the Archaeological Report offered a standard Condition of Approval, which has been incorporated to the project. The Biological Assessments concluded that the proposed relocation of the homeland boundary would be a better situation for native wildlife and plant life and that the proposal would "unquestionably benefit sensitive biological resources and should be approved." For geologic information, see **Finding 6, Evidence c** above.

h) The modification of the homeland boundary (building envelope) would not impose any burden on the fee owner of the subject property because the modification has been requested by the property owner.

i) On May 14, 2009 at the Standard Subdivision Committee Hearing, the applicant's representative submitted written documentation regarding the Santa Lucia Preserve Board of Governors conceptual approval of the proposed map amendment in order to relocate the homeland boundary on Lot 5. A letter dated May 13, 2009 from the Santa Lucia Conservancy to the applicant's representative, Mr. Joel Panzer, finds that the proposed project adds conservation benefits to the Santa Lucia Conservancy. The specific benefits are outlined in this May 13, 2009 found in Project File No. PLN090032.

j) The modification of the homeland boundary (building envelope) would alter rights, title, or interest in the real property reflected on the recorded map. Staff analyzed this information after the Standard Subdivision Hearing on May 14, 2009 when applicant, Joel Panzer submitted a letter from the Santa Lucia Preserve Board of Directors (see Evidence "i" above) and found that a separate entitlement was warranted. The separate entitlement that is required as part of this Map Amendment is an Amendment to the Conservation Easement. A Deed of Conservation Easement is recorded with the Monterey County Recorder's Office, as Document No. 9882397. This Deed of Conservation Easement explains that Condition No. 109 of PC94-067, the Combined Development Permit and Vesting Tentative Map for the Santa Lucia Preserve, Phase A, required that conservation easements over the Openlands areas of each phase of the Santa Lucia Preserve Maps be granted to the Santa Lucia Conservancy. The applicant has submitted a letter written by the Santa Lucia Conservancy, dated May 13, 2009 (See **Exhibit J** of the June 10, 2009 Staff Report), conceptually granting the approval of the Homeland adjustment and requiring that after County considers and approves the modification, the Santa Lucia Conservancy would consider the proposal at this time and undertake the necessary steps to ensure the conservation easement for Lot 5 reflects the approved changes and adequately protects the newly configured Openlands. The Openlands area for Lot 5 is the area outside of the Homeland boundary. Because the subject project was noticed for

the Planning Commission Hearing without the Amendment to the Conservation Easement entitlement, staff has incorporated a condition of approval (Condition No. 11 of the Planning Commission, June 10, 2009 Staff Report) that would allow for the Board of Supervisors to consider and approve this added entitlement.

k) The project was approved by the Santa Lucia Design Review Board (see **Exhibit H** of the June 10, 2009 Planning Commission Staff Report). Additionally, no opposition to the project has been expressed verbally or in writing.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Planning Commission does hereby:

A. Consider the Addendum to the Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005);

B. Recommend approval of the Tate Map Amendment Application to the Santa Lucia Preserve Phase A Subdivision Map (PLN090032) to the Board of Supervisors, in general conformance with the attached sketch **(Exhibit 2 and 3)** and subject to the conditions **(Exhibit 1),** exhibits being attached hereto and incorporated herein by reference.

PASSED AND ADOPTED this 10th day of June, 2009.

Mike Novo, Secretary

COPY OF THIS DECISION MAILED TO APPLICANT ON

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

   Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

   Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from the Monterey County Planning Department and Building Services Department office in Salinas.

2. This permit shall be consistent with the terms of the Subdivision Map Act, which requires that the map be recorded within 3 years after the above date of granting thereof.

RESOLUTION - EXHIBIT 1 Monterey County Resource Management Agency Planning Department Condition Compliance and/or Mitigation Monitoring Reporting Plan	**Project Name:** Charles Tate **File No:** PLN090032 **APNs:** 239-021-004-000 **Approved by:** Planning Commission **Date:** June 10, 2009

**Monitoring or Reporting refers to projects with an EIR or adopted Mitigated Negative Declaration per Section 21081.6 of the Public Resources Code.*

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
RMA – Planning Department						
1.		**PD001 - SPECIFIC USES ONLY** This Map Amendment Permit (PLN090032) allows a Map Amendment request to move Homeland Boundary on Lot 5, as shown on Recorded Map, Volume 20 Cities and Towns, Page 8. The property is located at 14 Rancho San Carlos Road, Carmel (Assessor's Parcel Number 239-021-004-000), Greater Monterey Peninsula Area Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the following terms and conditions. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. **(RMA-Planning Department)**	Adhere to conditions and uses specified in the permit.	Owner/ Applicant	Ongoing unless otherwise stated	
			Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of the RMA - Planning Department.	RMA - Planning		
			To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled.	WRA RMA - Planning		

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
2.		**PD002 - NOTICE-PERMIT APPROVAL** The applicant shall record a notice which states: "A permit (Resolution_____) was approved by the Monterey County Board of Supervisors for Assessor's Parcel Number 239-021-004-000 on July 14, 2009. The permit was granted subject to 13 conditions of approval which run with the land. A copy of the permit is on file with the Monterey County RMA - Planning Department." **(RMA-Planning Department)**	Obtain appropriate form from the RMA-Planning Department. The applicant shall complete the form and furnish proof of recordation of this notice to the RMA - Planning Department.	Owner/ Applicant RMA-Planning	Prior to recordation of Amended Map	
3.		**PD003(A) – CULTURAL RESOURCES – NEGATIVE ARCHAEOLOGICAL REPORT** If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. The Monterey County RMA - Planning Department and a qualified archaeologist (i.e., an archaeologist registered with the Society of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. **(RMA - Planning Department)**	Stop work within 50 meters (165 feet) of uncovered resource and contact the Monterey County RMA - Planning Department and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.	Owner/ Applicant/ Archaeo-logist	Ongoing	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
4.		**PD004 - INDEMNIFICATION AGREEMENT** The property owner agrees as a condition and in consideration of the approval of this discretionary development permit that it will, pursuant to agreement and/or statutory provisions as applicable, including but not limited to Government Code Section 66474.9, defend, indemnify and hold harmless the County of Monterey or its agents, officers and employees from any claim, action or proceeding against the County or its agents, officers or employees to attack, set aside, void or annul this approval, which action is brought within the time period provided for under law, including but not limited to, Government Code Section 66499.37, as applicable. The property owner will reimburse the county for any court costs and attorney's fees which the County may be required by a court to pay as a result of such action. County may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of his obligations under this condition. An agreement to this effect shall be recorded upon demand of County Counsel or concurrent with the issuance of building permits, use of the property, filing of the final map, whichever occurs first and as applicable. The County shall promptly notify the property owner of any such claim, action or proceeding and the County shall cooperate fully in the defense thereof. If the County fails to promptly notify the property owner of any such claim, action or proceeding or fails to cooperate fully in the defense thereof, the property owner shall not thereafter be responsible to defend, indemnify or hold the county harmless. **(RMA - Planning Department)**	Submit signed and notarized Indemnification Agreement to the Director of RMA – Planning Department for review and signature by the County. Proof of recordation of the Indemnification Agreement, as outlined, shall be submitted to the RMA – Planning Department.	Owner/ Applicant	Upon demand of County Counsel or concurrent with filing of the Amended Map, whichever occurs first and as applicable.	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
5.		**PDSP001 - NOTE ON MAP-STUDIES (NON-STANDARD)** A note shall be placed on the Amended Map or a separate sheet to be recorded with the Amended Map stating that: "The following reports have been prepared for this project, specific to Lot 5: 1. "Santa Lucia Preserve Lot 5, APN 239-021-004" (LIB090244) prepared by Archaeological Consulting, Salinas, CA, on October 30, 2007 2. "Supplemental Biological Field Review (Tate-PLN090032) Letter Report" (LIB090284) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on May 18, 2009. 3. "Biological Analysis and Report for a Revised Homeland and Driveway" (LIB090243) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on December 1, 2007. 4. "Recommendations for Building Site and Driveway Proposed Single Family Residence Lot 5, Santa Lucia Preserve, Carmel Valley (LIB090245) prepared by Nolan Associates, Santa Cruz, CA, on March 14, 2008. The recommendations contained in said report, shall be followed in all further development of this property." The note shall be located in a conspicuous location, subject to the approval of the County Surveyor. **(RMA – Planning Department)**	Amended Map shall have notes on the Map or on a separate document describing the information of the map studies described in Condition 5. The information shall be submitted to the RMA - Planning Department and Public Works for review and approval prior to recording of Amending Map or the recordation of the separate document.	Owner/ Applicant	Prior to recordation of Amended Map	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
6.		**PDSP002 – NOTICE OF REPORTS (NON-STANDARD)** Prior to issuance of building or grading permits, a notice shall be recorded with the Monterey County Recorder which states: "The following reports have been prepared for this project, specific to Lot 5: 1. "Santa Lucia Preserve Lot 5, APN 239-021-004" (LIB090244) prepared by Archaeological Consulting, Salinas, CA, on October 30, 2007. 2. "Supplemental Biological Field Review (Tate-PLN090032) Letter Report" (LIB090284) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on May 18, 2009. 3. "Biological Analysis and Report for a Revised Homeland and Driveway" (LIB090243) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on December 1, 2007. 4. "Recommendations for Building Site and Driveway Proposed Single Family Residence Lot 5, Santa Lucia Preserve, Carmel Valley (LIB090245) prepared by Nolan Associates, Santa Cruz, CA, on March 14, 2008. The recommendations contained in said reports, shall be followed in all further development of this property." **(RMA – Planning Department)**	Proof of recordation of this notice shall be furnished to the RMA - Planning Department.	Owner/ Applicant	Prior to recordation of Amended Map	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
7.		**PDSP003 – GEOLOGICAL RECOMMENDATIONS FOR CONSTRUCTION ZONES (ZONE 1, ZONE 2 AND SUB-AREA IN ZONE 2) (NON-STANDARD)** The report by Nolan and Associates (Library No. 090245) recommend that the proposed homeland boundary on Lot 5 be partitioned into three zones: *Zone 1*, *Zone 2* and *a Sub-area* in *Zone 2* (see **Exhibit 3**). ***Zone 1*** would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure; ***Zone 2*** would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. The non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities. The report describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may possible to reduce or eliminate that setback. ***Sub-area in Zone 2***. Subsequently, the Nolan report designates a *sub-area* in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation. This area is described in **Exhibit 3** attached to the Resolution of Approval. **(RMA – Planning Department)**	Adhere to the recommendations of the Nolan and Associates Reports filed with the Monterey County Planning Department as Library No. 090245 of this report and the specific information of Condition 7.	Owner/ Applicant/ Geologist	Ongoing	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
8.		**PDSP004 – GEOLOGICAL NOTES ON MAP FOR CONSTRUCTION ZONES (ZONE 1, ZONE 2 AND SUB-AREA IN ZONE 2) (NON-STANDARD)** A note shall be placed on the Amending Map or a separate sheet to be recorded with the Amending Map stating that: "The report by Nolan and Associates (Library No. 090245) recommend that the proposed homeland boundary on Lot 5 be partitioned into three zones: *Zone 1*, *Zone 2* and *a Sub-area* in *Zone 2* (see **Exhibit 3**). ***Zone 1*** would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure; ***Zone 2*** would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. The non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities. The report describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may possible to reduce or eliminate that setback. ***Sub-area in Zone 2***. Subsequently, the Nolan report designates a *sub-area* in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation." **(RMA – Planning Department)**	Amended Map shall have notes on the Map or on a separate document describing this information of the three construction zones as described in Condition 8. The information shall be submitted to the RMA - Planning Department and Public Works for review and approval prior to recording of Amending Map or the recordation of the separate document.	Owner/ Applicant	Prior to recordation of Amended Map	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
9.		**PDSP004(a) – GEOLOGICAL NOTES ON MAP FOR CONSTRUCTION ZONE 2 (NON-STANDARD)** A note shall be placed on the map stating the following: "In Zone 2 area of the approved Homeland Boundary only **non-habitable** structures shall be allowed. Non-habitable structures shall include but not limited to: barns, pool houses, or other structures without sleeping quarters or food preparation facilities. **(RMA – Planning Department)**	Amended Map shall have a note on the Map describing this information. The note shall be reviewed and approved by the RMA - Planning Department and Public Works, prior to recording of the Amending Map.	Owner/ Applicant	Prior to recordation of Amended Map	

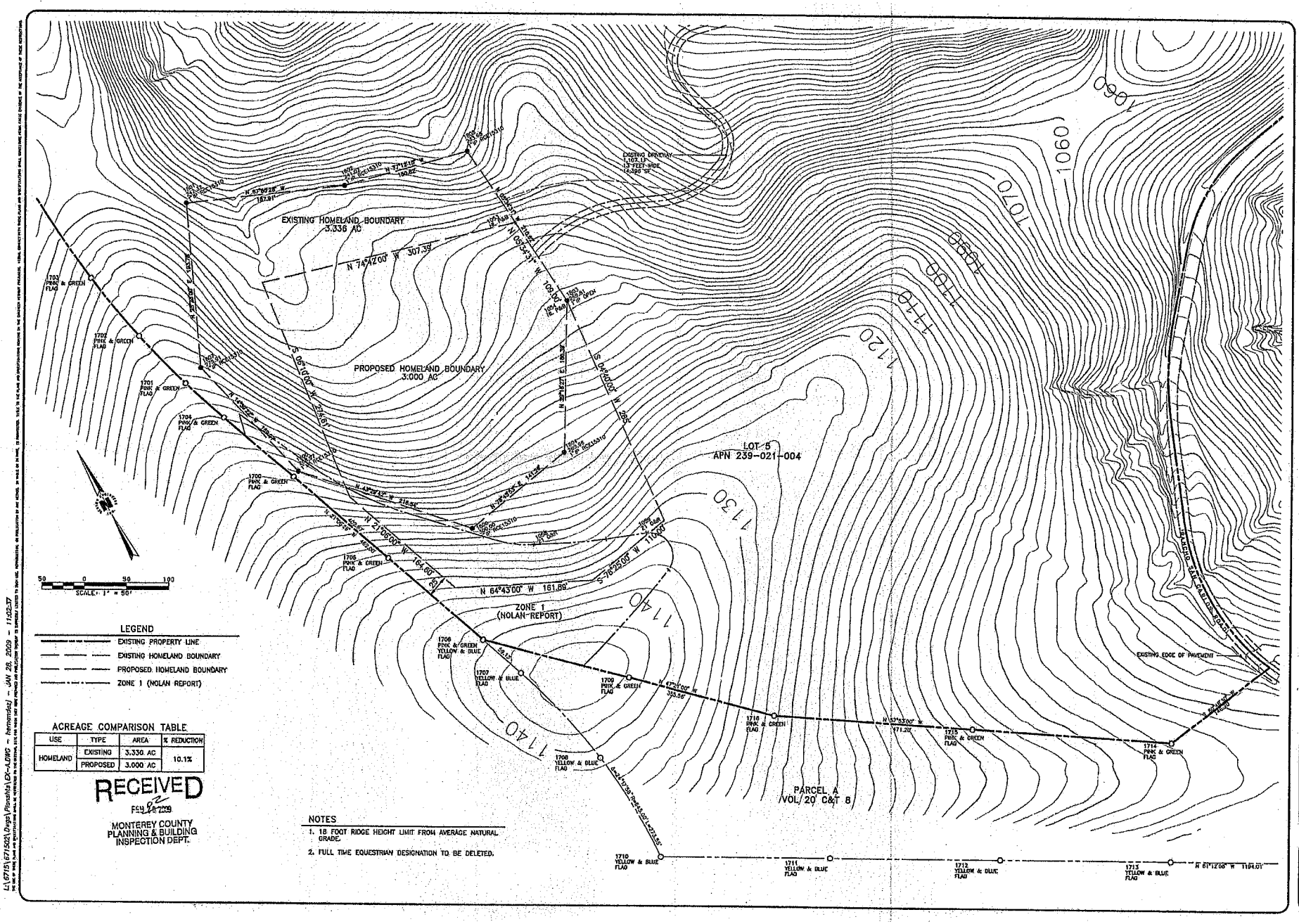
Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
10.		**PDSP004(b) – GEOLOGICAL NOTES ON MAP FOR CONSTRUCTION in SUB-AREA ZONE 2 (NON-STANDARD)** A note shall be placed on the map stating the following: "The Sub-area Zone 2 of the approved Homeland Boundary, may be considered suitable for habitable structures, with the preparation of a geologic and/or geotechnical investigation, per the Geologic Report (Library No. 090245), prepared by Nolan Associates, that analyzes and concludes that the area is suitable for habitable structures". **(RMA – Planning Department)**	Amended Map shall a have note on the Map describing this information. The note shall be reviewed and approved by the RMA - Planning Department and Public Works, prior to recording of the Amended Map.	Owner/ Applicant	Prior to recordation of Amended Map	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
11.		**PDSP005 – ADDITIONAL ENTITLEMENT FOR A CONSERVATION EASEMENT AMENDMENT TO BE CONSIDERED BY THE BOARD OF SUPERVISORS FOR THIS PROJECT (NON-STANDARD)** This condition of approval has been specifically requested by the Planning Commission on a noticed hearing held on June 10, 2009 for this subject project. This condition allows the Board of Supervisors to consider an additional entitlement to this project: a Conservation Easement Amendment, at the scheduled Board of Supervisors Hearing on July 14, 2009. The Conservation Easement Amendment shall be publicly noticed for the Board of Supervisors Hearing on July 14, 2009, as part of the description of the proposed project. **(RMA – Planning Department)**	Incorporate this additional entitlement to the project description and publicly notice for the Board of Supervisors Hearing scheduled on July 14, 2009.	Planner	Notice with this additional entitlement prior to the Board of Supervi-sors Hearing on July 14, 2009.	

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
12.		**PDSP006 – GEOLOGICAL RECOMMENDATIONS DELINEATE CONSTRUCTION ZONES ON AMENDED MAP (ZONE 1, ZONE 2 AND SUB-AREA IN ZONE 2) (NON- STANDARD)** Amended Map shall clearly delineate the construction zones, Zone 1, Zone 2 and Sub-area Zone 2 as recommended by the Geologic Report (Library No. 090245), prepared by Nolan Associates dated March 14, 2008. **(RMA – Planning Department)**	Amended Map shall reflect the appropriate construction zones on Lot 5. The information shall be submitted to the RMA - Planning Department and Public Works for review and approval prior to recordation of Amended Map.	Owner/ Applicant	Prior to recordation of Amended Map	
		Public Works Department				
13.		**PWSP001 – AMENDED MAP (NON-STANDARD)** File an Amended Map delineating the new homeland site, all existing and required easements or right-of-way and monument new lines. **(Public Works)**	Applicant's surveyor shall prepare an Amended Map, submit to DPW for review and approval.	Owner/ Applicant/ Engineer	Prior to Recordation of Amended Map	

END OF CONDITIONS

EXHIBIT C-2



ACREAGE COMPARISON TABLE

USE	TYPE	AREA	% REDUCTION
HOMELAND	EXISTING	3.336 AC	10.1%
	PROPOSED	3.000 AC	

RECEIVED
FEB 26 2009
MONTEREY COUNTY
PLANNING & BUILDING
INSPECTION DEPT.

NOTES

1. 18 FOOT RIDGE HEIGHT LIMIT FROM AVERAGE NATURAL GRADE.
2. FULL TIME EQUESTRIAN DESIGNATION TO BE DELETED.

REVISIONS

DESIGNED BY
DRAWN BY STAFF
DATE:
ENGINEER
PLS:
EXP:

PRELIMINARY
NOT FOR CONSTRUCTION

BESTOR ENGINEERS, INC.
CIVIL ENGINEERING - SURVEYING - LAND PLANNING
9701 BLUE LARKSPUR LANE, MONTEREY, CALIFORNIA 93940

PREPARED FOR: CHARLES TATE

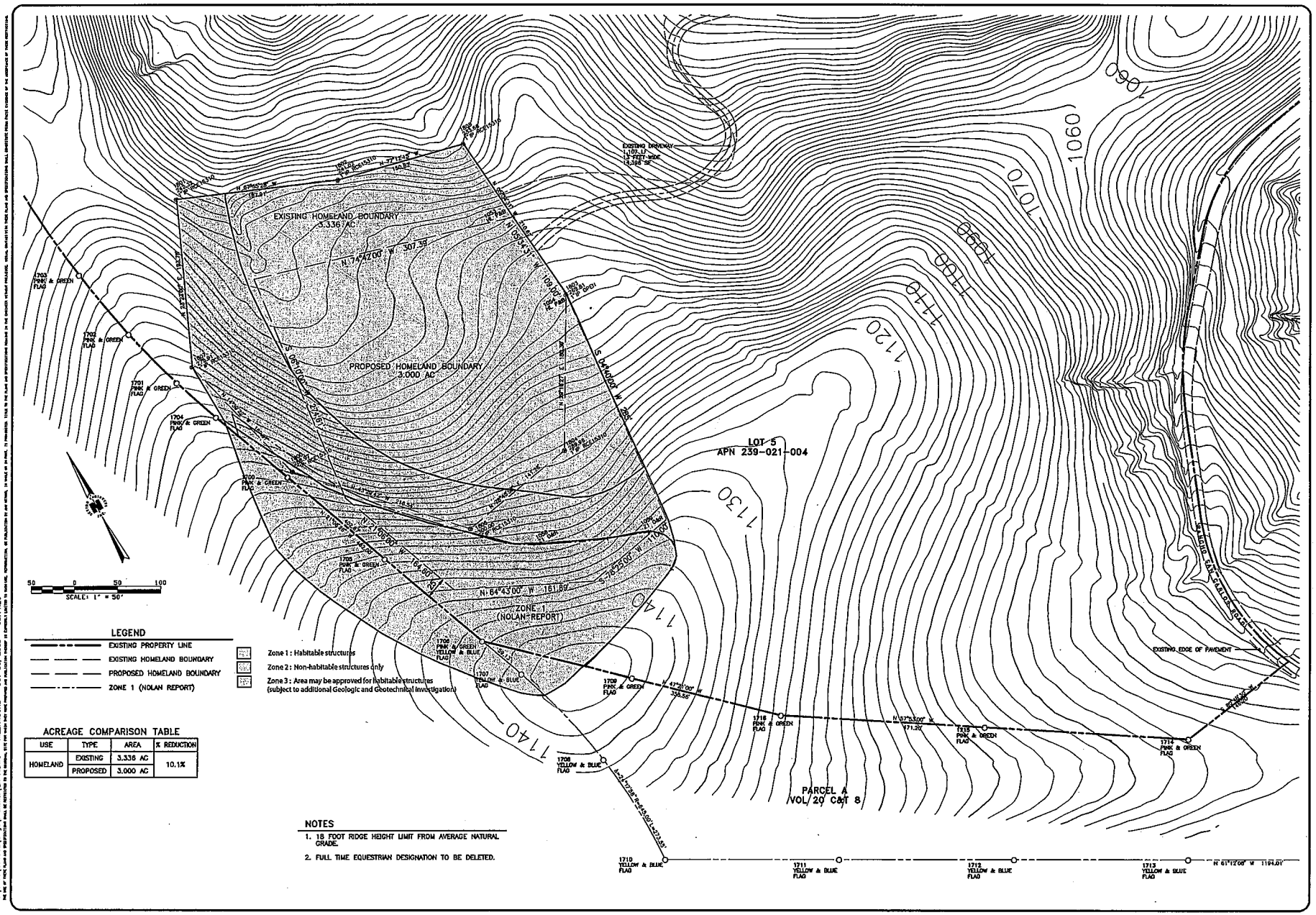
HOMELAND ADJUSTMENT

LOT 5 SANTA LUCIA PRESERVE
APN 239-021-004

COUNTY OF MONTEREY, CALIFORNIA

SCALE: 1"= 50'
DATE: OCT 30, 2008
SHEET: EX-A
WO: 8715.02

EXHIBIT C-3



ACREAGE COMPARISON TABLE

USE	TYPE	AREA	% REDUCTION
HOMELAND	EXISTING	3.336 AC	10.1%
	PROPOSED	3.000 AC	

NOTES

1. 18 FOOT RIDGE HEIGHT LIMIT FROM AVERAGE NATURAL GRADE.
2. FULL TIME EQUESTRIAN DESIGNATION TO BE DELETED.

REVISIONS

DESIGNED BY
DRAWN BY STAFF
DATE:
ENGINEER
PLS:
EXP:

PRELIMINARY
NOT FOR CONSTRUCTION

BESTOR ENGINEERS, INC.
CIVIL ENGINEERING - SURVEYING - LAND PLANNING
9701 BLUE LARKSPUR LANE, MONTEREY, CALIFORNIA 93940

PREPARED FOR CHARLES TATE

HOMELAND ADJUSTMENT

LOT 5 SANTA LUCIA PRESERVE
APN 239-021-004
COUNTY OF MONTEREY, CALIFORNIA

SCALE: 1" = 50'
DATE: OCT 30, 2008
SHEET: EX-A
WO: 6715.02

L:\6715\6715.02\Dwgs\Planning\EX-ALDWG - WILLIAMSONL - OCT 30, 2008 - 08:14:26

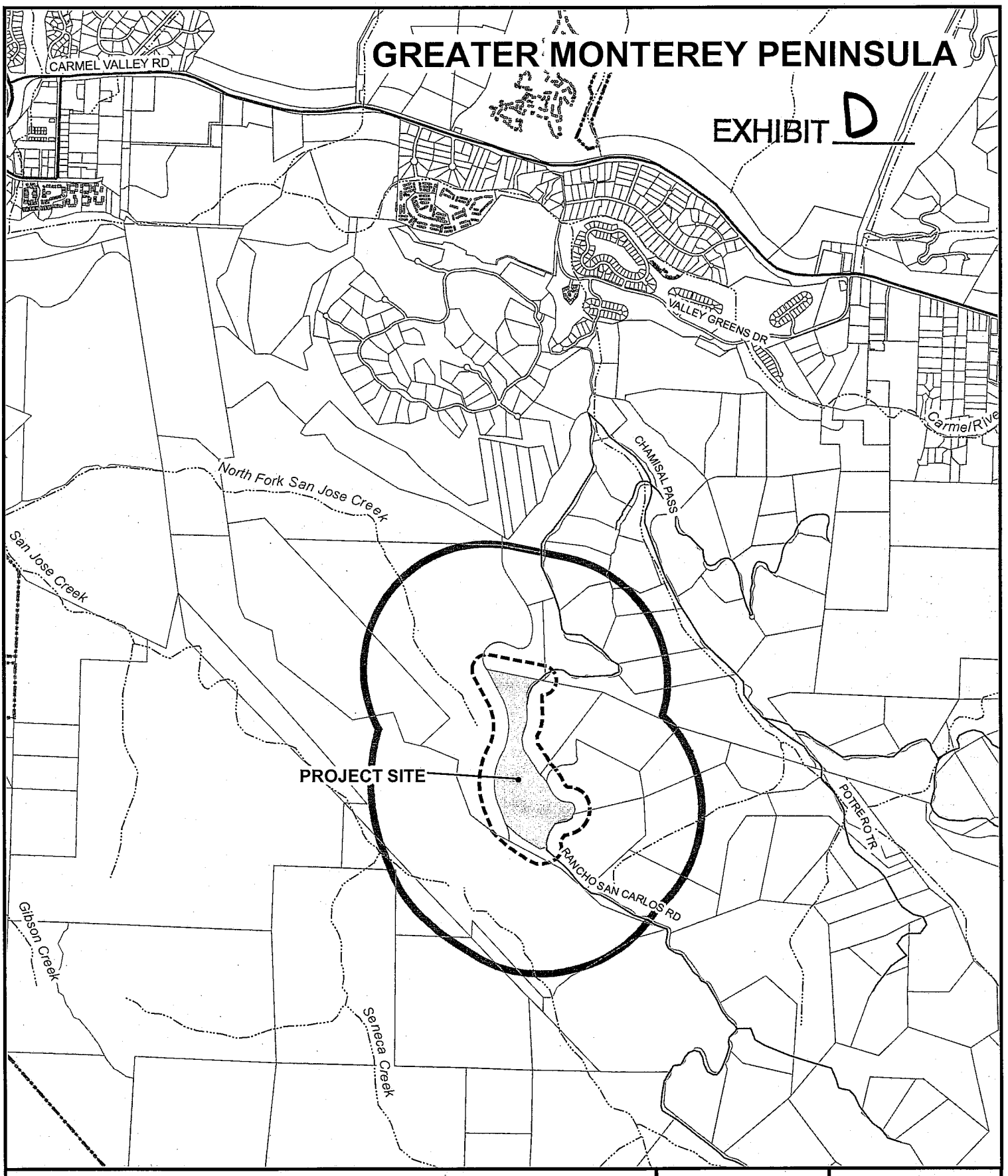
EXHIBIT D

VICINITY MAP

PLN090032 – Charles Tate

Planning Commission

June 10, 2009



PLANNER: AMADOR

EXHIBIT E

ADDENDUM TO THE ENVIRONMENTAL IMPACT REPORT FOR THE SANTA LUCIA PRESERVE (EIR 94-005)

(Note: EIR is available for review at the RMA-Monterey County Planning Dept., Salinas Office)

PLN090032 – Charles Tate

Planning Commission

June 10, 2009

EXHIBIT E 1 of 2 pgs

Addendum Pursuant to the California Environmental Quality Act Article 11, Section 15164

Charles Tate
Planning File No. PLN090032
Map Amendment

1. Introduction

This technical addendum has been prepared pursuant to Article 11, Section 15164 of the California Environmental Quality Act guidelines to make minor technical changes or if additions are necessary or if none of the conditions described in Section 15162 of the California Environmental Quality Act calling for the preparation of a subsequent EIR or adopted Negative Declaration, prior to making a decision of a project. The subject project site for the Tate Map Amendment requires an Addendum to the Santa Lucia Preserve Certified EIR, certified on February 6, 1996, by the Board of Supervisors Resolution No.96059. None of the conditions described in Section 15162 calling for preparation of a subsequent EIR or negative declaration have occurred.

