

COUNTY OF ORANGE

OC PUBLIC WORKS GRADING INSPECTION

PRELIMINARY GRADING PERMIT PRE-GRADING MEETING

GRADING INSPECTION 1152 E. FRUIT ST. BLDG #6 SANTA ANA, CA 92701 Tel. (714) 245-4550 Fax (714) 567-7810

Date:	Inspector:	
Note: Building Permits can not be issu	ued until this permit is superseded by a precise	e grading permit and a rough grade release is obtained
GRADING PERMIT NO:_	TRACT #:	LOT # ' S:
JOB ADDRESS:		
OWNER:		PERMIT EXPIRES ON:

I. GENERAL REQUIREMENTS:

- A. An approved set of grading plans, preliminary soil report, and a copy of the grading permit shall be on the job at all times; working hours are Monday thru Saturday, 7 a.m. to 8 p.m. Work other than this time requires prior authorization and may involve approval by Board of Supervisors.
- B. CALLING FOR INSPECTION: Grading Section must be called for PRIOR to the requested day of inspection. Inspection requests made the day of the inspection can not be made. To set up inspection, use the automated inspection line by calling (714) 667-8899. Requests can be made up to 11:00 PM for next day or subsequent day inspection requests. For specific instructions on using the automated system, a handout is available from County offices noted above or from your inspector, or by going to the County of Orange's web site at ocpublicworks.com where inspections can be made and general inspection information relating to this project can be obtained. Use the inspection item numbers identified during this meeting today to set up the required inspections on the automated system. If a specific time is needed to set up the inspection, contact the inspector on the morning of the inspection during the office hours noted above. Inspections are provided on the day if the workload and logistics allow. You must recall your inspection if an inspection you called for was not made.
- C. **State Water Resources Control Board** requirements: This project must comply with State of California water quality laws. If this project is North of El Toro Road, refer to http://swrcb.ca.gov/rwqcb8 (Santa Ana Regional Water Quality Control Board); if South of El Toro Road, refer to http://swrcb.ca.gov/rwqcb9 (San Diego Regional Water Quality Control Board). Study the respective laws for application to this site.
- D. Work covered by this permit should conform with the approved soil reports and OC Public Works stamped approved grading plans. Talk to your grading inspector before making any changes.
- E. If the inspector finds geotechnical or design conditions not as previously approved, a stop-work notice may be issued and not lifted until revised plans and/or soil reports are approved. All grading work can not extend beyond the approved grading limits shown on the plan.
- F. Before excavation for any underground utilities or other trenching, approval must be obtained from the grading inspector.

INSPECTION ITEM NO.

II. REQUIRED GRADING INSPECTIONS:

The following are required grading inspections, specific to this project. If any work requiring inspection is covered or concealed by additional work without inspection, the grading inspector may require that the covered work be exposed for inspection.

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A. **START OF WORK:** At time of brushing, clearing, or demolition. Limits of grading must be staked; adequate water, erosion control, and toilet facilities must be on site.

B. EXCAVATION AND FILL INSPECTION

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 CANYON CLEANOUT: After all brush and unsuitable material has been removed and an acceptable base has been exposed, and prior to fill placement.
 Required Paperwork - memo from soil engineer/geologist approving area for fill.

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2. **FILL OR BUTTRESS KEYWAY:** After the natural ground or bedrock is exposed; the bench or key must be excavated to design specifications; survey stakes are required to locate the toe of slope.

Required Paperwork - memo from soil engineer/geologist approving bench/key.

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- 3. **OVER-EXCAVATION:** After an area has been excavated of unsuitable material, and prior to any fill placement.
 - **Required Paper work** memo from soil engineer/geologist approving area for fill.

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4. **ROUTINE CUT & FILL**: Each working day of routine cut and/or fill; field memos for cut slopes and fill placement must be made available by the geotechnical firm, along with adequate engineered staking for limits of grading. **Note: Importing or exporting of soil may require traffic control and a haul route clearance.**

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5. CANYON/BUTTRESS SUBDRAINS:

- a. After excavation of trench and prior to placement of filter material and pipe. Subdrain and pipe shall be on-site for inspection.
- b. After sub-drain and bedding have been placed, prior to covering pipe with filter material. The soil engineer shall provide a memo approving sub-drain pipe placement.
- c. After all filter material has been placed; soil engineer shall provide a field memo approving completion of the sub-drain installation.

C. EARTHWALL (i.e., Keystone, Loffel, crib, etc.):

Basic Inspections:

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1. **FOUNDATION EXCAVATION**: Prior to placing any wall material. Wall materials (concrete members, fabric, gravel, geogrid) shall be on site for inspection and excavation must be located with engineered stakes.

