# 1776 Eucalyptus Hill Road Residential Lot Spilt

Appeal Hearing March 20, 2007



# ENGINEERS V SURVEYORS V CONSTRUCTION MANAGERS Quality Infrastructure Services

March 13, 2007

Beach Front Construction 4530 Via Esperanza Santa Barbara, California 93110

Attention: Mr. Rick Jeffrey

SUBJECT: 1776 EUCALYPTUS HILL ROAD SANTA BARBARA, CALIFORNIA

Dear Rick:

MNS Engineers, Inc. (MNS) is pleased to submit this letter discussing the geologic stability of the planned building envelope for the land division at 1776 Eucalyptus Hill Road. MNS prepared an Engineering Geology Report for the project, dated October 20, 2004. The parcel is located in the Barker Pass/Eucalyptus Hill area of Santa Barbara at an approximate elevation of 260 to 280 feet, mean sea level (msl). The terrain in the site vicinity consists of a southeast-facing slope. The geologic conditions encountered in the exploratory trench excavated for the engineering geology study indicates that surficial sediment consisting of fanglomerate (Oog) deposits and Monterey Formation (Tm) shale underlie the site. The fanglomerate is identified by its relatively dense nature and the presence of numerous boulders, cobbles and gravel layers. The fanglomerate generally consists of moderately dense to dense sand, clayey sand, and silty sand with interbedded layers of hard clay, silt, gravel, cobbles and boulders. The Monterey Formation underlies the fanglomerate deposits at depths of about 3 to 5 feet, and consists of marine siltstone and shale. Monterey Formation bedding was measured in the exploratory trench to strike N70E, and dips to the north at 29 degrees, indicating a "non dip slope" condition with respect to the east/southeast descending slope that the building envelope occupies.

The site is located on moderate sloping terrain and is in an area of mapped landsliding; however; evidence of historic or recent landsliding in the building area, and directly downslope of the envelope was not observed in our investigation. It is our understanding that the structure foundations will consist of deep foundations embedded into Monterey Formation material, it is therefore our opinion that there is not a significant potential for landsliding or slope instability to impact the site development.

On the basis of our evaluation, it is our opinion that the development of the building area is feasible from a geotechnical standpoint. In addition, drainage improvements incorporated into the project design and development will reduce the potential for slope instability on and below the building area. We appreciate the opportunity to provide our services on this project. Please contact the undersigned if you have questions regarding this report, or require additional information.

Sincerely,

MNS ENGINEERS, INC.

Roger C. Slayman, C.E.G. 1920 Principal Engineering Scologist

Copies: 5 – Addressee

## acific Materials Laboratory of Santa Barbara, Inc.

35-A South La Patera Lane P.O. Box 96 Goleta, CA 93116 Ph: (805) 964-6901

Santa Ynez Ph: (805) 688-7587

FAX No: (805) 964-6239

E-mail: pml@pml.sbcoxmail.com

March 13, 2007 Lab No: 73839-2 File No: 07-11909-2

Eucalyptus Modern, LLC

Attn: Rick Jeffrey 4530 Via Esperanza Santa Barbara, CA 93110

SUBJECT:

Response to Report Review by John B. Manning, Dated March 6, 2007

1776 Eucalyptus Hill Drive Santa Barbara, California

REFERENCE: Pacific Materials Laboratory Lab Report No. 61287-2

Dated November 12, 2004

Dear Mr. Jeffrey:

The Pacific Materials Laboratory, Inc. proposal stated that two exploratory borings would be performed, when in fact only one exploratory boring was performed together with an exploratory trench. The soil report incorrectly stated on Page 2, under the heading of Field Investigation, that two truck-mounted auger borings were performed to the depth of 20 feet. This is in error; there was only one truck-mounted auger boring. No density tests were performed, although the symbol for density tests remains in the legend on Plate 1 of the referenced report. The symbol should be ignored. The purpose of a surface density test is to make recommendations regarding concrete slab-on-grade floors and shallow footings. However, since it was known that this structure would be placed on a deep foundation, it was later decided not to perform a density test.