2. Scope and Purpose of this Addendum

Staff's analysis of the Santa Lucia Preserve Certified EIR indicates that the reason for the creation of the homeland boundaries was a compilation of analyzed resources and constraints, such as archaeology, biology and geology. The result of this analysis created the location of the homeland boundary for Lot 5.

The geology investigations that were performed for the EIR were reconnaissance level slope stability analysis of the landslide complex as a whole, but there were was not a local stability analysis for individual landslide masses. The EIR geology report indicated that the landslide mass, as a whole, was stable. However, the report also recommended that site specific studies be performed to support the development of individual lots. In the case of this project, a site specific study has been prepared for Lot 5 (Library No. LIB090245 and LIB090246) and the results have indicated that the relocation of the homeland boundary is necessary and geologically suitable for building area as opposed to the current boundary.

At the same time, the archaeological (LIB090244) and biological reports (LIB090243) prepared for this project have indicated that the project is appropriate and would not impact archaeological or biological resources.

EXHIBIT E 2 of 2 pgs

3. Conclusion

Staff has reviewed the Santa Lucia Preserve Environmental Impact Report, Resolution No. 96-060 and the proposed Map Amendment to relocate the Homeland Boundary for Lot 5 for consistency with the environmental considerations contained within. Staff finds that the site-specific conditions are not substantial changes and therefore do not warrant the preparation of a subsequent environmental document.

EXHIBIT F
TECHNICAL REPORTS

1.) Supplemental Biological Letter Report,
Dated May 18, 2009
(Library No. 090284)

2.) Biological Analysis and Report,
Dated December 1, 2007
(Library No. 090243)

3.) Summary Letter of Geologic Hazard Investigation,
Dated March 14, 2008
(Library No. 090245)

4.) Draft Preliminary Geologic Hazards Investigation,
Dated November 29, 2007
(Library No. 090246)

PLN090032 – Charles Tate
Planning Commission
June 10, 2009

EXHIBIT F-1

CALIFAUNA

JEFFREY B. FROKE, PH.D.
3158 BIRD ROCK ROAD
PEBBLE BEACH, CA 93953

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JBFROKE@MAC.COM

Monday, 18 May 2009

LETTER REPORT

To: Ms. Nadia Amador, Project Planner
Co. of Monterey - Resource Management Agency - Planning Department
168 West Alisal Street, 2nd Floor
Salinas, CA 93901

Subject: Supplemental Biological Field Review (Tate - PLN090032)

Per your request, this is the follow-up letter that documents my testimony made at the 14 May 2009 hearing of the Subdivision Committee. As stated, I surveyed and reviewed the subject property in 2007 and again recently on 13 May 2009. My first report was completed and submitted to Monterey County on 01 December 2007.

As background, I was the biologist responsible for all site surveys and analyses from 1991 and managed all biological consultants then surveying the Santa Lucia Preserve (Rancho San Carlos). Further, I was an original team member that participated in the selection of the site as a developable Preserve lot (lot no. 5). Lastly, and with respect to the subject property and its biological resources, it had been my responsibility for nearly 14 years to supervise the cattle grazing, planting and seeding, and mowing and brush-hogging over the entire site, i.e., specifically for the purpose of reducing the invasive and unwanted cover of *Genista monspessulana*, or French Broom.

In 2007, I thoroughly assessed the entire the Tate property, including the proposed extension, or shifted *homeland* area. The 2007 findings of the existing building envelope were virtually identical, per both habitat type and land-use history, to contemporary ecological conditions: All existing and proposed areas of homeland no. 5 are dominantly covered by a nonnative grassland (occasionally mown or brushed) that is moderately-severely overgrown with French Broom and various exotic thistles. Sparse patches of a native flora that occurs elsewhere within the *openland* portions of lot no. 5 (covered by conservation easement) are not found in the homeland area, existing and proposed. As a consequence of these equal habitat conditions, both the existing and proposed openland boundaries are inhabited by an identical fauna of wildlife species.

As would be a definitive and advantageous result of the proposed action, the southward shift of the homeland would increase the separation (~ 400-ft) between development and the only highly valued resource on lot no. 5, a pond that is inhabited by CA Red-legged Frog and CA Tiger Salamander (*personal observation,* 1992 and 1998, respectively).

It is my opinion that the proposed change of homeland boundaries will not adversely affect any onsite or adjacent natural resources, e.g., Coast Mule Deer, exotic Russian Wild Boar, numerous rodents and birds of prey. In sum, the conclusion and opinion of my 2007 report have not changed from that time to present; and, the proposed extension of areas in question are for all ecological and biological purposes identical to the area already analyzed.

I trust that you will not hesitate to share with me any comments or questions that you may have regarding this report.

J.B. Froke, Ph.D.

Attached: An annotated aerial image of the Tate property, including proposed v. existing homeland locations (Fig. 09-1).

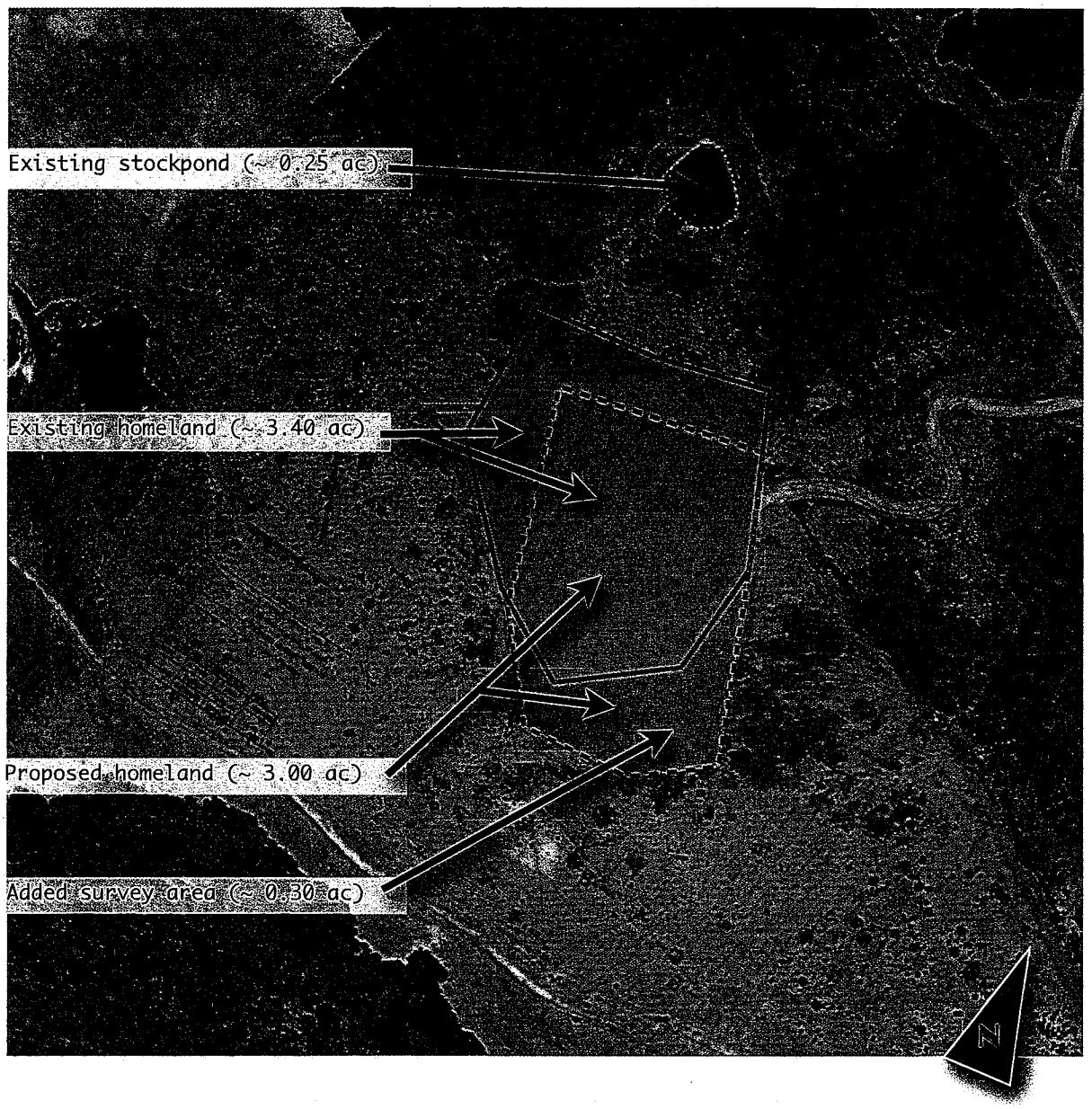

FIGURE 09-1. This view includes an overlay of the existing Homeland polygon (inside solid line) and overlapping proposed homeland (inside dashed line). The yellow section represents the portion of the overall site that was not previously surveyed in 2007 (~ 0.30 ac): The area was thoroughly studied on 13 May 09 for its biological resources including those that may not have been present for the 2007 survey.

SLP-5:Charles Tate Property: 14 Rancho San Carlos Road, Carmel CA

EXHIBIT E 2

JEFFREY B FROKE, PhD
CALIFAUNA
Survey Design Monitor & Manage
3158 Bird Rock Road / Pebble Beach CA 93953
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01 December 2007

BIOLOGICAL ANALYSIS & REPORT
for a Revised Homeland & Driveway

ATTN	JOEL PANZER, Maureen Wruck Planning Consultants, Salinas, CA
FROM	*Jeffrey B Froke, PhD*
SUBJECT	Proposed Revision of Homeland & Driveway / Lot 5, Santa Lucia Preserve, Monterey Co., CA
OWNER	Charles Tate c|o: *Janet Malone, CPA*
A.P.N.	239-021-004
STUDY AREA[1]	Existing & Proposed Transaction Areas per CTRL-03 *(Bestor Engrs., 19 Sep 07)*
GEO-REFERENCE	lat 36.504516° @ minus121.872087° / 1,071 ft ASL *(@ junction of ex. no. 5 drive & Homeland)*

STUDY APPROACH

The principal approach to studying and analyzing Lot 5's Homeland/Driveway complex [combined existing and proposed areas] involved an all-day field evaluation on Saturday, 20 October 2007. The scale of the fieldwork extended from a walkover of the encompassing landscape to an intensive on-the-ground search for individual biotic resources. To underscore how much was already known and understood about the Lot 5 complex, i.e., by the present ecologist/writer [*JBF*], the recent daylong assessment capped approximately 12 years of comprehensive and revisted field work (species inventory, population studies, and habitat/range experimentation), both directly on and adjacent to the site. Finally, in addition to *insitu* observations, the present study features comparative analyses made of high quality aerial photographs (1994-2005).

BACKGROUND & PREFACE

Santa Lucia Preserve Lot No. 5, including its present location and boundaries, was originally situated during the mid-1990s, before its sale by Rancho San Carlos Partnership (the *developer*) to the present owner. As was the case with virtually all prospective SLP Lots, the identification and mapping of the lots (generally and specifically) were made in the field by a trio of project principals/partners, one of whom was JBF, then the project ecologist. Among a range of useful determinants was the potential and mutual effect between each prospect homesite and its encompassing landforms and vegetation. The original identification and placement of the Lot 5 *Homeland* (the buildable, livable area)[1] was chiefly influenced by dominant physical and aesthetic concerns, whereas known and potential ecological limitations of the Lot 5 site and contiguous resources were given somewhat less credence.

Preview → Viewed in the present, it appears the current proposal to revise Lot 5 -- by relocating both its Homeland and access drive -- could generate beneficial gains for the affected natural landscape and its biological resources, with no significant sacrifice of those values. For example, the revision would offer an opportunity within the Preserve to *reconsider and recover* balance between adverse and contrary design elements, i.e., of formerly subjective matters such as aesthetic opinion, and more objective items like the avoidance of habitat that is occupied by at least one high-level protected species. These issues and more will be examined in the following report.

White-Tailed Kite Foraging Over Existing Lot 5 Homeland/Grassland

[1] → In the Preserve lexicon, HOMELAND represents that portion of the total site deeded to the purchaser, and that remains unencumbered by an underlying Conservation Easement (otherwise, the OPENLAND). The Homeland encompasses all of the owner's residential and ancillary structures: In effect, containing all built and livable uses. Importantly, the entire Homeland area is not constructed or built upon, and commonly a substantial portion remains in its original or managed open space and habitat condition. Therefore, while conservative analyses might assume the entire Homeland (in the present case = 3.34 acres) is modified by development, in actuality this is not the case.

LANDSCAPE OVERVIEW

Survey Basemap

Figure 1, below, is a reduced but true version of the Updated Control Plan for Lot 5 SLP (CTRL-03; Bestor Engineers; 19 Sep 07). The document was used as the common basemap for the present biological analysis and report.

Homeland & Driveway Arithmetic

For transactional purposes, the original (existing) and proposed (revised) Lot 5 Homelands each measure 3.34 acres. Whereas the original (existing but derelict and eroded)[2] paved access drive measures 1,107 lft at an average width of 13 ft (~14,391 sqft; 0.33 ac), the proposed replacement drive would measure 814 lft at 12 ft wide (~9,768 sqft; 0.22 ac). In sum, the two alternative Homelands purposefully measure the same area (3.34 ac); but, the overall size of the proposed driveway would be 0.11 ac (~4,623 sqft; 68 pct) less than the existing decrepit driveway.

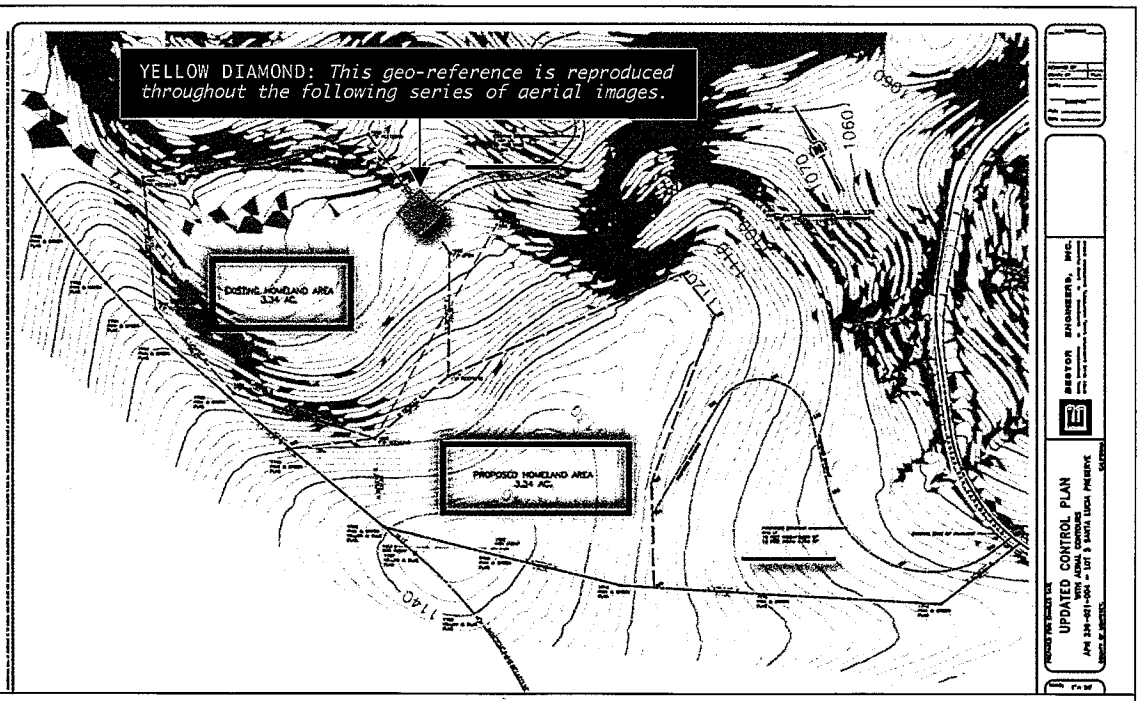


FIGURE 1 A reduced print version of CTRL-03, *Updated Control Plan for Lot 5, Santa Lucia Preserve*, Bestor Engineers (19 Sep 07).

[2] → Derelict & eroded, meaning edges are falling off and plants are growing through the length of the asphalt road, while loosened material is washing downhill in steeper sections

As a matter of fact, the present condition of the existing driveway inevitably would require end-to-end construction repairs should homesite construction based on the original lot placement and configuration be realized. In such an event, it would be reasonable for the total square footage of the drive to increase; and if by just a third more (35 pct), the existing drive would be double the size of the alternative/proposed drive.

Comparative Imagery: 1994 – 2005

Current Uses of Aerial Images

The collection of aerial photographs shown below is intended to reveal land use conditions over the coverage period of 1994-2005. The range spans the approximate period during which the site was identified as a marketable Homeland (1994-96), and includes modest site improvements related to its development for sale (e.g., construction of access drive; brush mowing). Additional developer actions that are readily evident or implied by the following landscape images encompass both the existing and proposed Lot 5, and include e.g., brush clearing, livestock grazing (or its absence), and attention (or lack of it) to brush encroachment that previously had been managed (ca. 1996-1998).

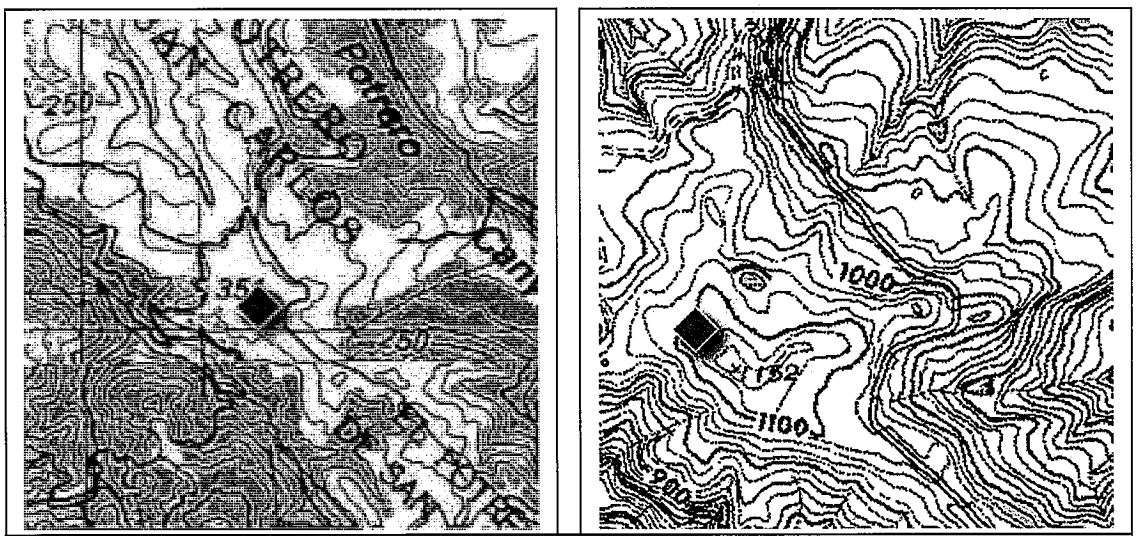


FIGURE 2 Clips from two 1:24,000 Topographic Maps; one (R) is clipped to show more detail, including built features (stockponds). Again, the yellow diamond represents a common geographic reference. Note: Topo units of the source maps are either Metric (L) or English (R).

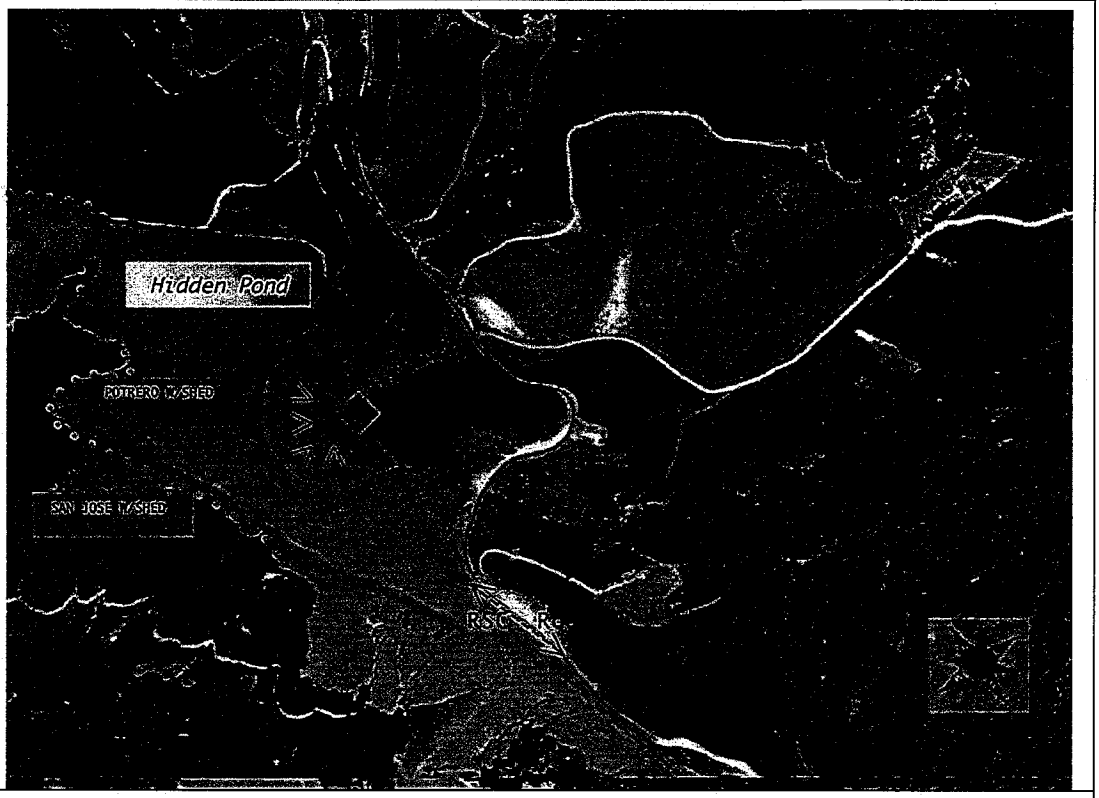
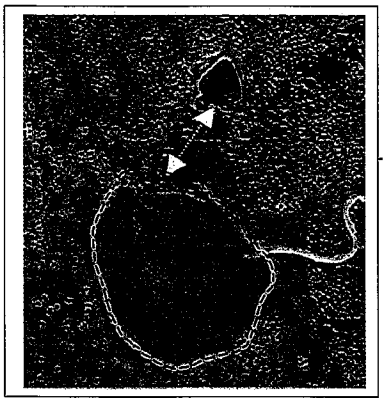


FIGURE 3 Aerial image of SLP Lot 5 and vicinity, illustrating key points within the surrounding landscape, including special wildlife values.

a) Hidden Pond, which is/was occupied by California Red-legged Frogs, Western Pond Turtles and California Tiger Salamanders, circa 1991-2000

b) Presence & location of a slump-derived depression that is seasonally wetted (subsurface) and occasionally flooded; and that is the 'headwaters' of a mile-long tributary stream running to Potrero Creek – The existing Lot 5 Homeland squarely occupies this hydrological feature.



c) Dotted line signifies approximate watershed boundary.

Photo Datum: 28 May 1994

INSERT: Recent close-up of the natural depression and adjacent Hidden Pond. The existing (undeveloped) homesite is sited in the depression. Distance between proximal edges of the basin and pond (arrow) = 200 ft.

The depression collects natural runoff and infiltration from the uphill and lateral grasslands.

Photo Datum: 10 Nov 2005

FIGURE 4 Aerial image of SLP Lot 5 and vicinity, illustrating pre-development actions such as road building (and widening), drives accessing lots onsite and throughout viewed portion of the Preserve. Major vegetation masses remain unchanged.

For reference to subsequent (more recent) images, note relative openness and absence of brush (exotic *Genista*) across the subject grassland. This 'native' condition was due to managed livestock grazing, circa 1995-1998.

Red-circled clearing is offsite with respect to the Lot 5 Homeland. This site is the relict of a makeshift base and helipad ('pot-pad') used by coordinated law enforcement agencies (C.A.M.P.) during its work to investigate and remove marijuana stands from Palo Corona Ranch, then a private property adjacent to the Preserve (ca. 1999).

Photo Datum: 01 Aug 2002

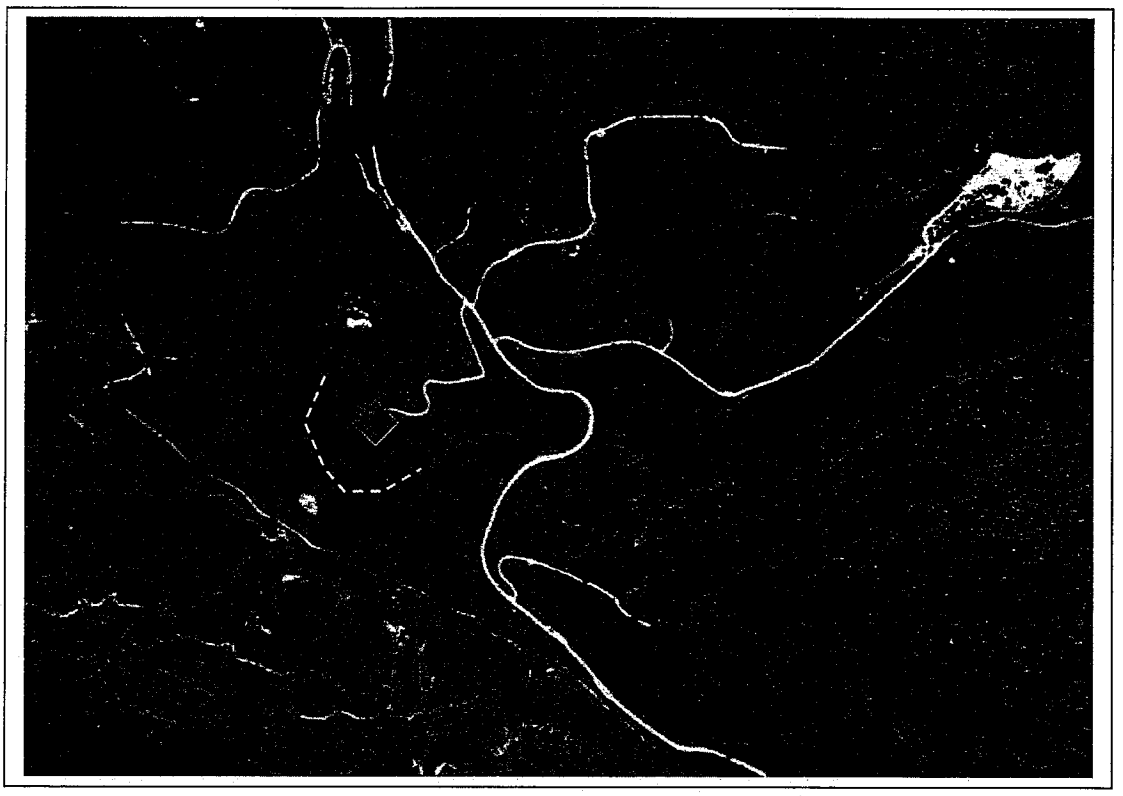


FIGURE 5 Comparative aerial images: 01 May 05 (upper); 01 Nov 05 (lower). The November image emphasizes extensive brush encroachment since ca 1999.

