CITY OF LOS ANGELES
CALIFORNIA

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

OSAMA YOUNAN, P.E.
GENERAL MANAGER
SUPERINTENDENT OF BUILDING

JOHN WEIGHT
EXECUTIVE OFFICER

GEOLOGY AND SOILS REPORT APPROVAL LETTER

January 3, 2023

LOG # 124167
SOILS/GEOLOGY FILE - 2
LAN

Bill and Harpreet Purewal
14389 S. McCall Avenue
Selma, CA 93662

TRACT:	8557
BLOCK:	D
LOT(S):	18
LOCATION:	7027 S. Vista Del Mar Lane

CURRENT REFERENCE REPORT/LETTER(S)	REPORT No.	DATE OF DOCUMENT	PREPARED BY
Geology/Soils Report	GH18197-G	11/02/2022	Grover-Hollingsworth
Oversized Doc(s).	``	``	``

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provides recommendations for the proposed multi-level residence, accessory dwelling unit (ADU), pool and retaining walls. According to the report, the site consists of an undeveloped hillside lot with a slope that descends from Vista Del Mar Lane to the west. The slope is about 80 feet high with a gradient of 1.5:1 to 1:1 (H:V). The proposed 5-level residence (including subterranean) residence is located at the eastern part of the property at the upper part of the slope and the 3-level ADU and the bottom western part of the property. The pool is proposed in the rear yard of the ADU, with a stacked retaining wall to provide the slope clearance.

According to the report, the existing slope does not possess the code required static and seismic factor of safety, therefore three row of soldier/shoring piles are required to help stabilize the slope.

The earth materials at the subsurface exploration locations consist of natural soil, dune sand, terrace deposits and San Pedro Formation. The consultants recommend to support the proposed structures on conventional and/or drilled-pile foundations bearing on the terrace deposits and/or San Pedro Formation.

The site is located in a designated seismically induced landslide hazard zone as shown on the Seismic Hazard Zones map issued by the State of California. The above report includes an acceptable seismic slope stability analysis and the requirements of the 2020 City of Los Angeles Building Code have been satisfied.

The referenced report is acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2020 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. Conformance with the Zoning Code Section 12.21 C8, which limits the heights and number of retaining walls, will be determined during structural plan check.

2. Provide a notarized letter from all adjoining property owners allowing temporary tie-back anchors on their property (7006.6).

3. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans that clearly indicates the geologist and soils engineer have reviewed the plans prepared by the design engineer; and, that the plans include the recommendations contained in their reports (7006.1).

4. All recommendations of the report that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

5. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans (7006.1). Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit.

6. A grading permit shall be obtained for all structural fill and retaining wall backfill (106.1.2).

7. Prior to the issuance of any permit, an accurate volume determination shall be made and included in the final plans, with regard to the amount of earth material to be exported from the site. For grading involving import or export of more than 1000 cubic yards of earth materials within the grading hillside area, approval is required by the Board of Building and Safety. Application for approval of the haul route must be filed with the Board of Building and Safety Commission Office. Processing time for application is approximately 8 weeks to hearing plus 10-day appeal period (7006.7.5).

8. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density. Placement of gravel in lieu of compacted fill is only allowed if complying with LAMC Section 91.7011.3.

9. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction (7013.12).

10. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Grading Division of the Department and the Department of Public Works, Bureau of Engineering, B-Permit Section, for any grading work in excess of 200 cubic yards (7007.1).

    1828 Sawtelle Blvd., 3rd Floor, West LA (310) 575-8388

11. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the General Safety Orders of the California Department of Industrial Relations (3301.1).

12. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring, as recommended. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an

angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3.1)

13. Prior to the issuance of any permit that authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation (3307.1).

14. The soils engineer shall review and approve the shoring plans prior to issuance of the permit (3307.3.2).

15. Prior to the issuance of the permits, the soils engineer and the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval.

16. Unsurcharged temporary excavation may be cut vertical up to 3 feet. For excavations over 3 feet, the lower 3 feet may be cut vertically and the portion of the excavation above 3 feet shall be trimmed back at a gradient not exceeding 1:1, as recommended.

17. Temporary shoring shall be designed for the lateral earth pressures specified on page 39 of the 11/02/2022 report; all surcharge loads shall be included into the design.

