#### BEFORE THE BOARD OF COUNTY COMMISSIONERS

FOR COLUMBIA COUNTY, OREGON 3 In Re: An Ordinance Providing For the County to Utilize the State Uniform Building Code, 4 including Penalties for Violations) 5 Contained Therein, and Certain No. 84-6Speciality Codes, Adopting Specified Optional Provisions, Authorizing The Administrator For ) BUILDING CODE ORDINANCE 7 Land Development Services to Recommend The Adoption of New 8 Uniform Building Codes, Repealing Certain Ordinances in Conflict 9 Herewith. 10 WHEREAS, it appearing to the Board that, pursuant to ORS 11 456.775, the state building code pre-empts local ordinances and 12 is applicable and uniform throughout the state of Oregon and 13 especially Columbia County; and now, therefore, THE BOARD OF COUNTY COMMISSIONERS FOR COLUMBIA COUNTY, OREGON 15 ORDAINS AS FOLLOWS: 16 Section 1: 17 Except as provided herein, Columbia County shall utilize the 18 various uniform building and speciality codes adopted by the 19 State of Oregon as referred to in ORS Chapters 447, 456, and 476. 20 The effective date of said codes shall be the effective date of 21 this ordinance or later dates for amendments by the State as 22 determined under ORS 183.355. 23 Section II: Adoption of Optional Codes and Provisions 24 In addition to the Uniform State Building Gode and Speciality 25 regulations provided for under state statute; building or related activities within Columbia County shall also pecigower pelity cer-PETA C. RERRY, CO. CLX 1 - ORD. No. 84-6

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- tain optional codes and appendicies referred to in Exhibit A,
- 2 attached hereto, hereby adopted by reference. The Administrator
- 3 for Land Development Services of Columbia County shall report to
- 4 the Board any subsequent additions, deletions, amendments, or
- 5 options, adopted or rejected by the State. The administrator
- 6 shall, within 90 days of notice by the State, recommend to the
- 7 Board those new optional provisions that may be adopted by the
- 8 County.
- 9 Section III: Building Fee Schedule
- 10 The Columbia County Building Permit Fee Schedule, Ordinance
- 11 No. 84-1, adopted February 1, 1984, shall continue in full
- 12 force and effect.
- 13 Section IV: Severability
- If any portion of this ordinance, including Exhibit A, is for
- 15 any reason held invalid by a court of competent jurisdiction,
- 16 such portions shall be deemed a separate, distinct, and indepen-
- 17 dent portion and such holdings shall not effect the validity of
- 18 the remaining portion thereof.
- 19 <u>Section V: Repeal</u>
- 20 Except as provided in Ordinance Number 84-1, as referred to
- 21 in this ordinance, all previously adopted ordinances, resolutions
- or parts thereof, referring to building or related activities in
- 23 Columbia County, now covered by the Uniform State Building Codes,
- 24 are hereby repealed. The provisions of this ordinance shall not
- 25 apply to or govern the construction of and remedy, for any viola-

2 = ORD. No. 84-6

Diane Spies & Associates 1618 S. W. 1st Ave. Portland, Oregon 97201 (503) 922-9117 34 007 31 M 11: 17

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1	tion of the prior Building Code Ordinances committed before the
2	effective date of this ordinance, or the construction and appli-
3	cation of any defense to enforcement of such a violation. Such a
4	violation shall be construed and remedied according to the law
5	existing at the time of the commission of the violation in the
6	same manner as if this ordinance had not been enacted.
7	Section VI: Emergency Clause:
8	This ordinance being necessary for the immediate protection
9	of the public health, safety and welfare, and being necessary to
10	establish comprehensive building, planning and zoning in the
11	unincorporated portions of Columbia County, an emergency is
12	declared to exist and this ordinance shall take effect on its
13	passage.
15	REGULARLY PASSED AND ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS FOR COLUMBIA COUNTY, OREGON THIS 194 DAY OF Lentented, 1984.
16	BOARD OF COUNTY COMMISSIONERS
17	The present
18	Chairman
19	Hobert on Elis
20	Commissioner
Ω1	Roberta Stubby Commissioner
22	Recording Secretary Commissioner
23	First Reading: Justiniber 19 1984
24	
25	VOTE:  STATE OF LOAD OF COMMENTS OF COMMEN
	Aye: Nay: State of the Nay: Nay: Nay: Nay: Nay: Nay: Nay: Nay:
-áge	Aye: Nay:
	Diane Spies & Associates 1618 S. W. 1st Ave. Portland, Oregon 97201  RETAUL HERRY, CO. CLK

(503) 222-2117

# Chapter 70 EXCAVATION AND GRADING

**Purpose** 

Sec. 7001. The purpose of this chapter is to safeguard life, limb, property and the public welfare by regulating grading on private property.