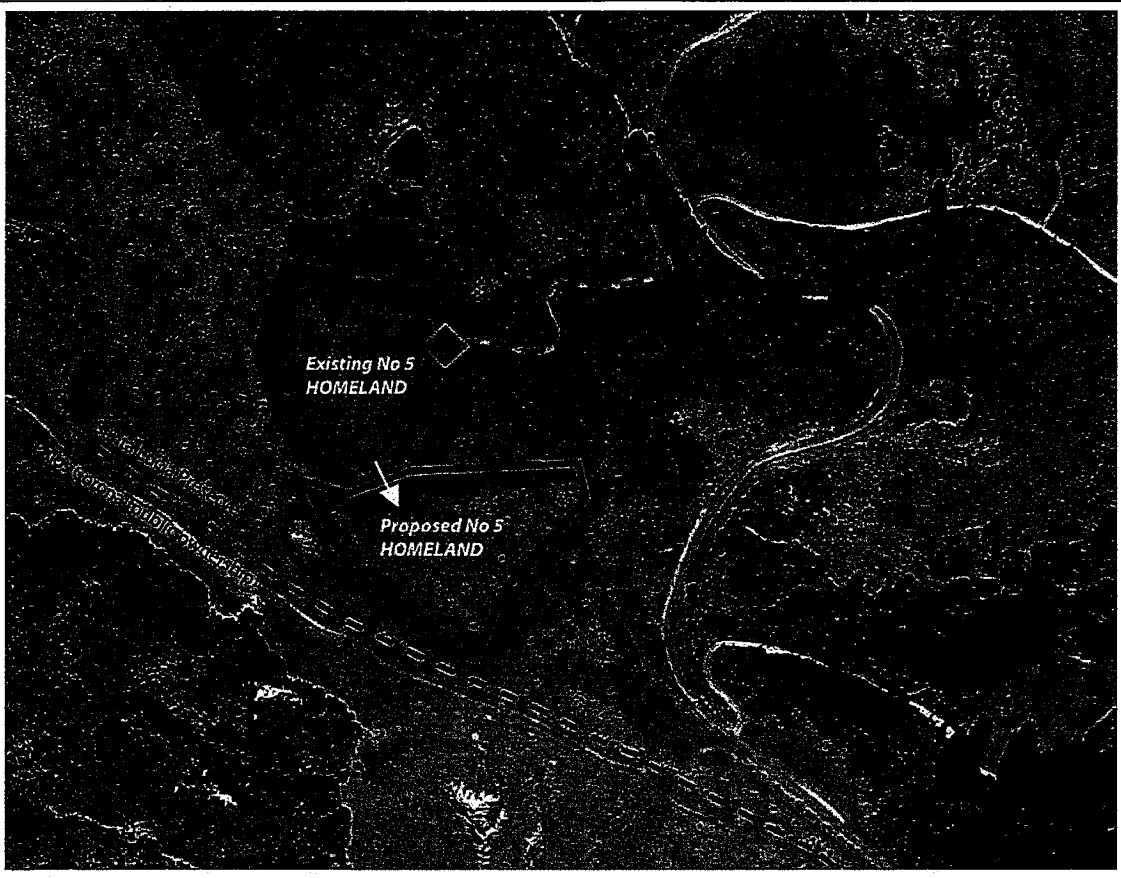


FIGURE 6 An overlay of the existing and proposed Homeland boundaries (approximate) for SLP No.5, with alternative driveways illustrated. Note extensive encroachment by Coyote Brush and French Broom since 1999.
Photo Datum: 01 Nov 2005

BIOLOGICAL FINDINGS

Common Resources *(see map notes)*

In general, the prevalent cover of the Lot 5 area (existing + proposed) is an Old Field (pasture) Grassland. This cover type is a mix of native perennial and nonnative annual grass and forb species. Throughout the area, with the limited exception of the natural depression, recruitment of common and widespread brush species including nonnative and invasive French Broom and native Coyote Brush is taking place. The encroachment and increasing density of these two woody species over what had been extensively grassland reflects two main factors: (1) a longstanding history of grazing and particularly overgrazing, and (2) the special capacity of the two species, especially French Broom, to overtake unmanaged and ruderal pastures.

Nevertheless, the grasses are making a stand, and there are areas that may stay relatively brush-free (a *good thing* in this case) due especially to resilient native soil conditions plus past efforts to manage the site for grasses (1994-1999). Notably, the native grasses in this

area include, e.g., *Nasella cernua, Nasella pulchra, Bromus californica, Danthonia californica.* A small patch of what appears to be Johnson Grass (*Sorghum halepense*), a toxic weed, is present inside the depression.

In previous years, one portion of the study area (S/SE) was densely covered with nonnative Slender Wild Oats, to the detriment of native grass stands. This aggressive grass was successfully reduced by a fundamental conversion of the ongoing grazing program. To wit, grazing was limited to the first three-four months of the year (Jan-Apr); and this program was carefully applied over the four-year period, 1995-1999. The effort was successful, because very little of the species can be found onsite, whereas it had been the dominant sub-shrub cover plant prior to 1995-1996.

Wildlife of the Area

Mammals known to occupy the entire study area include Mule Deer (foraging on grasses), Mountain Lion, Bobcat and Coyote (foraging on deer and other mammals), nonnative Wild Boar (foraging and nesting in heavy stands of French Broom), American Badger, Audubon's Cottontail and Long-tailed Weasel, plus abundant rodents (Botta's Pocket-Gopher, California Vole, Deer Mice, Broad-handed Mole, and Harvest Mice, *et al.*

Pocket-gophers, which are important food sources for predatory mammals and birds, appear to be especially abundant inside the previously described natural depression (current Homeland of Lot 5). California Voles are common throughout the more intact grasslands; and the species is vitally important to White-tailed Kites.

In addition to kites, observed and expected birds of prey of the overall study area include, e.g., Red-tailed Hawk, Cooper's Hawk, American Kestrel, Northern Harrier, Western Screech-Owl, Barn Owl, and Great Horned Owl. None of the species nest in the Lot 5 complex, due in large part to the absence of trees. Characteristic songbirds of the grassland and brushland include Western Meadowlarks, Lark Sparrows, Grasshopper Sparrow, and numerous others.

EVALUATION OF FINDINGS

Clearly, the switch between the existing and proposed Homeland sites will be balanced in terms of acreage affected (3.34 : 3.34 acres). As reported, however, the two sites are not equal by way of their ecological values: The existing (original) site contains *better* habitat for native plants and wildlife (more native grass and less invasive shrubs), and it is significantly closer and hydrologically connected to the highly valuable Hidden Pond, home to as many as two special status (T&E) amphibians and one special-status reptile.

Conversely, the vegetation cover of the proposed Homeland area consists of a higher density of introduced annual grasses and abundantly more French Broom.

Protected Resources, including those plants and animals identified and discussed in the SLP Resource Management Plan (JBF 1994) were carefully considered in the conduct of this survey and report. In addition, all special-status resources identified as species with the potential to occur within the Preserve were so noted in the Final EIR for the Preserve project (County of Monterey, 1995; see Tables 11-2 and 11.3); and those resources, too, were evaluated by the present review of SLP Lot 5 and surroundings. Results of these

reviews resulted in a present finding that no special-status resource, plant or animal, utilize the proposed replacement Lot 5 for its reproductive or primary habitat. Further, the proposed trade of land does not change the circumstances and conclusions of the FEIR; and it fully complies with all relevant requirements and expectations of the FEIR. For example, the proposal to trade the existing for the proposed Lot 5 (and driveway) does fully comply with Applicants Mitigation Measures (FEIR 11-39). In view of these findings, the prospective trade between the existing and proposed Lot 5 is consistent with both the 1994 Resource Management Plan (the plan was adopted by the County as a condition for approval of the Preserve in 1995) and the 1995 FEIR for the Preserve, which also was adopted by the County.

It has been assumed that all natural resources occuring in the proposed Lot 5 Homeland could be lost or degraded due to construction of the homesite and other built facilities, increased lighting and other changed conditions that could adversely affect the quality and values of the present natural communities. Nevertheless, the proposal to switch sites will not increase or intensify these conditions when viewed from the standpoint of both potential lots (existing and proposed), as only one will be developed and the other left to open space. And, as previously stated, it is a reality that the entirety of whichever lot is selected will not be fully developed, thereby leaving a portion intact as habitat and open space.

Ultimately, it is not a matter of whether homesite development will occur, or over how large an area as those factors are equal regardless of which alternative lot (@ 3.34 ac plus driveway) is so designated. From a biological standpoint, however, it is critical to evaluate the comparative resource values of the two respective sites, and to consider the ecological outcome of developing which of the two lots for the other. For example,

- ☐ The existing lot is directly tied to the downhill pond (Hidden Pond) and the connected tributary to Potrero Creek. Both the pond and the creek are habitat for a diversity of species, including the California Red-legged Frog, Western Pond Turtle, and California Tiger Salamander. The creek is occupied by Steelhead Trout, also a federally threatened species. Preclusion of development from the existing Lot 5 would benefit the habitat and aforementioned species.

- ☐ The existing lot has a greater and higher quality of native and overall grassland, and in turn a lesser amount of both native and especially nonnative encroaching brush. Removal of development from the existing site wouild directly benefit grassland species including burrowing rodents and the birds of prey that rely on them for food.

- ☐ The existing lot is farther away from Rancho San carlos Road and neighboring Homelands than the proposed site, which is closer to the road and to other sites. As such, the driveway to the proposed site is shorter and has a briefer interface with adjacent habitat. Removing development from the existing lot will place it into the open space context and reserved landscape to the W/NW.

CONCLUSION & OPINION

As crucial values of the Preserve and Monterey County, native wildlife and plantlife will substantially benefit from a trade of the existing Lot 5 for the proposed alternative Lot 5.

Trading the existing SLP No. 5 Homeland, which has the greater ecological value, for the proposed site will result in improved natural values of the immediate and surrounding landscape and wild communities. Conversely, the *status quo* would result in a higher likelihood of reducing protected values. A given example is about better protecting threatened species that occupy the offsite Hidden Pond and the balance of its tributary to Potrero Creek.

As the ecologist who made the first resource assessments of the affected area in the early 1990s, and now the ecologist who has made this review for the County's assessment and determination, it is my professional opinion that the proposed trade of Homeland sites – existing and proposed – unquestionably will benefit sensitive biological resources and should be approved.

Signed,

JB Froke, PhD / *01 Dec 2007*

EXHIBIT E-3

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

March 14, 2008

Mr. Charles Tate
c/o Mr. Michael Canning
Sotheby's International Realty
200 Clocktower Place, Suite 100D
Carmel, California 93923

Subject: Recommendations for Building Site and Driveway
Proposed Single Family Residence
Lot 5, Santa Lucia Preserve
Carmel Valley, California

References:

1. *"PRELIMINARY Geological and Geotechnical Synopsis*
Homeland Envelope Lot 5
Santa Lucia Preserve
Carmel, California"
Report by Haro, Kasunich, and Associates, Watsonville, CA
and Nolan Associates, Santa Cruz, CA
Report dated 8 February 2007

2. *"PRELIMINARY GEOLOGIC HAZARDS INVESTIGATION*
Proposed Single Family Residence Site
Lot 5, Santa Lucia Preserve
Monterey County, California"
Report by Nolan Associates, Santa Cruz, CA
Report dated June 22, 2007

Dear Mr. Tate:

At the request of Mr. Michael Canning, we have prepared this letter summarizing our recommendations for an amendment to the proposed building envelope ("homeland" area) and driveway alignment for Lot 5 in the Santa Lucia Preserve. This letter is also intended to help clarify the findings of our earlier geologic and geotechnical evaluations at the site.

Our previous evaluations of the site, referenced above, indicated that a substantial portion of the presently designated homeland lies within the boundaries of a landslide mass. Our geologic hazards investigation (reference 2) identified an area outside the landslide mass that we considered suitable for residential development with respect to geologic hazards.

Stability of Existing Homeland Area

We identified landslide deposits underlying the homeland area based on subsurface investigations, including exploratory borings and backhoe excavated test pits, in conjunction with surface geologic and geomorphologic mapping. The subject landslide has previously been identified by Cleary Consultants (1994), Grice Engineering (1998), and Gausch and Associates (1998). Our work consisted primarily of defining the depth and areal limits of the landslide deposits.

The stability of these landslide deposits is unknown. Cleary Consultants (1994) identified a large area of nested landslide deposits in their geologic study for the vesting tentative map for the Preserve, which they named the Animus Landslide Complex. They prepared a reconnaissance level slope stability analysis of the landslide complex as a whole, but did not perform local stability analysis for individual landslide masses. The Cleary Consultants (1994) study indicated that the landslide mass, as a whole, is stable. However, the Cleary report also recommended that site specific studies be performed to support development of individual lots.

Based on our more detailed, site-specific studies performed for Lot 5, the boundaries of the Animus Landslide Complex extend farther uphill than those identified in the Cleary (1994) report. In addition, the landslide mass consists of several different, individual landslides, ostensible of different ages, any one of which could be unstable at the present time. Consequently, the stability of the Lot 5 homeland has not, in our opinion, been adequately demonstrated.

The 8 February 2007 report (reference 1, above) discussed two means of evaluating the landslide under the homeland: 1) a quantitative slope stability analysis or 2) an age of movement study of the landslide mass. Theoretically, a quantitative slope stability analysis could be undertaken for the landslide mass as depicted on the geologic map and cross sections. However, as noted above, this landslide is compound and includes individual masses that are of different apparent ages; therefore, such an analysis would require a daunting three-dimensional analysis potentially reaching in hundreds of thousand of dollars in cost. The enormity of the landslide area extends beyond the limits of Lot 5 all the way to the valley below, encompassing several other properties; incurring right of way issues for exploration. It is our judgment that a competent slope stability analysis sufficient to demonstrate the stability (or instability) of the site is untenable for a landslide mass of this size and complexity.

We can also undertake an age of movement study that may be able to demonstrate the age of most recent movement of the landslide. However, there is a potential this study may not produce conclusive results. In some jurisdictions, the age of a landslide is accepted as a proxy for a stability analysis; that is, if it can be proven that a landslide hasn't moved in tens of thousands of years, it is accepted that the landslide is sufficiently stable to permit development. It should be noted, however, that landslides may become more stable or less stable over time, so that a simple age determination is not the same as a stability determination. An age study is feasible, although it will not be known until the study is complete whether a reliable age can be assigned to the landslide's most recent movement.

We are unable to recommend a building site situated on any portion of the landslide mass

without performing a stability assessment of the landslide, which is conventionally unattainable. Based on the following bulleted evidence, another approach to developing on a landslide is to assume that the landslide is potentially unstable from a geomorphic point of view and to institute some mitigation measures to limit potential damage to the development, should the landslide reactivate.

- Most of the current homeland envelope is mapped as a landslide by four different firms.
- The landslide is situated on dip slope, which is negative for stability.
- The homeland area is situated high on sloping ground, near the head scarp of the landslide slide in a potentially kinetic condition as opposed to the more level ground near the toe of the slide, which would be closer to equilibrium.
- The ground water level is approximately 30 to 60 feet below grade which is negative for stability.
- Cleary's analysis included water levels at more than 160 feet below grade rather than 30 to 60 feet.
- There is a pond on the homeland which is extremely negative for stability for the smaller nested slides.

The Grice Engineering report (1998) has proposed several potential mitigation measures to stabilize the homeland area with respect to landslide movement. However, their mitigations fall short in light of the new, larger geometry of the landslide. In our opinion, the only reliable mitigation of the landslide hazard posed to the homeland area would be replacement of the landslide materials under the homeland with engineered fill. The average depth of landslide materials to be replaced under the homeland is about 60 feet (ranging from 0 to over 100 feet). Because of the need to slope the sides of any excavation no steeper than 1:1 (horizontal to vertical) and the need for the fill supporting the stabilized area to have a finished slope of no more than 2:1 (h:v), the actual area of grading would be on the order of 400 feet wide and 500 feet long, involving removal and replacement of 300,000 to 500,000 cubic yards of soil. We do not consider such a mitigation to be tenable.

It is our opinion that, due to potential instability, development of habitable structures within the current homeland envelope cannot be recommended. Development of habitable structures within the current homeland would place them at an unacceptable level of risk.

Proposed Amendment to the Homeland Area and Driveway Alignment

The June 22, 2007 geologic report provided a geologically suitable building envelope situated away from areas underlain by landslide. The January 23, 2008 letter from the Preserve's design review board has cited view shed and conservation issues as potential reasons for not approving a relocation of the homeland. In view of these potential objections, we are proposing to adjust the boundary of the existing homeland to include a portion of the area approved in the June 22, 2007 geologic report. The proposed area is not directly visible from Rancho San Carlos Road, but is located off of recognized landslide deposits.

We would also propose to partition the homeland into two zones: zone 1 would include the

a relocation of the homeland. In view of these potential objections, we are proposing to adjust the boundary of the existing homeland to include a portion of the area approved in the June 22, 2007 geologic report. The proposed area is not directly visible from Rancho San Carlos Road, but is located off of recognized landslide deposits.

We would also propose to partition the homeland into two zones: zone 1 would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure; Zone 2 would be the remaining portion, situated within the boundaries of recognized landslide, and would be approved only for development of non-habitable structures. Such non-habitable structures would include barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities. The proposed reconfigured homeland, with the designed zones, is depicted on Figure 1.

Because there is some uncertainty in the exact location of the landslide boundary, Zone 1 includes a setback of about 50 feet from the inferred landslide location. With additional geologic investigation, probably combined with specific foundation design requirements, it may be possible to reduce or eliminate that setback. Therefore, we have designated a sub-area in Zone 2 that may be suitable for habitable structures with additional geological/geotechnical investigation. This area is situated between Zone 1 and the mapped landslide boundary and is cross-hatched on Figure 1.

Please let us know if you have any questions regarding this matter.

Sincerely,

Nolan Associates

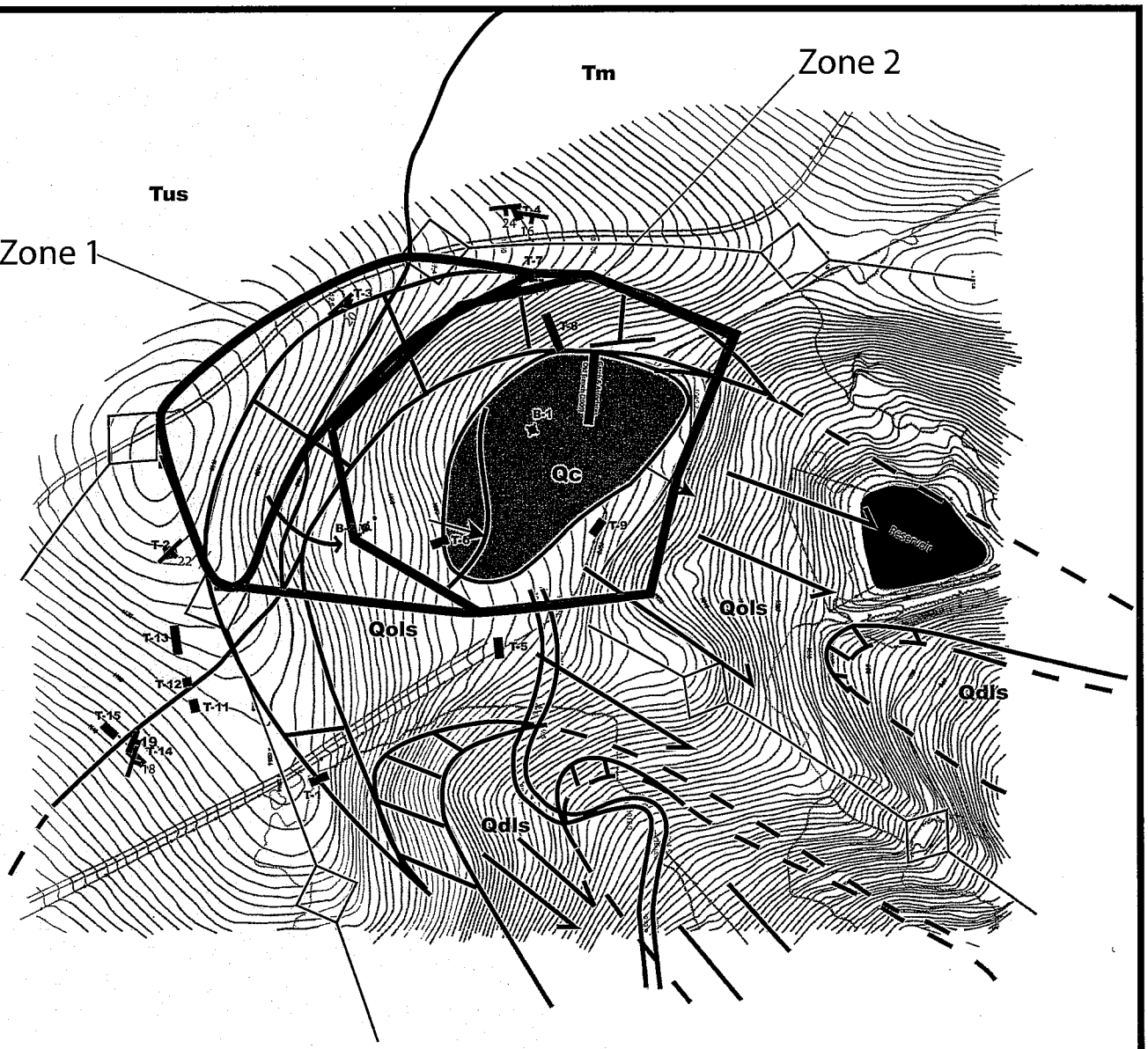
by Jeffrey M. Nolan
Principal Geologist
C.E.G. No. 2247

Haro, Kasunich, and Associates

by Vicki Odello
Senior Engineer
C.E. No. 52651

by John Kasunich
Principal Engineer
G.E. 455

Attachments: Figure 1



BASE MAP: Plate 1, Prepared by Nolan Associates for Preliminary Geologic Investigation for Santa Lucia Preserve Lot 5, dated June 22, 2007.

N

Zone 1 - Habitable Structures

Zone 2 - Non-Habitable Structures only

Existing Homeland Boundary

SCALE 1"=200'

100 0 100 200

SCALE IN FEET

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

Topographic Index Map
Lands of Tate
Santa Lucia Preserve, Lot 5
Carmel, California

FIGURE #
1
JOB #
07026

EXHIBIT F-4

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

DRAFT PRELIMINARY GEOLOGIC HAZARDS INVESTIGATION
Proposed Single Family Residence Site
Lot 5, Santa Lucia Preserve
Monterey County, California

Prepared for:
Mr. Charles Tate

Prepared by:
Nolan Associates
1509 Seabright Ave, Ste A2
Santa Cruz, CA 95062

Job No. 07026
November 29, 2007

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

November 29, 2007 Job. No. 07026

Mr. Charles Tate
c/o Mr. Michael Canning
Sothby's International Realty
200 Clocktower Place, Suite 100D
Carmel, California 93923

Subject: Preliminary Geologic Hazards Investigation

Project: Proposed Single Family Residence
Lot 5, Santa Lucia Preserve
Monterey County, California
APN 238-021-004

Dear Mr. Tate:

We have completed our preliminary geologic hazards investigation at the above-referenced project site. Our investigation addressed potential geologic hazards associated with permitting and developing a single family residence on the property.

Geologic hazards that may affect the project within its design life include landsliding and seismic shaking. We have made engineering geologic recommendations to mitigate risks associated with these hazards to the level of "ordinary" risk. Ordinary risk is defined in Appendix B. Your project engineers and designers should carefully review and incorporate our conclusions and recommendations where prudent.

Our recommendations are intended principally to lower the risks posed to habitable structures by geologic hazards. This report in no way implies that the subject property will not be subject to earthquake shaking, landsliding, faulting or other acts of nature. Such events could damage the property and affect the property's value or its viability in ways other than damage to habitable structures. We have not attempted to investigate or mitigate all such risks and we do not warrant the project against them. We would be happy to discuss such risks with you, at your request.

We have attempted to mitigate recognized risks to the proposed development to the level of "ordinary" risk. Ordinary risk is defined qualitatively as the level of risk that is typical for comparable existing residential structures in similar settings. Ordinary risk is not meant to imply that the project cannot or will not be damaged during an earthquake, landslide event, or other natural calamity, but that damage in most cases will be repairable. Please review the discussion

of ordinary risks in Appendix B. If you determine that an ordinary level of risk is not acceptable, we would be happy to develop mitigation recommendations to provide a lower level of risk.

If you have any questions or comments regarding this report, please contact us at your earliest convenience.

Sincerely,
Nolan Associates

Jeffrey M. Nolan
Principal Geologist
C.E.G. #2247

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NOTE: This report should not be considered complete without all listed figures and plates.

PRELIMINARY GEOLOGIC HAZARDS INVESTIGATION
Proposed Single Family Residence Site
Lot 5, Santa Lucia Preserve
Monterey County, California
APN 238-021-004

INTRODUCTION

This report presents the results of our preliminary geologic hazards investigation for an existing parcel situated in the Santa Lucia Preserve, approximately 2 miles southeast of the city of Carmel, in central Monterey County, California. The Project site is located on Lot 5 of the Santa Lucia Preserve, Assessor's Parcel Number (APN) 239-021-004, and is accessed from Rancho San Carlo Road. Figure 1, Topographic Index Map, depicts the location and topographic setting of the subject property.

The project site is currently undeveloped. At the time the subject parcel was created, a "homeland" area was designated for future residential development of the site. Our investigation included two phases: phase 1 was a detailed investigation of geologic conditions at the designated homeland site; phase 2 consisted of a geologic hazards evaluation for an alternate proposed homeland. The results of our phase 1 studies were summarized in a letter report prepared jointly by Nolan Associates and Haro, Kasunich, and Associates, the project geotechnical engineers (report dated 2/8/07). This report summarizes the results of both phases and makes recommendations for residential development of the site.

PURPOSE OF INVESTIGATION

The purpose of our investigation was to provide an assessment of risks posed to residential development of the project site by geologic hazards. Where specific geologic hazards were found to present greater than ordinary risks to the Project, we developed recommendations to reduce these risks to ordinary levels.

SCOPE OF INVESTIGATION

Work performed during this study included:

1. A review of geologic literature and maps pertinent to the project site and previous geologic or geotechnical reports for the subject parcel, including:

    * Geological and Geotechnical Investigation, Vesting Tentative Map Submittal, Rancho San Carlos, Monterey, California for Rancho San Carlos Partnership dated February 1994 by Cleary Consultants

    * Lot No. 5 – Information Summary for Residential Wastewater Disposal System by Cleary Consultants produced in 1994

* Geotechnical Soils Report with Development Recommendations for the Tate Residence Site at Santa Lucia Preserve, Rancho San Carlos, Monterey County, California dated February 2001 by Grice Engineering, Inc

* Geophysical Exploration at the Tate Residence Site, Santa Lucia Preserve, Carmel, California dated September 2000 by Gasch and Associates.

2. Examination and interpretation of stereo pair vertical aerial photographs, to assess the recent geologic history of the project site.

3. Field reconnaissance and geologic mapping around the project site.

4. Advancing and logging of nine backhoe test pits in November 2006. Advancing and logging of six backhoe test pits in October 2007

5. Advancing and logging of two exploratory borings in November 2006

6. Preparation of a geologic base map and geologic cross sections for the Project site, to be used for the geologic evaluation.

7. Analysis and interpretation of the geologic data and preparation of this report.

REGIONAL GEOLOGY AND SEISMICITY

Figure 2, Regional Geologic Map, presents a generalized depiction of the Project's geologic setting. The Project site is located on the northwest flank of the Santa Lucia Mountains. These mountains form part of the Salinian tectonic block, within the Coast Ranges Geomorphic Province of California. The Salinian block is characterized by a basement of Paleozoic to Mesozoic age granitic and metamorphic rocks, overlain by Cenozoic marine and terrestrial sedimentary rocks. The San Andreas, San Gregorio and Nacimiento fault systems form the boundaries of the Salinian block, separating it from Franciscan basement rocks to the northeast and southwest (Figure 2).

Throughout the later portion of the Cenozoic Era, the Coast Ranges Province has been dominated by tectonic forces associated with lateral motion between the North American and Pacific lithospheric plates, producing long, northwest-trending, strike-slip faults with horizontal displacements measured in tens to hundreds of miles. Accompanying the horizontal movement of the plates have been episodes of compressive stress, reflected by repeated episodes of uplift, deformation, erosion and deposition of sedimentary rocks. This tectonic deformation is evidenced by steeply dipping folds, overturned bedding, faulting, jointing, and fracturing within the northwest-oriented mountain chains that parallel the faults. The adjacent valleys are filled with hundreds of feet of sediment eroded from these ranges. Along the coast, the on-going tectonic activity is most evident in the formation of a series of uplifted marine terraces.