18. Shoring shall be designed for a maximum lateral deflection of 1 inch, provided there are no structures within a 1:1 plane projected up from the base of the excavation. Where a structure is within a 1:1 plane projected up from the base of the excavation, shoring shall be designed for a maximum lateral deflection of ½ inch, or to a lower deflection determined by the consultant that does not present any potential hazard to the adjacent structure.

19. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.

20. Controlled Low Strength Material, CLSM (slurry) proposed to be used for backfill shall satisfy the requirements specified in P/BC 2020-121.

21. All foundations shall derive entire support from terrace deposits or the San Pedro Formation, as recommended and approved by the geologist and soils engineer by inspection.

22. Foundations adjacent to a descending slope steeper than 3:1 (horizontal to vertical) in gradient shall be a minimum distance of one-third the vertical height of the slope but need not exceed 40 feet measured horizontally from the footing bottom to the face of the slope (1808.7.2); for pools the foundation setback shall be one-sixth the slope height to a maximum of 20 feet (1808.7.3). Where the slope is steeper than 1:1, the required setback shall be measured from an imaginary plane 45 degrees to the horizontal, projected upward from the toe of the slope.

23. Buildings adjacent to ascending slopes steeper than 3H:1V in gradient shall be setback from the toe of the slope a level distance measured perpendicular to slope contours equal to one-half the vertical height of the slope, but need not exceed 15 feet (1808.7.1); for pools the setback shall be one-fourth the vertical height of the slope, but need not exceed 7.5 feet (1808.7.3). Where the slope is steeper than 1:1, the toe of the slope shall be assumed to be at the intersection of a horizontal plane drawn from the top of the foundation and a plane drawn tangent to the slope at an angle of 45 degrees to the horizontal.

24. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4), ½-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed near the top of the footing.

25. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2017-116 "Foundation Design for Expansive Soils" (1803.5.3).

26. Pile caisson and/or isolated foundation ties are required by LAMC Sections 91.1809.13 and/or 91.1810.3.13. Exceptions and modification to this requirement are provided in Information Bulletin P/BC 2020-030.

27. Pile and/or caisson shafts shall be designed for a lateral load of 1000 pounds per linear foot of shaft exposed to fill, soil and weathered bedrock per P/BC 2020-050.

28. The design passive pressure shall be neglected for a portion of the pile with a horizontal setback distance less than five feet from fill, soil or weathered bedrock, or as recommended in the soils report, whichever is greater.

29. When water is present in drilled pile holes, the concrete shall be tremied from the bottom up to ensure minimum segregation of the mix and negligible turbulence of the water (1808.8.3).

30. Lateral resistance of the shoring/soldier pile shafts shall be determined as recommended on page 29 of the report.

31. Slabs placed on approved compacted fill shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.

32. The seismic design shall be based on a Site Class D, as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check.

33. Retaining walls shall be designed for the lateral earth pressures specified in the section titled "Retaining Walls" starting on page 34 of the 11/02/2022 report. Note: Where two separate stacked retaining walls (the upper wall surcharges the lower wall) are proposed, the lower of the 2 walls shall be designed for the combined height of the 2 walls. All surcharge loads shall be included into the design.

34. Retaining walls at the base of ascending slopes shall be provided with a minimum freeboard of two feet, as recommended.

35. The recommended equivalent fluid pressure (EFP) for the proposed retaining wall shall apply from the top of the freeboard to the bottom of the wall footing.

36. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted in a non-erosive device to the street in an acceptable manner (7013.11).

37. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector (108.9).

38. Basement walls and floors shall be waterproofed/damp-proofed with an LA City approved "Below-grade" waterproofing/damp-proofing material with a research report number (104.2.6).

39. Prefabricated drainage composites (Miradrain, Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.

40. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soils report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record (1805.4).

41. Where the ground water table is lowered and maintained at an elevation not less than 6 inches below the bottom of the lowest floor, or where hydrostatic pressures will not occur, the floor and basement walls shall be damp-proofed. Where a hydrostatic pressure condition exists, and the design does not include a ground-water control system, basement walls and floors shall be waterproofed. (1803.5.4, 1805.1.3, 1805.2, 1805.3)

42. The proposed swimming pool shall be designed for a freestanding condition.

43. Pool deck drainage shall be collected and conducted to an approved location via a non-erosive device (7013.10).

44. The structure shall be connected to the public sewer system per P/BC 2020-027.

45. All roof, pad and deck drainage shall be conducted to the street in an acceptable manner in non-erosive devices or other approved location in a manner that is acceptable to the LADBS and the Department of Public Works; water shall not be dispersed on to descending slopes without specific approval from the Grading Division and the consulting geologist and soils engineer (7013.10).