On Page 2 of the referenced report, under the heading SOIL CONDITIONS, it was stated that "the soil profile consists of a dark brown expansive clay covering the top 3 to 7 feet of the surface soil. Below the expansive clay layer is a tan stiff clay and white shale." The "tan stiff clay" is referring to the soil conditions encountered in the 20-foot deep boring. The "white shale" is referring to the soil conditions encountered in the exploratory trench.

Based on my discussions with the Project Geologist, it was determined that piles penetrating at least 10 feet into the stiff clay or shale would provide a stable foundation. The recommendation, under the heading FOUNDATIONS on Page 5 (Item No. 3), states all piles shall be drilled a minimum distance of 10 feet into the stiff shale layer. This may also read "into the stiff clay layer". It should be noted the Monterey shale is a clay stone and a silt stone, and the exploratory borings we performed grinds the shale layer such that the disturbed

March 13, 2007

-2-

Lab No: 73839-2 File No: 07-11909-2

samples on the drill, which are used to identify the soil profile by the field technicians, appears to be clay, silty sand with clay, and silty sandy clays.

It remains the opinion of the undersigned that piles embedded into the soil described in the Boring Log labeled B-1 in the referenced report will provide a stable foundation.

If you have any questions concerning this matter, please do not hesitate to call. Thank you for the opportunity of providing this service.

Respectfully submitted,

PACIFIC MATERIALS LABORATORY, INC.

Ronald J. Pike, C. E. 42788

RJP:vlh

February 26, 2007

Rick Jeffery 4530 Via Esparanza Santa Barbara, California 93110

Subject: Request for consultation regarding fire mitigation measures and their affect on a 4.12 acre residential property proposed for a two lot subdivision.

APN 015-161-054

Dear Mr. Jeffery:

The Eucalyptus Hill Road Canyon site of your proposed subdivision lies within the designated High Fire Hazard Area of the City of Santa Barbara. The City of Santa Barbara General Plan –Seismic- Safety Element adopted by the City Council in 1979 identifies high fire hazard areas and develops policies and actions focused on reducing the impact of wildfire within the community including the area of your proposed project. The Cities policies and actions are based on an assessment that considers topography, weather and fuels (vegetation) and their influence on fire behavior. This assessment also evaluated six factors which consist of roof type, proximity of structures to other structures, road systems, water supply, Fire Department response times, and historic fire starts.

After evaluating the subject property and considering the Cities High Fire Hazard Area requirements I am inclosing my findings and my opinion of each finding as they relate to your proposed project:

### Finding:

Eucalyptus Hill Road Canyon lies within the Cities High Fire Hazard Foothill Zone (as described by the City of Santa Barbara Fire Department Wildland Fire Plan) and is filled with a mixture of non-native and native vegetation with many mature trees on slops of 30 % to 40% throughout the canyon. Also contained within the canyon is a riparian zone and habitat corridors.

### Opinion:

Given the amount of fuel (vegetation), slope and size of your parcel the 200 foot defensible space requirement for the existing and the proposed single family structure will provide a significant mitigation against the threat of fire spread. Reducing the existing vegetation by the recommended 1/3 to 1/2 and removing flammable under story grasses, brush, exotic plants and thinning, pruning and liming of trees to remove fire ladders that communicate fire into the over story (canopy) will benefit the entire area from the perspective of fire spread. Vegetation removal and ongoing management can be accomplished by hand

cutting and chipping which creates bio mass that can be utilized on site for erosion control and retention of soil moisture. This effort will be consistent with the Santa Barbara City Wildland Fire Plan for the Eucalyptus Hill Road area when using a mosaic landscape pattern that preserves habitats and nesting areas while reducing fuel (vegetation) loads.

The defensible space created on your property will serve as a buffer from fire for your existing structure, your proposed structure, adjacent structures and in particular residences above your property.