The Quaternary history of the Santa Lucia Mountains includes abundant evidence for landslide related processes as an important factor shaping the evolution of the modern landscape. Historical accounts and geologic studies of the San Andreas earthquake of 1906 and the Loma Prieta earthquake of 1989 indicate that there is a strong correlation between major earthquakes and resulting landslides, earth flows and ground cracking. The occurrence of landsliding is also strongly controlled by the amount of seasonal rainfall the area receives.

California's broad system of strike-slip faulting has a long and complex history. The region as a whole is subject to on-going seismicity. The most severe historic earthquakes to affect the subject property are the 1906 San Francisco Earthquake and the 1989 Loma Prieta Earthquake, both of which had hypocenters on the San Andreas Fault, with Richter magnitudes of about 8.3 and 7.1, respectively. Other historic earthquakes of note include two magnitude 6.1 earthquakes in Monterey Bay in 1926 and a host of smaller or more distant events.

Figure 3, Regional Seismicity Map, shows Quaternary-active faults (Bryant, 2005) and historic earthquake hypocenters (CGS, 2000) near the Project site. Locally, the San Andreas, San Gregorio and Monterey Bay-Tularcitos fault systems are known to be active, as evidenced by historical earthquakes along these faults and offset Holocene stratigraphy. These faults present the greatest seismic hazard to the Project.

SITE GEOLOGIC SETTING

This section describes geologic conditions around the Project site. Plate 1, Geologic Site Map, and Plate 2, Geologic Cross Sections, depict relevant geologic information collected for the Project site. Figure 4, Local Geologic Map, shows generalized geologic and structural information for the site vicinity (Clark et al., 1997). Because the geologic map shown on Figure 4 was compiled at a relatively small scale (1:24,000), many smaller geologic features observed during this property-scale investigation are not depicted. Plates 3 and 4 depict logs of our exploratory test pits.

Topography

The Project site lies along the crest of a rounded, southeast-northwest trending ridge line separating the Potrero Canyon and San Jose Creek drainages (Figure 1). The northeastern ridge flank slopes moderately down to the canyon bottom with many spur ridges and gently sloping benches creating a diverse topography (Figure 1). The southwestern ridge flank drops steeply off to San Jose Creek, with only a single, broad topographic bench occurring about half way down the side of the ridge. Elevation on the parcel ranges from 900 to 1150 feet above mean sea level.

The presently designated homeland area is reached by a switch-backed driveway from Rancho San Carlos Road (Plate 1). This driveway occupies a small, steep swale on the ridge flank. The homeland occupies a broad, gently sloping area immediately to the northeast of the ridge crest

(Plate 1). Slope gradients along the driveway are in the range of 20% to 26%. Slope gradients within the homeland vary from about 5% to 30%.

For the Phase 2 portion of our investigation, we looked at an area southwest of the present homeland, also situated immediately northeast of the ridge crest ("Recommended Geologically Feasible Building Envelope", Plate 1). Slopes in this area were generally gentle to moderate, ranging from0 to 50 percent gradient.

The project site is vegetated chiefly by grasses and scrub brush.

Previous Grading

Minor cuts and fills a few feet high exist on the subject property related to grading for the access road. We do not anticipate any hazards associated with grading for the driveway. The driveway showed abundant cracking and partial collapse of portion of the asphalt paving. The cause of the cracking has been evaluated by the project geotechnical engineer, Haro, Kasunich, and Associates. There is a small reservoir situated north of the existing homeland (Plate 1). This reservoir was formed from an earthen embankment. We did not evaluate the construction or suitability of the reservoir embankment as part of this study.

Drainage

There are no well defined, incised drainage channels on the portions of the property intended for development. Drainage at the site appears to be predominantly via sheetflow towards natural swales. The existing homeland area drains towards the reservoir located north of the homeland. Minor gullying and erosion was noted in road cuts south of the existing homeland, along Rancho San Carlos Road.

Surface and Ground Water

We did not observe any standing or flowing surface water on the site during our investigation. Groundwater was encountered in our exploratory borings at depths of 60 and 32 feet in borings 1 and 2, respectively (located on Plate 1).

Earth Materials

Unnamed Sandstone (Tus)

An unnamed marine sandstone underlies the southern and southwestern portion of the study area (Dibblee (1999); Clark et al. (1997); Tus, Plate 1). This sandstone is described as dark-yellowish-orange, very thick bedded, coarse- to fine-grained, angular to subangular, poorly to well-sorted arkosic sandstone, with common very thick cobble-boulder conglomerate beds in the lower part and rare siltstone beds in the upper part. During our field studies, we noted a fine- to medium grained, well sorted arkosic sandstone, with cobble conglomerate layers in the lower part of the formation, cropping out southwest of the subject property. The sandstone appears to

rest directly on granitic rock (Plate 1 and Plate 2, Cross Section C-C') and is considered to be of middle Miocene age.

Monterey Formation (Tm)

The Monterey Formation (unit Tm on Plate 1) conformably overlies the unnamed sandstone on the site. It consists of a lower unit, as much as 30 m thick, that is typically thin-bedded, yellowish-brown semi-siliceous mudstone with interbedded siltstone. The lower unit is overlain by a thick section of thin-bedded and laminated, light brown to white porcelanite with very thin clay partings between the porcelanite beds and with thin interbeds of waxy-yellow to brown chert. We observed primarily the mudstone and siltstone layers in our test pits and borings on the site. The basal contact with the sandstone appeared to be interfingering, with layers of mudstone increasing in thickness and frequency progressively upward through the section.

Colluvial/Alluvial Deposits (Qc/al)

Undifferentiated colluvial deposits overly sandstone and mudstone bedrock on hillsides across the subject property. These deposits consist of interlayered, unlithified sandy silt and clay ranging from less than one foot thick to tens of feet thick.. This unit was exposed in test pits and in erosional gullies on the southwest side of the ridgecrest (Plate 1).

Colluvium is formed from downslope creep of weathered bedrock materials, mixed with organic material from surface vegetation. Because it creeps slowly downslope, colluvium tends to accumulate at the base of steep slopes and in hollows on steeper slopes, while it thins over ridge crests. Colluvium occurs almost ubiquitously across the site. However, it is depicted on the geologic map only where its thickness is expected to exceed 5 feet, otherwise its map depiction would obscure all other site geology. We noted two areas of significant colluvium accumulation, as shown on Plate 1.

Artificial Fill (af)

Minor amounts of artificial fill were deposited on the property as a result of grading for the existing driveway. These deposits are assumed to consist of mixed native earth materials derived onsite by grading for the road. They are localized and do not impact the proposed project. Because it occurs in small, localized bodies, we did not map the distribution of the fill for this project.

Local Geologic Structure and Faulting

Bedding within the unnamed sandstone and the Monterey Formation is conformable and dips uniformly to the northeast, towards Potrero Canyon at gentle to moderate angles (Figure 4 and Plate 1). The faults nearest the subject property include the Potrero and San Francisquito faults and the San Jose Thrust, situated one-half to three-quarters of a mile to the southeast of the property (Figure 4). The activity of these faults is unknown. No faults are known to cross the

subject property, and we did not observe any evidence for faulting on the property in our site investigation.

Locally, the San Andreas, Monterey Bay-Tularcitos and San Gregorio faults have been designated as being active seismic sources (Peterson et al., 1996; Cao et al., 2003). Table 1 contains a list of active faults near the subject property. The distances and directions shown on Table 1 were measured using the most recent available database of Quaternary-active faults (Bryant, 2005). See Figure 3 for locations of these faults, and Appendix A for discussions of each fault.

TABLE 1: Distances and Directions to Local Faults

Fault	Distance from site (km)	Distance from site (miles)	Direction from site
San Andreas	48	30	northeast
Monterey Bay-Tularcitos Fault Zone	6.0	3.7	southwest
San Gregorio	9.5	5.9	southwest

Landsliding

The Local Geologic Map (Figure 4) depicts several large landslides taking in most of the subject property. These landslides were recognized by Cleary Consultants (1994) when they prepared their geologic and geotechnical evaluation for the vesting tentative map stage of the Santa Lucia Preserve. The Cleary Consultants (1994) report grouped the large landslides together into two large landslide complexes: one to the north, termed the Animus Landslide Complex; and one to the east, called the Potrero Landslide Complex (Figure 5).

The landslide complexes are each composed of a number of large landslides with smaller, possibly younger, slides nested within them. Cleary Consultants (1994) performed a quantitative stability analysis of a major landslide within each of the landslide complexes, and formed an opinion based on the results that each of the analyzed landslides was stable under expected climatic and seismic conditions. They considered the large landslides to be very old. Cleary Consultants (1994) did note that, although the stability of the major landslides appeared satisfactory, it was possible for portions of them to be less stable than the large landslide as a whole. In general, it is common to observe secondary, or "nested" landslides occurring within the mass of older, larger landslides.

Development on each proposed lot in the Santa Lucia Preserve is restricted to a "homeland" area that complies with planning guidelines. The present homeland area location on lot 5 was based, in part, on the results of the geologic and geotechnical evaluation by Cleary Consultants. The homeland is situated within the headscarp of the Animus Landslide Complex (Figure 5). The

headscarp is the area immediately above a landslide deposit, and is the area from which the materials making up the slide mass moved.

The Cleary Consultants report proposed that additional, site-specific geologic and geotechnical studies be performed to support specific development plans on each lot. Detailed site investigations were performed for the presently designated homeland on lot 5 by Gasch and Associates (2000) and Grice Engineering (2001). Their reports identified landsliding under a portion of the present homeland. As a result of their studies, Nolan Associates was engaged to provide more detail regarding landsliding hazard on the parcel.

Our geologic map for the site, depicted on Plate 1, shows the distribution of landsliding on the subject site. Geologic relationships are depicted in cross sectional view on Plate 2. The results of our test trench and drilling program indicate that the Animus landslide complex extends farther uphill than previously thought and it underlies most of the Lot 5 homeland area (Plate 1). Our site investigation included excavation and logging of numerous test pits around the homeland to help delineate the boundary between intact bedrock and bedrock that is disturbed due to downslope movement as part of a landslide block. Logs of our test pits are included on Plates 3 and 4. The difference between intact and disturbed bedrock was readily apparent in the test pits, and it allowed us to define landslide boundaries with more precision than had been possible previously.

In addition to test pitting, we reviewed stereographic aerial photos of the site vicinity, performed geologic field mapping of the subject property and adjacent areas, and advanced two exploratory borings. The logs of the borings are provided in Appendix A. The landslides depicted on Plate 1 are a result of the combined mapping, test pitting, exploratory boring, and aerial photo review.

The homeland area encompasses a large, gently sloping area near the crest of the ridge. The results of our exploratory borings indicate that this area is underlain by a deposit of colluvium and fractured bedrock up to 70 feet thick. We interpret this accumulation of colluvium to have occurred within a closed depression, or graben, created by downslope movement of the landslide mass. This colluvium filled depression is associated with surficial evidence of landsliding consisting of a well-defined headscarp and well defined lateral margins.

An area of landsliding was identified to the south and east of the homeland that is not associated with any well-defined surface expression of landsliding. However, the test pits defined a distinct boundary between intact bedrock and disturbed bedrock. The intact bedrock is identified by undistorted primary bedding and bedding attitudes parallel to bedding attitudes in intact rock nearby. The disturbed bedrock showed evidence of shearing and offset of primary stratigraphy, accompanied by disaggregation and deep weathering of the rock and random or semi-random rotation of bedding planes. We have identified this area of landsliding as incipient landsliding (Qils Plate 1), that is, it has moved downslope in landslide fashion, but the movement has not been of sufficient magnitude to create clearly observable land forms (surface features) commonly associated with landslides.

Landslide Mechanism

The Monterey Formation consist of fissile shale that easily separates into thin layers. Seams of clay are observed at intervals in the section separating layers, providing ready detachment surfaces for landslide movement when the layers are inclined in a downhill direction, known as a dip slope condition. Because of its makeup, the Monterey Formation is prone to dip slope failures, and such failures are commonly observed throughout the northern Santa Lucia Mountains.

The Animus Landslide Complex is clearly a dip slope failure, although of complex geometry. The landslide movement direction is almost perfectly down the dip of bedding (Plate 1). A study of five large dip slope failures on the northern side of the Carmel Valley by the present author indicates that dip slope failures occur in the Monterey where the dip of bedding is in the range of 17 to 32 degrees and the slope direction is within about 30 degrees of the dip direction. The subject site closely fits these criteria.

One of the features of a dip slope failure is that large blocks of rock may remain relatively intact as they slide down slope, since movement is largely parallel to bedding planes (layering). Cleary Consultants (1994) noted that there were large blocks of relatively coherent (intact) rock within the Animus Landslide Complex, separated by shear zones. We noted relatively intact appearing outcrops of Monterey Formation in road cuts along Rancho San Carlos Road that were clearly within the boundaries of the landslide complex.

During landslide movement, the landslide mass can segment, giving rise to the appearance of multiple landslide masses or "blocks" within the landslide mass as a whole. As well, landslide movement breaks up the rock, weakening it, and promoting later formation of smaller landslides from within the original landslide mass. These two processes are considered to be responsible for the nested series of landslides identified at the Animus Landslide complex.

Age of Landsliding

We did not determine any analytical ages for landsliding on the site through such means as radiocarbon dating. We have, however, made qualitative inferences about the ages of the various landslide masses based on two lines of evidence. Landslide age can be inferred from the degree to which the landside is expressed at the ground surface. Landslides are associated with distinctive land forms that diminish over time due to erosion. Therefore, very well defined landslides are considered to be relatively recent, while those whose surface is expression is muted are considered to be older. This type of analysis provides a relative age only.

A second qualitative means of evaluating landslide age is based on pedogenic soil profile development. The rock at the ground surface weathers into soil over time due to wetting/drying cycles, temperature variation, plant and animal activity, and other factors. The minerals near the surface break down into clays, which get washed down through the soil during rainstorms. These processes produce distinctive characteristics in the upper several feet of soil that get stronger over time. This process takes thousands or tens of thousands of years to develop.

Therefore, the degree of soil development can be used to provide an approximate age for the ground surface where the soil is forming.

In general, we found very well developed soils in our test pits, indicating that much of the landslide activity took place many thousands of years ago. However, some of the smaller landslides on the property (which were not sites of test pits) have well defined surface expression, indicating a relatively young age compared to the more muted, larger landslides within the Animus Landslide Complex. These landslides are considered to be dormant and are denoted Qdls on Plate 1. The larger, less well defined landslides are considered to be "old" landslides. Dormant landslides are considered to have a greater potential for future movement than old landslides. Two of the dormant landslides underlie the existing driveway serving the presently designated homeland.

It should be noted that age is not necessarily an indication of stability or instability. The stability of an existing landslide may increase or decrease over time, depending on how it is modified by physical processes such as erosion, climate change, or human activity. In addition, we have observed the reactivation of many landslides thought to be inactive due to strong earthquake shaking. Small or moderate movements during earthquakes can occur without leaving much visible evidence in the landscape.

GEOLOGIC HAZARDS

The following section summarizes geologic hazards with respect to development of a single family residence at the subject property. We have included discussions of seismic shaking and slope stability. Other geologic hazards are not likely to affect the project site. We have included recommendations for mitigating geologic hazards to an "ordinary" level in a following section. An "ordinary"risk level from geologic hazards is defined in Appendix B.

Seismic Shaking

Seismic shaking at the subject site will be intense during the next major earthquake along one of the local fault systems. It is important that our recommendations regarding seismic shaking be considered in the design for habitable structures and site improvements.

We have calculated deterministic seismic shaking estimates for the site. A deterministic assessment considers only the effects of the largest ground motion that can be expected at a given site, regardless of how likely it is to occur within the typical 50-year design life of a single family residence.

For comparison, we have included the results of a statewide probabilistic assessment, applied to the project site. A probabilistic seismic analysis differs from a deterministic analysis in that it evaluates the probability for shaking of a certain intensity to occur at a particular site within a given time frame (50 years for residential development).

The intensity of seismic ground shaking is typically characterized as the peak acceleration that a point on the ground experiences during the shaking. Acceleration is measured as a percentage of the acceleration of the Earth's gravity, g.

Deterministic Seismic Shaking Analysis

For the purpose of evaluating deterministic peak ground accelerations for the site, we have considered possible earthquakes on the San Gregorio and Monterey Bay-Tularcitos faults. These faults are both considered to be seismic sources by the State of California (Peterson et al., 1996; Cao et al., 2003). While other faults in this region may be active, their potential contribution to seismic hazards at the site is overshadowed by these larger and/or closer faults.

TABLE 2: Faults, Earthquakes and Deterministic Seismic Shaking Data

Fault	$M_{W(MAX)}$	Geometry	PGA (g)	PGA + ∂ (g)	Duration (sec)	RI (years)	Seismic Source Type
Monterey Bay-Tularcitos	7.3	Strike-slip	0.51	0.75	18	2,841	B
San Gregorio	7.0	Strike-slip	0.38	0.58	14	400	B

$M_{W(MAX)}$: Moment magnitude of maximum credible earthquake. San Andreas 1906 rupture after Peterson et al., 1996; Zayante-Vergeles after Cao et al., 2003.
Rupture Geometry and Recurrence Interval after Peterson et al., 1996.
PGA: Mean peak horizontal ground acceleration. After Sadigh et al., 1997.
PGA + ∂: Mean peak horizontal ground acceleration plus one dispersion. After Sadigh et al., 1997.
Duration: Abrahamson and Silva, 1996
Seismic Source Type from CBSC, 2002

Table 2 shows estimated magnitudes ($M_{W(MAX)}$) and rupture geometries for the maximum expected earthquakes on each of the above-listed fault systems (Cao et al., 2003). Estimated mean peak (PGA) and mean peak plus one dispersion (PGA + ∂) horizontal ground acceleration values for the site are calculated using these magnitudes and geometries, and the fault distances shown in Table 1. These accelerations are based on an attenuation relationship derived from the analysis of historical earthquakes (Sadigh et al., 1997), and are for sites founded on soft rock. We caution that the listed values are approximations, based on theoretical curves fit to a relatively small data set: actual measured accelerations may be larger. The PGA + ∂ value is a conservative design value that is intended to compensate for the uncertainty in the attenuation relationship.

The duration of strong seismic shaking shown in Table 2 is calculated from a magnitude-dependent formula proposed by Abrahamson and Silva (1996). Expected recurrence interval (RI; Peterson et al., 1996) is the expected time between major earthquakes on each fault. The UBC Seismic Source Type (CBSC, 2000; Cao et al., 2003) is also listed.

In summary, Monterey Bay-Tularcitos fault zone, passing within 6 km of the site, will generate the largest expected earthquake ground motion at the site. The characteristic earthquake on this

fault ($M_{W(MAX)}$ = 7.3) is predicted to generate an expected ground motion of 0.51g. Duration of strong seismic shaking from this event will be about 18 seconds. The recurrence interval for this earthquake is relatively long (RI = 2,841 years); therefore, the probability of this earthquake occurring within the project lifespan is relatively low.

The maximum event on the San Gregorio Fault ($M_{W(MAX)}$ = 7.9; RI = 400 years) is more likely to occur within the project lifespan. Expected ground motion at the site from this event is 0.38g.

Probabilistic Seismic Values

The U.S. Geological Survey and the California Geological Survey together produced a probabilistic seismic hazards assessment for the state of California (Petersen et al., 1996; Cao et al., 2003). The study used a model that explicitly considered faults that are capable of generating moment magnitude 6.5 or greater earthquakes. The San Francisco Bay Area, Monterey Bay Area and Santa Cruz Mountains are traversed by numerous minor faults and splays, many of which may be capable of generating smaller earthquakes: to account for these seismic sources, a background magnitude of 6.5 was applied in the probabilistic model.

Probabilistic ground motions based on that study for the proposed building sites are listed in Table 3. These estimated ground motions assume a soil profile type Sc (soft rock), per the 2001 California Building Code (CBSC, 2002). We caution that these values are not based on a site-specific probabilistic assessment, which is normally required for critical structures such as schools and hospitals.

TABLE 3: Probabilistic Ground Motions (10% probability of being exceeded in 50 years)

Ground Motion Measure	Acceleration in Soft Rock (g)
Peak Ground Acceleration (g)	0.107
Spectral Acceleration (g) at 0.2 sec.	0.239
Spectral Acceleration (g) at 1.0 sec.	0.152

The ground motion intensities shown in Table 3 are the seismic shaking intensities that have a 10% chance of being exceeded in 50 years. The "10% in 50 year" ground motion cited in Table 3 is considered appropriate for a residential structure. The difference in predicted acceleration values between the deterministic and probabilistic estimates shows that large accelerations, in the range of 0.4 to 0.5 g are possible, but not highly probable at the subject site in a 50-year time frame. In our opinion, the results of the deterministic assessment, as described in the preceding section, are a better basis for site design.

Seismic shaking intensity can be affected by site specific conditions, such as soil type and thickness or topography. Consequently, the seismic shaking parameters given in this section should be adjusted for site specific conditions, as necessary, before being used in design. In

particular, the subject site is situated in close proximity to a ridge crest. Ridge crests can be subject to more intense seismic shaking due to the effects of topographic amplification.

Landsliding

The geologic evaluation of landslide hazard is based on a qualitative assessment of geologic conditions around the proposed building site. Among the factors considered are the distribution, ages, and types of landsliding in the area surrounding the proposed development site; the steepness of slopes; and the occurrence of geologic conditions in the area that would favor landslide formation, such as weak bedrock or bedding planes oriented parallel to slope. In this type of assessment, often the best indicator of landslide hazard is the past behavior of slopes in the area. Consequently, the type and location of past landsliding is heavily relied upon as an indicator of possible future occurrence of landsliding. It should be pointed out, however, that there is always some potential for landsliding in areas of steep slopes or mountainous terrain, regardless of past conditions, and anyone building in such areas must be prepared to assume some risk due to landsliding. No amount of qualitative or quantitative analysis can be expected to identify every factor that might cause landsliding to occur.

Potential landslide hazards on the site may be divided into three categories: 1) reactivation of existing landslides, 2) development of new landslides, and 3) movement of the incipient landslide observed on the site. These failure types will be discussed separately, below.

Reactivation of Existing Landslides

We recognized at least two generations of landsliding on the site, identified as older landslides and dormant landslides (Plate 1). We noted very old soil profiles in our trenches, suggesting that most of the movement of the landslides where the test pits were excavated took place many thousands of years ago. However, this information cannot be used to preclude more recent *incremental* movement of the landslide masses (movements measured in inches or a few feet). Such movements could offset the soils at specific locations, without disturbing the soils to the extent that the disturbance would be readily visible in a few test pits. Incremental landslide movements tend to occur due to strong earthquake shaking.

The older landslide most directly underlying the present homeland area is moderately expressed at the ground surface. The headscarp of the landslide is well-defined, and the top of the landslide block has a clearly demarcated colluvial basin. This degree of geomorphic definition is compatible with periodic incremental movement, although no evidence for such movement was noted in our test pits.

We consider the dormant landslides observed in the area of the existing driveway to be more prone to future movement than the older landslides. However, the stability of these landslides cannot be readily determined without preparing quantitative slope stability analyses, a process that is well beyond the scope of the present evaluation.

Development of New Landslides

Any area of steep to moderately steep slopes may be the site of landsliding. Based on our inspection of stereographic aerial photos dating back to the 1940's, it appears that the dormant landslide located on the slope below the reservoir (Plate 1) formed during the 1950's, indicating that formation of new landslides is possible at this site. New landslides are most likely to form on the steepest slopes in areas where previous landsliding has weakened the rock.

Incipient Landslide Movement

The incipient landslide observed on the site has not previously been mapped as a landslide. It has little surface expression indicative of landsliding, and its existence and location is based primarily on test pit exposures. Although we are of the opinion that the recognized landslide is incipient, we recognize that it is also possible that this landslide is so old that surface expression of the landslide had been almost totally removed by natural landscape processes. In either case, we are of the opinion that the likelihood of renewed movement of this landslide is lower than for either older or dormant landsliding elsewhere at the subject site.

CONCLUSIONS

Based on our investigation, we are of the opinion that a substantial portion of the homeland area on lot 5 and the access driveway are underlain by landslide deposits. The Cleary Consultants Report (1994) presented a slope stability analysis indicating that the Animus Landslide Complex is grossly stable. Their analysis, however, is not sufficient to demonstrate that all portions of the landslide complex are stable, particularly portions that have be identified as younger (dormant) landslides. The relatively shallow ground water table found in our exploratory borings is a significant adverse factor that was not included in the Cleary Consultants analysis.

We should make it clear that we have not identified any evidence suggesting that these landslides are unstable. However, under the standards of professional practice, it is not considered acceptable to site a residential structure on a landslide without significant indication that the landslide is stable and is unlikely to move within the term of a standard building lifetime (50 to 100 years). Our previous letter report for this project (Nolan Associates and Haro, Kasunich, and Associates letter of 2/8/2007) outlined the prospective costs and difficulties of preparing a stability analysis for the site landslides.

As an alternative to preparing a slope stability evaluation for the existing homeland, Nolan Associates undertook phase 2 studies to evaluate other portions of the property for landslide hazard. Based on these studies, we have designated a proposed building envelope on lot 5 that is free of older landsliding (Plate 1). This building envelope is set back at least 25 feet from recognized older landsliding and is situated off areas identified as incipient landslide. As well, it excludes areas that are considered likely sites for formation of new landslides. Provided that residential structures are situated within this building envelope, we consider to risks to the project due to landsliding to be "ordinary", as defined in Appendix B.

We have also identified an alternate alignment for the driveway serving the newly proposed building envelope. The existing driveway has been severely damaged by soil creep and it would have to be reconstructed to be used for site access. Such reconstruction will have to include modification of underlying soils to mitigate the soil creep. Such reconstruction would not mitigation the potential for landsliding under the driveway. Consequently, we recommend to relocate the driveway to the alternate alignment depicted on Plate 1.

The Grice Engineering report for the subject parcel did not include a slope stability analysis for the site; it assumed that the landslide had the potential to move and it proposed a list of alternative means for protecting a home from such movement. The mitigation recommendations included:

1. Abandon the homeland for development
2. Remove and replace about 20 feet of soil
3. Stabilize the slide plane with deep piers – approximately 30 feet deep
4. Remove soil and replace with approximately 7 feet of lightweight Geofoam material (expanded polystyrene) to offset proposed new loading.
5. Install 50-foot deep de-watering wells.

Based on our additional site investigations, it is clear that the landslide under the homeland is deeper and more complex than that recognized by Grice Engineering. In our opinion, the engineering mitigation recommendations provided by Grice Engineering would have to be greatly extended in depth to achieve the desired result. Such measures would not be economically feasible. This opinion is provided in more detail in our 2/8/07 letter.

We have proposed an alternative building site as the most economically and technically viable alternative for the project. We can, at your request, prepare a slope stability analysis for landslides underlying the present homeland area. However, we do not recommend performing such studies unless no other project alternatives exist.

Our recommendations are intended principally to lower the risks posed to habitable structures by geologic hazards. This report in no way implies that the subject property will not be subject to earthquake shaking, landsliding, faulting or other acts of nature. Such events could damage the property and affect the property's value or its viability in ways other than damage to habitable structures. We have not attempted to investigate or mitigate all such risks and we do not warrant the project against them. We would be happy to discuss such risks with you, at your request.

RECOMMENDATIONS

1. We recommend that all structures intended for human habitation, and any structurally attached appurtenances, be placed within the areas designated as "Geologically Feasible Building Envelope" on Plate 1. The designation of this building site is based partially on the scope of the geologic investigation and is not meant to imply that this is the only geologically acceptable site on the property. We reserve the right to amend or relocate

building envelopes where investigation shows such changes are consistent with sound geologic judgement.

2. We recommend that access to the Geologically Feasible Building Envelope be developed in the area designed as "Alternate Access Corridor". In our opinion, it is acceptable to develop the access road across areas of incipient landsliding.

3. We recommend that any foundations constructed over the non-engineered backfill in our trenches be designed to span the fill without damage. Alternatively, the fill may be removed and re-compacted or foundations deepened to derive support from underlying earth materials. Engineering specifications for the re-compaction of the backfill should be provided by the project geotechnical engineer.

4. We recommend that the project engineers consider the findings of our seismic shaking analysis in project design. Given the potential for strong seismic shaking to occur during the design life span of the proposed structures, all structures should be designed to the most current standards of the California Building Code, at a minimum.

