CITY OF
AGOURA HILLS

Building & Safety Department

FORMS

No. 12

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Foundation and Soil Report Waiver Request

The waiving of a Foundation and Soil Investigation is subject to the approval of the Building Official. Please provide the information requested below and submit along with your permit application. Building and Safety Department reserves the right to impose additional conditions and/or to require a foundation and soil investigation report. **All fields must be completed to accept this request.**

Project Location Information:

Project Location: _____

Plan Check No: _____

Project Detail:

Existing Bldg Floor Area: _____s.f. Proposed Bldg Floor Area: _____s.f.

Use/Occupancy: Group _____ Division _____

Is this a natural, level lot with no soil fill material? Yes No

Number of stories above Grade: _____

Height of Structure above Grade: _____

Depth under Grade Level: _____ sq ft Any Substructure? Yes No

Will the excavated soil material exceed 50 cubic yards? Yes No
Will the excavated soil material be disposed of onsite? Yes No

If the excavated soil is not disposed onsite, please state the location of disposal:

Address: _____

Grading Permit Number: _____

Property Owner's Name and Contact Information of Disposal Site:

_____

Print Name and Title: _____

Signature: _____ Date: _____

Requirements for Foundation and Soil Investigation Reports
On a Natural Level lot with No Fill Material

Agoura Hills Building Code section 1802.1 states that, when required by the Building Official, the classification and engineering properties of the soil at a building site shall be determined in accordance with Section 1802.2 through 1802.8. When a Foundation and Soil Investigation report is required, it must be prepared by a California licensed Engineer with experience in soils engineering and comply with Section 1802.6 through 1802.8.

All projects where foundations are required to support the building or structure shall obtain a Foundation and Soil Investigation Report prior to submitting plans to the Building and Safety Division, except as provided for in the table below, on a natural level lot with no fill material and approved by the Building Official.

USE/OCCUPANCY	HEIGHT OF STORIES	FLOOR AREA	FOUNDATION DESIGN REQUIREMENTS
1. Residential Group R3 or R4 (1), (2), (4) • Non-Tract Single Family Dwelling • Room Addition	1– Story 4 or 30 Feet	1000 S.F. or Less	• Weighted Expansion Index (EI) of 91-130 from Table 1805.4.2.1 • Maximum Vertical bearing pressure: 1000 #PSF
2. Nonresidential Group U (1), (2), (4) (Non Agricultural) • Private Garages/Carports • Structures accessory to private residence	1 Story 4 or 30 Feet	100 S.F. or Less	• Weighted Expansion Index (EI) of 91-130 from Table 1805.4.2.1 • Maximum Vertical bearing pressure: 1000 #PSF
3. Agricultural Group U (2), (4) • Livestock Shelters and Buildings • Poultry Shelters and Buildings • Barns, Sheds and Stables • Ag Equipment and Machinery Storage	1 Story	3000 S.F. or Less	• Weighted Expansion Index (EI) of 91-130 from Table 1805.4.2.1 • Maximum Vertical bearing pressure: 1000 #PSF • Lateral bearing pressure: 150 PSF
4. Retaining Walls (7) • Reinforced Concrete and Masonry using conventional spread footings only.	12 Feet measured from the bottom of the footing.	N/A	• Vertical bearing pressure: 1000 PSF • Passive bearing pressure: 250 PSF • Active fluid pressure (7) • Factor of Safety for Sliding and Overturning: 1.5
5. Swimming Pools on Level Lot Only:	N/A	N/A	• Pool Wall Lateral Earth Pressure: • EI of 91-130—Use 60#/cft
6. Non Building Structures—Group U: • Tanks, towers, vessels, cantilevered structures, • storage racks, pedestrian bridges.	14 Feet (6)	N/A	• Vertical bearing pressure: 1000 PSF • Lateral bearing pressure: 150 PSF

Footnotes:

1. **Total proposed floor areas of buildings combined per items 1 and 2 shall not exceed 1000 square feet.**
2. **When not exempt from plan check and inspection in accordance with Agoura Hills Building Code Section 105.2**
3. **When supported by a letter from a qualified geotechnical engineer or geologist that liquefaction is not probable, one additional story may be allowed.**
4. **Gutter and downspouts are required per Table 1805.4.2.1 Footnote #13.**
5. **When an Expansion Index Report is provided by a Soil Engineer, the foundation depth may be reduced to equal the corresponding Index in Table 1805.4.2.1 (See page 3 of handout).**
6. **For specific height limitations see Planning and Building Departments.**
7. **For Retaining wall design, use active fluid pressure as noted below. Grading permit is required when the quality of cut or fill exceeds 50 cubic yards.**

Surface Slope	Fluid Pressure
LEVEL	30#/cft
5 to 1	32#/cft
4 to 1	35#/cft
2 to 1	38#/cft
1.5 to 1	55#/cft
1 to 1	80#/cft