### Finding:

The Santa Barbara Wildland Fire Plan indicates that there are few wood roof structures in the subject area, the proximity of structures to one another in the area is classified as low, the roadway is adequate and well maintained, the water supply is adequate and a fire hydrant is located across the street from the property, Fire Department response time is 4 to 6 minutes, There are no historic wildland fire starts indicated in area from 1995 to present.

### Opinion:

Considering the findings information obtained from the Santa Barbara City Wildland Fire Plan the proposed project dose not seem to add to the existing potential danger within the Eucalyptus Hill Road Canyon area rather the defensible space created by your proposed project along with ongoing required maintenance will provide for a more fire safe environment for residents and natural resourses.

The project when completed in concert with existing codes, ordinances and design standards will prove to be an asset in the event of a wild fire in the Eucalyptus Hill Road Canyon.

Sincerely,

Warner R. McGrew

Warner R. McGrew and Associates, Inc.

515 Consuelo Dr.

Santa Barbara, Calif. 93110

FLOWERS & ASSOCIATES, INC.

Robert T. Flowers RCE 18324 Stephen G. Flowers RCE 26192 Vemon E. Williams RCE 30690 Eric L. Flavell RCE 3000 David R. Baum RCE 46497

500 EAST MONTECITO STREET SANTA BARBARA, CA 93103
PHONE: 805.966.2224 • FAX: 805.965.3372
E-MAIL: www.flowersassoc.com

### **MEMORANDUM**

To:

Rick Jeffrey

W.O.;

0512

From:

Mike Viettone

Date:

02/01/07

Subject:

1776 Eucalyptus Hill Road

Rick,

Per your request, we are providing to you the following information for your 1776 Eucalyptus Hill Road project in order for you to respond to questions raised by the project planner.

- A. Earthwork Quantity Estimate Breakdown:
- 1. Reconfigure driveway to Parcel B, including Eucalyptus Hill Road widening, pedestrian shoulder, and regrading of Parcel B existing driveway.

Cut 50 C.Y. Fill 200 C.Y.

2. Storm drainage system improvements, including two drop inlets, storm drain pipe trench and backfill, and rock rip rap energy dissipater.

Cut 200 C.Y. Fill 200 C.Y.

3. Existing asphalt road removal and regrade as shown on Parcels A and B.

Cut 50 C.Y. Fill 250 C.Y.

4. Recontouring of slope on Parcel A to remove existing cut pad.

Cut 50 C.Y. Fill 150 C.Y.

Please see sheet TM-3 of our civil plans for the above information.

B. Average Slope for the Proposed Building Envelope as Defined on Sheet TM-2

The City of Santa Barbara has identified a formula to calculate the average slope of a parcel of land. The formula is as follows:

$$S = .00229 (1) (L)$$

Where:

S = The Average Slope of the Land in Percent

I = The Contour Interval in Feet

L = The Combined Length of all Contours in Feet

A = The Net Area of the Parcel in Acres

The average slope of the entire building envelope proposed for Parcel A is:

I = 2 feet

L = 670 feet

A = 0.118 acres

$$S = .00229(2)(670)$$
  
0.118

$$S = 26\%$$

The average slope of the entire building envelope proposed for Parcel A excluding that portion over 30% that falls within the building envelope is:

I = 2 feet

L = 620 feet

A = 0.112 acres

$$S = .00229(2)(620)$$
  
 $0.112$ 

$$S = 25\%$$

The average slope of that area over 30% that falls within the building envelope is:

I = 2 feet

L = 50 feet

A = 0.006 acres

$$S = \underline{.00229(2)(50)}$$
 $0.006$ 

$$S = 38\%$$

Please let me know if you have any questions or if you should need any additional information.

FLOWERS & ASSOCIATES, INC.

Robert T. Flowers RCE 18324 Stephen G. Flowers RCE 26192 Vernon E. Williams RCE 33650 Eric L. Flavell RCE 33000 David R. Baum

500 EAST MONTECITO STREET SANTA BARBARA, CA 93103

PHONE: 805.966.2224 • FAX: 805.965.3372

www.flowersassoc.com

W.O. 0512

March 15, 2007

Mr. Rick Jeffrey 4530 Via Esperanza Santa Barbara, CA 93110

Subject:

1776 Eucalyptus Hill Road

John B. Manning's March 6, 2007 memo to the Santa Barbara City Council

### Dear Rick:

We have reviewed the John B. Manning's March 6, 2007 memo to the Santa Barbara City Council and are providing herein a response to those items that are related to the Civil Engineering portions of the project submittal package.

