

## GRADING PLAN SUBMITTAL

To be considered complete, a FIRST submittal for Grading Plan processing must contain the following items:

- Blueline prints of the Improvement Plan, including public planting & irrigation.
  - 6 copies if submitted in the Olivenhain Municipal Water District (OMWD) or Leucadia County Water District (LCWD). \_\_\_\_\_
  - 7 copies if submitted in the San Dieguito Water District (SDWD) \_\_\_\_\_
- Approved Tentative Map (TM) or Tentative Parcel Map (TPM), if applicable
  - 2 copies \_\_\_\_\_
- Resolution of Approval or Notice of Decision, with project conditions, if applicable
  - 2 copies \_\_\_\_\_
- Preliminary Title Report, valid, showing current vesting and all easements.
  - 2 copies \_\_\_\_\_
- Cost Estimate, itemizing earthwork/private surface & drainage improvements/site retaining walls/erosion control.
  - 2 copies \_\_\_\_\_
- Soils Report, less than 3 years old and applicable to current project, per 23.24.17 & 18.
  - 2 copies \_\_\_\_\_
- Structural Calculations, for non-standard site retaining walls and customized private crossings.
  - 2 copies \_\_\_\_\_
- Hydrology Study, with map and hydraulic calculations.
  - 2 copies \_\_\_\_\_
- Letter regarding Permission to Grade, as applicable.
- Original, properly acknowledged, plus 1 copy \_\_\_\_\_
- Coastal Development Permit (Inquire at Community Development Department)
- 2 copies (proof of application) \_\_\_\_\_
- Special Districts (If project is within the jurisdiction of OMWD and/or LCWD, applicant must submit separately and directly to the special district(s), as applicable). \_\_\_\_\_
- Digital file required prior to permit issuance. \_\_\_\_\_
- Submittal Fee/Deposit \_\_\_\_\_
- Completed and signed Engineering Development Application \_\_\_\_\_
- SWPPP \_\_\_\_\_
- 2 copies (if applicable) \_\_\_\_\_

**CITY OF ENCINITAS**  
ENGINEERING SERVICES DEPARTMENT  
PLANNING AND BUILDING DEPARTMENT

**GRADING GUIDELINES**  
Permits and Environmental Review

**I. When a Grading Permit is not required:**

Pursuant to Section 23.24.090 of the City's Grading Ordinance, an applicant is not required to obtain a grading permit if all of the following criteria are met:

- A. The land area which is distributed or filled is 10,000 square feet or less.
- B. Natural and finished slopes are less than 10%.
- C. Cut or fill of soil or earth materials is 50 cubic yards or less in volume.
- D. Rainwater runoff is diverted, either during or after construction, from an area smaller than 5,000 square feet.
- E. An impervious surface, if any, of less than 5,000 square feet is created.
- F. No drainage-way is blocked or has its stormwater carrying capacities or characteristics modified.
- G. The activity does not take place within 100 feet by horizontal measurement from the top of a coastal bluff, the bank of a watercourse, the mean high watermark (line of vegetation) of a body of water or within the wetlands associated with a watercourse or water body, whichever distance is greater.

A grading permit is not required for excavation which is strictly limited to that below the finished grade of a building (for basements or footings), below a retaining wall for footings, or excavation for a swimming pool, septic tank, or similar below-ground structure authorized by a valid building permit. The use of such excavated material as fill, however, may require a grading permit, as determined by criteria above.

## **II. Environmental Review of Grading Permit Applications**

The Planning and Building Department shall determine if environmental review is required prior to submitting the grading plans to the Engineering Services Department for processing. Grading plans will not be accepted by Engineering Services unless environmental clearance has been obtained from Planning and Building.

Section 23.24.110 of the City's Grading Ordinance provides that all grading permit applications shall be reviewed by the Planning and Building Department, whereupon a determination will be made as to whether environmental review will be required. If such review is required, the developer must complete and submit an application for an Environmental Initial Study (EIS) to the Planning and Building Department along with the associated deposit amount. The Planning and Building Department shall then determine the appropriate form of environmental review given the project particulars, i.e., Negative Declaration or Environmental Impact Report. Whichever form environmental review takes, all documentation shall be prepared in accordance with the California Environmental Quality Act (CEQA) as well as the City's CEQA Implementation Guidelines and environmental processing procedures. The environmental review process shall be completed pursuant to CEQA prior to issuance of the grading permit.

## **III. California Coastal Commission Review**

No grading permit shall be issued for a project or development within the California Coastal Zone until the applicant has presented an approved Coastal Act permit or a certificate of exemption from Coastal Act requirements granted by the Coastal Commission.

Regardless of City requirements for grading permits, any grading activity in the Coastal Zone is subject to review for conformance with the Coastal Act. Therefore, any person proposing to grade within the Coastal Zone should contact the California Coastal Commission as to permitting requirements.

## **IV. Grading Permit Application and Plans**

- A. Grading Requirements: The requirements for grading, excavating and filling of land are contained in the City of Encinitas Grading, Erosion and Sediment Control Ordinance.
- B. The Engineering Services Department should be contacted regarding grading plan requirements, items to be submitted with grading plans, processing procedures, and fees and deposits.

C. In addition to the requirements of the Engineering Services Department, the Planning and Building Department needs the following information shown on the grading plan:

- 1) Complete and accurate existing and proposed site topography, as shown by contour intervals, and points of grade for pads and paved surfaces. Topographic plans shall be certified as accurate by the project engineer or a qualified professional.
- 2) Notes indicating the quantity of cut and fill involved in the project.
- 3) Notes indicating the steepest existing (%) slope where the proposed grading is to occur.
- 4) Notes indicating the maximum vertical depth of cut and the maximum vertical height of fill.
- 5) Show as notes the following calculations:
  - a) 
$$\frac{\text{Volume of cut (cubic ft.)}}{\text{Area of cut (square ft.)}} = \text{Average depth of cut (ft.)}$$
  - b) 
$$\frac{\text{Volume of fill (cubic ft.)}}{\text{Area of fill (square ft.)}} = \text{Average height of fill (ft.)}$$

#### GRADING AND LANDSCAPING

#### ENGINEERING SERVICES DEPARTMENT REQUIREMENTS

##### I. REQUIREMENTS

The requirements for grading, erosion control, sediment control, and excavating and filling of land are contained in the City of Encinitas Grading, Erosion and Sediment Control Ordinance.