5. We recommend that all drainage from improved surfaces be captured by closed pipe or lined ditches and dispersed on site in such a way as to maintain the pre-development runoff patterns as much as possible. At no time should any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for control of erosion, prevention of water ponding against foundations, and preservation of slope stability.

6. This report is issued with the understanding that it is the duty and responsibility of the owner, or of his representative or agent, to ensure that this report is provided to and brought to the attention the architect, engineer(s) and general contractor for the project, and that all recommendations made in the report are incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out the report's recommendations in the field.

7. We request the privilege of reviewing final project plans for conformance with our recommendations. If we are not permitted such a review, we cannot be held responsible for misinterpretation or omission of our recommendations.

8. If any unexpected variations in soil conditions, or if any unanticipated geologic conditions are encountered during construction, or if the proposed project will differ from that discussed or illustrated in this report, Nolan Associates should be notified so that supplemental recommendations can be given. Our conclusions and recommendations shall not be considered valid unless the changes are reviewed and the conclusions in this report are modified or verified in writing by a representative of Nolan Associates.

9. We recommend that home owners implement the simple safety procedures outlined by Peter Yanev in his book, *Peace of Mind in Earthquake Country*. This book contains a

wealth of information regarding earthquakes, seismic design and precautions that the individual home owner can take to reduce the potential for loss of life, injury and property damage.

INVESTIGATIVE LIMITATIONS

1. The conclusions and recommendations noted in this report are based on probability and in no way imply the site will not possibly be subjected to ground failure or seismic shaking so intense that structures will be severely damaged or destroyed. The report does suggest that implementation of the recommendations contained within will reduce the risks posed by geologic hazards.

2. This report is issued with the understanding that it is the duty and responsibility of the owner or his representative or agent to ensure that the recommendations contained in this report are brought to the attention of the architect and engineer for the project, incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

3. If any unexpected variations in soil conditions or if any undesirable conditions are encountered during construction or if the proposed construction will differ from that planned at the present time, Nolan Associates should be notified so that supplemental recommendations can be given.

4. The findings of this report are valid as of the present date. However, changes in the conditions of the property and its environs can occur with the passage of time, whether they be due to natural processes of the works of man. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, the conclusions and recommendations contained in this report cannot be considered valid beyond a period of two years from the date of this report without review by a representative of this firm.

5. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering geology principles and practices. No warranty, expressed or implied, including any implied warranty of merchantability or fitness for the purpose is made or intended in connection with our services or by the proposal for consulting or other services, or by the furnishing of oral or written reports or findings.

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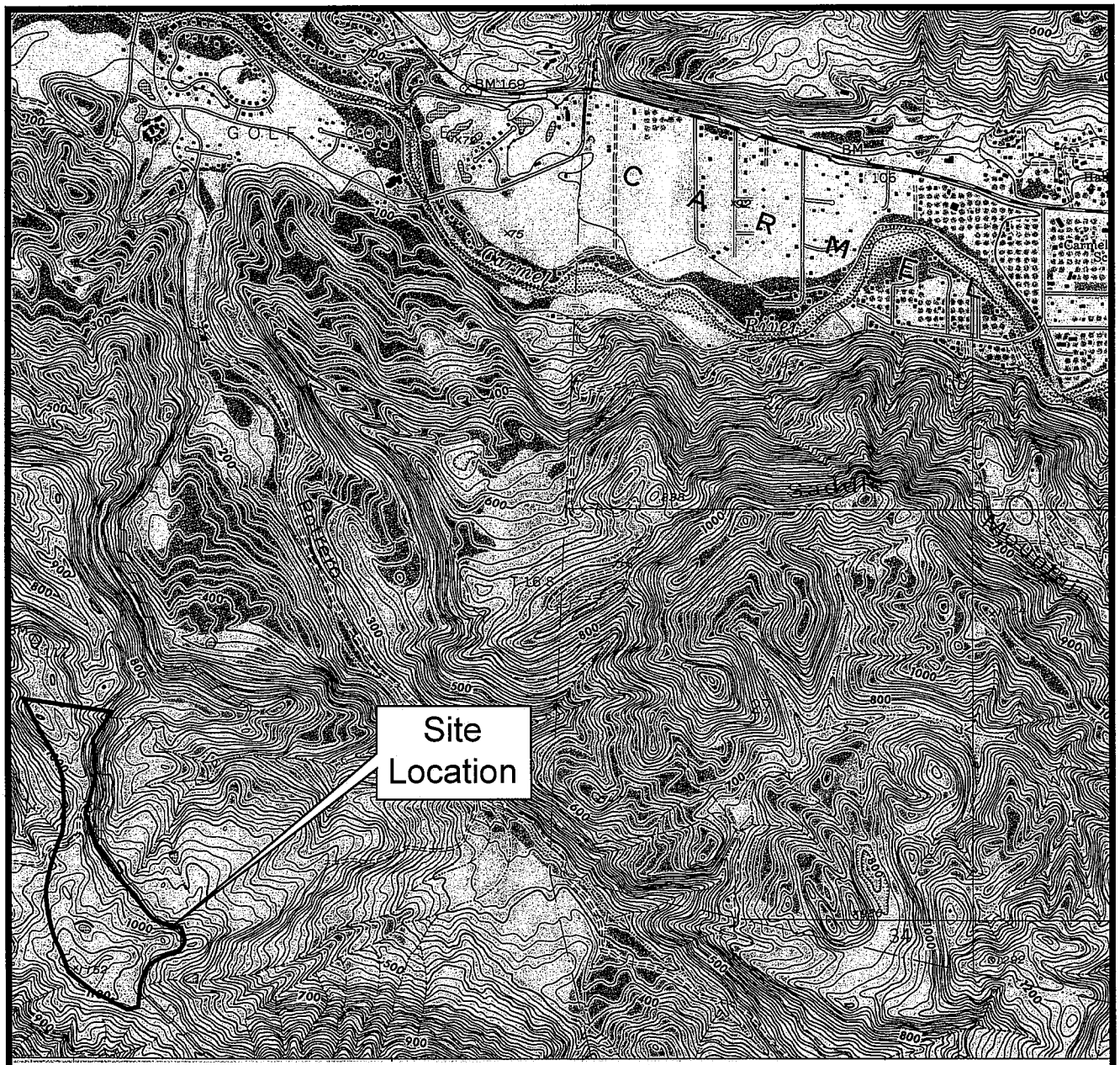
FIGURES



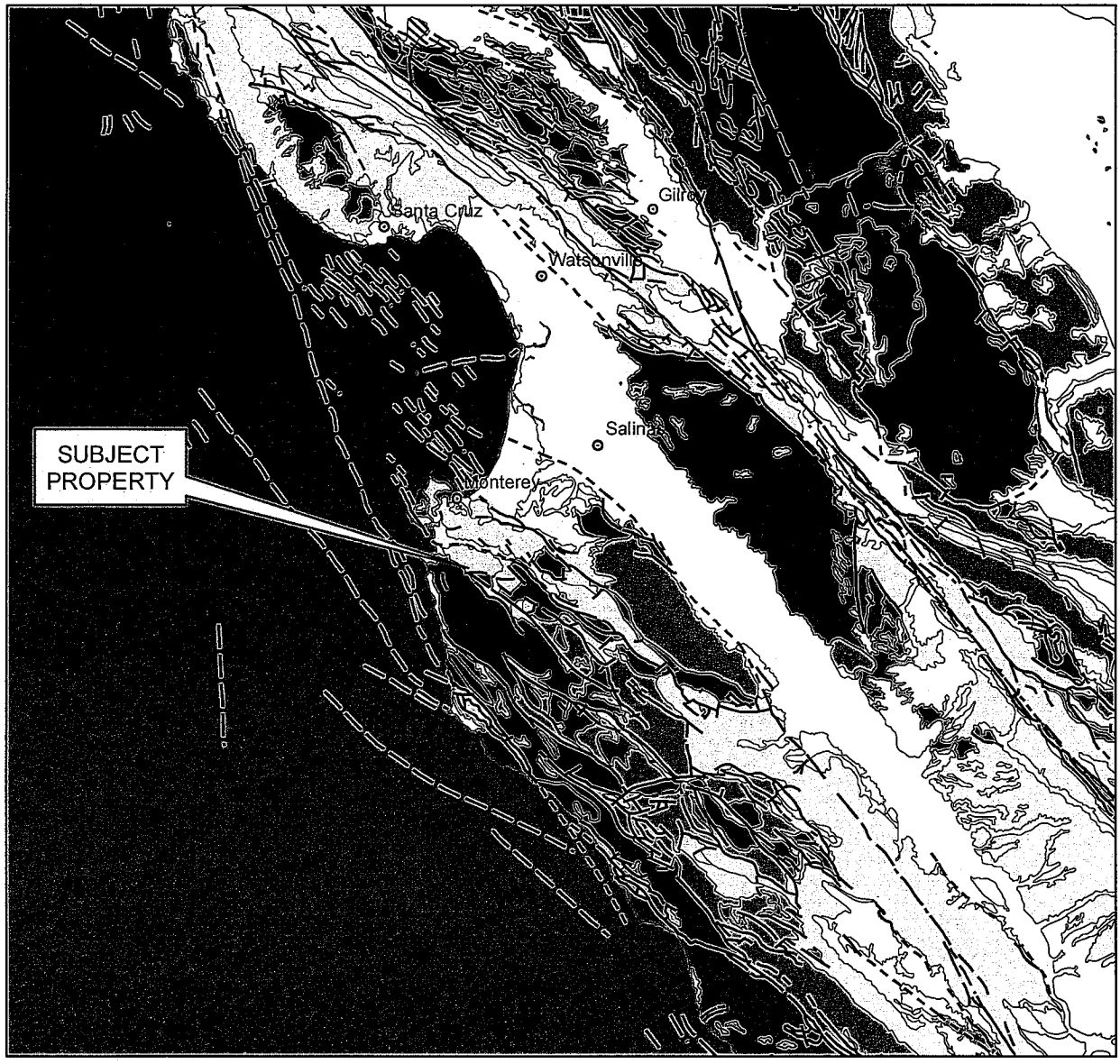
BASE MAP: Mount Carmel and Seaside 7.5' Quadrangles, United States Geological Survey, 1983

- Engineering Geology
- Hydrogeology
- GIS Services

NOLAN ASSOCIATES

Topographic Index Map
Lands of Tate
Santa Lucia Preserve, Lot 5
Carmel, California

FIGURE #
1
JOB #
07026



Reference: Jennings, 1977, Geologic Map of California
Digital Data: Saucedo et al., 2000, GIS Data for the Geologic Map of California

Legend

geology_units_simplified_merged

Geology Units

- Quaternary Deposits
- Quaternary Volcanics
- Tertiary Sedimentary Rocks
- Tertiary Volcanic Rocks
- Pre-Tertiary Sedimentary Rocks
- Pre-Tertiary Volcanic Rocks
- Pre-Tertiary Metamorphic Rocks
- Granitic Intrusive Rocks
- Franciscan Complex
- Ultramafic Rocks
- Pre-Cambrian Metamorphic and Igneous Rocks

Symbols

- contact
- fault, certain
- fault, approximate
- fault, concealed or inferred

3

SCALE 1:1,000,000

10 0 10 20 Miles

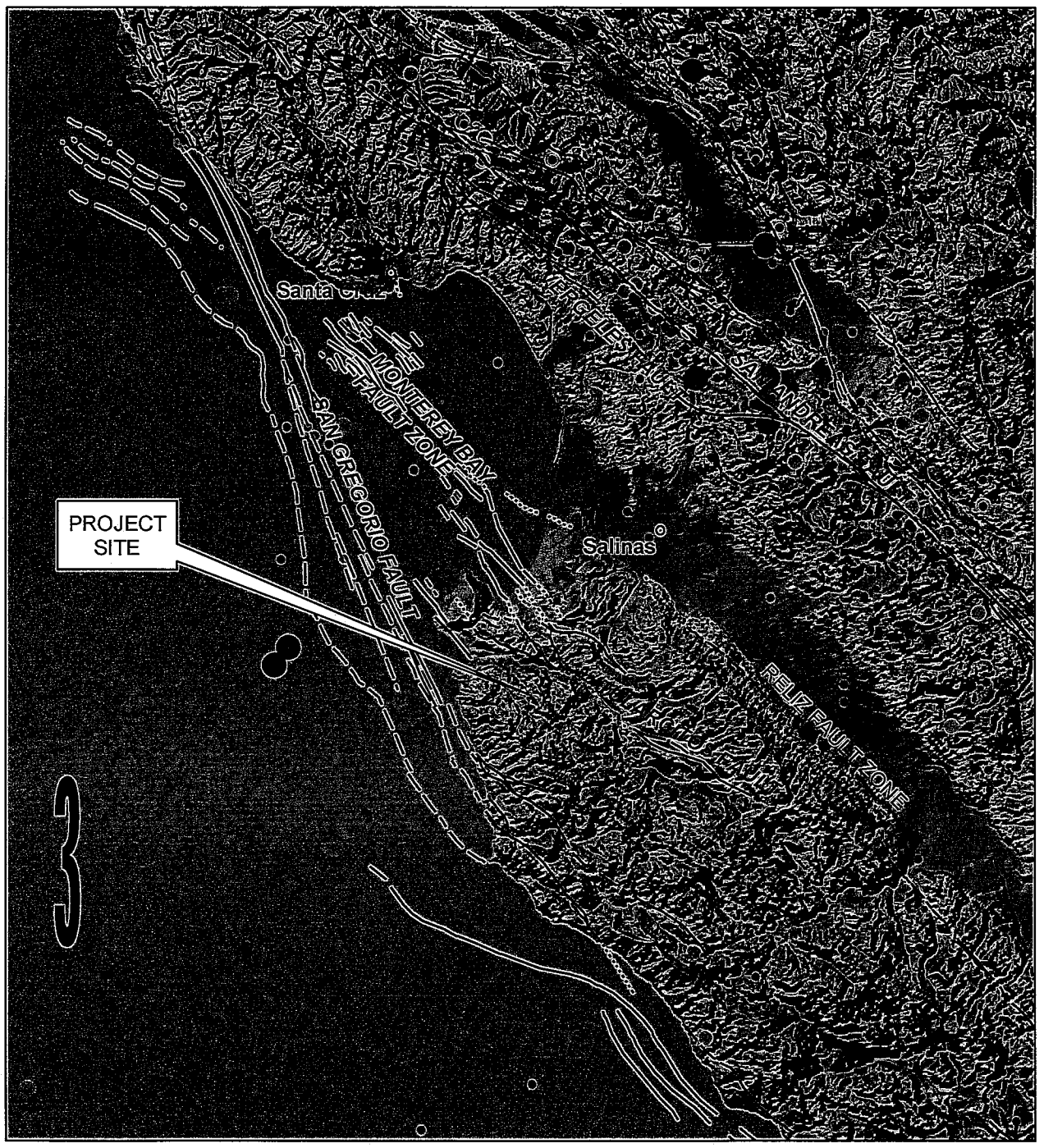
• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

Regional Geologic Map
Lands of Tate
Santa Lucia Preserve, Lot 5, Carmel
APN 239-021-004

FIGURE # **2**

JOB # **06046**



Quaternary Faults

- fault, certain
- fault, approximate
- fault, concealed

Earthquake Magnitude

- 4.0 to 4.99
- 5.0 to 5.99
- 6.0 to 6.99
- 7.0 +

References: CGS, 2000; Bryant, 2005

SCALE 1:750,000

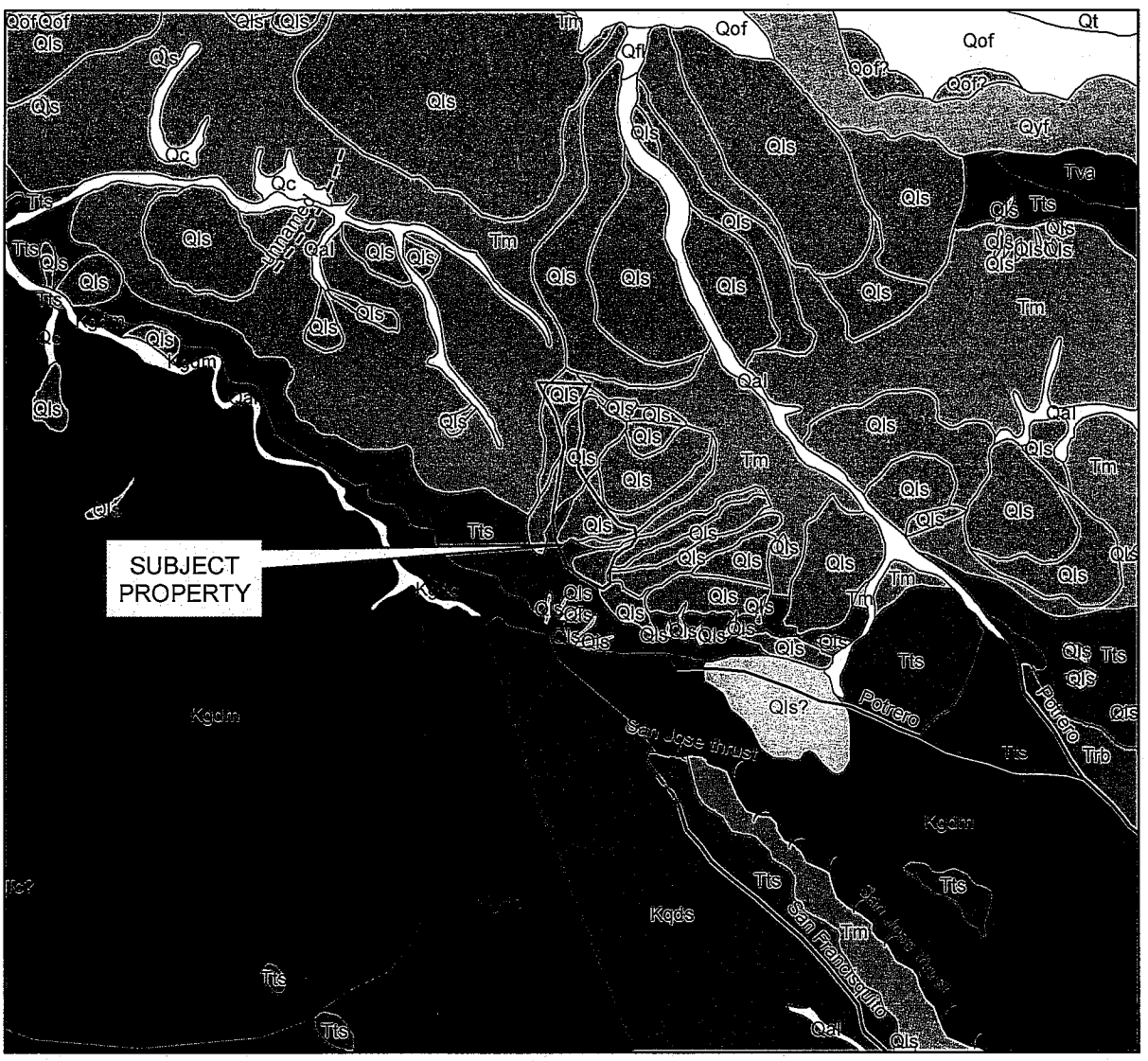
10 0 10 20 Miles

- Engineering Geology
- Hydrogeology
- GIS Services

NOLAN ASSOCIATES

Regional Seismicity Map
Lands of Tate
Santa Lucia Preserve, Lot 5, Carmel
APN 239-021-004

FIGURE **3**
JOB NO. **06046**



Geology: Clark and others, 2001; Cleary Consultants, 1994; Rosenburg, 1993; Ross, 1976
Digital Data: Rosenburg, 2001

Legend

- fault-certain
- fault-inferred
- thrust fault-certain
- thrust fault-inferred
- Qyf: Younger Flood Plain Deposits
- Qc: Colluvium
- Qal: Alluvium
- Qls?: Landslide (Questionable)
- Qls: Landslide Deposit
- Qof: Older Flood Plain Deposits
- Qof?: Older Flood Plain (Questionable)
- Tm: Monterey Formation
- Trb: Red Bed of Robinson Canyon
- Tts: Marine Sandstone (Unnamed)
- Tva: Andesitic Flows
- Tc?: Carmelo Formation (Questionable)
- Tc: Carmelo Formation
- Kqds: Granodiorite
- Kgdm: Quartz Monzonite
- Kgdc: Granite

3

SCALE 1:40,000

0 1,250 2,500 5,000 7,500 10,000 Feet

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

Local Geologic Map
Lands of Tate
Santa Lucia Preserve, Lot 5, Carmel,
APN 239-021-004

FIGURE # **4**

JOB # **07026**

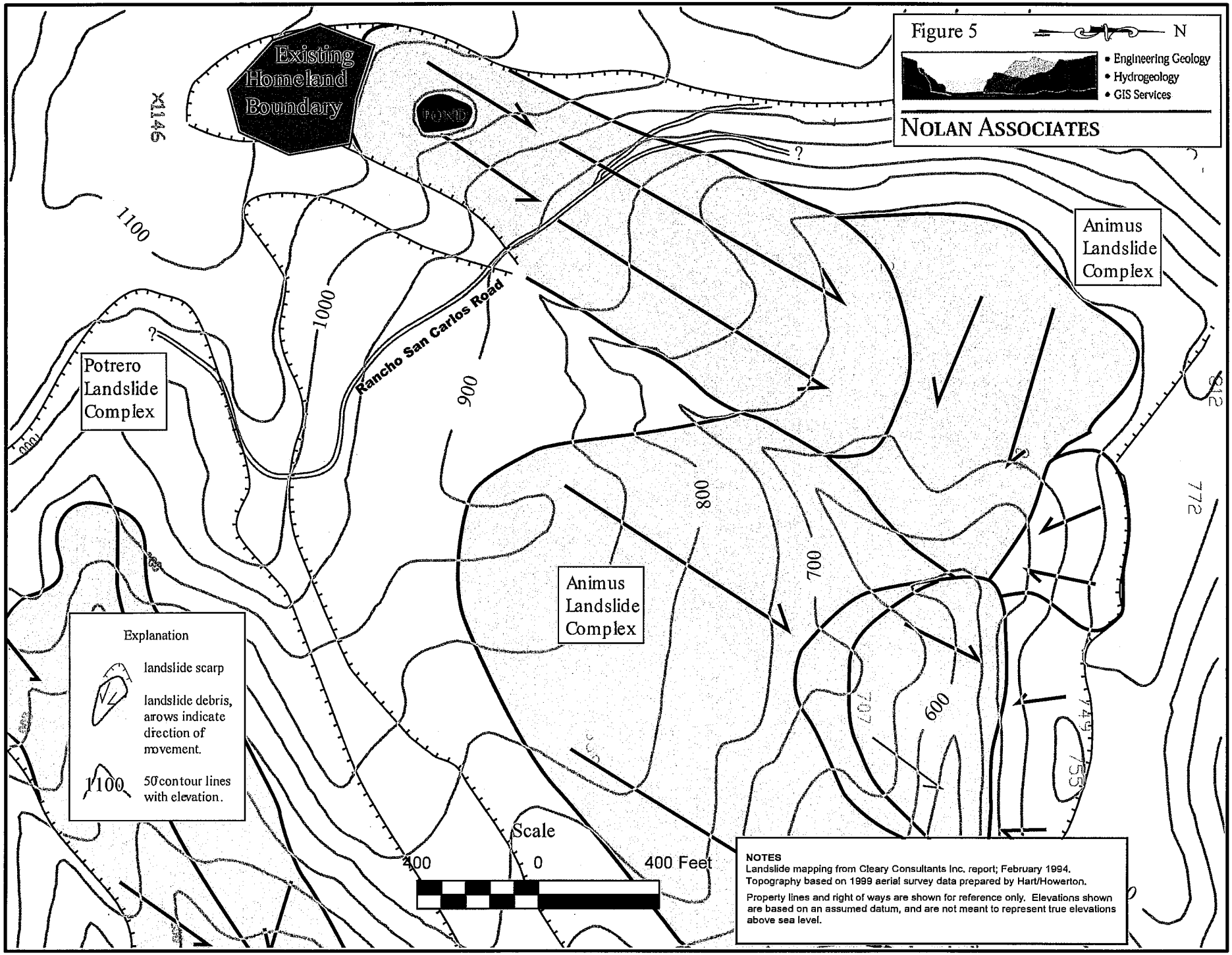


Figure 5
N
• Engineering Geology
• Hydrogeology
• GIS Services
NOLAN ASSOCIATES
Existing Homeland Boundary
POND
X146
1100
1000
900
800
700
600
Rancho San Carlos Road
Potrero Landslide Complex
Animus Landslide Complex
Animus Landslide Complex
Explanation
landslide scarp
landslide debris, arows indicate drection of movement.
1100
50' contour lines with elevation.
Scale
400
0
400 Feet
NOTES
Landslide mapping from Cleary Consultants Inc. report; February 1994.
Topography based on 1999 aerial survey data prepared by Hart/Howerton.
Property lines and right of ways are shown for reference only. Elevations shown are based on an assumed datum, and are not meant to represent true elevations above sea level.

APPENDIX A: FAULTS OF SIGNIFICANCE IN THE SITE REGION

San Gregorio Fault Zone

The San Gregorio fault, as mapped by Greene (1977), and Weber et al. (1995) skirts the coastline of Santa Cruz County northward from Monterey Bay, and trends onshore at Point Año Nuevo. Northward from Año Nuevo, it passes offshore again, to connect with the San Andreas fault near Bolinas. Southward from Monterey Bay, it may trend onshore north of Big Sur (Greene, 1977), to connect with the Palo Colorado fault, or continue southward through Point Sur to connect with the Hosgri fault in south-central California. Based on these two proposed correlations, the San Gregorio fault zone has a length of at least 100 miles, and possibly as much as 250 miles.

The landward extension of the San Gregorio fault at Point Año Nuevo shows evidence of late Pleistocene (Jennings, 1994) and Holocene displacement (Weber and Cotton, 1981). Although stratigraphic offsets onshore at Point Año Nuevo indicate a history of horizontal and vertical displacements, the San Gregorio is a primarily a right-lateral strike-slip fault. Dickinson et al. (2005) have demonstrated 156 km of right lateral offset on the fault since its initiation in Miocene time.

In addition to stratigraphic evidence for Holocene activity, the historical seismicity in the region is partially attributed to the San Gregorio fault. Due to inaccuracies of epicenter locations, even the magnitude 6+ earthquakes of 1926, tentatively assigned to the Monterey Bay fault zone, may have actually occurred on the San Gregorio fault (Greene, 1977).

The WGONCEP (1996) has divided the San Gregorio fault into the "San Gregorio" and "San Gregorio, Sur Region" segments. The segmentation boundary is located west of the Monterey Bay, where the fault appears to have a right step-over. The San Gregorio fault has been assigned a slip rate that results in a M_w 7.3 earthquake with a recurrence interval of 400 years. This is based on the preliminary results of a paleoseismic investigation at Seal Cove by Lettis and Associates (see WGONCEP, 1996), and on regional mapping by Weber et al. (1995). The Sur Region segment has been assigned a slip rate that results in a M_w 7.0 earthquake with an effective recurrence interval of 400 years). The Sur Region earthquake was derived from an assumed slip rate similar to that of the Hosgri fault.

Monterey Bay-Tularcitos Fault Zone

The Monterey Bay-Tularcitos fault zone is 6 to 9 miles wide, about 25 miles long, and consists of many en échelon faults identified during shipboard seismic reflection surveys (Greene, 1977). The fault zone trends northwest-southeast and intersects the coast in the vicinity of Seaside and Ford Ord. At this point, several onshore fault traces have been tentatively correlated with offshore traces in the heart of the Monterey Bay-Tularcitos fault zone (Greene, 1977; Clark et al., 1974; Burkland and Associates, 1975). These onshore faults are, from southwest to northeast, the Tularcitos-Navy, Berwick Canyon, Chupines, Seaside, and Ord Terrace faults. Only the larger of these faults, the Tularcitos-Navy and Chupines, are shown on Figure 4. It must be emphasized that these correlations between onshore and offshore portions of the Monterey Bay-Tularcitos fault zone are only tentative; for example, no concrete geologic

evidence for connecting the Navy and Tularcitos faults under the Carmel Valley alluvium has been observed, nor has a direct connection between these two faults and any offshore trace been found.