With regard to the last paragraph starting on the first page:

- A. We did not prepare the initial slope calculations for the proposed building envelope which separated out an area that was over 30%. We have recently performed average slope analysis, in response to questions asked at the Planning Commission Hearing. A summary of the results is presented below (also see attached memo):
  - 1. The average slope of the entire building envelope proposed for Parcel A is:

S = 26%

2. The average slope of the entire building envelope proposed for Parcel A, excluding that portion over 30% that falls within the building envelope is:

S = 25%

3. The average slope of that area over 30% that falls within the building envelope proposed for Parcel A is:

S = 38%

B. The 450 cubic yards of import material estimated for the project can be broken down into the following categories (also see Sheet TM-3 and attached memo).

Page 2 March 15, 2007 W.O. 0512

1. Reconfiguring Driveway to Parcel B, widening Eucalyptus Hill Road, and regrading Parcel B to improve existing turning movement of vehicles into and out of the existing driveway for Parcel B. Vehicles currently have to pull out into the opposing lane of traffic when turning right out of the driveway.

Cut 50 cubic yards Fill 200 cubic yards

2. Constructing storm drain system improvements (pipe trench) to repair existing erosion scar and install upper 240± lineal feet of storm drain pipe in Eucalyptus Hill Road and along the southerly property line.

Cut 200 cubic yards Fill 200 cubic yards

3. Removing and regrading existing asphalt road on Parcels A and B to remove 300± lineal feet of existing asphalt concrete pavement which connects Eucalyptus Hill Road with the lower portion of Parcel A and B.

Cut 50 cubic yards Fill 250 cubic yards

4. Re-contouring of slope on Parcel A to remove the existing pad and create a finish grade with softer contours than existing.

Cut 50 cubic yards Fill 150 cubic yards

We did not plan on Parcel A being graded to restore the contours which existed prior to any disturbance of the existing parcel, but instead planned on re-contouring a portion of the existing slope to remove the pad that had been previously created and to blend the slope into the existing ground surface on either side of the area to be re-contoured. That portion of the parcel immediately north of the area being re-contoured (Parcel B) has been previously developed, limiting the options for re-contouring of this area. As we do not have an accurate topographic map depicting the condition of the parcel prior to the grading that created this pad, we do not know the limits of the area that was graded and cannot calculate how much earth was moved in the process and what may have happened to any excess material generated during grading.

With regard to the last paragraph at the bottom of the second page:

A. There is no cistern proposed to be constructed in line with, or adjacent to, the above ground storm drain shown on Sheet TM-2 and TM-3. The lower portion of this pipe is proposed to be constructed above ground to minimize impacts to the existing vegetation during construction. Construction of the above ground storm drain pipe and anchoring system will enable the pipe to be placed along a meandering alignment that would allow

for the preservation of the existing trees and minimize the disturbance to the existing understory.

- B. The runoff graphs and methods used to calculate the storm water runoff tributary to the proposed storm drain system for Eucalyptus Hill Road were developed by the Santa Barbara County Flood Control and Water Conservation District. We cannot change either of these when performing our calculations.
- C. The existing City of Santa Barbara storm drain system collects runoff from Eucalyptus Hill Road and discharges the now concentrated flow at the outlet of the existing storm drain pipe. This concentrated flow must then travel down a 27% average slope for approximately 400 feet before reaching Cuelham Creek. The concentration of storm water on this steep slope results in the ongoing erosion that is evident at the site.

We hope that the above information answers the questions raised by John Manning in his March 6, 2007 memo to the Santa Barbara City Council.

Please let me know if you have any questions or if you should need any additional information.

Sincerely,

FLOWERS & ASSOCIATES, INC.