Required Paperwork -- Line & Grade from design engineer*; Memo from geotechnical engineer approving excavation and materials on site*

^{*}Must be wet signed by registered engineers/geologist.

- 821 2. **SUBDRAIN**: Prior to covering with rock and fabric **Required Paperwork** -- Memo from geotechnical engineer.
- 822 3. **GEOGRID**: At initial placement, and thereafter during placement.
 - 4. FILL AND WALL MEMBER PLACEMENT: Daily inspection calls must be made during routine construction of wall once initial work above is completed memos from both design and geotechnical engineers may be required if work warrants clarification.

NOTE: The design engineer must incorporate geotechnical and manufacturer specifications on plans; full time inspection by geotechnical engineer may be required during placement of wall materials and fill.

D. COURTESY ROUGH GRADE INSPECTION - For Release of:

1. STREETS/STORM DRAIN TO PUBLIC WORKS:

Required Site Conditions:

Streets shall be staked for alignment, including staking for curbs, and centerline of street. Cut-outs for street sections must comply with cross sections for approved grading plans, and must be within allowable tolerances. The following paperwork is required at the time of inspection:

- a. Geotechnical Approval memo or letter from soil engineer/geologist earthwork, granting release of street construction or storm drain placement; must be wet-ink signed by registered geotechnical engineer/geologist.*
- b. **Design Civil Engineer Approval** letter from civil engineer approving line and grade for the street alignment or storm drain placement.*
- **Grading Contractor** Statement of Compliance
- * Must be wet signed by registered engineer/geologist.

832 2. RETAINING WALLS TO BUILDING INSPECTOR:

Required Site Conditions:

Backcuts and foundation excavations to walls must be made, and off-set stakes locating face of wall set by civil engineer; at the time of inspection. The following paperwork is required at time of inspection:

- a. Geotechnical approval memo or letter from soil engineer/geologist releasing wall for construction; must include wet-ink signature by registered engineer/geologist, and state if foundation recommendations have changed from previously approved reports; the referenced reports containing previously approved recommendations must be listed.*
- b. Civil engineer approval memo or letter from civil engineer approving line and grade for wall backcut and footing excavation.*

Preliminary Pre-grade meeting REVISED 9/16/13

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* Must be wet signed by registered engineer/geologist.

3. PADS: (Courtesy only, not for building permit release)

Required Site Conditions:

Generally, pads must be staked with witness stake for pad elevation, blue top, property corners, and top/toe of slope stakes at time of inspection, in accordance with inspector's requirements. The following must be provided at time of inspection:

- a. **Geotechnical approval -** memo/letter with wet-ink signature signed by registered soil engineer/geologist, granting approval of earthwork for pads and adjacent slopes.*
- b. **Civil engineer approval -** letter from civil engineer approving line and grade for pads and slopes; must state if as-built plan included with certification.*
- c. As-built plan, if minor changes occurred during grading.
- d. **Statement of compliance -** provided by licensed grading contractor.
- * Must be wet signed by registered engineer/geologist.

NOTE: A GEOTECHNICAL REPORT MAY BE REQUIRED FOR ANY OF THE ABOVE ITEMS IN LIEU OF A MEMO OR LETTER IF CONDITIONS DURING GRADING WARRANT (i.e.: settlement monitoring, slope stability issue, etc.)

E. CONCRETE V-DITCH - TERRACE DRAINS, DOWN DRAINS, BROW DITCHES, AND RIBBON GUTTERS:

1. **Forms**: Required reinforcement and thickness-control wires must be in place at the time of inspection.

Required Paperwork - memo from soil engineer approving area to receive concrete and if type 5 concrete is needed; line & grade from design engineer, minimum 2500 P.S.I. load tickets will be collected.

2. Concrete or Gunite Placement

F. STORM / AREA DRAIN AND INLET / JUNCTION STRUCTURES:

These drainage devices are ones that are covered by approved grading plans, not by improvement plans issued by the Public Works Department.

- 1. **RCP DELIVERY** provide certificate of "D" load from manufacture
- 2. STORM DRAIN PIPE PLACEMENT prior to covering with backfill.

 Required Paperwork line & grade from the design engineer.
- 3. <u>PIPE COLLAR/ANCHOR FORMS</u> with required reinforcement in place.
 - 4. <u>INLET/JUNCTION STRUCTURE FORMS</u> with required reinforcement in place. Required Paperwork line & grade from design engineer.