Outcrop evidence indicates a variety of strike-slip and dip-slip movement associated with onshore and offshore traces. Earthquake studies suggest the Monterey Bay-Tularcitos fault zone is predominantly right-lateral, strike-slip in character (Greene, 1977). Stratigraphically, both offshore and onshore fault traces in this zone have displaced Quaternary beds and, therefore, are considered potentially active (Jennings, 1994). One offshore trace, which aligns with the trend of the Navy fault, has displaced Holocene beds and is therefore active by definition Greene, 1977).

Seismically, the Monterey Bay-Tularcitos fault zone may be historically active. The largest historical earthquake *tentatively* located in the Monterey Bay-Tularcitos fault zone are two events, estimated at 6.2 on the Richter Scale, in October 1926 (Greene, 1977). Because of possible inaccuracies in locating the epicenter of these earthquakes, it is possible that they actually occurred on the nearby San Gregorio fault zone (Greene, 1977).

Another earthquake in April 1890 might be attributed to the Monterey Bay-Tularcitos fault zone (Burkland and Associates, 1975); this earthquake had an estimated Modified Mercalli Intensity of VII (Table 1) for Monterey County on a whole.

The WGONCEP (1996) has assigned an earthquake of M_w 7.1 with an effective recurrence interval of 2,600 years to the Monterey Bay-Tularcitos fault zone, based on Holocene offshore offsets. Petersen et al. (1996) have a similar earthquake magnitude, but for a recurrence interval of 2,841 years. Their earthquake is based on a composite slip rate of 0.5 millimeters per year (after Rosenberg and Clark, 1994)

TABLE A1: Modified Mercalli Intensity Scale

The modified Mercalli scale measures the intensity of ground shaking as determined from observations of an earthquake's effect on people, structures, and the Earth's surface. This scale assigns to an earthquake event a Roman numeral from I to XII as follows:

I	Not felt by people, except rarely under especially favorable circumstances.
II	Felt indoors only by persons at rest, especially on upper floors. Some hanging objects may swing.
III	Felt indoors by several. Hanging objects may swing slightly. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV	Felt indoors by many, outdoors by few. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing automobiles rock. Windows, dishes, doors rattle. Wooden walls and frame may creak.
V	Felt indoors and outdoors by nearly everyone; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset; some dishes and glassware broken. Doors swing; shutters, pictures move. Pendulum clocks stop, start, change rate. Swaying of tall trees and poles sometimes noticed.
VI	Felt by all. Damage slight. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks and books fall off shelves; pictures off walls. Furniture moved or overturned. Weak plaster and masonry cracked.
VII	Difficult to stand. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary buildings; considerable in badly designed or poorly built buildings. Noticed by drivers of automobiles. Hanging objects quiver. Furniture broken. Weak chimneys broken. Damage to masonry; fall of plaster, loose bricks, stones, tiles, and unbraced parapets. Small slides and caving in along sand or gravel banks. Large bells ring.
VIII	People frightened. Damage slight in specially designed structures; considerable in ordinary substantial buildings, partial collapse; great in poorly built structures. Steering of automobiles affected. Damage or partial collapse to some masonry and stucco. Failure of some chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed pilings broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	General panic. Damage considerable in specially designed structures; great in substantial buildings, with some collapse. General damage to foundations; frame structures, if not bolted, shifted off foundations and thrown out of plumb. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground; liquefaction.
X	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Landslides on river banks and steep slopes considerable. Water splashed onto banks of canals, rivers, lakes. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI	Few, if any masonry structures remain standing. Bridges destroyed. Broad fissures in ground; earth slumps and landslides widespread. Underground pipelines completely out of service. Rails bent greatly.
XII	Damage nearly total. Waves seen on ground surfaces. Large rock masses displaced. Lines of sight and level distorted. Objects thrown upward into the air.

APPENDIX B: SCALE OF ACCEPTABLE RISKS FROM GEOLOGIC HAZARDS

Scale of Acceptable Risks from Seismic Geologic Hazards

Level of Acceptable Risk	Kinds of Structure	Extra Project Cost Probably Required to Reduce Risk to an Acceptable Level
Extremely low[1]	Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intake systems, plants manufacturing or storing explosives or toxic materials.	No set percentage (whatever is required for maximum attainable safety).
Slightly higher than under "Extremely low" level.[1]	Structures whose use is critically needed after a disaster: important utility centers; hospitals; fire, police and emergency communication facilities; fire station; and critical transportation elements such as bridges and overpasses; also dams.	5 to 25 percent of project cost.[2]
Lowest possible risk to occupants of the structure.[3]	Structures of high occupancy, or whose use after a disaster would be particularly convenient: schools, churches, theaters, large hotels, and other high rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses.	5 to 15 percent of project cost.[4]
An "ordinary" level of risk to occupants of the structure.[3,5]	The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single family residences.	1 to 2 percent of project cost, in most cases (2 to 10 percent of project cost in a minority of cases).[4]

[1] Failure of a single structure may affect substantial populations.

[2] These additional percentages are based on the assumptions that the base cost is the total cost of the building or other facility when ready for occupancy. In addition, it is assumed that the structure would have been designed and built in accordance with current California practice. Moreover, the estimated additional cost presumes that structures in this acceptable risk category are to embody sufficient safety to remain functional following an earthquake.

[3] Failure of a single structure would affect primarily only the occupants.

[4] These additional percentages are based on the assumption that the base cost is the total cost of the building or facility when ready for occupancy. In addition, it is assumed that the structures would have been designed and built in accordance with current California practice. Moreover the estimated additional cost presumes that structures in this acceptable-risk category are to be sufficiently safe to give reasonable assurance of preventing injury or loss of life during and following an earthquake, but otherwise not necessarily to remain functional.

[5] "Ordinary risk": Resist minor earthquakes without damage: resist moderate earthquakes without structural damage, but with some non-structural damage; resist major earthquakes of the intensity or severity of the strongest experienced in California, without collapse, but with some structural damage as well as non-structural damage. In most structures it is expected that structural damage, even in a major earthquake, could be limited to repairable damage. (Structural Engineers Association of California)

Source: Meeting the Earthquake, Joint Committee on Seismic Safety of the California Legislature, Jan. 1974, p.9.

Scale of Acceptable Risks from Non-Seismic Geologic Hazards

Risk Level	Structure Type	Risk Characteristics
Extremely low risks	Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intake systems, plants manufacturing or storing explosives or toxic materials.	1. Failure affects substantial populations, risk nearly equals nearly zero.
Very low risks	Structures whose use is critically needed after a disaster: important utility centers; hospitals; fire, police and emergency communication facilities; fire station; and critical transportation elements such as bridges and overpasses; also dams.	1. Failure affects substantial populations. Risk slightly higher than 1 above.
Low risks	Structures of high occupancy, or whose use after a disaster would be particularly convenient: schools, churches, theaters, large hotels, and other high rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses.	1. Failure of a single structure would affect primarily only the occupants.
"Ordinary" risks	The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single family residences.	1. Failure only affects owners /occupants of a structure rather than a substantial population. 2. No significant potential for loss of life or serious physical injury. 3. Risk level is similar or comparable to other ordinary risks (including seismic risks) to citizens in a similar setting. 4. No collapse of structures; structural damage limited to repairable damage in most cases. This degree of damage is unlikely as a result of storms with a repeat time of 50 years or less.
Moderate risks	Fences, driveways, non-habitable structures, detached retaining walls, sanitary landfills, recreation areas and open space.	1. Structure is not occupied or occupied infrequently. 2. Low probability of physical injury. 3. Moderate probability of collapse.

[6] Non-seismic geologic hazards include flooding, landslides, erosion, wave runup and sinkhole collapse

BORING LOGS

• Engineering Geology
• Hydrogeology
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NOLAN ASSOCIATES

Job #: 07026
Client: Tate
Location: Santa Lucia Preserve, Lot 5

Driller: Central Coast Drilling

Date: 16 Nov., 2006
Logged by: ELJ

BORING B-1
SHEET 1 OF 2

EXPLANATION L 3-inch O.D. sampler M 2.5-inch O.D. sampler T 2-inch O.D. sampler
Blows are raw field counts for 6 inches of sampler penetration, or distance penetrated for 50 blows. Blow counts are not converted to SPT values.

depth (feet)	sample #	blows	geologic unit	SOIL DESCRIPTION
2	L	7 7 10	Qls	
4				
6	L	8 7 12		mottled orange-brown and greenish-grey clay; moist
8				
10	L	8 14 13		greenish-grey clay with few orange-brown, silty, clay mottles; moist
12				
14				
16	L	7 11 14		greenish-grey clay with diffuse iron oxide staining along fractures
18	M	7 12 13		greenish-grey clay with many small iron oxide filled fractures and micas; some light yellowish-brown lenses of harder siltstone
	T	6 10 12		same
20	L	6 13 17		same
22				
24				
26	L	22 37 50/5"		light greenish-tan, very fine grained sandstone with silt; lenses of dark brown clay and yellow-brown siltstone; dry
28				
30	L	9 14 17		layered light brown, clayey, silt with some darker mottles, and greenish-grey clay with iron oxide stained fractures; some free water
32				
34			Qls	
36	L	6 12 42		greenish-grey silty clay; some small fractures with iron oxides; micas
	M	10 12 16		same, with more iron oxides in fractures
38	T			same

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• Engineering Geology
• Hydrogeology
• GIS Services

Job #: 07026
Client: Tate
Location: Santa Lucia Preserve, Lot 5

Date: 16 Nov., 2006
Logged by: ELJ

Driller: Central Coast Drilling

BORING B-1
SHEET 2 OF 2

EXPLANATION L 3-inch O.D. sampler | M 2.5-inch O.D. sampler | T 2-inch O.D. sampler
Blows are raw field counts for 6 inches of sampler penetration, or distance penetrated for 50 blows. Blow counts are not converted to SPT values.

depth (feet)	sample #	blows	geologic unit	SOIL DESCRIPTION
42	T	10 12 44	Qls	greenish-grey clay with silt; moist; some iron oxides along fractures
44				
46	T	13 25 50/6"		dark brown, saney, silt with clay; some micas; slightly moist; iron oxides in fractures. Some pockets of dark brown to black indurated sandy silt; few grey clay lenses.
48				
50	L	20 25 50/5.5"		angular gravel in dark black silty clay matrix; some mottles of grey clay. Gravel is hard siltstone. polished shear surface in grey clay
52				
54				
56	T	11 19 23		dark brown, clayey, siltstone with varigated iron-oxide weathering; angular, dark brown siltstone gravel
58				
				Water Table @ 59.5
60				
62				
64				
66	T	23 38 43		dark grey, clayey, silt changes to grey sandy silt with grey clay mottling
68				
70				
72				
74				
76	T	50/3.5"		dark brown angular gravels in clayey silt matrix
78			Qls	

NOLAN ASSOCIATES
• Engineering Geology
• Hydrogeology
• GIS Services

Job #: 07026
Client: Tate
Location: Santa Lucia Preserve, Lot 5

Driller: Central Coast Drilling

Date: 16 Nov., 2006
Logged by: ELJ

BORING B-2
SHEET 1 OF 2

EXPLANATION L 3-inch O.D. sampler | M 2.5-inch O.D. sampler | T 2-inch O.D. sampler
Blows are raw field counts for 6 inches of sampler penetration, or distance penetrated for 50 blows. Blow counts are not converted to SPT values.

depth (feet)	sample #	blows	geologic unit	SOIL DESCRIPTION
2	T	9 12 15	Qls	greenish-brown clay with orange-brown, fine to medium grained sand
4				
6	T	8 9 8		light tan sandy silts with clay; varigated iron oxide staining and lenses of light grey clay
8				
10	T	5 8 9		light tan to yellow-tan clayey silt with iron oxides along fractures; moist
12				
14				
16	T	5 7 10		greenish-grey clay; varigated iron oxide stained fractures; wet black clay in voids; shoe has medium to coarse sandstone with clay
18				
20	T	7 12 11		tan, medium to coarse sand with clay; clay lenses and varigated iron oxide fractures
22				
24				
26	T	13 15 16		greenish-grey clayey silt; sharp contact with medium to coarse grained grey sand; varigated iron oxide fractures
28				
30	T	4 4 5		greenish-grey clayey silt; show has wet orange-brown silty clay
32				▼ Water table @ 32.6' (11/29/06)
34				
36	T	17 17 18	Qls	greenish-grey clayey silt with sharp 45 degree contact to thin (4mm) lens of grey, moist, clay. changes to dark brown silt;
38				▼ Water table @ 39' (11/16/06)

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

Job #: 07026
Client: Tate
Location: Santa Lucia Preserve, Lot 5

Driller: Central Coast Drilling

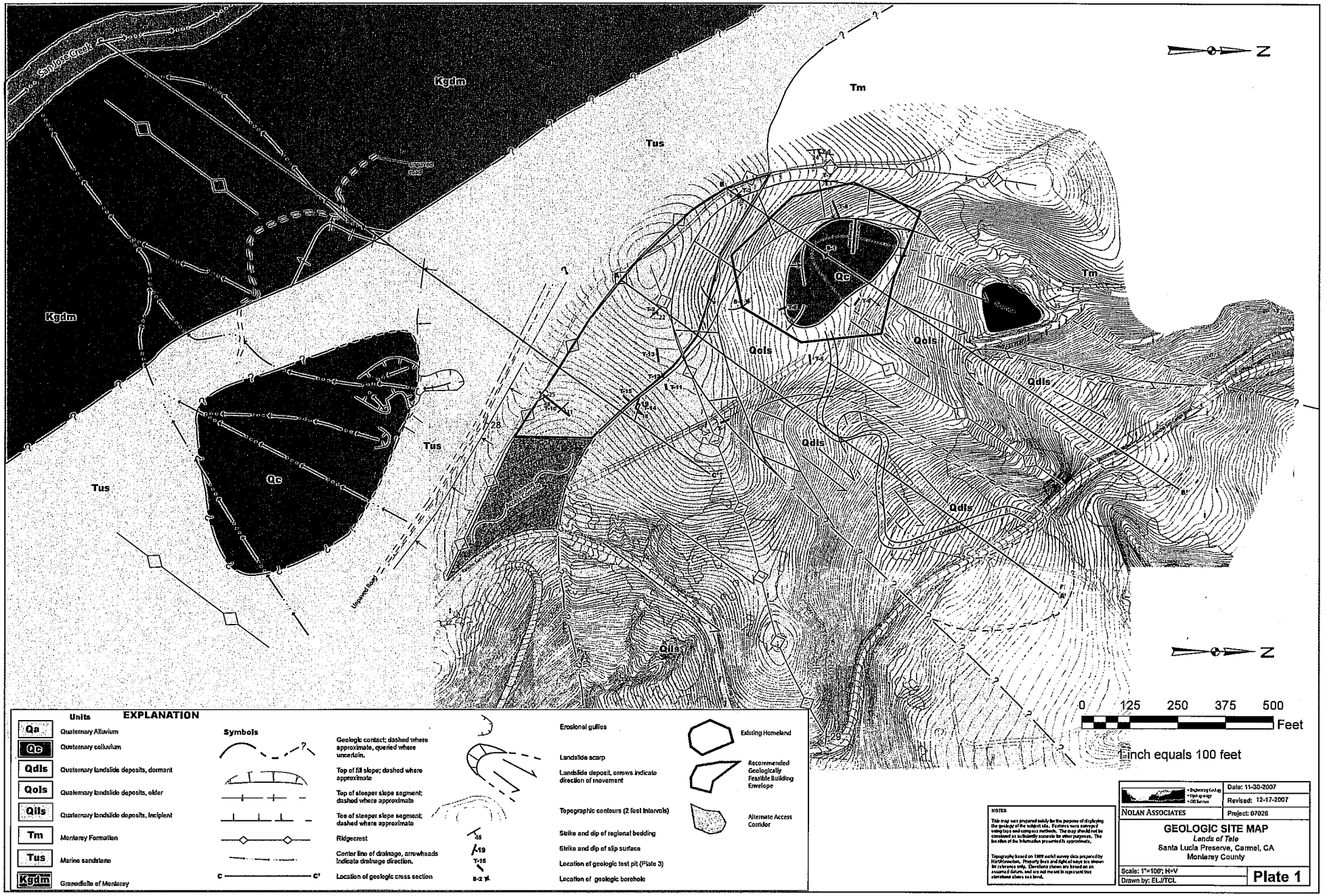
Date: 16 Nov., 2006
Logged (to 50') by: ELJ

Date: 29 Nov., 2006
Logged by: JMN

BORING B-2
SHEET 2 OF 2

EXPLANATION L 3-inch O.D. sampler M 2.5-inch O.D. sampler T 2-inch O.D. sampler
Blows are raw field counts for 6 inches of sampler penetration, or distance penetrated for 50 blows. Blow counts are not converted to SPT values.

depth (feet)	sample #	blows	geologic unit	SOIL DESCRIPTION
42	M	8 9 13		blue-grey clayey, silt with trace sand; layer of dark grey, angular, siltstone gravel in clay
44				
46	M	14 21 27		dark brown, sandy, clayey, silt with blue to white quartz? pebbles; sharp contact with mottled grey clay
48				
50	M	21 50/3"		dark grey sandy silt; damp (1/2 core recovery)
52	T	26 30 40		light to medium grey sanstone; wet; firm to hard; slightly fractured
54				
56	T	30 50/6"		Same
58				
60	T	9 18 50/5"		light to medium grey sandstone with sheared zone; small shiny crystals, does not look like mica, could be calcite; wet; soft to firm clayey shear zones, hard sandstones dipping 30°
62				
64				
66	T	8 12 30		layered sandstone and siltstone, moderately dipping contacts; siltstone shows evidence of shearing, some weathered to plastic zones; material dipping approximately 25°, becomes harder, more intact sandstone in shoe; light blueish-grey sandstone, dark greyish-brown sheared siltstone
68				
70	T	40 50/5"		light to medium bluisht grey sandstone, layered, moderately dipping, little evidence of shearing
72				
74				
76	T	16 24 25		light blueish-grey, fine grained sandstone, dense; firm, with irregular interbeds of siltstone; dark greyish-brown, some wispy probably infilled fractures; inclined surface lined with carbonized plant debris; dipping 222° bedding surface
78		30 30 42		Sample @ 80-81.5' Regularly bedded medium grey siltstone; firm; dense; even textured; brown to dark brown sandy siltstone to silty sandstone; moist and dense; fractues; moderate, irregular parting along bedding; some polished parting surfaces; bedded on 1/2 to 3" intervals dipping 25°
	T			



EXPLANATION

Units		Symbols	
Qa	Quaternary Alluvium		Geologic contact; dashed where approximate, queried where uncertain.
Qc	Quaternary colluvium		Top of fill slope; dashed where approximate
Qdls	Quaternary landslide deposits, dormant		Top of steeper slope segment; dashed where approximate
Qols	Quaternary landslide deposits, older		Toe of steeper slope segment; dashed where approximate
Qils	Quaternary landslide deposits, incipient		Ridgecrest
Tm	Monterey Formation		Center line of drainage, arrowheads indicate drainage direction.
Tus	Marine sandstone	C — C'	Location of geologic cross section
Kgdm	Granodiorite of Monterey		Erosional gullies
			Landslide scarp
			Landslide deposit, arrows indicate direction of movement
			Topographic contours (2 foot intervals)
		38	Strike and dip of regional bedding
		19	Strike and dip of slip surface
		T-15	Location of geologic test pit (Plate 3)
		B-2	Location of geologic borehole
			Existing Homeland
			Recommended Geologically Feasible Building Envelope
			Alternate Access Corridor

NOTES

This map was prepared solely for the purpose of displaying the geology of the subject site. Features were surveys of using tape and compass methods. The map should not be considered as sufficiently accurate for other purposes. The location of the information presented is approximate.

Topography based on 1999 aerial survey data prepared by MarkThomas, Property lines and right of ways are shown for reference only. Elevations shown are based on an assumed datum, and are not meant to represent true elevations above sea level.

Engineering Geology • Hydrogeology • GIS Services	Date: 11-30-2007
	Revised: 12-17-2007
NOLAN ASSOCIATES	Project: 07026

GEOLOGIC SITE MAP

Lands of Tele

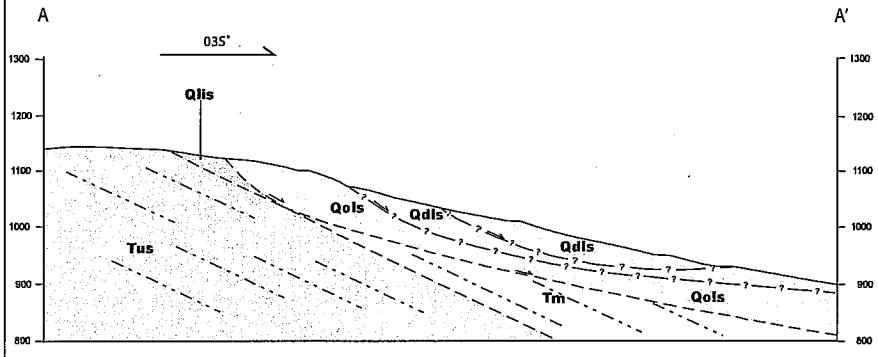
Santa Lucia Preserve, Carmel, CA

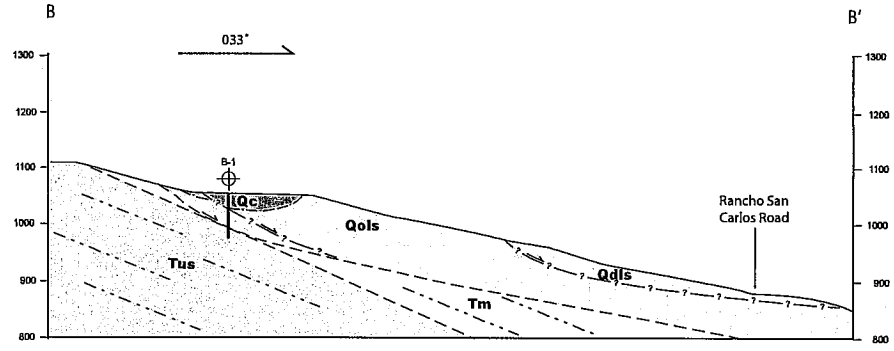
Monterey County

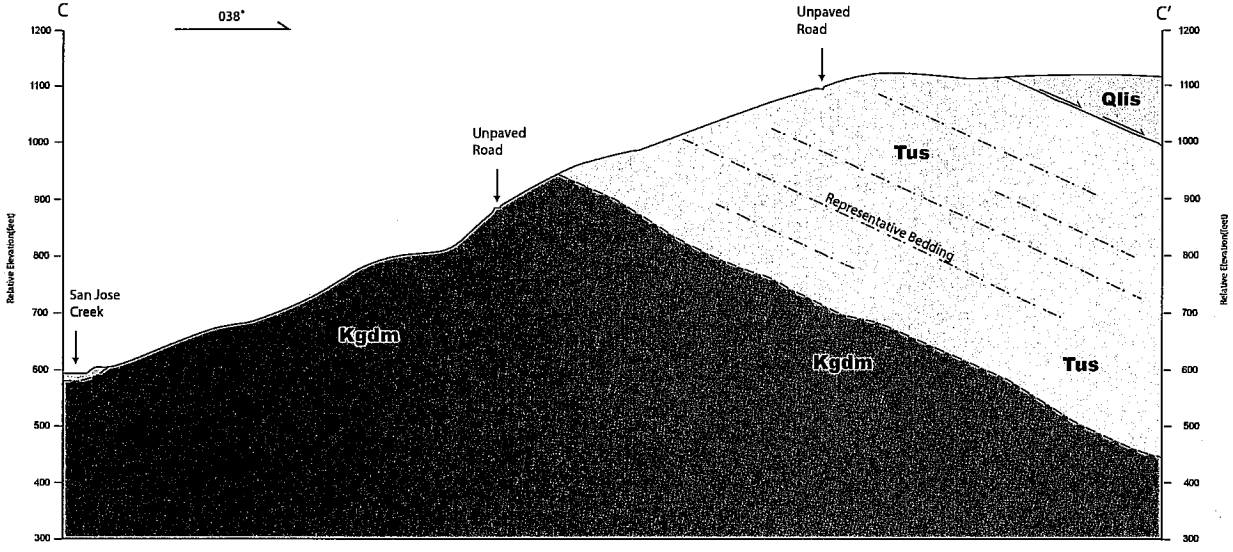
Scale: 1"=100'; H=V

Drawn by: EL./TCL

Plate 1







Qa	Alluvium
Qc	Colluvium
Qdls	Landslide Deposit, Dormant
Qols	Landslide Deposit, Older
Qlis	Incipient Landslide Deposit
Tus	Sandstone
Tm	Monterey Formation
Kdgm	Granodioite
	representative bedding
	contact; dashed where approximate, quieried where uncertain. arrows indicate direction of landslide movement.
B-1	borehole location

See Plate 1 for Explanation

NOTES
Elevations shown on sections are based on aerial survey by Hart/Howerton, 1999. Elevations shown are based on an assumbed datum, and are not meant to represent true elevations above sea level.

NOLAN ASSOCIATES

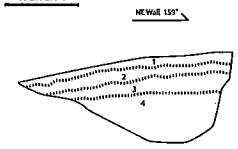
Date: 11-26-2007
Revised: 12-17-2007
Project: 07026

GEOLOGIC CROSS SECTIONS
Lands of Tate
Santa Lucia Preserve, Carmel, California
Monterey County

Scale: 1"=100', H=V
Drawn by: EL/TCL

Plate 2

Trench 1



Units T-1

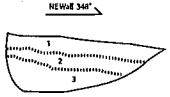
1- Gray, fine sandy silt; dry; friable; well developed, fine-medium crumb structure; few relict medium angular blocky peds; common pores and dessication cracks; common roots and organics. [A-Horizon]

2- Silt with trace clay; dark grey; dry; very firm, well developed, fine-medium crumb structure overprinting fine to medium blocky peds; few faint clay films on ped faces; common pores and organics, common dessication cracks. [AB Soil Horizon (A overprinting B, deflating profile)]

3- Clay with fine sand; dark brown; dry; very stiff; plastic; well developed, medium blocky to prismatic peds; thick, distinct, very dark reddish-brown clay films on ped faces; common dessication cracks. [B1 Horizon]

4- Clay with gravel, olive-grey; moist; stiff; yellowish-red gravel, fine, angular siltstone, common yellowish red mottles; moderate, medium blocky peds; medium, faint, light grey clay films on ped faces. [B2 Horizon]

Trench 2



Units T-2

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine to medium crumb structure; common organics and macropores; bioturbated. [A-Horizon]

2 Weathered shale, yellow to yellowish-red; dry; firm to hard; retains most bedrock structure, with thick prominant, dark reddish-grey clay films along blocks; forming few angular blocky to prismatic peds. [BC Horizon]

3 Pale yellow with interbeds of light grey mudstone; dry to damp; firm to hard; common thin prominant dark reddish gray clay films on fracture faces. [Monterey Formation]

Notes T-2

N1 Bedding 315/22 NE

N2 Bedding 330/13 NE on top of light grey mudstone bed.

N3 Bedding 325/21 NE along shale parting

N4 Fracture 288/38 NE: some clayey soil infill, up to 1/4" wide, no offset; few shale beds (1.5') are parallel on hanging wall; some preferential soil development across fracture; syn-depositional.

Trench 3

Units T-3

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine to medium crumb structure; common organics and macropores; bioturbated. [A-Horizon]

2 Weathered shale, yellow to yellowish-red; dry; firm to hard; retains most bedrock structure, with thick prominant, dark reddish-grey clay films along blocks; forming few angular blocky to prismatic peds. [BC Horizon]

3 Interbedded shale and 4-6" thick fine sandstone, white to pale yellow; dry; hard. [Monterey Formation]

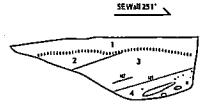
Notes T-3

N1 Bedding 268/40 N: on shale parting.

N2 Bedding 314/22 NE: atop sandstone bed.

N3 Bedding 318/20 NE: atop sandstone bed.

Trench 4



Units T-4

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine to medium crumb structure; common organics and macropores; bioturbated. [A-Horizon]

2 Thinly laminated pale yellow shale with dark brown weathering shale parting; dry; very firm. [Shale]

3 Massive to faintly laminated; pale reddish-yellow; very fine grained sandstone with clay and thin mudstone interbeds; dry; very firm; well sorted. [Fine Sandstone]

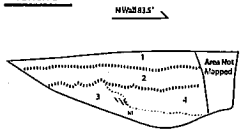
4 Poorly sorted, greenish-grey pebbly fine-course grained sandstone with angular fine sandstone (unit 3) rip-ups; dry; very firm. [Pebbly Sandstone]

Notes T-4

N1 Bedding on sandstone/ pebbly sandstone, 355/24 E.