By:

Michael Viettone, P.E.

MV/mk

Encls.

# FLOWERS & ASSOCIATES, INC.

Robert T. Flowers RCE 18324 Stephen G. Flowers RCE 26192 Vernon E. Williams RCE 33690 Eric L. Flavell RCE 33000 David R. Baum

RCE 46497

500 EAST MONTECITO STREET SANTA BARBARA, CA 93103

PHONE: 805.966.2224 • FAX: 805.965.3372

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### **MEMORANDUM**

To:

**Rick Jeffrey** 

W.O.:

0512 02/01/07

From:

Mike Viettone

Date: Subject:

1776 Eucalyptus Hill Road

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Where:

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I = The Contour Interval in Feet

L = The Combined Length of all Contours in Feet

A = The Net Area of the Parcel in Acres

The average slope of the entire building envelope proposed for Parcel A is:

I = 2 feet

L = 670 feet

A = 0.118 acres

$$S = .00229(2)(670)$$
  
 $0.118$ 

$$S = 26\%$$

The average slope of the entire building envelope proposed for Parcel A excluding that portion over 30% that falls within the building envelope is:

I = 2 feet

L = 620 feet

A = 0.112 acres

$$S = .00229(2)(620)$$
  
0.112

$$S = 25\%$$

The average slope of that area over 30% that falls within the building envelope is:

I = 2 feet

L = 50 feet

A = 0.006 acres

$$S = \underline{.00229(2)(50)} \\ 0.006$$

$$S = 38\%$$

Please let me know if you have any questions or if you should need any additional information.

FAX:805 563 5495

PAGE 1

BEACH FRONT CONSTRUCTION ASUD YOU ESPERANZA SANTA BARBARA, CA 93110

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Members of the Santa Barbara City Council De la Guerra Plaza Santa Barbara, CA 93101 RECEIVED

MAR - 6 2007

John B. Manning 1716 Overlook Lane Santa Barbara, CA 93101 (805) 965-5197

CITY CLERK'S OFFICE SANTA BARBARA, CA

March 6, 2007

To All Members of the City Council:

Re: Advisability of rescinding the Planning Commission's approval of subdividing APN 015-161-054.

I am writing to impart salient information that will be important to the decision making process and will therefore be beneficial to have considered before the upcoming appeal hearing. Some of this information is potentially of considerable concern to the City of Santa Barbara.

Exhibit F (beginning on p. 130 of 186 of the full document) in the proposal indicates that on Sept. 9, 2004, Pacific Materials Laboratory of Santa Barbara, Inc. dug an exploratory trench and drilled two 20 foot bore holes on the site. That trench reached tan-white shale, the alleged bedrock, at a depth of 6 feet. The one 20 foot bore hole that is represented by profile revealed alternating layers of clay and sand, but no shale (cf. p. 145 of 186). The other bore hole is mentioned as having been dug, but it is never referred to again in the report. On the map showing one bore hole location, B-1 (p. 142 of 186), no exploratory trench is shown, the second bore hole is not shown, and the field density test location, D-1, is listed in the legend but not shown. The stated conclusion is that there is a clay layer about 3-7 feet thick at the top, which becomes shale below that depth. It then goes on to require that "all piles shall be drilled a minimum distance of 10 feet into the stiff shale layer, which was encountered approximately 3 to 7 feet below the present grade." Yet the 20 foot bore hole never reached the shale. Clearly there are considerable inconsistencies in this report and its recommendations.

A detailed environmental impact report was prepared in October, 1976 for APN 015-202-039, the lot immediately adjacent, on the south side of APN 015-161-054. In a subsequent field investigation in 1983 it was revealed that the geology of the western side of the canyon is highly suspect in terms of building safely. Indeed, past shallow landslides have shaped the topography. It was further suggested that "some of the underlying Monterey formation moved by block-gliding," and is actually unstable. Those findings suggest that a far more detailed geologic study of the proposed parcel than has been prepared so far is in order since the possibility of a similar problem in APN 015-161-054 has not been eliminated. The 1983 study concludes, "In any event, construction on the parcel should be designed with foundations resting on Monterey bedrock and not on existing soil or fill." Since both geologic reports recommend bedrock and since the 20 foot bore hole did not encounter any, there is a problem.