Scope

Sec. 7902. This chapter sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspection of grading construction.

**Permits Required** 

Sec. 7003. No person shall do any grading without first having obtained a grading permit from the building official except for the following:

1. Grading in an isolated, self-contained area if there is no danger apparent to

private or public property.

2. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than 5 feet after the completion of such structure.

3. Cemetery graves.

4. Refuse disposal sites controlled by other regulations.

5. Excavations for wells or tunnels or utilities.

6 Mining, quarrying, excavating, processing, stockpiling of rock, seal, gravel, aggregate or clay where established and provided for by law, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.

Exploratory excavations under the direction of soil engineers or engineering

geologists.

- 8. An excavation which (a) is less than 2 feet in depth, or (b) which does not create a cut slope greater than 5 feet in height and steeper than one and one-half horizontal to one vertical.
- 9. A fill less than 1 foot in depth and placed on natural terrain with a slope flatter than five horizontal to one vertical, or less than 3 feet in depth, not intended to support structures, which does not exceed 50 cubic yards on any one lot and does not obstruct a drainage course.

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Sec. 7004. Whenever the building official determines that any existing excavation or embankment or fill on private property has become a hazard to life and limb, or endangers property, or adversely affects the safety, use or stability of a public way or drainage channel, the owner of the property upon which the excavation or fill is located, or other person or agent in control of said property.

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upon receipt of notice in writing from the building official, shall within the period specified therein repair or eliminate such excavation or embankment so as to eliminate the hazard and be in conformance with the requirements of this code.

#### Definitions

Sec. 7005. For the purposes of this chapter the definitions listed hereunder shall be construed as specified in this section.

APPROVAL shall mean a written engineering or geological opinion concerning the progress and completion of the work.

AS-GRADED is the extent of surface conditions on completion of grading.

BEDROCK is in-place solid rock.

BENCH is a relatively level step excavated into earth material on which fill is to be placed.

BORROW is earth material acquired from an off-site location for use in grading on a site.

CIVIL ENGINEER shall mean a professional engineer registered in the state to practice in the field of civil works.

CIVIL ENGINEERING shall mean the application of the knowledge of the forces of nature, principles of mechanics and the properties of materials to the evaluation, design and construction of civil works for the beneficial uses of mankind.

COMPACTION is the densification of a fill by mechanical means.

EARTH MATERIAL is any rock, natural soil or fill and/or any combination thereof.

ENGINEERING GEOLOGIST shall mean a geologist experienced and knowledgeable in engineering geology.

ENGINEERING GEOLOGY shall mean the application of geologic knowledge and principles in the investigation and evaluation of naturally occurring rock and soil for use in the design of civil works.

EROSION is the wearing away of the ground surface as a result of the movement of wind, water and/or ice.

EXCAVATION is the mechanical removal of earth material.

FILL is a deposit of earth material placed by artificial means.

GRADE shall mean the vertical location of the ground surface.

Existing Grade is the grade prior to grading.

Rough Grade is the stage at which the grade approximately conforms to the approved plan.

Finish Grade is the final grade of the site which conforms to the approved plan.

GRADING is any excavating or filling or combination thereof.

KEY is a designed compacted fill placed in a trench excavated in earth material beneath the toe of a proposed fill slope.

SITE is any lot or parcel of land or contiguous combination thereof, under the

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same ownership, where grading is performed or permitted.

SLOPE is an inclined ground surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

SOIL is naturally occurring superficial deposits overlying bed rock.

SOILS ENGINEER shall mean a civil engineer experienced and knowledgeable in the practice of soils engineering.