N2 Bedding on mudstone bed in sandstone: 009/18 E.

Trench 5



Units T-5

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine to medium crumb structure; common organics and macropores; bioturbated. [A-Horizon]

2 Dark grey to dark reddish-grey, gravelly clayey sand; dry; very firm; many, fine to medium blocky to prismatic peds; thick distinct dark reddish-brown clay films on ped faces, some over printing with crumb structure and bioturbation. [AB Horizon]

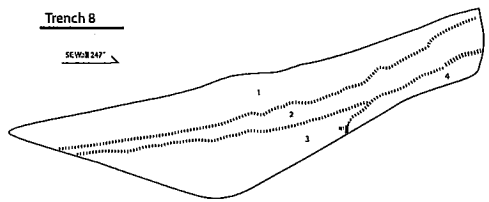
3 Mottled light grey and reddish-yellow; moist; stiff; plastic; common internal parting [LANDSLIDE].

4 Gravelly Sand with clay; mixed pale yellow and dark grey; dry; firm; angular fm gravel; clast-supported; several large blocks of rock; no consistent structure [LANDSLIDE].

Notes T-5

N1 Parting parallels contact.

Trench 8



Units T-8

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine-medium crumb structure; common organics and macropores; bioturbated; some weak B-soil layers developing in older A-soil. [A-Horizon]

2 Dark grey sandy silt with clay; dry; firm; weakly developed, fine-medium, blocky to prismatic peds overprinting older A-horizon soil; thin , faint clay films on ped faces. [AB-Horizon]

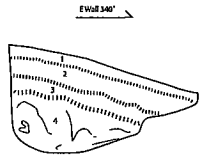
3 Very dark greyish-brown clay with sand and fine angular Monterey Shale clasts; damp; hard; plastic. [Colluvium]

4 Clayey, pebbly sand with angular fine-grained sandstone fragments; damp; firm; mixed dark grey and dark reddish-brown; common parting surfaces, some evidence for creep. [Weathered sandstone]

Notes T-8

N1 Apparent offset, downhill side down, offset unconstrained, appears very old, over-printed by soil processes.

Trench 6



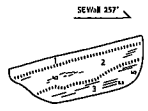
Units T-6

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine-medium crumb structure; common organics and macropores; bioturbated. [A Horizon]

2 Light grey silt; dry; firm; well developed, medium prismatic peds, overprinted with some crumb structure and macropores. [AB-Horizon Soil]

3 Very dark greyish-brown clay; common orange mottles; moist; firm, well developed, medium, prismatic peds; thick, distinct, dark brown clay films on ped faces. [B-Horizon]

Trench 7



Units T-7

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine-medium crumb structure; common organics and macropores; bioturbated. [A-Horizon]

2 Mixed clayey very-fine sand and angular very-fine sandstone clasts; damp; firm; sandstone retains bedrock structure, fine laminations; sandy clay is dark grey; well developed medium blocky to prismatic peds with medium, distinct clay films on ped faces. [B-Horizon]

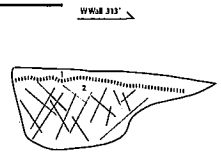
3 Massive to faintly laminated; pale reddish-yellow, very fine grained sandstone with clay and thin mudstone interbeds; dry; very firm; well sorted. [Sandstone]

N1 Bedding on mudstone interbed: 355/14N.

N2 Bedding preserved in soil: 018/15 SE.

N3 Bedding on laminae-parallel fractures: 340/18 NE

Trench 9



Units T-9

1 Very dark olive-grey, fine, sandy silt with trace clay; dry; friable; fine to medium crumb structure; common organics and macropores; bioturbated. [A-Horizon]

2 Mottled, reddish-yellow and light grey sandstone with clay; damp; firm; pervasively fractured with grey clays lining fractures; no preferred orientation. [Sandstone]

SYMBOLS - ALL TRENCHES

Lithologic contact, solid where certain, dashed where approximate, queried where uncertain

Pedogenic soil contact; solid where certain, dashed where abrupt, hatched where gradual (representative); queried where uncertain.

Landslide slip surface; arrows indicate direction of movement

0 5 10

1 inch equals 5 feet (H=V)

Engineering Geology • Hydrogeology • Civil Services

NOLAN ASSOCIATES

Date: Draft 11-30-06

Revised: 12-17-07

Project: Talo 07026

GEOLOGIC TRENCH LOGS (1-9)

Lands of Talo

Santa Lucia Preserve, Lot 5

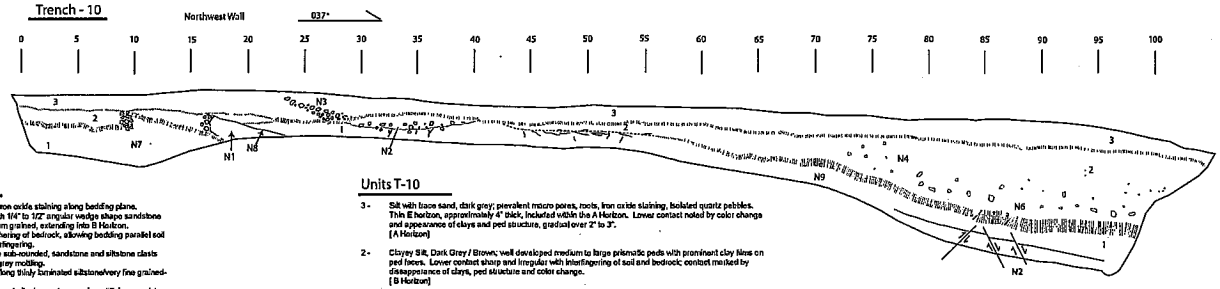
Carmel, CA

Scale: 1"=5'; H=V

Drawn by: EL//TCL

Plate 3

Trench - 10



Notes T-10

N1 - 1/8" to 1/2" thick iron oxide staining along bedding plane.
N2 - Sharp contact with 1/4" to 1/2" angular wedge shape sandstone clasts, fine-medium grained, extending into B Horizon.
N3 - Preferential weathering of bedrock, allowing bedding parallel soil intrusion and interfingering.
N4 - 1/8" Ø rounded to sub-rounded, sandstone and siltstone clasts with orange and grey mottling.
N5 - 1" to 1½ offsets along thinly laminated siltstone/very fine grained-sandstone.
N6 - 2" to 4" thick layers of olive/green to grey clay, stiff, iron, moist. Mottling more diffuse toward A Horizon
N7 - Coarse purplish grey manganese nodules.
N8 - Orientation of bedding measured at 130° / 25°N.
N9 - Orientation of bedding measured at 149° / 46°N.
N10 - Orientation of bedding measured at 135° / 31°N.

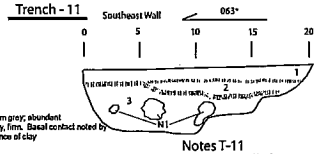
Units T-10

3 - Silt with trace sand, dark grey; prevalent macro pores, roots, iron oxide staining, isolated quartz pebbles. Thin E Horizon, approximately 4" thick, included within the A Horizon. Lower contact noted by color change and appearance of clays and ped structure, gradual over 2" to 3". [A Horizon]

2 - Clayey Silt, Dark Grey / Brown; well developed medium to large prismatic peds with prominent clay films on ped faces. Lower contact sharp and irregular with interfingering of soil and bedrock; contact marked by disappearance of clays, ped structure and color change. [B Horizon]

1 - Very-fine to fine grained-sandstone, isolated silty sand, light brown to tan; interbedded thinly laminated siltstone beds, iron oxide staining. [weathered Sandstone]

Trench - 11



Units T-11

3 - Silt with trace sand, medium grey; abundant macro pores, and roots, dry, firm. Basal contact noted by color change and appearance of clay [A Horizon]

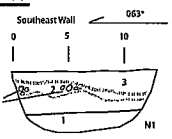
2 - Silty clay with coarse grained-sand, grey / brown; weak blockly ped structure. Lower contact gradual over 6", with some clay infilled fractures. [B Horizon]

1 - Coarse to medium-grained sandstone, tan / olive green; with angular to sub-rounded siltstone clasts, intensely fractured, iron oxide staining, no apparent bedding; isolated pockets of mottled grey clay. [weathered Sandstone]

Notes T-11

N1 - Isolated pockets of highly cemented sand.

Trench - 12



Units T-12

3 - Silt with trace sand, light grey; angular to sub-rounded pebbles, abundant macro pores and roots. Basal contact noted by color change and appearance of clay, contact gradual over 2" to 4". [A Horizon]

2 - Clayey silt, dark grey; weak ped structure, angular siltstone clasts, isolated roots; dry, firm. Contact irregular and gradual over 4"; contact noted by color change. [B Horizon]

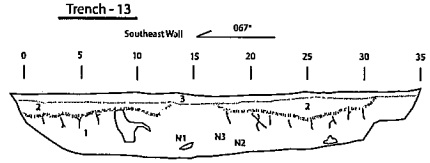
1 - Highly fractured siltstone with isolated fine-grained sandstone beds, olive green; isolated clay seams, iron oxide staining. [weathered Sandstone]

Notes T-12

N1 - Approximate attitude of siltstone bed, 59° / 18°NW.

N2 - Siltstone / very fine-grained sandstone, tan / light brown; angular with iron oxide staining.

Trench - 13



Units T-13

3 - Silt with trace sand, light grey; abundant roots and macro pores. Lower contact marked by color change and appearance of clays and peds, gradual over 1" to 2". [A Horizon]

2 - Clayey silt, brown / grey; weak block peds, some rootlets, cemented bedding fragments of siltstone and sandstone. Lower contact irregular and marked by color change; gradual over 2" to 4". [B Horizon]

1 - Massive siltstone to sandy siltstone, olive-grey; orange iron oxide staining, possible manganese oxide staining, highly fractured. [weathered Sandstone]

Notes T-13

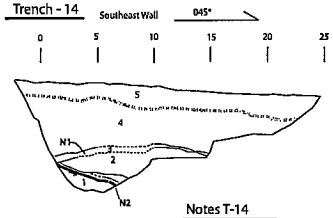
N1 - Structureless medium to coarse-grained sand, hard, cemented.

N2 - Fracture trending 28° / 84°SE.

N3 - Fracture trending 31° / 85°SE

N4 - Soil infilled fractures.

Trench - 14



Units T-14

5 - Very fine-grained sandy silt, light grey to tan; hard, dry weak, rootlets and macro pores common; undeveloped angular blocky to prismatic ped structure. Contact marked by appearance of clay. [A Horizon]

4 - Siltstone with grey clay, olive-green to brown; pockets of diffuse coarse grained-sands (white to grey); clasts of sandstone and siltstone, prominent manganese oxides staining. [B Horizon]

3 - Silt band with orange iron oxide staining, parting surfaces bounding unit above and below. [Landslide Mass]

2- Medium to coarse-grained sandstone, light yellowish brown; sheared, bed appears deformed. [Landslide Mass]

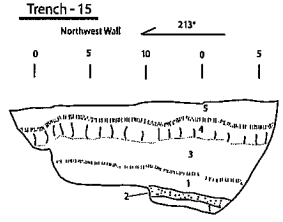
1- Light grey to slang brown; variegated, sheared, zones of semi-intact rocket fabric separated by zones of clearly sheared motion. [Landslide Mass]

Notes T-14

N1 - Orange iron oxide band, discontinuous, very fine-grained sand; thin clay layer at upper and lower contact with sheared parting surfaces, very fine grain, sticky. Strike/dip: 130 / 30SW. Discontinuous siltstone clasts, sands and clays below iron oxide band and clay layer.

N2 - Shear surface, weak parting, anastomosing shear surfaces in zone 1/2" to 1" wide; strike/dip: 110/18.

Trench - 15



Units T-15

5 - Silt with trace sand, light grey; macro pores and rootlets, lower contact gradual over 1"-2". Base of unit light grey, strongly eluviated. [A Horizon]

4 - Silty clay, dark grey to brown; well developed large prismatic peds, lower contact sharp and marked by disappearance of ped structure and increase in coarse grained sand. [B Horizon]

3 - Coarse sand to sandy silt, light grey to dark grey; very firm, moist, isolated clasts, highly weathered siltstone and sandstone bedrock. B-C horizon included with weak angular to sub-angular peds, common clay films on ped surfaces. Lower contact gradual over 8" to 12" and noted by downward disappearance of rock structure. [Weathered Sandstone]

2- Medium to fine-grained sandstone, orangish brown; well sorted, friable, dry, fracture, intact rock fabric. [Weathered Sandstone]

1- Siltstone, olive green; moist, plastic, original rock fabric intact. [Weathered Siltstone]

Notes T-15

N1 - Intact interbedded sandstone and siltstone, bedding: 105°/22°N, 110°/15°N; slight folding noted in bedding.

Legend

- Sharp contact (dashed where indicated)
- Gradual contact (length of vertical lines represent zone of gradation)
- Y Prominent fractures
- Approximate or indistinct contact
- Landslide Slip Surface; Arrow indicate direction of movement
- Sandstone & Siltstone Clasts

0 5 10

1 Inch equals 5 feet

Horizontal = Vertical

Nolan Associates	Date: 11-30-2007
	Revised:
	Project: 07026

GEOLOGIC TRENCH LOGS (10-15)
Lands of Tele
Lot 5, Santa Lucia Preserve
Carmel, Monterey County, California

Scale: 1"= 5'; H=V
Drawn by: AP/TCL

Plate 4

EXHIBIT G

VOLUME 20, CITIES & TOWNS, PAGE 8,
SHEET 9 OF 33 (LOT 5)

PLN090032 – Charles Tate
Planning Commission
June 10, 2009

EXHIBIT G

Vol. 20 C.E.T. Pg. 8

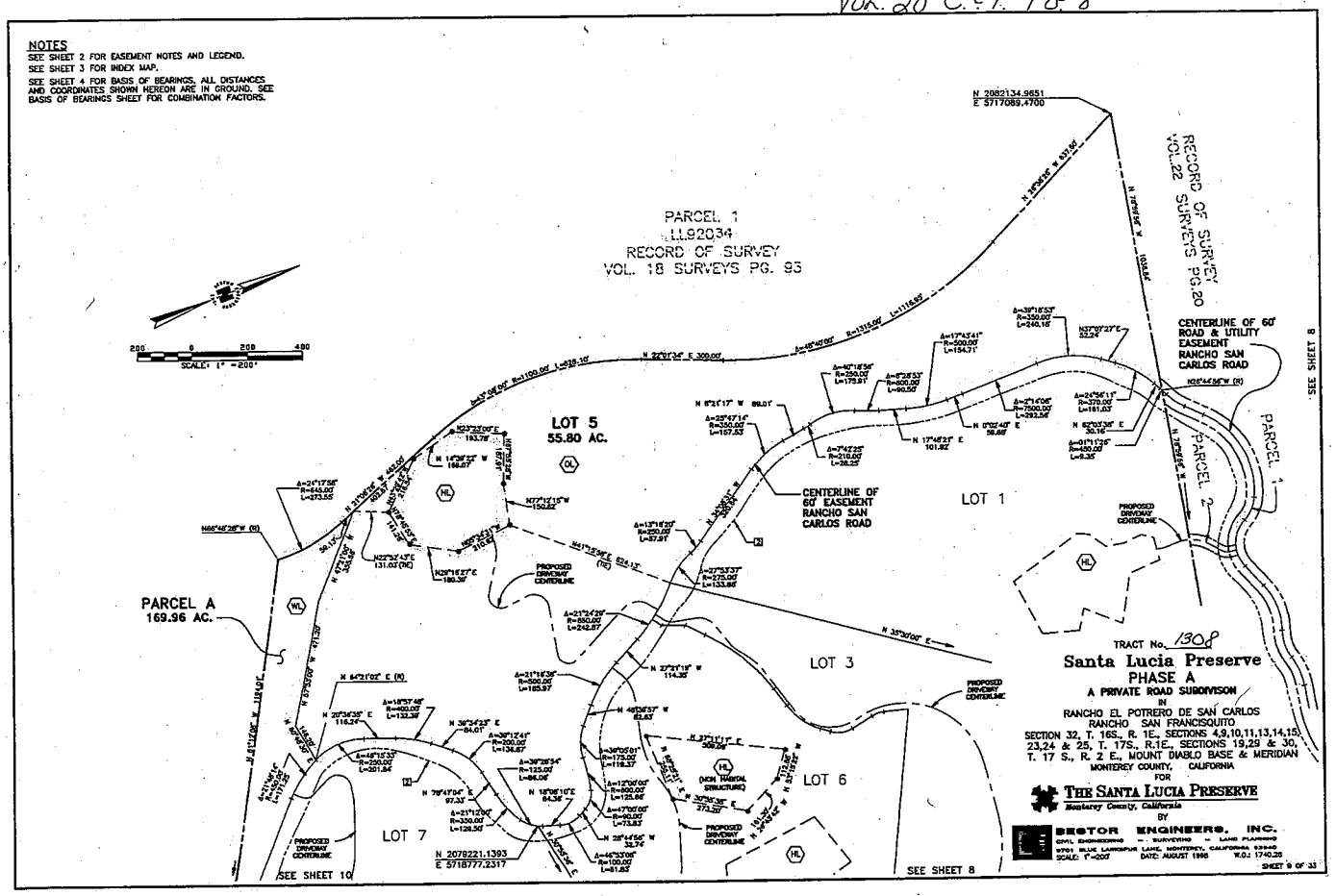


EXHIBIT H

LETTER FROM THE SANTA LUCIA PRESERVE DESIGN REVIEW BOARD, DATED DECEMBER 19, 2008.

PLN090032 – Charles Tate
Planning Commission
June 10, 2009

EXHIBIT H

Santa Lucia Preserve

December 19, 2008

Joel Panzer
Maureen Wruck Planning Consultants, LLC
21 West Alisal Street, Suite 111
Salinas, California 93901

RE: Lot 5 Tate Residence – Homeland Adjustment *Via Email*

Dear Mr. Panzer:

The Design Review Board has agreed conceptually on the proposed Homeland Boundary adjustment as defined on the site plan from Bestor Engineers, Inc., dated October 30, 2008, with the following conditions added as notes on the amended Homeland Boundary filed with the County:

1. Eliminate the full time equestrian rights in a manner mutually acceptable with the Owner and the Santa Lucia Conservancy.
2. This lot shall be subject to a Landscape Enhancement Zone, to be included on landscape plans required by the Design Guidelines. The purpose of the Landscape Enhancement Zone is to provide screening sufficient enough to break up the mass of any future structures proposed on Lot 5. The Design Review Board will review the adequacy of landscaping plans during the course of review procedures outlines in Appendix B of the Design Guidelines.
3. One Story, with 18 ft height limit from average natural grade. Roof ridge shall not extend above the 1142 ft topographic contour or be visible as ridgeline from Rancho San Carlos Road eastbound between the shared driveway for Lots 4 and 6, and the driveway of Lot 8. The DRB may approve chimneys to extend beyond the ridgeline restrictions noted above if screened to protect the view shed from the above defined areas.

The DRB recognizes and advises the Lot owner that this review is only the initial step in a process which also involves the Santa Lucia Conservancy and County of Monterey. The DRB review is to ensure the request is compliant with the Design Guidelines of the Santa Lucia Preserve. With the above conditions the DRB is recommending the Homeland Boundary Adjustment to the Santa Lucia Conservancy for their consideration under the obligations described in the terms of the conservation easement encumbering the Openlands of the Lot.

If you have any questions, please contact me at 831-620-6710 or via email at llerable@santaluciapreserve.com.

Regards,

Lindsay Lerable
DRB Manager

CC Charles Tate
Jim Sulentich
Mike Canning
DRB

EXHIBIT I

STANDARD SUBDIVISION HEARING
RESOLUTION NO. 09005,
DATED MAY 14, 2009.

(PLN090032 – Charles Tate
Planning Commission
June 10, 2009

Before the Standard Subdivision Committee in and for the County of Monterey, State of California

In the matter of the application of:
Charles Tate (PLN090032)
RESOLUTION NO. 09005
Resolution by the Monterey County Standard Subdivision Committee

1) Consider the Addendum to the Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005)
2) Recommend approval of PLN090032 to the Planning Commission for the Tate Map Amendment of the Santa Lucia Preserve Phase A Subdivision Map, filed as Volume 20, Cities and Towns, Page 8.

(PLN090032, Charles Tate, 14 Rancho San Carlos Road, Carmel, Greater Monterey Peninsula Area Plan (APN: 239-021-004-000)

EXHIBIT I

The Map Amendment application (PLN090032) came on for public hearing before the Monterey County Standard Subdivision Committee on May 14, 2009. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Standard Subdivision Committee finds and decides as follows:

FINDINGS

1. **FINDING:** **CONSISTENCY** – The Project, as conditioned, is consistent with the applicable plans and policies which designate this area as appropriate for development.

EVIDENCE: a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:
- the Monterey County General Plan,
- Greater Monterey Peninsula Area Plan,
- Monterey County Zoning Ordinance (Title 21)
- Monterey County Subdivision Ordinance (Title 19)
- the Comprehensive Development Plan for the Santa Lucia Preserve

No conflicts were found to exist. No communications were received during the course of review of the project indicating any inconsistencies with the text, policies, and regulations in these documents.

b) The property is located at 14 Rancho San Carlos Road, Carmel (Assessor's Parcel Number 239-021-004-000), Greater Monterey Peninsula Area Plan. The parcel is zoned Resource Conservation, 40 acres per unit with Design Control, and Site Plan Review zoning district overlays or "RC/40-D-S". The subject property complies with all the rules and regulations pertaining to zoning uses and any other applicable provisions of Title 21. The proposal is to amend the Santa Lucia

Preserve Phase A Subdivision Map, filed as Volume 20, Cities and Towns, Page 8 in order to relocate the homeland boundary on Lot 5 for the future construction of a single family residence and related structures. These uses are consistent with the RC/40-D-S zoning regulations, and therefore the site is suitable for the proposed development.

c) The project is consistent with the Regulations of the Monterey County Subdivision Ordinance, Title 19, pursuant to Section 19.08. See Finding 6.

d) The project planner conducted a site inspection on February 24, 2009 to verify that the project on the subject parcel conforms to the plans listed above.

e) Site Plan Review or "S" zoning requires review of development in those areas of the County of Monterey where development, by reason of its location has the potential to adversely affect or be adversely affected by natural resources or site constraints, without imposing undue restrictions on private property. The project does not include the construction of any structures, but in the future, any proposed structures proposed on the homeland boundary would be subject to the regulations of Chapter 21.45 in order to assure protection of the resources described previously in this paragraph.

f) The proposed homeland boundary has areas of 6% to 28% slopes. Development on slopes that exceed 30% is prohibited unless there is no feasible alternative that would allow development to occur on slopes of less than 30%, or the proposed development better achieves the goals, policies and objectives of the Monterey County General Plan and applicable area plan than other development alternatives. A Use Permit is required, if development occurs in areas in excess of 30% slope. Although, this project does not involve the construction of any structures, the relocation of the homeland boundary would facilitate building areas with slopes less than 30%. Any future structures proposed on the homeland boundary would be subject to the regulations of Chapter 21.64.230. *Development in Slopes in Excess of 30%.*

g) The project was not referred to a Land Use Advisory Committee (LUAC) for review because no LUAC exists for this area.

h) Although no LUAC exists for this area of the County, the applicants, pursuant to their CC& R's, were required to present their proposal to the Santa Lucia Preserve Design Review Board for review and approval. The Santa Lucia Preserve Design Review Board approved the proposal, subject to conditions outlined in the Santa Lucia Preserve letter dated, December 19, 2008, found in Project File PLN090032. The letter is addressed to Mr. Joel Panzer, applicant's representative. The applicant has agreed to the conditions contained in this letter.

i) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project File PLN090032.

2. **FINDING:** **SITE SUITABILITY** – The site is physically suitable for the use proposed.

EVIDENCE: a) The project has been reviewed for site suitability by the following

departments and agencies: RMA - Planning Department, Carmel Valley Fire Protection District, Parks, Public Works, Environmental Health Division, and Water Resources Agency. There has been no indication from these departments/agencies that the site is not suitable for the proposed development. Conditions recommended have been incorporated.

b) Staff identified potential impacts to Biological Resources, Archaeological Resources and Soil/Slope Stability. Technical reports by outside consultants indicated that there are no physical or environmental constraints that would indicate that the site is not suitable for the use proposed. County staff independently reviewed these reports and concurs with their conclusions. The following reports have been prepared:
   - "Santa Lucia Preserve Lot 5, APN 239-021-004" (LIB090244) prepared by Archaeological Consulting, Salinas, CA, on October 30, 2007.
   - "Biological Analysis and Report for a Revised Homeland and Driveway" (LIB090243) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on December 1, 2007.
   - "Recommendations for Building Site and Driveway Proposed Single Family Residence Lot 5, Santa Lucia Preserve, Carmel Valley (LIB090245) prepared by Nolan Associates, Santa Cruz, CA, on March 14, 2008.
   - "Draft Preliminary Geologic Hazards Investigation for Proposed Single Family Residence Site Lot 5 Santa Lucia Preserve Monterey County, California" (LIB090246) prepared by Nolan Associates, Santa Cruz, CA, on November 29, 2007.

c) Staff conducted a site inspection on February 24, 2009 to verify that the site is suitable for this use.

d) Oral testimony on May 14, 2009 at the Standard Subdivision Committee Hearing by Jeffrey B. Froke, PhD, biologist for the project. Dr. Froke testified that the project's site is suitable for the proposed homeland relocation and that no biological impacts exist.

e) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project File PLN090032.

3. **FINDING:** **HEALTH AND SAFETY** - The establishment, maintenance, or operation of the project applied for will not under the circumstances of this particular case be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

EVIDENCE: a) The project was reviewed by the RMA-Public Works Department, Carmel Valley Fire Protection District, Environmental Health, Water Resources and Parks Department. The respective departments/agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare

of persons either residing or working in the neighborhood. The applicant has agreed to these conditions as evidenced by the application and accompanying materials and conditions (**Exhibit 1**).

b) The purpose for moving the location of the boundary is to provide a geologically suitable building area situated away from areas underlain by landslide. The applicant has submitted comprehensive geological studies which recommend that the proposal be done. The report states that the development of habitable structures within the current homeland boundary cannot be recommended because the soils are unstable. The report further states, "Development of habitable structures within the current homeland would place them at an unacceptable level of risk." Therefore, the proposed Map Amendment to relocate the homeland boundary on Lot 5 would result in the solution to health and safety issues posed by the current homeland boundary.

c) Preceding and following findings and supporting evidence for PLN090032.

4. **FINDING:** **NO VIOLATIONS** - The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County's zoning ordinance. No violations exist on the property.

EVIDENCE: a) Staff reviewed Monterey County RMA - Planning Department and Building Services Department Monterey County records and is not aware of any violations existing on the subject property.

b) Staff conducted a site inspection on February 24, 2009 and researched County records to assess if any violation exists on the subject property.

c) The application, plans and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project File PLN090032.

5. **FINDING:** **CEQA (Addendum):** - An Addendum to a previously certified EIR was prepared pursuant to State of California Code of Regulations, Title 14, Section 15164 to reflect changes or additions in the project that do not cause substantial changes or new information that would require major revisions to the adopted EIR.

EVIDENCE: a) An EIR for Santa Lucia Preserve was prepared and certified by the Board of Supervisors on February 6, 1996 (Board Resolution No. 96059)

b) Pursuant to Section 15162 of the CEQA Guidelines, there is no new information of substantial importance that was not known at the time the EIR was adopted. Staff's analysis of the Santa Lucia EIR indicates that the reason for the creation of the homeland boundaries was a compilation of analyzed resources and constraints, such as archaeology, biology and geology. The result of this analysis created the location of the current homeland boundary for Lot 5. Archaeological (LIB090244) and biological reports (LIB090243), along with the oral testimony by Jeffrey B. Froke, PhD, biologist for the project on May 14, 2009, at the Standard Subdivision Committee Hearing (See **Finding 2, Evidence d**), have indicated that the revised boundary would not impact archaeological or biological resources beyond what was anticipated in the Certified EIR. The geology investigations that were performed for

the EIR were reconnaissance level slope stability analysis of the landslide complex as a whole, but there were was not a local stability analysis for individual landslide masses. The EIR geology report indicated that the landslide mass, as a whole, was stable. However, the report also recommended that site specific studies be performed to support the development of individual lots. In the case of this project, a site specific study has been prepared for Lot 5 (Library No. LIB090245 and LIB090246) and the results have indicated that the relocation of the homeland boundary is necessary in order to provide a geologically suitable area for building. The current homeland boundary is not geologically suitable for the construction of a single family residence. The site specific information found through current geology reports on Lot 5 is not a sufficient reason to prepare a subsequent EIR because the previous EIR recommended site specific geological information be performed on each parcel at the time of residential construction. All impacts (biological, archeological and geological) of the revised boundary are equal to, or less than the boundary evaluated under the Certified EIR.

c) The Addendum attached as Exhibit E to the May 14, 2009 Staff Report to the Standard Subdivision Committee reflects the County's independent judgment and analysis.

d) The independent analysis of the materials for Project File No. PLN090032.