##### II. GRADING PLANS

When a grading permit is required, a grading plan must be prepared by a registered civil engineer. A preliminary sketch may be submitted to obtain the City Engineer's acceptance of the proposed grading design after which the grading plan will be prepared. The plan shall be prepared on 24" x 36" "D" Sheets with City of Encinitas title block. Mylar "D" Sheets are available in the City Engineer's office. Exhibit "A" is a check list for grading plans.

##### A. Grading Plan Requirements:

1. The grading plan is a permanent record and shall be

drawn with black drawing ink on mylar; or may be drawn on vellum and reproduced on mylar.

2. Contour lines:

a. Both existing and finish grade contours shall be shown as per legend shown on Exhibit "B". Ninety percent (90%) of the contours shall be plotted within one contour interval of the true location.

b. Contour intervals:

<u>Average Slope of Area</u>	<u>Contour Interval</u>
0 - 2%	1'
2 - 5%	2'
5 - 20%	5'
Over 20%	10'

Average slope shall be determined by using the following formula:

$$S = \frac{0.0023 \times I \times L}{A}$$

Where:  
S = Average slope in %  
I = Contour interval in ft.  
L = Length of Contours in ft.  
A = Total site area in acres

c. Contours shall extend beyond limits of grading at least 50 feet or a sufficient distance to show on- and off-site drainage.

d. In addition to contour lines, spot elevations shall be shown to clarify any land surface not readily discernible from a study of contour lines.

3. Site's property lines and existing and proposed easements shown in true location with respect to the plan's topographic information.

4. Location and graphic representation of all existing natural and proposed man-made drainage facilities.

5. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams, and other protective devices to be constructed with or as a part of the proposed work.

6. Location and graphic representation of proposed excavations and fills, of onsite storage of soil and other earth material, and of onsite disposal.

7. Location of existing trees with trunks greater than 4 inches 3 feet above natural grade and the location and type of vegetation to be left undisturbed.
8. Location of proposed final surface runoff, erosion and sediment control measures.
9. Quantity of soil or earth material in cubic yards to be excavated, filled, stored or otherwise utilized onsite.
10. Outline of the methods to be used in clearing vegetation, and in storing and disposing of the cleared vegetative matter.
11. Proposed sequence and schedule of excavation, filling and other land-disturbing and filling activities, and soil or earth material storage and disposal.
12. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners which are within 15 feet of the property or which may be affected by the proposed grading operations.
13. 100 year flood plain as shown on County flood plain map, if applicable.

B. Items to be submitted with grading plans:

1. Proof of ownership (title report, maximum of 30 days old, showing current vesting and all easements), and legal description of proposed development.
2. Two copies of hydrologic and hydraulic calculations.
3. Engineering calculations for any structures or retaining walls to be constructed in conjunction with grading permit.
4. Two copies of preliminary soils report, if applicable. A soils update letter may be required.
5. Two copies of the engineer's cost estimate (in letter form) to the City Engineer. The cost estimate shall include the following subsections with subtotals for each portion:

- a. Grading.
  - b. Appurtenant structures - retaining walls, drainage facilities or other grading appurtenances.
6. Notarized letter from adjacent owners granting permission for off-site grading where appropriate (original, properly acknowledged, plus one copy).
  7. Two copies of the resolution of Approval or Notice of Decision, with project conditions, if applicable.
  8. Two copies of Coastal Development Permit, if applicable. (inquire at Planning and Building Department)
  9. Two copies of approved Tentative Map(TM) or Tentative Parcel Map (TPM), if applicable.

C. Procedures for processing grading plans:

1. Submit blueline prints of the grading plan, including intermediate erosion and sediment control, to the Engineering Services Department along with any other items required to be submitted with grading plans. Six sets of blueline prints are required for projects falling within Leucadia Wastewater District or Olivenhain Municipal County Water District, seven sets for projects falling within San Dieguito Water District.
2. Complete permit application and pay plan check fee per Fee Schedule.
3. Plans will be reviewed by the Engineering and Planning Departments for compliance with applicable ordinances.
4. When plans have been checked, Engineer will be notified so that he may pick up plans and make necessary corrections.
5. Two copies of the corrected plans and the check prints will be resubmitted to the Engineering Department for further checking.
6. If corrected plans are acceptable, they will be approved by the City Engineer upon posting of required security and payment of an inspection fee for the Grading Permit. A separate security may be posted for slope planting and landscaping. This

security will normally be the last security to be released.

7. Following approval by the City Engineer, and issuance of the Grading Permit, applicant shall furnish the City with three blue-line copies of the signed plans plus one complete set of mylar reproductions with original signatures.

D. Grading Permit Fees and Security

1. Prior to accepting an application for plan checking and processing a fee shall be paid based on the following:

Plan Check Fee

\$700.00 per sheet.

2. Prior to issuance of a grading permit, the applicant shall pay a fee to cover the cost of inspection services based on the following:

Inspection Fee

ACE* $\leq$ \$100,000	5% of ACE
ACE $>$ \$100,000	\$5,000 plus 3% of ACE over \$100,000

\*ACE = Approved Cost Estimate.

Cost estimates shall be based on all proposed grading, site improvements associated with proposed grading, and erosion and sediment control devices.

3. Security

The applicant shall provide security guaranteeing proper completion of the work described and delineated on the approved Grading Plan, Interim Erosion and Sediment Control Plan in the amount of 100% of the approved estimated cost of performing said work prior to issuance of permit. The security shall be in the form of one or more of the following at the option of the City Engineer for the full protection of the City:

- a. Cash
- b. Letter of Credit
- c. Certificate of Deposit
- d. Instrument of Credit
- e. Performance Bond\*

\*Bonding may be for up to maximum of 80% of the

total security required.

4. The Director of Engineering Services retains the right to use a deposit system in lieu of fees. The deposit will be used to recover costs on a time and materials basis.