As a result of the various studies of APN 015-202-039 and the concerns expressed therein, applications to divide the parcel and add buildings were turned down twice, with one of the petitions having gone all the way to the California State Board of Appeals. The canyon has remained essentially in its natural state since then, and unquestionably the geology has not changed.

The above studies are on file in the city archives, and geologic concerns are outlined therein that resulted in these previous applications having been turned down. As a result the city may well be approving an unwise project. If geologic problems actually come to light at a later date, those archives and the inconsistencies in the current report could put the city in an uncomfortable position of having approved a building in an area known to be potentially unstable and in which the city wisely blocked similar proposals in the past.

At the Planning Commission hearing it was noted that part of the footprint for the proposed residence is on a slope that exceeds 30%, and when the proponents were asked how the slope calculations were

made, no adequate answer was given. It is possible that the average slope is greater than 28% and perhaps approaches or exceeds 30%? The lack of clarity in the slope calculation process and brings into question the purpose of the 450 yards of fill dirt that need to be imported. The questions that remain are: Just how was the slope calculated? How can the "original" natural slope be determined, and what happened to the original 450 yards of soil that is having to be replaced by the imported soil? Was that soil moved, or did it never exist? If the soil was moved, where did it go and how did it change the topography of the land? Is it possible that before the soil was moved the average slope of the footprint was greater than 30%?

It is unclear how the project will affect fire truck access to both the existing residence and the proposed residence. How will the new driveway allow for such vehicles?

The portion of Eucalyptus Hill Road between Alameda Padre Serra and Salinas Street is full of spectacular, framed and panoramic views. One of these views is across APN 015-161-054 and can be enjoyed by any driver headed downhill. There is a beautiful corridor looking down the canyon to the ocean framed by trees on both sides, and on a clear day one can see part of Anacapa Island. In the Architectural Board of Review reports it is emphasized that the concept proposal for the residence is set back and down from the road, and that it will block the view minimally at most. This is reemphasized in the Final Initial Study (p. 4 and 7 of 32, or p. 37 and 40 of 186). That concept proposal to the ABR emphasized that the conceptual height of the project would not exceed the height of flucalyptus Hill Road. As a result, under Aesthetics (p. 6 of 32 or p. 39 of 186), the answer to 1 a. should be "potentially significant, mitigable," and include the above-mentioned height restriction (which was self-imposed by the owner in the original ABR hearing). This stipulation should be included under the Planning Commission Conditions of Approval and should encompass landscaping as well to avoid future issues that might arise because of the current omission.

The last 130 feet of above ground culvert and below ground eisterns extend into undisturbed woodland and riparian areas that serve as a wildlife refuge in an otherwise urban area. Additionally, the runoff volume graphs are due to over 8 inches of rain in a 24 hour period, most of which fell in a matter of four hours around 10:00 a.m. The prognosis of such a deluge even being a 25 year event is an exaggeration, as is the contention that the minor amount of erosion resulting from that deluge is symptomatic of a serious problem. The project should be revised to have no or little impact on the undisturbed area.

All of the above suggests that approval of the division should be rescinded because:

- 1. The geology of APN 015-202-039 is known to be unstable, the geologic study that has been made of APN 015-161-054 is full of inconsistencies, and the city may be approving building in an area known to be unsafe.
- 2. Adequate accessibility by fire safety vehicles is unclear.
- 3. Preservation of public view lines is not adequately covered in the Conditions of Approval.
- 4. The pastoral beauty and the unspoiled nature of the area along with the accompanying flora and fauna and the general impact on the environment have not been given sufficient recognition or consideration in the decision, especially in relation to the location of the drain and cisterns.
- 5. The above renders the proposal inconsistent with the Conservation Element of the Santa Barbara General Plan and the California Environmental quality act.

Respectfully submitted.

John B Manning