SOILS ENGINEERING shall mean the application of the principles of soil mechanics in the investigation, evaluation and design of civil works involving the use of earth materials and the inspection and testing of the construction thereof.

TERRACE is a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.

**Grading Permit Requirements** 

Sec. 7006. (a) Permits Required. Except as exempted in Section 7003 of this code, no person shall do any grading without first obtaining a grading permit from the building official. A separate permit shall be required for each site, and may cover both excavations and fills.

(b) Application. The provisions of Section 302 (a) are applicable to grading and in addition the application shall state the estimated quantities of work

involved.

(c) Plans and Specifications. When required by the building official. each application for a grading permit shall be accompanied by two sets of plans and specifications, and supporting data consisting of a soils engineering report and engineering geology report. The plans and specifications shall be prepared and signed by a civil engineer when required by the building official.

(d) Information on Plans and in Specific ations. Plans shall be draw scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. The first sheet of each set of plans shall give the location of the work and the name and address of the owner and the person by whom they were prepared.

The plans shall include the following information:

1. General vicinity of the proposed site.

2. Property limits and accurate contours of existing ground and details of terrain and area drainage.

3. Limiting dimensions, elevations or finish contours to be achieved by the

grading, and proposed drainage channels and related construction.

4. 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 together with a map showing the drainage area and the estimated runoff of the area rerved by any drains.

5. 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 and of adjacent owners which are within 15 feet of the property or which may be affected by the

pr. posed grading operations.

(b) Grading Fermit Fees. A fee for each grading permit shall be paid in the building official as set forth in Table No. 70-B. Separate permits and fees shall building official as set forth in Table No. 70-B. Separate permits and the supply to retaining walls or major drainage structures as required characters and similar code. There shall be no separate charge for standard terracy drains and similar facilities. The fee for a grading permit authorizing additional work to that sorder a valid permit shall be the difference between the fee paid for the original permit and the fee shows for the curier project.

Gec. 7007. (a) Flass Review Fees. When a plan or other data are required to be submitting plans and submitting plans and submitting plans and submitting plans and specifications for review fees shall be at set forth in Table 196.70. A Separate plan review fees shall apply to retaining walls, or major dramage arractures as required elsewhere in this code. For excavation and full on the same surrectures as required elsewhere in this code. For excavation and full on the same surrectures as required elsewhere in this code. For excavation and full on the same surrectures as required elsewhere in this volume of excavation or full, whichever it

(g) Issuessect. The provisions of Socion 901 are appaieable to trading per mire. The building official may require man grading operations and project designs be modified if delays occur which near weather penetrated problems and considered at the time the permit was issued.

adequacy of sites to be developed by the proposed grading.

Recommendations included in the report and approved by the building official shall be incorporated in the grading plans or specification.

(1) Engineering Geology Report. The engineering geology lepost required by Subsection (c) stiall include an adequate description of the geology of the sine, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the proposed development, and opinions and recommendations governs. The

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## TABLE NO. 70-A-GRADING PLAN REVIEW FEES

_	No Fee
	50 cubic yards or less
	\$10.00 \$10.00 cubic yards
	1001 to 10,000 cubic yards
	10,001 to 100,000 cubic yards—\$20.00 for the first 10,000 cubic yards, plus \$10.00 for each additional 10,000 cubic yards or fraction thereof.
	100,001 to 200,000 cubic yards—\$110.00 for the first 100,000 cubic yards, plus \$6.00 for each additional 10,000 cubic yards or fraction thereof.
	200,001 cubic yards or more—\$170.00 for the first 200,000 cubic yards, plus \$3.00 for each additional 10,000 cubic yards or fraction thereof.
١	Other Fees:
	Additional plan review required by changes, additions or revisions to approved plans (minimum charge—one-half hour)