E. Grading Permit - General Conditions.

The owner, as permittee, is responsible for all the following regardless of whether the work is done by him, his engineer, or his contractor.

1. Work Authorized. Issuance of a Grading Permit constitutes authorization to do only that work which is specified and approved by such permit.
2. Time Limits.
  - a. The permittee shall complete all of the work described within the Land Development Permit within the time limit specified in such permit. If no time limit is specified, work shall be completed within 180 days after the date of issuance of the Land Development Permit.
  - b. If the permittee is unable to complete the work within the prescribed time, he shall prior to the expiration of the permit, present a written request for an extension of time setting forth the reasons for such request.
3. Storm Damage Precautions. During the progress of land development operations the permittee shall take all precautions reasonably necessary to protect adjacent property from damage due to erosion, flooding, silting or other storm related hazards which are a consequence of his operation.
4. Dust Control. The permittee shall provide adequate dust control measures by watering or other means acceptable to the City Engineer. Dust control measures shall be applied at the cut site, the fill site and/or material in transit as may be necessary.

5. Hours of Grading Operations. Grading and equipment operating within one-half mile of a structure for human occupancy shall not be conducted between the hours of 5:30 p.m. and 7:30 a.m. nor on Saturdays, Sundays, and City recognized holidays.
6. Noise. The permittee shall conform to the requirements of the City Code which limits the generation of noise.
7. Responsibility of Permittee.
  - a. Protection of Utilities. During land development operations the permittee shall be responsible for the prevention of damage to any public utilities or services. This responsibility applies to the site of the land development and along any routes of travel of any equipment performing the land development.
  - b. Protection of Adjacent Property. Notwithstanding minimum standards set forth in the Land Development Ordinance or the conditions of issuance of a Land Development Permit issued thereunder, the permittee is responsible for the prevention of damage to adjacent property and shall not excavate on land so close to the property line as to endanger any adjoining public or private property without supporting and protecting such property from settling, cracking, or other damage which might result.
8. Modification of Approved Plans. All modifications of any approved land development plan must be in writing and be approved by the City Engineer.
9. Completion of Work - Notification and Certification. The permittee shall notify the City Engineer when the land development operation is ready for final inspection. Final approval shall not be given until all work including installation of all drainage structures and facilities, and all protective devices have been completed and any required planting established, and any required certifications, as-built plans, and/or reports have been submitted and approved. The City Engineer may, upon request, certify the completion of work in accord with the permit issued pursuant to the Grading Ordinance.

10. Release of Security. Security shall be released upon receipt of a signed, written request.

III. EROSION AND SEDIMENT CONTROL PLAN

A. Interim Erosion and Sediment Control Plan.

All the following information shall be provided by a California registered civil engineer with respect to conditions existing on the site during land-disturbing or filling activities or soil storage:

1. Maximum surface runoff from the site shall be calculated using the method approved by the City Engineer.
2. The Interim Plan shall also contain the following information:
  - a. a delineation and brief description of the measures to be undertaken to retain sediment on the site, including, but not limited to, the designs and specifications for sediment detention basins and traps, and a schedule for their maintenance and upkeep;
  - b. a delineation and brief description of the surface runoff and erosion control measures to be implemented, including, but not limited to, types and method of applying mulches, and designs and specifications for diverters, dikes and drains, and a schedule for their maintenance and upkeep;
  - c. a delineation and brief description prepared by a landscape architect of the vegetative measures to be used, including, but not limited to, types of seeds and fertilizer and their application rates, the type, location and extent of pre-existing and undisturbed vegetation types, and a schedule for maintenance and upkeep.
3. The location of all the measures listed by the Applicant under Subsection (2) above, shall be depicted on the Grading Plan, or on a separate plan at the discretion of the City Engineer.
4. An estimate of the cost of implementing and maintaining all interim erosion and sediment control measures must be submitted in a form acceptable to the City Engineer.

B. Final Erosion and Sediment Control Plan.

All the following information shall be provided by a California registered civil engineer with respect to conditions existing on the site after final structures and improvements (except those required under this Section) have been completed and where these final structures have not been covered by an Interim Plan:

1. Maximum runoff from the site shall be calculated using the method approved by the City Engineer.
2. The Final Plan shall also contain the following information:
  - a. a description of and specifications for sediment retention devices;
  - b. a description of and specifications for surface runoff and erosion control devices;
  - c. a description of vegetative measures prepared by a landscape architect;
  - d. a graphic representation of the location of all items in Subsection (a) - (c) above;
3. An estimate of the costs of implementing all final erosion and sediment control measures must be submitted in a form acceptable to the City Engineer.
4. Upon approval of the City Engineer, the required elements of the Grading Plan and the Final Erosion and Sediment Control Plan may be combined onto one plan.

C. Procedures for Processing Erosion and Sediment Control Plans.

1. Items to be submitted with Erosion and Sediment Control Plans:
  - a. two copies of runoff and sedimentation calculations;

- b. two copies of the engineer's cost estimate broken into interim and final subtotals. The cost of final erosion and sediment control measures shall include the cost of maintaining final measures for a period of one year;
- c. three copies of sediment and erosion control plans, if not combined with grading plan.

IV. GRADING PLAN GENERAL NOTES AND CERTIFICATES

The following general notes and soils engineer's certificate shall appear on the first sheet of ALL GRADING PLANS submitted.

**WORK TO BE DONE**

A. GENERAL

- 1. All work shall be done in accordance with these plans, the standard specifications for public works construction, the design construction standards of the City of Encinitas and the San Diego area regional standard drawings. Any changes or revisions therefrom shall be approved by the City Engineer prior to any request for inspection.
- 2. The soils report titled \_\_\_\_\_ prepared by \_\_\_\_\_ dated \_\_\_\_\_ shall be considered as a part of this grading plan. All grading shall be done in accordance with the recommendations and specifications contained in said report.
- 3. Approval of this plan does not constitute approval of sizes, location and type of drainage facilities, nor of improvements within street right-of-ways. Separate approvals and permits for these shall be required in conjunction with improvement plans.
- 4. Written permission shall be obtained for any off-site grading.
- 5. Contractor shall take any necessary precautions required to protect adjacent properties during grading operations. Anything damaged or destroyed shall be replaced or repaired to condition existing prior to grading.
- 6. The developer shall be responsible that any monument or bench mark which is disturbed or destroyed shall be re-established and replaced by a registered civil engineer or a licensed land surveyor.