6. **FINDING:** **MAP AMENDMENT** – There is evidence in the record to support the required findings under Section 66472.1 of the Subdivision Map Act to amend the recorded Final Map.

EVIDENCE: a) A Map Amendment is required to amend a recorded homeland boundary (building envelope) pursuant to Monterey County's Subdivision Ordinance (Chapter 19.08.015 County Code) and the Subdivision Map Act (Section 66469 and 66472.1 Government Code).

b) The subject application (PLN090032) consists of an amendment to the *Santa Lucia Preserve Phase A* Subdivision Map, filed as *Volume 20, Cities and Towns, Page 8*. The amendment is required because the applicant is proposing to move the "Homeland Boundary" (commonly referred to as a building envelope) on Lot 5 of this Map. Lot 5 is 55.80 acres in size with a current homeland boundary of 3.336 acres. The proposal would shift the homeland boundary southerly and reduce the size of the boundary to 3 acres. The purpose for moving the location of the boundary is to provide a geologically suitable building area situated away from areas underlain by landslide.

c) The applicant has submitted comprehensive geological studies which recommend that the proposal be done. The report states that the current boundary is potentially unstable and the development of habitable structures within the current homeland boundary cannot be recommended. The relocation of the homeland boundary includes an area that is safe for construction of a single family residence. The Geological experts recommend that the proposed homeland boundary be partitioned into two zones: *Zone 1* and *Zone 2* (see **Exhibit C-3** of the May 14, 2009 Staff Report). *Zone 1* would include the portion of the reconfigured

homeland situated off of landslide deposits and it would be approved for development of any type of structure; *Zone 2* would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. These non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities.

d) The Nolan and Associates geological report dated March 14, 2008, describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may be possible to reduce or eliminate that setback. Subsequently, the Nolan report designates a sub-area in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation. This area is described in **Exhibit C-3** of the May 14, 2009 Staff report.

e) With the results of site specific geological studies on Lot 5, the Standard Subdivision Committee has determined that the current homeland boundary location on Lot 5 is not geologically suitable for the construction of a single family residence due to a landslide mass consisting of several different, individual landslides, ostensible of different ages, any one of which could be unstable at the present time.

f) The geologist (Nolan and Associates) that performed the site-specific studies on Lot 5, describes that the only reliable mitigation of the landslide hazard posed to the homeland boundary area would be the replacement of the landslide materials under the homeland with engineered fill. This would result in the creation of fill area with a depth of 60 feet under the current homeland boundary and an actual area of grading of 400 feet wide by 500 feet long, involving removal and replacement of 300,000 to 500,000 cubic yards of soil. The Nolan report describes that they do not consider such mitigation to be tenable for a single family residence. As far as the current homeland boundary on subject Lot 5, the Nolan report concludes that "due to potential instability, development of habitable structures within the current homeland envelope cannot be recommended. Development of habitable structures within the current homeland would place them at an unacceptable level of risk." For this reason, the geologist recommends the relocation of the homeland boundary as presented in **Exhibit C-2** and **3** of the May 14, 2009 Staff Report.

g) There are changes in circumstances that make the originally recorded building envelope, as previously modified, no longer necessary. Staff's analysis of the Santa Lucia EIR indicates that the reason for the creation of the homeland boundaries was a compilation of analyzed resources and constraints, such as archaeology, biology and geology. The result of this analysis created the location of the current homeland boundary for Lot 5. Archaeological (LIB090244) and biological reports (LIB090243), including the oral testimony on May 14, 2009 at the Standard Subdivision Committee Hearing by Jeffrey B. Froke, PhD, biologist for the project (See *Finding 2, Evidence d*), have indicated that the project is appropriate and would not impact archaeological or

biological resources beyond what was anticipated in the Certified EIR. The Archaeological Letter concluded that since the area for Lot 5 had been previously surveyed without any findings of cultural resources, the parcel did not require additional reconnaissance and the Archaeological Report offered a standard Condition of Approval, which has been incorporated to the project. The Biological Assessments concluded that the proposed relocation of the homeland boundary would be a better situation for native wildlife and plant life and that the proposal would "unquestionably benefit sensitive biological resources and should be approved." For geologic information, see **Finding 6, Evidence c** above.

h) The modification of the homeland boundary (building envelope) would not impose any burden on the fee owner of the subject property because the modification has been requested by the property owner.

i) The modification of the homeland boundary (building envelope) would not alter any right, title, or interest in the real property reflected on the recorded map. The Map Amendment only involves the relocation of the homeland boundary within Lot 5 and no other easements are affected.

j) On May 14, 2009 at the Standard Subdivision Committee Hearing, the applicant's representative submitted written documentation regarding the Santa Lucia Preserve Board of Governors conceptual approval of the proposed map amendment in order to relocate the homeland boundary on Lot 5. A letter dated May 13, 2009 from the Santa Lucia Conservancy to the applicant's representative, Mr. Joel Panzer, finds that the proposed project adds conservation benefits to the Santa Lucia Conservancy. The specific benefits are outlined in this May 13, 2009 found in Project File No. PLN090032.

k) The project was approved by the Santa Lucia Design Review Board. Additionally, no opposition to the project has been expressed verbally or in writing.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Standard Subdivision Committee does hereby:

A. Consider the Addendum to the Environmental Impact Report for the Santa Lucia Preserve (EIR 94-005);

B. Recommend approval of the Tate Map Amendment Application to the Santa Lucia Preserve Phase A Subdivision Map (PLN090032) to the Planning Commission, in general conformance with the attached sketch **(Exhibit 2 and 3)** and subject to the conditions **(Exhibit 1),** exhibits being attached hereto and incorporated herein by reference.

PASSED AND ADOPTED this 14th day of May, 2009.

Jacqueline L. Onciano

Jacqueline Onciano, Standard Subdivision Committee

COPY OF THIS DECISION MAILED TO APPLICANT ON JUN 0 3 2009

his decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

   Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

   Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from the Monterey County Planning Department and Building Services Department office in Salinas.

2. This permit shall be consistent with the terms of the Subdivision Map Act, which requires that the map be recorded within 3 years after the above date of granting thereof.

RESOLUTION NO. 09005- EXHIBIT 1 Monterey County Resource Management Agency Planning Department Condition Compliance and/or Mitigation Monitoring Reporting Plan	**Project Name:** Charles Tate **File No:** PLN090032 **APNs:** 239-021-004-000 **Approved by:** Standard Subdivision **Date:** May 14, 2009

Monitoring or Reporting refers to projects with an EIR or adopted Mitigated Negative Declaration per Section 21081.6 of the Public Resources Code.

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
RMA – Planning Department						
1.		**PD001 - SPECIFIC USES ONLY** This Map Amendment Permit (PLN090032) allows a Map Amendment request to move Homeland Boundary on Lot 5, as shown on Recorded Map, Volume 20 Cities and Towns, Page 8. The property is located at 14 Rancho San Carlos Road, Carmel (Assessor's Parcel Number 239-021-004-000), Greater Monterey Peninsula Area Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the following terms and conditions. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. **(RMA-Planning Department)**	Adhere to conditions and uses specified in the permit.	Owner/ Applicant	Ongoing unless otherwise stated	
			Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of the RMA - Planning Department.	RMA - Planning		
			To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled.	WRA RMA - Planning		
2.		**PD002 - NOTICE-PERMIT APPROVAL** The applicant shall record a notice which states: "A permit (Resolution 09005) was approved by the Monterey County Board of Supervisors for Assessor's Parcel Number 239-021-004-000 on July 7, 2009. The permit was granted subject to 12 conditions of approval which	Obtain appropriate form from the RMA-Planning Department. The applicant shall complete the form and furnish proof of recordation of this	Owner/ Applicant RMA-Planning	Prior to recordation of Amended Map	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
		run with the land. A copy of the permit is on file with the Monterey County RMA - Planning Department." **(RMA-Planning Department)**	notice to the RMA - Planning Department.			
3.		**PD003(A) – CULTURAL RESOURCES – NEGATIVE ARCHAEOLOGICAL REPORT** If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. The Monterey County RMA - Planning Department and a qualified archaeologist (i.e., an archaeologist registered with the Society of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. **(RMA - Planning Department)**	Stop work within 50 meters (165 feet) of uncovered resource and contact the Monterey County RMA - Planning Department and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.	Owner/ Applicant/ Archaeo-logist	Ongoing	
4.		**PD004 - INDEMNIFICATION AGREEMENT** The property owner agrees as a condition and in consideration of the approval of this discretionary development permit that it will, pursuant to agreement and/or statutory provisions as applicable, including but not limited to Government Code Section 66474.9, defend, indemnify and hold harmless the County of Monterey or its agents, officers and employees from any claim, action or proceeding against the County or its agents, officers or employees to attack, set aside, void or annul this approval, which action is brought within the time period provided for under law, including but not limited to, Government Code Section 66499.37, as applicable. The property owner will reimburse the county for any court costs and attorney's fees which the County may be required by a	Submit signed and notarized Indemnification Agreement to the Director of RMA – Planning Department for review and signature by the County. Proof of recordation of the Indemnification Agreement, as outlined, shall be submitted to the RMA – Planning Department.	Owner/ Applicant	Upon demand of County Counsel or concurrent with filing of the Amending Map, whichever occurs first and as applicable.	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
		court to pay as a result of such action. County may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of his obligations under this condition. An agreement to this effect shall be recorded upon demand of County Counsel or concurrent with the issuance of building permits, use of the property, filing of the final map, whichever occurs first and as applicable. The County shall promptly notify the property owner of any such claim, action or proceeding and the County shall cooperate fully in the defense thereof. If the County fails to promptly notify the property owner of any such claim, action or proceeding or fails to cooperate fully in the defense thereof, the property owner shall not thereafter be responsible to defend, indemnify or hold the county harmless. **(RMA - Planning Department)**				
5.		**PDSP001 - NOTE ON MAP-STUDIES (NON-STANDARD)** A note shall be placed on the Amending Map or a separate sheet to be recorded with the Amending Map stating that: "The following reports have been prepared for this project, specific to Lot 5: 1. "Santa Lucia Preserve Lot 5, APN 239-021-004" (LIB090244) prepared by Archaeological Consulting, Salinas, CA, on October 30, 2007. 2. "Biological Analysis and Report for a Revised Homeland and Driveway" (LIB090243) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on December 1, 2007. 3. "Recommendations for Building Site and Driveway Proposed Single Family Residence Lot 5, Santa Lucia Preserve, Carmel Valley (LIB090245) prepared by Nolan Associates, Santa Cruz, CA, on March 14, 2008.	Amending Map shall have notes on the Map or on a separate document describing the information of the map studies described in Condition 5. The information shall be submitted to the RMA - Planning Department and Public Works for review and approval prior to recording of Amending Map or the recordation of the separate document.	Owner/ Applicant	Prior to recordation of Amended Map	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
		The recommendations contained in said report, shall be followed in all further development of this property." The note shall be located in a conspicuous location, subject to the approval of the County Surveyor. **(RMA – Planning Department)**				
6.		**PDSP002 – NOTICE OF REPORTS (NON-STANDARD)** Prior to issuance of building or grading permits, a notice shall be recorded with the Monterey County Recorder which states: "The following reports have been prepared for this project, specific to Lot 5: 1. "Santa Lucia Preserve Lot 5, APN 239-021-004" (LIB090244) prepared by Archaeological Consulting, Salinas, CA, on October 30, 2007. 2. "Biological Analysis and Report for a Revised Homeland and Driveway" (LIB090243) prepared by Jeffrey B. Froke, PhD, Pebble Beach, CA, on December 1, 2007. 3. "Recommendations for Building Site and Driveway Proposed Single Family Residence Lot 5, Santa Lucia Preserve, Carmel Valley (LIB090245) prepared by Nolan Associates, Santa Cruz, CA, on March 14, 2008. The recommendations contained in said reports, shall be followed in all further development of this property." **(RMA – Planning Department)**	Proof of recordation of this notice shall be furnished to the RMA - Planning Department.	Owner/ Applicant	Prior to recordation of Amended Map	

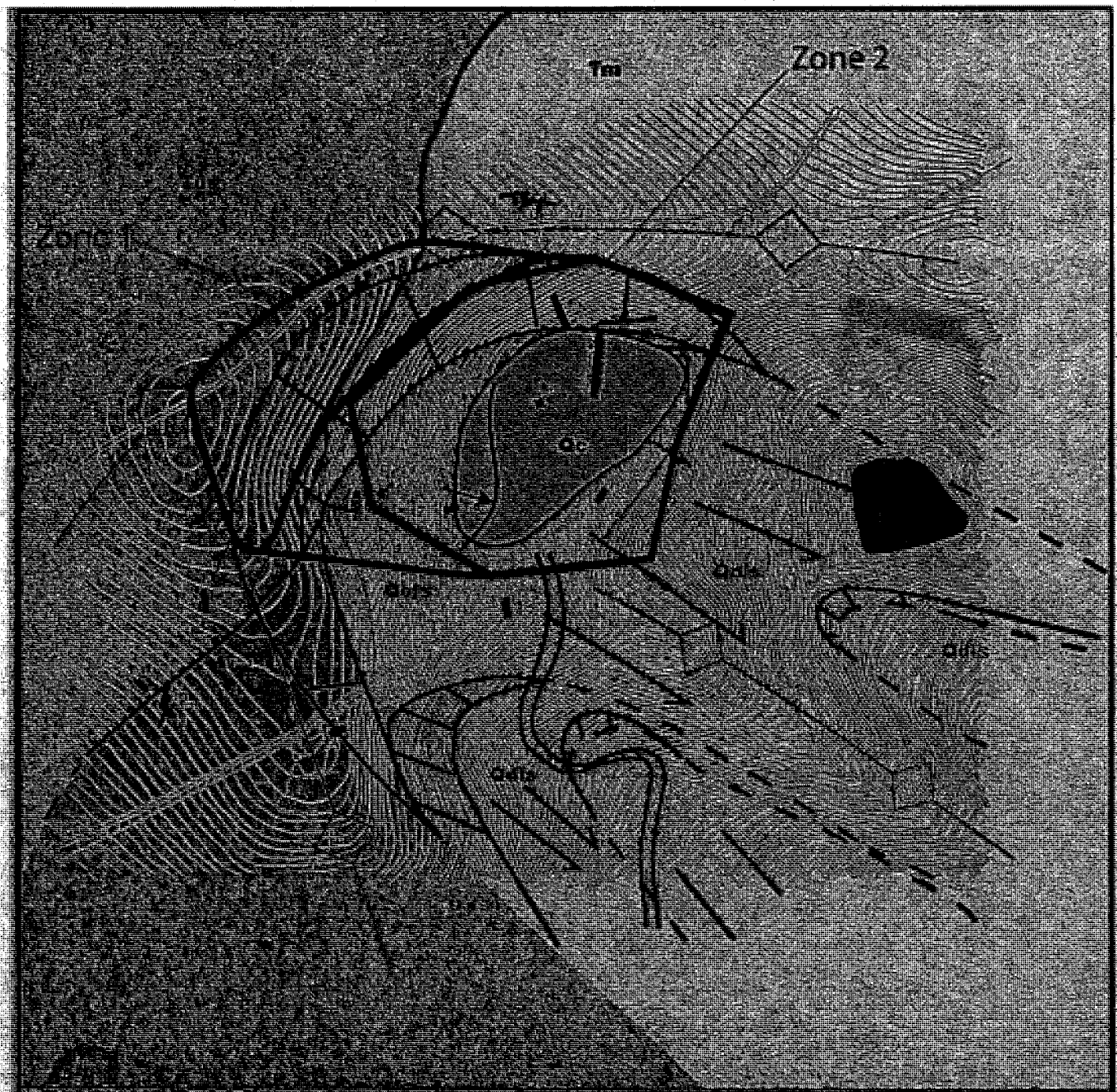
Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
7.		**PDSP003 – GEOLOGICAL RECOMMENDATIONS FOR CONSTRUCTION ZONES (ZONE 1, ZONE 2 AND SUB-AREA IN ZONE 2) (NON-STANDARD)** The report by Nolan and Associates (Library No. 090245) recommend that the proposed homeland boundary on Lot 5 be partitioned into three zones: *Zone 1*, *Zone 2* and *a Sub-area* in *Zone 2* (see **Exhibit 3**). ***Zone 1*** would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure; ***Zone 2*** would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. The non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities. The report describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may possible to reduce or eliminate that setback. ***Sub-area in Zone 2***. Subsequently, the Nolan report designates a *sub-area* in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation. This area is described in **Exhibit 3** attached to the Resolution of Approval. **(RMA – Planning Department)**	Adhere to the recommendations of the Nolan and Associates Reports filed with the Monterey County Planning Department as Library No. 090245 of this report and the specific information of Condition 7.	Owner/ Applicant/ Geologist	Ongoing	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
8.		**PDSP004 – GEOLOGICAL NOTES ON MAP FOR CONSTRUCTION ZONES (ZONE 1, ZONE 2 AND SUB-AREA IN ZONE 2) (NON-STANDARD)** A note shall be placed on the Amending Map or a separate sheet to be recorded with the Amending Map stating that: "The report by Nolan and Associates (Library No. 090245) recommend that the proposed homeland boundary on Lot 5 be partitioned into three zones: *Zone 1*, *Zone 2* and *a Sub-area* in *Zone 2* (see **Exhibit 3**). ***Zone 1*** would include the portion of the reconfigured homeland situated off of landslide deposits and it would be approved for development of any type of structure; ***Zone 2*** would be the remaining portion, situated within the boundaries of the recognized landslide, and would be approved only for development of non-habitable structures. The non-habitable structures would include, barns, pools, pool houses, tennis courts, or other structures without sleeping or food preparation facilities. The report describes that because of the uncertainty in the exact location of the landslide boundary, *Zone 1* includes a setback of about 50 feet from the inferred landslide location. The report suggests that with additional geologic investigation and possible foundation requirements, it may possible to reduce or eliminate that setback. ***Sub-area in Zone 2***. Subsequently, the Nolan report designates a *sub-area* in *Zone 2* that may be suitable for habitable structures, with additional geologic and/or geotechnical investigation." **(RMA – Planning Department)**	Amending Map shall have notes on the Map or on a separate document describing this information of the three construction zones as described in Condition 8. The information shall be submitted to the RMA - Planning Department and Public Works for review and approval prior to recording of Amending Map or the recordation of the separate document.	Owner/ Applicant	Prior to recordation of Amended Map	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
9.		**PDSP004(a) – GEOLOGICAL NOTES ON MAP FOR CONSTRUCTION ZONE 2 (NON-STANDARD)** A note shall be placed on the map stating the following: "In the Zone 2 area of the approved Homeland Boundary only **non-habitable** structures shall be allowed. Non-habitable structures shall include but not limited to: barns, pool houses, or other structures without sleeping quarters or food preparation facilities." **(RMA – Planning Department)**	Amending Map shall have a note on the Map describing this information. The note shall be reviewed and approved by the RMA - Planning Department and Public Works, prior to recording of the Amending Map.	Owner/ Applicant	Prior to recordation of Amended Map	
10.		**PDSP004(b) – GEOLOGICAL NOTES ON MAP FOR CONSTRUCTION IN SUB-AREA ZONE 2 (NON-STANDARD)** A note shall be placed on the map stating the following: "The Sub-area Zone 2 of the approved Homeland Boundary may be considered suitable for habitable structures, with the preparation of a geologic and/or geotechnical investigation, per the Geologic Report (Library No. 090245), prepared by Nolan Associates, that analyzes and concludes that the area is suitable for habitable structures.. **(RMA – Planning Department)**	Amending Map shall a have note on the Map describing this information. The note shall be reviewed and approved by the RMA - Planning Department and Public Works, prior to recording of the Amending Map.	Owner/ Applicant	Prior to recordation of Amended Map	
11.		**PDSP005 – GEOLOGICAL RECOMMENDATIONS DELINEATE CONSTRUCTION ZONES ON AMENDING MAP (ZONE 1, ZONE 2 AND SUB-AREA IN ZONE 2) (NON- STANDARD)** The Amended Map shall clearly delineate the construction zones, Zone 1, Zone 2 and Sub-area Zone 2, as recommended in the Geologic Report (Library No. 090245), prepared by the Nolan Associates dated March 14, 2008. **(RMA – Planning Department)**	Amending Map shall reflect the appropriate construction zones on Lot 5. The information shall be submitted to the RMA - Planning Department and Public Works for review and approval prior to recordation of Amending Map.	Owner/ Applicant	Prior to recordation of Amended Map	
Public Works Department						

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
12.		**PWSP001 – AMENDING MAP (NON-STANDARD)** File an Amending Map delineating the new homeland site, all existing and required easements or right-of-way and monument new lines. **(Public Works)**	Applicant's surveyor shall prepare an Amending Map, submit to DPW for review and approval.	Owner/ Applicant/ Engineer	Prior to Recordation of Amending Map	

END OF CONDITIONS



BASEMAP Plate 1 Prepared by Nolan Associates for Preliminary Geologic Investigation for Santa Lucia Preserve Lot 5, dated June 22, 2007

N

Zone 1 - Habitable Structures

Zone 2 - Non-Habitable Structures only

Existing Homeland Boundary

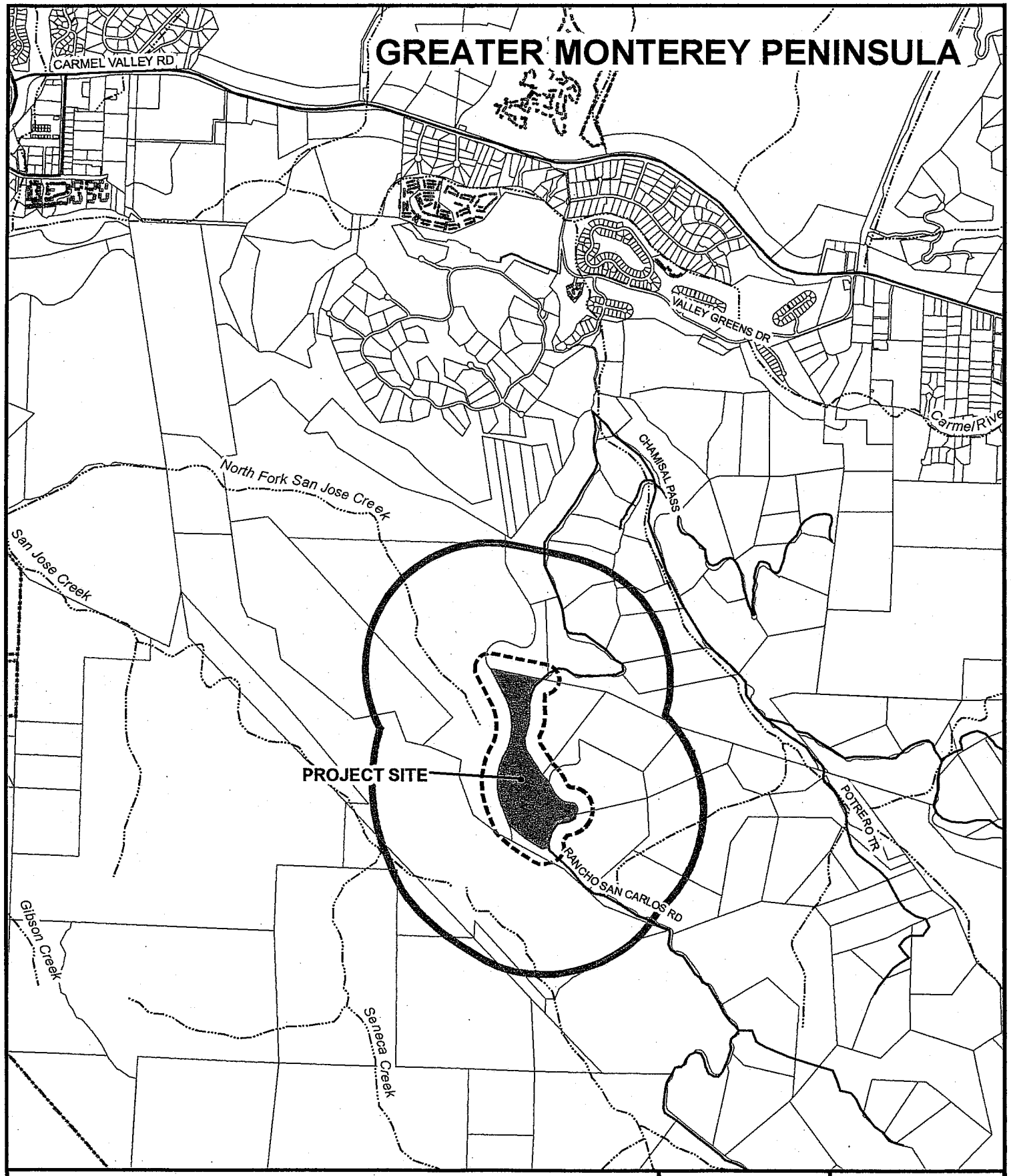
SCALE 1"=200'

SCALE IN FEET

NOLAN ASSOCIATES

Topographic Index Map
Lands of Tate
Santa Lucia Preserve, Lot 5
Carmel, California

FIGURE #
1
JOB #
07025



APPLICANT: TATE

APN: 239-021-004-000 **FILE #** PLN090032

300' Limit 2500' Limit City Limits

N

0 2,000

Feet

MONTEREY COUNTY CALIFORNIA 1850

EXHIBIT J

LETTER FROM THE SANTA LUCIA CONSERVANCY,
DATED MAY 13, 2009

(PLN090032 – Charles Tate
Planning Commission
June 10, 2009

EXHIBIT J

SANTA LUCIA
CONSERVANCY

26700 Rancho San Carlos Road
Carmel, CA 93923
Phone: 831.626.8595
Fax: 831.626.8522
www.slconservancy.org

May 13, 2009

Mr. Joel Panzer
Maureen Wruck Planning Consultants, LLC
21 West Alisal Street, Suite 111
Salinas, CA 93901

RE: Proposed Homeland Adjustment for Lot 5, Santa Lucia Preserve.

Dear Mr. Panzer:

At the March 1, 2009 meeting of the Santa Lucia Conservancy Board of Governors, the proposed Homeland adjustment request from the owner of Lot 5 was considered. Governors learned of the challenging site specific geological circumstances at the root of the owner's request. The conservation benefits of the proposed adjustment outcomes were presented and discussed. These specifically included the following recognized conservation benefits:

- As proposed, adjustment would result in the northern boundary of the Homelands being located farther away from a historic stock pond on the Openlands portion of Lot 5 known to be an active breeding site for California tiger salamanders. Such an action would help reduce future potential impacts to this valuable resource;

- As proposed, the area of the adjusted Homeland would be reduced by 10 percent when compared to the Homeland in the Final Map. From a biological perspective, the reduced area and modified configuration of the Homeland would likely protect and improve higher quality upland habitat conditions important to California tiger salamanders, and

- Lot 5 is an approved Full-Time Equestrian Lot on the Santa Lucia Preserve. As such, the owner has specific turnout pasture rights in the Openlands for horsekeeping. As proposed, the owner of Lot 5 is willing to extinguish this equestrian right in the Openlands. Such an action would likely contribute positively to the long term conservation values of the Lot and Santa Lucia Preserve.

The Santa Lucia Conservancy recognizes that the Lot owner needs to secure approval from the County of Monterey for a Homeland adjustment. The Santa Lucia Conservancy Board of Governor's

consideration of the proposal was to provide the Lot owner input and potential conceptual approval before pursuing the matter with the County of Monterey.

The discussion concluded by a unanimous vote of the Board of Governors to conceptually approve the proposed Homeland adjustment. At such time the County of Monterey considers and approves the proposed Homeland adjustment, the Board of Governors will again consider the proposal and any County modifications. This will be followed by a vote of ratification.

Counsel for the Santa Lucia Conservancy will then undertake all necessary steps on behalf of the Board of Governors to ensure the conservation easement for Lot 5 reflects the approved changes and adequately protects the newly configured Openlands. The modified conservation easement will be reviewed by and recorded with the County of Monterey.

Please let me know if you have any questions regarding this action.

Sincerely,

James M. Sulentich
Executive Director

Cc: William W. Shaw, Ph.D.
Mark Blum, Esq.