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5. OUTLET STRUCTURE/RIP RAP - prior to placing required concrete.

NOTE: All pipe bells shall be glued and face upstream.

G. CURB & GUTTER / PAVING:

On a preliminary grading permit, this work is normally inspected by the Public Works Department

H. EROSION CONTROL and STATE WATER QUALITY REQUIREMENTS:

The official wet season is Oct. 1 thru April 30. During this time, all projects must have erosion control devices in place and functional and be subject to regular inspection for sediment control measures affecting water quality exiting the project into storm drains, streams, creeks, and the ocean. In addition, these requirements are enforceable throughout the entire year, including the dry season, especially if rain is imminent or practices on the project are cause for damage to water quality. The design and placement of devices on site that control water quality (called BMP's or Best Management Practices) must be designed by the project civil engineer. Erosion control plans, Storm Water Pollution Prevention Plans (SWPPP) and a suitable National Pollutant Discharge Elimination System (NPDES) must be current with the grading operation, available on site at all times, and be updated on a regular basis. If, in the opinion of the grading inspector, a lack of preparedness on the site is present for a possible rain event, or if housekeeping practices on the site impact requirements set forth within the SWPPP or NPDES, a stop work order my be given on construction activities until readiness is met. Further involvement by the County's authorized Water Quality Ordinance Inspector, or even the State of California Regional Water Quality Control Board inspector could result in severe fines for issues violating the Clean Water Act.

Required inspections for typical erosion control

 PREBUILD/SANDBAG PLACEMENT: Prior to starting erosion control work, contact grading inspector to review erosion control program being planned, and the required sand bag placement.

2. **DESILTING BASIN INSTALLATION**:

- a. **BASIN RISER AND OUTLET PIPES** prior to backfilling. **Required Paperwork** line & grade from design engineer.
- b. ANTI-SEEP COLLAR FORMS prior to concrete pour
- c. **SPILLWAYS** prior to gunite; required reinforcement and guide wires must be in place.

Required Paperwork - line & grade from design engineer; memo from soil engineer for 90% compaction of the sub-grade and the desilt basin embankment.

3. COMPLETION OF EROSION CONTROL:

When erosion control work is complete and readiness for the threat of rain is intact. **Required Paperwork**: line & grade from the design engineer may be required.

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870 I. FINAL GRADING INSPECTION AND GRADING BOND RELEASE:

A preliminary permit can be finalled and the grading bond released when:

- 1. **Erosion Control** All potential for erosion has been eliminated and maintenance against erosion is not needed. This means slopes must be planted, irrigated, and established; streets must be paved; graded pads can not be subject to excessive maintenance for erosion control.
- 2. **Monumentation** All monumentation must be set in accordance with the recorded tract map.
- 3. Geotechnical Reports All geotechnical reports must be submitted and approved
- 4. **As-Built plans & certifications** as needed; provided by design civil engineer
- 5. **Tract Conditions** All conditions for approval of tract and mitigating measures have been met
- 6. **Slope Planting and Irrigation** slopes must be fully established with plant material and irrigated in accordance with the grading code. A certification from the landscape architect may be required.
- 7. Public Works Approval concurrence with public works is required.

371 J. MONUMENTATION INSPECTION:

Lot and Tract corner monuments must be inspected as a condition of finalling this permit, releasing the grading bond, and releasing monumentation bonds. Prior to calling for this inspection, the monuments that are required "to be set" of the recorded tract map must be located and flagged for inspection. A copy of the recorded tract map and a letter from the engineer, certifying the setting of the monuments, is required at time of inspection.

NOTE:

The preliminary permit can be closed out and the grading bond released when the permit is superceded by a precise grading permit, or a group of precise grading permits comprising of all the geographic area covered by the preliminary. These precise permits can be under the original owner who had the preliminary or other owners. PRECISE PERMITS WILL NOT BE ISSUED ON ANY PRELIMINARY UNTIL THE REQUIREMENTS OF THE COURTESY ROUGH GRADE WALK HAVE BEEN MET, AND GEOTECHNICAL REPORTS ARE SUBMITTED AND APPROVED.

OTHER CONCERNS / NOTES:

Owner	Civil Engr./Arch.	
Ву	Ву	
Address	Address	
Telephone	Telephone	
Soils Engineer	Geologist	
By	Ву	
Address	Address	
Telephone	Telephone	
Grading Contractor	Coordinator/Superintendent	
Ву	Ву	
Address	Address	
Telephone	Telephone	
Others	Others	
Ву	Ву	
Address	Address	
Telephone		