7. The contractor shall design, construct and maintain all safety devices, including shoring, and shall be responsible for conforming to all local, state and federal safety and health standards, laws and regulations.
8. Grading and equipment operating within one-half (1/2) mile of a structure for human occupancy shall not be conducted between the hours of 5:30 p.m. and 7:30 a.m. nor on Saturdays, Sundays and City recognized holidays.
9. No grading operations shall commence until a pre-grading meeting has been held onsite with the following people present: City Inspector, Civil Engineer, Soils Engineer, Grading Contractor and Permittee. The pre-grade meeting shall be scheduled with the City at least 48 hours in advance by calling (760) 633-\_\_\_\_\_.
10. Prior to hauling dirt or construction materials to any proposed construction site within this project the developer shall submit to and receive approval from the City Engineer for the proposed haul route. The developer shall comply with all conditions and requirements the City Engineer may impose with regards to the hauling operation.
11. Upon final completion of the work under the grading permit but prior to final grading approval and/or final release of security, an as-graded certification shall be provided stating: "The grading under Permit No. \_\_\_\_\_ has been performed in substantial conformance with the approved grading plan or as shown on the attached as-graded plan". This statement shall be followed by the date and signature of the Civil Engineer who certifies such grading operation.

B. NOTIFICATIONS

1. The existence and location of underground utility pipes and structures shown on these plans were obtained by a search of available records. To the best of our knowledge there are no existing utilities except as shown on these plans, however:

The contractor is required to take due precautionary measures to protect any existing utilities or structures located at the work site. It is the contractor's responsibility to contact the following owners of said utilities or structures prior to any

excavation, for verification and location of utilities and notification of commencement of work:

- a. Sewers - (Agency) (Phone)
  - b. Gas & Electric - (Agency) (Phone)
  - c. Water - (Agency) (Phone)
  - d. Telephone - (Agency) (Phone)
  - e. Cable TV - (Agency) (Phone)
2. Contractor shall notify the City Engineer's office 48 hours prior to beginning any work on this project. Phone: (760) 633-\_\_\_\_\_.
  3. The contractor shall give 24 hours notice on calls for inspection. Phone: (760) 633-\_\_\_\_\_. All work performed without benefit of inspection will be subject to rejection and removal.

C. GRADING

1. All grading shall be observed and tested by a qualified soils engineer or under his/her direction. He/She shall observe and test the excavation placement and compaction of fills and backfills and compaction of trenches. He/She shall submit soils reports as required and will determine the suitability of any fill material. Upon completion of grading operations he/she shall state that observations and tests were made by him/her or under his/her supervision and that in his/her opinion, all embankments and excavations were constructed in accordance with the approved grading plans and that all embankments and excavations are acceptable for their intended use.
2. The contractor shall properly grade all excavated surfaces to provide positive drainage and prevent ponding of water. He/she shall control surface water and avoid damage to adjoining properties or to finished work on the site and shall take remedial measures to prevent erosion of freshly graded areas until such time as permanent drainage and erosion control measures have been installed.
3. All areas to be filled shall be prepared to be filled and fill shall be placed in accordance with standard specifications. All vegetable matter and

objectionable material shall be removed by the contractor from the surface upon which the fill is to be placed. Loose fill and alluvial soils shall be removed to suitable firm natural ground. The exposed soils shall be scarified to a depth of 6" and then compacted to a minimum of 90 percent. It shall be the contractor's responsibility to place, spread, water, and compact the fill in strict accordance with specifications.

4. Cut and fill slopes shall be cut and trimmed to finish grade to produce smooth surfaces and uniform cross sections. The slopes of excavations and embankments shall be shaped, planted and trimmed as directed by the engineer of work and left in a neat and orderly condition. All stones, roots, and other waste matter exposed on excavation or embankment slopes which are liable to become loosened shall be removed and disposed of. The toe and top of all slopes shall be rounded in accordance with the Grading Ordinance.
5. All trees, brush, grass, and other objectionable material shall be collected, piled or otherwise disposed of off the site by the contractor so as to leave the areas that have been cleared with a neat and finished appearance free from unsightly debris. Approval of location of debris fill shall be secured from the soils engineer and City Engineer prior to the disposal of any such material.

D. EROSION CONTROL

1. In case emergency work is required, contact \_\_\_\_\_ at \_\_\_\_\_ (phone number), 24 hours a day.
2. Equipment and workers for emergency work shall be made available at all times during the rainy season (October 1 to April 15). All necessary materials shall be stockpiled on site on October 1 at convenient locations to facilitate rapid construction of temporary devices when rain is imminent.
3. Devices shown on plans shall not be moved or modified without the approval of the Engineering Inspector.
4. The contractor shall restore all erosion control devices to working order to the satisfaction of the City Engineer after each run-off producing rainfall.

5. The contractor shall install additional erosion control measures as may be required by the City Engineer due to an incomplete grading operation or unforeseen circumstances which may arise.
6. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas when impounded waters create a hazardous condition.
7. All erosion control measures provided per the approved grading plan shall be incorporated hereon.
8. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each work day.
9. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty percent (40%). Silt and other debris shall be removed after each rainfall.
10. Should germination of hydro-seeded slopes fail to provide effective coverage of graded slopes (90% coverage) prior to November 15, the slopes shall be stabilized with punched straw installed in accordance with Section 35.023 of the Erosion and Sediment Control Handbook of the State of California Department of Conservation.