Table 1805.4.2.1 – Minimum Foundation Requirements *

Weighted Expansion Index (13)	Foundation for Slabs and Raised Floor System (4)(8)							Concrete Slabs (8)(12)		Premoistening of Soils under Footings, Piers and Slabs(4)(5)	Restriction on Piers under Raised Floors
	# of stories	Stem Thickness	Footing Width	Footing Thickness	All Perimeter Footings (5)	Interior footings for slab and raised floors (5)	Reinforcement for continuous foundations (6)	3-1/2" Minimum Thickness			
					Depth below natural surface of ground and finish grade			Reinforcement (3)	Total thickness of sand (10)		
	(Inches)										
0-20 Very Low (non-expansive)	1 2 3	6 8 10	12 15 18	6 6 8	12 18 24	12 18 24	1#4 top and bottom	#4@48" o.c. each way, or #3@36" o.c. each way	2"	Moistening of ground recommended prior to placing concrete	Piers allowed for single floor loads only
21-50 Low	1 2 3	6 8 10	12 15 18	6 6 8	15 18 24	12 18 24	1 #4 top and bottom	#4@48" o.c. each way, or #3@36" o.c. each way	4"	120% of optimum moisture required to a depth of 21" below lowest adjacent grade. Test required	Piers allowed for single floor loads only
51-90 Medium	1 2	6 8	12 15	6 6	21 21	12 18	1 #4 top and bottom	#3@24" o.c. each way	4"	130% of optimum moisture required to a depth of 27" below lowest adjacent grade. Test required	Piers not allowed
	3	10	18	8	24	24	#3 bars @24" in ext. footing Bend 3' into slab (7)				
91-130 High	1 2	6 8	12 15	6 6	27 27	12 18	2#4 top and bottom	#3@24" o.c. each way	4"	140% of optimum moisture required to a depth of 33" below lowest adjacent grade. Test required	Piers not allowed
	3	10	18	8	27	24					
Above 130 Very High	Special design by licensed engineer/architect										

***SEE REVERSE SIDE FOR FOOTNOTES (1) THROUGH (14)**

Footnotes:

1. Pre-moistening is required where in Table 1805.4.2.1 in order to achieve maximum and uniform expansion of the soil prior to construction and thus limit structural distress caused by uneven expansion and shrinkage. Other systems which do not include pre-moistening may be approved by the Building Official when such alternatives are shown to provide equivalent safeguards against the adverse effects of expansive soil.

2. Reinforcement for continuous foundations shall be placed not less that 3" above the bottom of the footing and not less than 3" below the top of the stem.

3. Reinforcement shall be placed at mid depth of slab.

4. After pre-moistening, the specified moisture content of soils shall be maintained until concrete is placed. Required moisture content shall be verified by an approved testing laboratory not more than 24 hours prior to placement of concrete.

5. Crawl spaces under raised floors need not be pre-moistened except under interior footings. Interior footings which are not enclosed by a continuous perimeter foundation system or equivalent concrete or masonry moisture barrier complying with Footnote #12 of Table 1805.4.2.1 shall be designed and constructed as specified for perimeter footings in Table 1805.4.2.1.

6. Foundation stem walls which exceed a height of three times the stem thickness above lowest adjacent grade shall be reinforced as required by engineering design.

7. Bent reinforcing bars between exterior footing and slab shall be omitted when floor is designed as an independent, "floating" slab.

8. Where frost conditions or unusual conditions beyond the scope of this table are found, design shall in accordance with recommendations of a foundation investigation. Concrete slabs shall have a minimum thickness of 4.

9. The ground under a raised floor system may be excavated to the elevation of the top of the perimeter footing, except where otherwise required by engineering design or to mitigation groundwater conditions.

10. GRADE BEAM, GARAGE OPENING. A grade beam, not less than 12" x 12" in cross section, or 12" x depth required by Table 1805.4.2.1, whichever is greater, and have reinforcement as specified for continuous foundations in Table 1805.4.2.1, shall be provided at garage door openings.

11. Where a post-tensioning slab system is used, the width and depth of the perimeter footings shall meet the requirements of this table.

12. An approved vapor barrier shall be installed below concrete slab on grade floors between 2" minimum sand on all residential occupancies in such a manner as to form an effective barrier against the migration of moisture into the slab. When sheet plastic material is employed for this purpose it shall be not less than 6 mils (.006 inch) in thickness. The installation of a vapor barrier shall not impair the effectiveness of required anchor bolts or other structural parts of a building foundation at the perimeter of concrete floor slabs shall form a continuous moisture barrier of Portland cement concrete or solid grouted masonry to the depths required by Table 1805.4.2.1.

13. When buildings are located on expansive soil having an expansion index greater than 50, gutters, downspouts, piping, and/or other non-erosive devices shall be provided to collect and conduct rainwater to a street, storm drain, or other approved watercourse or disposal area.

14. Fireplace footings shall be reinforced with a horizontal grid located 3" above the bottom of the footing and consisting of not less than No. 4 bars at 12" on center each way. Vertical chimney reinforcing bars shall be hooked under the grid. Depth of fireplace chimney footings shall be no less than that required by Table 1805.4.2.1.