46. An on-site storm water infiltration system at the subject site shall not be implemented, as recommended.

47. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS (7013.10).

48. Sprinkler plans for irrigation shall be submitted and approved by the Mechanical Plan Check Section (7012.3.1).

49. Any recommendations prepared by the geologist and/or the soils engineer for correction of geological hazards found during grading shall be submitted to the Grading Division of the Department for approval prior to use in the field (7008.2, 7008.3).

50. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading (7008, 1705.6 & 1705.8).

51. All friction pile or caisson drilling and excavations shall be performed under the inspection and approval of the geologist and soils engineer. The geologist shall indicate the distance that friction piles or caissons penetrate into competent terrace deposit or San Pedro Formation in a written field memorandum. (1803.5.5, 1705.1.2)

52. Prior to pouring concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the work inspected meets the conditions of the report. No concrete shall be poured until the LADBS Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)

53. The installation and testing of tie-back anchors shall comply with the recommendations included in the report or the standard sheets titled "Requirement for Tie-back Earth Anchors", whichever is more restrictive. Research Report #23835

54. Prior to excavation an initial inspection shall be called with the LADBS Inspector. During the initial inspection, the sequence of construction; shoring; pile installation; protection fences; and, dust and traffic control will be scheduled (108.9.1).

55. Installation of shoring and/or pile excavations shall be performed under the inspection and approval of the soils engineer and deputy grading inspector (1705.6, 1705.8).

56. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the soil inspected meets the conditions of the report. No fill shall be placed until the LADBS Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the grading permit and the permit number shall be included (7011.3).

57. No footing/slab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.

DANIEL C. SCHNEIDEREIT
Engineering Geologist II

LEILA ETAAT
Structural Engineering Associate II

DCS/LE:dcs/le
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cc: Tony Russo, Applicant
Grover-Hollingsworth, Project Consultant
WL District Office

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
Grading Division

District WL	Log No. 124167

APPLICATION FOR REVIEW OF TECHNICAL REPORTS

INSTRUCTIONS

A. Address all communications to the Grading Division, LADBS, 221 N. Figueroa St., 12th Fl., Los Angeles, CA 90012 Telephone No. (213)482-0480.
B. Submit two copies (three for subdivisions) of reports, one "pdf" copy of the report on a CD-Rom or flash drive, and one copy of application with items "1" through "10" completed.
C. Check should be made to the City of Los Angeles.

1. LEGAL DESCRIPTION
Tract: 8557
Block: D Lots: 18
3. OWNER: Bill and Harpreet Purewal
Address: 7027 Vista Del mar lane
City: LA, CA 14389 S. McCall, Selma CA Zip: 93662
Phone (Daytime):

2. PROJECT ADDRESS: 7027 Vista Del mar Lane
4. APPLICANT TONY RUSSO
Address: 11150 W Olympic Blvd
City: LA, CA Zip: 90064
Phone (Daytime): 408-655-0998
E-mail address: TONY@[redacted].com

5. Report(s) Prepared by: Grover Hollingsworth 6. Report Date(s): 11/2/22 Crest Regrest4t2.com

7. Status of project: ☐ Proposed ☐ Under Construction ☐ Storm Damage
8. Previous site reports? ☐ YES if yes, give date(s) of report(s) and name of company who prepared report(s)

9. Previous Department actions? ☐ YES if yes, provide dates and attach a copy to expedite processing.
Dates:
10. Applicant Signature: Position:

(DEPARTMENT USE ONLY)

REVIEW REQUESTED	FEES	REVIEW REQUESTED	FEES
☐ Soils Engineering		No. of Lots	
☐ Geology		No. of Acres	
☐ Combined Soils Engr. & Geol.		☐ Division of Land	
☐ Supplemental		Other	
☑ Combined Supplemental	726.00	☑ Expedite	363.00
☐ Import-Export Route		☐ Response to Correction	
Cubic Yards:		☐ Expedite ONLY	
		Sub-total	1089.00
		Surcharge	249.58
		TOTAL FEE	1338.58

Fee Due: 1338.58
Fee Verified By: MC Date: 11/30/22
(Cashier Use Only)

1473085 Pd 12/13/22

ACTION BY:
THE REPORT IS: ☐ NOT APPROVED
☐ APPROVED WITH CONDITIONS ☐ BELOW ☐ ATTACHED

For Geology Date

For Soils Date