E. HYDRO-SEED

1. Hydro-seeding shall be applied to all slopes that are graded 6:1 (Horizontal to Vertical) or steeper when they are:
  - A. Three feet or more in height in fill areas.
  - B. 5 feet or more in height in cut areas, unless slope is not subject to erosion due to the erosion resistant character of the material as approved by the City Engineer.
2. Irrigation shall maintain the moisture level of the soil at the optimum level for the growth of the hydro-seeded growth.
3. Hydro-seeding mix shall consist of all the following:
  - A. Seed mix shall consist of no less than:
    - a. 20 lbs. per acre of rose clover
    - b. 20 lbs per acre of zorro fescue

- c. 3 lbs. per acre of E school cia californica
  - d. 4 lbs. per acre of achillea millefolia
  - e. 3 lbs. per acre of alyssum (carpet of snow)
  - f. 1/2 lb. per acre of dimorpholeca
  - g. Items c, d, e, and f of this subsection may be omitted on locations where the area being hydro-seeded is not visible from either a public street or residential structures.
  - h. Item "a" of this subsection must be inoculated with a nitrogen fixing bacteria and applied dry either by drilling or broadcasting before hydro-seeding.
  - i. All seed materials shall be transported to the job-site in unopened containers with the California Department of Food and Agriculture certification tag attached to, or printed on said containers.
  - j. Non-phyto-toxic wetting agents may be added to the hydro-seed slurry at the discretion of the contractor.
- B. Type 1 mulch applied at the rate of no less than 2,000 lbs. per acre. Type 6 mulch (straw) may be substituted, all or part, for hydraulically applied fiber material. When straw is used it must be anchored to the slope by mechanically punching no less than 50% of the straw into the soil.
  - C. Fertilizer consisting of ammonium phosphate sulfate, 16-20-0, with 15% sulfur applied at the rate of 500 lbs. per acre.
4. Areas to be hydro-seeded shall be prepared prior to hydro-seeding by:
- A. Roughening the surface to be planted by any or a combination of:
    - a. Track walking slopes steeper than 6:1.
    - b. Ripping areas that will not break up using item "a" above.
  - B. Conditioning the soil so that it is suitable for planting by:
    - a. Adjusting the surface soil moisture to

provide a damp but not saturated seed bed.

- b. The addition of soil amendments, pH adjustment, leaching or covering saline soils to provide viable conditions for growth.
5. Hydro-seeded areas shall be maintained to provide a vigorous growth until the project is permanently landscaped or, for areas where hydro-seeding is the permanent landscaping, until the project is completed and all security released.

### Concrete Washout

- Contractor shall establish and use an adequately sized concrete washout area to contain washout wastes on site. It is illegal to wash concrete, slurry, mortar, stucco, plaster and the like into the stormwater conveyance system or any receiving water. Contractor shall post a sign designating the washout location.

### Construction Site Access

- A stabilized construction site access shall be provided for vehicles egress and ingress to prevent tracking dirt off site. This shall include using material such as gravel and/or corrugated steel panels/plates.

### Construction Vehicles

- A specific area away from gutters and stormdrain shall be designated for construction vehicles parking, vehicle refueling, and routine equipment maintenance. All major repairs shall be made off-site.

### Erosion Control

- Erosion control must be provided for all erosive surfaces. Sloped surfaces especially shall be protected against erosion by installing erosion resistant surfaces such as erosion control mats, adequate ground cover vegetation, and bonded fiber matrix.
- No excavation and grading activities are allowed during wet weather.
- Diversion dikes shall be constructed to channel runoff around the construction site. Contractor shall protect channels against erosion using permanent and temporary erosion control measures.
- Remove existing vegetation only when absolutely necessary. Large projects shall be conducted in phases to avoid unnecessary removal of the natural ground cover. Do not remove trees or shrubs unnecessarily; they help decrease erosion.
- Temporary vegetation must be planted on slopes or where construction is not immediately planned for erosion control purposes. Erosion shall be prevented by planting fast-growing annual and perennial grasses to shield and bind the soil.
- Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.
- Water usage for dust control shall be minimized.

### On-site Construction Material Storage

- Stored materials shall be contained in a secure place to prevent seepage and spillage. Contractor shall store these products where they will stay dry out of the rain. Contractor shall provide secondary containment for all fuel stored on-site.
- Eliminate or reduce pollution of stormwater from stockpiles kept on-site. Stockpiles may include soil, paving materials, asphalt concrete, aggregate base, etc. Stockpiles shall be located away from concentrated stormwater flows and stormdrain inlets. Stockpiles shall be covered or protected with soil stabilization measures and provided with a temporary sediment barrier around the perimeter at all times.

### Training

- Contractors' employees who perform construction in the City of Encinitas shall be trained to be familiar with the City of Encinitas stormwater pollution control requirements. These BMP notes shall be available to everyone working on site. The property owner(s) and the prime contractor must inform subcontractors about stormwater requirements and their own responsibilities.

### Waste Management

- Contractor shall be responsible for properly disposing of all waste and unused construction materials. Dumping of unused or waste products on the ground, where water can carry them into the conveyance system is strictly prohibited.
- No seepage from dumpsters shall be discharged into stormwater. Berms/dikes shall be placed around dumpsters to divert the natural storm runoff. Dumpsters shall be checked frequently for leaks. Dumpster lids shall remain closed at all times. Dumpsters without lids shall be placed within structures with impervious roofing or covered with tarps in order to avoid rain contact with any trash material.
- Many construction materials, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. Non-recyclable materials must be taken to an appropriate landfill or disposed of as hazardous waste. For information on disposal of hazardous material, call the **Hazardous Waste Hotline** toll free at (800) 714-1195. For information on landfills and to order dumpsters call **EDCO** at (760) 436-4151.
- Pollutants shall be kept off exposed surfaces. Place trash cans and recycling receptacles around the site.
- Portable toilets must be in good working order and checked frequently for leaks. Contractor shall provide secondary containment and locate portable toilets away from stormdrain inlets on pervious surfaces.
- All construction debris shall be kept away from the street, gutter, and stormdrain. Contractor must routinely check and clean up material that may have traveled away from construction site

**ENVIRONMENTAL DATA:**

1) Steepest Existing Natural Slope On-Site = \_\_\_\_\_ %

2) Maximum Vertical Depth of Cut = \_\_\_\_\_'

3) Maximum Vertical Depth of Fill = \_\_\_\_\_'

4) Average Depth of Cut =  $\frac{\text{_____ C.Y.} \times 27}{\text{_____ S.F.}}$  =

5) Average Depth of Fill =  $\frac{\text{_____ C.Y.} \times 27}{\text{_____ S.F.}}$  =

Earthwork:

Cut = \_\_\_\_\_ C.Y.

Fill = \_\_\_\_\_ C.Y.

Import/Export = \_\_\_\_\_ C.Y.

**OWNER'S CERTIFICATE**

I (WE) HEREBY CERTIFY THAT A REGISTERED SOILS ENGINEER OR GEOLOGIST HAS BEEN OR WILL BE RETAINED TO SUPERVISE OVER ALL GRADING ACTIVITY AND ADVISE ON THE COMPACTION AND STABILITY OF THE SITE.

\_\_\_\_\_  
Signature

DATE:

**STATEMENT OF ENGINEER OF WORK**

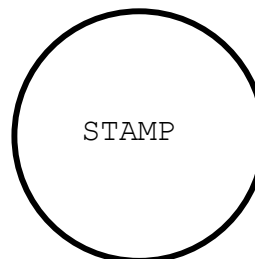
The undersigned engineer agrees that the work performed by the engineer shall comply with the generally accepted standards and practices of the engineer's trade or profession. The engineer further agrees that the work performed herein shall be in accordance with the rules and regulations required by the City of Encinitas. The engineer agrees that any plancheck or review performed by the City of Encinitas in its capacity as a public entity for the plans prepared by the engineer is not a determination by the City of Encinitas of the technical sufficiency or adequacy of the plans or design, and it therefore does not relieve the engineer of responsibility for the plans or design of improvements based thereon. The engineer agrees to indemnify and hold harmless the City of Encinitas and its officers, agents, and employees from property damage or bodily injury arising solely from the negligent acts, errors, or omissions of the engineer and his/her agents or employees acting within the course and scope of such agency and employment and arising out of the work performed by the engineer.

By: \_\_\_\_\_  
Print Name

Date: \_\_\_\_\_

RCE No: \_\_\_\_\_

Company  
Address  
Phone  
Engineer's Job No.



**SOILS ENGINEER'S CERTIFICATE**

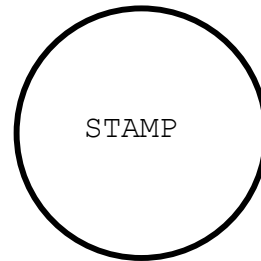
I, \_\_\_\_\_ a registered civil engineer in the State of California, principally doing business in the field of applied soil mechanics, hereby certify that a sampling and study of the soil conditions prevalent within this site was made by me or under my direction between the dates \_\_\_\_\_ and \_\_\_\_\_. One complete copy of the soils report compiled from this study, with my recommendations, has been submitted to the office of the City Engineer. Furthermore, I have reviewed these grading plans and certify that the recommendations included in the soils report for this project have been incorporated in the grading plans and specifications.

SIGNED:

RCE NO.:

EXP. DATE:

Company  
Address  
Phone  
Engineer's Job No.



**EXHIBIT "A"**

**CITY OF ENCINITAS**

**CHECK SHEET FOR: GRADING PLANS**

**(References are to City of Encinitas Grading Ordinance)**

Property Owner(s) :

Engineer/Surveyor:

NO.	ITEM	CHECK	REMARKS
A.	GENERAL:		
1.	Fees		
2.	Blue line prints: 6 or 7 sets		
3.	Supporting data/calculations submitted.		
	(a) Soils report.		
	(b) Drainage calculations.		
	(c) Structural calculations.		
	(d) Geology report.		
	(e) Landscape plan.		
	(f) Irrigation plan.		
	(g) Application.		
	(h) Letters of permission/easements.		
	(i) Engineer's estimate.		
	(j) Interim Erosion and Sediment Control Plan.		
	(k) Final Erosion and Sediment Control Plan.		
	(l) Work Schedule (prior to permit issuance).		
	(m) Other		
4.	Drafting requirements (each sheet):		
	(a) Prepared on City of Encinitas "D" Sheets (24" x 36").		
	(b) Drawn on mylar.		
	(c) Drawn with black water-proof drawing ink.		
	(d) All lettering to be a minimum of 1/8" in height.		
	(e) Sheets numbered consecutively with total number of sheets indicated.		

Sheet 1 of 4

NO.	ITEM	CHECK	REMARKS
	(f) Engineer of work's signature and registration number on each sheet		
	(g) Title block on each sheet contains:		
	(1) Title: Grading Plan		
	(2) Designation of sub-division, if applicable.		
	(3) City assigned plan number		
	(h) Bench mark description.		
B.	COVER SHEET:		
	1. Vicinity map with north arrow and scale indicated.		
	2. Key map (for projects covering several sheets).		
	(a) North arrow.		
	(b) Scale: 1" = 200'.		
	(c) Shows general plan of sub-division with subdivision boundary, streets and lots identified.		
	(d) Shows adjacent subdivisions and connecting streets.		
	(e) Shows sheet coverage.		
	(f) Legend identifies all symbols used.		
	(g) Drainage facilities.		
	(h) Direction of drainage flow.		
	3. Work to be done (general notes, notification notes, grading/landscaping notes) and Soils Engineer's Certificate.		
	4. Street cross-sections:		
	(a) Each street represented.		
	(b) Dimensions - right-of-way, sidewalks, medians, easements, etc.		
	(c) Rough grade line shown with width and depth of grading.		
	(d) Side slopes (2:1 max. cut, 2:1 max. fill).		

Sheet 2 of 4

NO.	ITEM	CHECK	REMARKS
	5. Legend identifies all symbols used		
	6. Details shown as necessary.		
	7. Approvals by other agencies, as applicable.		
C.	GRADING SHEETS:		
	1. Boundary lines shown:		
	(a) City-County boundaries.		
	(b) Subdivision boundaries.		
	(c) Right-of-way lines.		
	(d) Lot line dimensioned.		
	(e) Lot lines of adjacent properties.		
	(f) Utility easements.		
	(g) Open space or other easements		
	2. Contours (extend at least 50' beyond limits of grading).		
	(a) Existing contours shown.		
	(b) Finish grade contours shown.		
	3. Lots		
	(a) Numbered.		
	(b) Building pads shown with pad elevations.		
	(c) Sufficient elevations flagged to show slope of lots and portions of lots.		
	4. Grading:		
	(a) Slopes:		
	(1) Cut slopes - 2:1 max.		
	(2) Fill slopes - 2:1 max. (shaded).		
	(3) Slope ratios shown.		
	(4) Daylight line(s) shown.		
	(5) Off-site grading shown with reference to authority (notarized letters of permission, etc).		
	5. Drainage:		
	(a) Existing drainage facilities shown.		
	(b) Further drainage facilities (not a part of grading).		
	(c) Drainage facilities. Only show system on G.P. if on improvement plans. Show profile, invert elevation, type, size and gage, if not on Imprv Plans.		
	(1) Location.		
	(2) Type, size, gage (strength).		
	(3) Details as necessary		

Sheet 3 of 4

NO.	ITEM	CHECK	REMARKS
	(4) Elevations, grades, direction of flow.		
	(5) Easements.		
	6. Streets show:		
	(a) Names and dimensions.		
	(b) Direction of street drainage.		
	(c) Percent of slope:		
	(d) Elevations at intersections.		
	D. EROSION CONTROL PLANS.		
	1. Generally.		
	(a) Provide when project will not be completed and landscaped through the rainy season.		
	(b) Show on 60%+ matte of grading plan.		
	2. Specifically.		
	(a) Must accompany any grading plan submitted between August 1 and April 1. All grading plans for large projects must have an erosion control plan irregardless of submittal date		
	(b) Must show placement of facilities, specified location parameters that require field calculations are not acceptable.		
	(c) Must have provisions to access erosion control facilities during wet weather.		
	3. Additional information.		
	(a) 24 hour telephone number for emergency erosion control and name of specific individual with authority and responsibility for erosion control.		
	(b) Schedule for completion of installation of erosion control facilities.		
	(c) Erosion control planting and method of starting and maintaining growth (irrigation).		
	4. Standard Notes		

Sheet 4 of 4

**EXHIBIT "B"**  
**CITY OF ENCINITAS**  
**GRADING PLAN LEGEND**

SUBDIVISION BOUNDARY . . . . .
PROPERTY LINE. . . . .
EXISTING STRUCTURE . . . . .
LOT NUMBER . . . . .
EXISTING ELEVATION . . . . .
PAD ELEVATION. . . . .
FINISH ELEVATION . . . . .
EXISTING CONTOUR . . . . .
FINISH GRADE CONTOUR . . . . .
DAYLIGHT LINE. . . . .
FILL SLOPES. . . . .
CUT SLOPES . . . . .
SWALES AND FLOW DIRECTION. . . . .
STORM DRAIN. . . . .
BROW DITCH . . . . .
RIP RAP. . . . .
CURB INLET . . . . .
CLEANOUT . . . . .
HEADWALL . . . . .

**EXHIBIT "C"**

**GRADING PERMIT EXPIRATION NOTICE**

DATE

SUBJECT:

(Project ID: Project Name, Tract #, Permit #, etc.)

Be informed that your project GRADING PERMIT (will expire, expired) on \_\_\_\_\_. A copy of the permit is enclosed for your reference. Items which need to be addressed include, but are not limited to:

1. Work Never Started
2. Rough Grade Incomplete
3. Slope Protection/Planting Inadequate
4. Need to Submit Certification Letter, Soils Report, etc.
5. Other

Please contact \_\_\_\_\_, Project Engineer at (760) 633-\_\_\_\_ to resolve pending issues. Your prompt response is requested.

Cordially,

Greg Shields  
Field Operations Engineer

BY:

GRADING INSPECTOR

**EXHIBIT "D"**

**SAMPLE STATEMENT OF COMPLIANCE  
FOR ENGINEER OF WORK**

Date

City Engineer  
CITY OF ENCINITAS  
505 South Vulcan Avenue  
Encinitas, CA 92024

**FINAL GRADING ENGINEER'S REPORT FOR  
GRADING PERMIT NO.**

Pursuant to Section 23.24.310 of the Encinitas Municipal Code, this letter report is hereby submitted as a final grading report for the subject project. As supervising grading engineer on the project, I hereby state all grading, lot drainage, and drainage facilities on the site have been completed and installed in conformance with the approved plans and requirements of the City of Encinitas Codes and Standards.

I have inspected the site and found the embankment and cut slopes to have been cut to their proper line and grade in conformance with Sections 23.24.450 through 23.24.500. All building pad sizes, elevations, drainage and berming have been completed in substantial compliance with the approved plans and any approved revision thereto.

An "As-Built" grading plan has been completed by me or under my direction and has been submitted to the City for review and approval.

(Signature)

NAME

RCE#

SEAL  
EXPIRATION  
DATE

**EXHIBIT "E"**

**CITY OF ENCINITAS  
INSPECTION CHECKLIST  
FOR GRADING PERMIT RELEASE**

PROJECT INSPECTOR: \_\_\_\_\_  
PROJECT ID: \_\_\_\_\_

DATE: \_\_\_\_\_  
GRADING PERMIT No.: \_\_\_\_\_

N/A = Not Applicable  
/ = Complete  
0 = Incomplete or unacceptable

1st.	2nd.	
		1. Site erosion control measures adequate
		2. Overall site adequate for health, safety and welfare of public
		3. Compaction report from soils engineer submitted and approved
		4. Engineer-of-work certification of work done and pad elevations
		5. Geologic engineer's letter if unusual geologic or subsurface conditions exist
		6. Project conditions of approval reviewed for relevant conditions
		7. "As-built" grading plans submitted and approved
		8. "As-built" geologic map submitted when required

APPROVED FOR RELEASE	PROJECT INSPECTOR	DATE
_____	_____	_____
	SENIOR INSPECTOR	DATE
	_____	_____

**AUTHORIZATION FOR SECURITY RELEASE**

Release 100% of grading security and cash deposit  
 Retain \_\_\_\_\_% of grading security  
 Retain \_\_\_\_\_% of cash deposit

\_\_\_\_\_ PROJECT ENGINEER \_\_\_\_\_ DATE

EXHIBIT "F"

GRADING FINAL RELEASE CHECKLIST

PROJECT: \_\_\_\_\_ PERMIT NO.  
DEVELOPER:  
SOILS ENGINEER:  
GRADING ENGINEER:  
GEOLOGIST:  
OTHER:  
PROJECT INSPECTOR:

- I. Final visual inspection of site
- Inspection checklist signed off
- II. Grading permit original sign off
  
- III. Reports submitted:
  - A. Rough Grade 
    - 1. Soils Report
    - 2. All PAD Certification Letters
  - B. Final Grade 
    - 1. Final Grading Engineer's Report
    - 2. Soils Engineer's Report
    - 3. Geologist's Report
- IV. Blueline as-builts checked
  
- V. Survey of Monumentation Certification

All grading requirements are complete and acceptable to the Inspection Division.

\_\_\_\_\_  
Project Inspector

Senior Inspector

**EXHIBIT "G"**  
**ROUGH GRADING APPROVAL NOTICE**

TO: BUILDING DIVISION

FROM: ENGINEERING SERVICES DEPARTMENT

DATE: \_\_\_\_\_ Permit No. \_\_\_\_\_

ROUGH GRADING APPROVAL FOR PROJECT NO.

(Tract Name)

(Developer's Name & Address)

We have inspected the grading for lots \_\_\_\_\_ or phase \_\_\_\_\_ of the above mentioned project. In addition, we have received rough grading certification from \_\_\_\_\_, the Soils Engineer, dated \_\_\_\_\_, and from \_\_\_\_\_, the Supervising Grading Engineer, dated \_\_\_\_\_, and are satisfied that the rough grading has been completed in accordance with City standards.

Based on these certifications and our observation, we take no exception to the issuance of a building permit for lots \_\_\_\_\_ or phase \_\_\_\_\_ of project \_\_\_\_\_ from a grading standpoint. This release, however, is not intended to certify the project from other engineering concerns including site development, water or sewer availability, or final grading.

Prior to the issuance of a certificate of occupancy, we need to be advised so that we can verify that final grading and landscaping has been completed in accordance with the approved plans for the project.

APPROVED:

\_\_\_\_\_  
Project Grading Inspector

\_\_\_\_\_  
Project Engineer

cc: Developer

EXHIBIT "G.1"

City of Encinitas

Engineering Services Permits  
505 South Vulcan Avenue  
Encinitas, CA 92024

RE: Engineering Rough Grading Approval Request

Developer: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, zip: \_\_\_\_\_

Grading Permit Number \_\_\_\_\_

Engineer of Record \_\_\_\_\_

Geotechnical Engineer \_\_\_\_\_

Contractor \_\_\_\_\_

Project Manager \_\_\_\_\_

Rough Grading Approval is requested for the following lots:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The following attachments are included as required for rough grading approval:

- Inspector's Rough Grading Approval Checklist
- Geotechnical Reports for each of the above lots
- Engineer's Pad Certification Report for each of the above lots.
- Wall Certification Reports

INSPECTOR - \_\_\_\_\_

Re: Engineering Rough Grading Approval Requirements  
Project: \_\_\_\_\_ Grading Permit: \_\_\_\_\_

The following requirements are the minimum allowable prior to rough grading approval.

1. All grading operations required to obtain the elevations shown on the grading plan are complete and pad elevations are within 0.1 ft.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

Provide geotechnical report certifying the grading has been performed in accordance with the soils report and the compaction test results shall be submitted to the City.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

All retaining walls shown on the approved grading plans also require a letter of Certification, for each wall shown, from the geotechnical engineer certifying that it was inspected and constructed in accordance with their recommendations and conforms to the approved plans.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

2. All drainage systems, public and private, surface and subsurface, have been installed and completed per the grading plan, inspected and approved by the inspector. Yard drain inlets need not be installed at this point for rough grading approval.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

3. All sewer systems shall be installed and accepted by the City Inspector and Leucadia County Water District.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

4. All water systems, including fire protection systems, are to be installed and accepted by the appropriate water districts, and the City as complete, including pressure testing, bacteria testing and chlorinating.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

5. Curb and gutter, sidewalk grades are completed and R value tests have been taken. Letter of Certification from the Engineer certifying line and grade as required. Compaction report from the geotechnical engineer is also required.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

6. All fire hydrants are to be installed, tested, inspected and accepted by the Fire Department.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

7. All roads are to be installed, except for the final lift of paving.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

8. All dry utilities shall be installed, inspected and approved by the appropriate agency.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

9. All TRAILS shall be installed, inspected and approved by Parks and Recreation Department.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

All other safety and health issues as required by the City to assure a safe and hazard free environment.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

These items are to be submitted to the City Inspector along with a written request for rough grading approval. The Inspector will then approve or disapprove and forward to the Engineering Department.

EXHIBIT "G.2"

**SAMPLE**

Date: \_\_\_\_\_

City of Encinitas  
Engineering Services Permits  
505 South Vulcan Avenue  
Encinitas, CA 92024

RE: **Engineer's Pad Certification for Grading Permit No.** \_\_\_\_\_

Pursuant to section 23.24.310 of the Encinitas Municipal Code, this letter is hereby submitted as a Pad Certification Letter for lots \_\_\_\_\_ through and including \_\_\_\_\_. As the Engineer of Record for the subject project, I hereby state all rough grading for these units has been completed in conformance with the approved plans and requirements of the City of Encinitas, Codes and Standards.

VII. The following list provides the pad elevations as field verified and shown on the approved grading plan:

<u>Lot No.</u>	<u>Pad Elevation Per plan</u>	<u>Pad Elevation per field measurement</u>
1	100.00	100.06
2	103.00	102.96
3	100.00	100.09
4	102.00	102.09

VIII. Construction of line and grade for all engineered drainage devices and retaining walls have been field verified and are in substantial conformance with the subject grading plan.

VIX. The location and inclination of all manufactured slopes and walls have been field verified and are in substantial conformance with the subject grading plan.

X. The construction of earthen berms and positive building pad drainage walls have been field verified and are in substantial conformance with the subject grading plan.

*The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.*