## TABLE NO. 70-B-GRADING PERMIT FEES

50 cubi	ic yards or less
51 to 1	00 cubic yards
101 to	1000 cubic yards—\$15.00 for the first 100 cubic yards plus \$7.00 for each tional 100 cubic yards or fraction thereof.
1001 R	o 10,000 cubic yards—\$78.00 for the first 1000 cubic yards, plus \$6.00 for additional 1000 cubic yards or fraction thereof.
10,001 \$27	to 100,000 cubic yards—\$132.00 for the first 10,000 cubic yards, plus .00 for each additional 10,000 cubic yards or fraction thereof.
100.0	1 cubic yards or more—\$375.00 for the first 100,000 cubic yards, plus .00 for each additional 10,000 cubic yards or fraction thereof.
Other	Inspections and Fees:
1.	Inspections outside of normal business hours
2.	Reinspection fee assessed under provisions of
. 3.	Inspections for which no fee is specifically indicated \$15.00 per hour (minimum charge—one-half hour)

The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

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#### Bonds

Sec. 7006. The building official may require bonds in such form and amounts as may be deemed necessary to assure that the work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate hazardous conditions.

In lieu of a surety bond the applicant may file a cash bond or instrument of credit with the building official in an amount equal to that which would be required in the surety bond.

#### Cuts

Sec. 7009. (a) General. Unless otherwise recommended in the approved soils engineering and/or engineering geology report, cuts shall conform to the provisions of this section.

(b) Slope. The slope of cut surfaces shall be no steeper than is safe for the intended use. Cut slopes shall be no steeper than two horizontal to one vertical.

(c) Drainage and Terracing. Drainage and terracing shall be provided as required by Section 7012.

#### Fills

Sec. 7010. (a) General. Unless otherwise recommended in the approved soils engineering report, fills shall conform to the provisions of this section.

In the absence of an approved soils engineering report these provisions may be waived for minor fills not intended to support structures.

- (b) Fill Location. Fill slopes shall not be constructed on natural slopes steeper than two to one.
- (c) Preparation of Ground. The ground surface shall be prepared to receive fill by removing vegetation, noncomplying fill, topsoil and other unsuitable materials scarifying to provide a bond with the new fill and, where slopes are steeper than five to one and the height is greater than 5 feet, by benching into sound bedrock or other competent material as determined by the soils engineer. The bench under the toe of a fill on a slope steeper than five to one shall be at least 10 feet wide. The area beyond the toe of fill shall be sloped for sheet overflow or a paved drain shall be provided. Where fill is to be placed over a cut, the bench under the toe of fill shall be at least 10 feet wide but the cut must be made before placing fill and approved by the soils engineer and engineering geologist as a suitable foundation for fill. Unsuitable soil is soil which, in the opinion of the building official or the civil engineer or the soils engineer or the geologist, is not competent to support other soil or fill, to support structures or to satisfactorily perform the other functions for which the soil is intended.

(d) Fill Material. Detrimental amounts of organic material shall not be permitted in fills. Except as permitted by the building official, no rock or similar irreducible material with a maximum dimension greater than 12 inches shall be buried or placed in fills.

EXCEPTION: The building official may permit placement of larger rock when the soils engineer properly devises a method of placement, continuously inspects its placement and approves the fill stability. The following conditions shall also apply:

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ssuance of the grading permit, potential rock disposal areas shall be delinessed on the grading plan.

B. Rock sizes greater than 12 inches in maximum dimension shall be 10 feet or more below grade, measured vertically.

C. Rocks shall be placed so as to assure filling of all voids with fines.

(e) Compaction. All fills shall be compacted to a minimum of 90 percent of maximum density as determined by 11.B.C. Standard No. 70-1. Field density shall be determined in accordance with U.B.C. Standard No. 70-2 or equivalent as approved by the building official.

(f) Slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes shall be no steeper than two horizontal to one vertical.

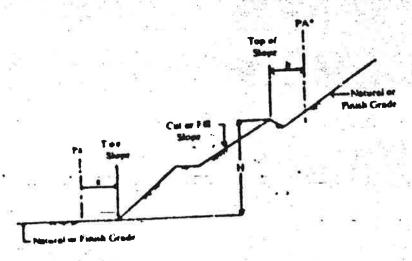
(g) Drainage and Terracing. Drainage and terracing shall be provided and the area above fill slopes and the surfaces of terraces shall be graded and paved as required by Section 7012.

#### Setbacks

Sec. 7011. (a) General. The setbacks and other restrictions specified by this section are minimum and may be increased by the building official or by the recommendation of a civil engineer, soils engineer or engineering geologist, if necessary for safety and stability or to prevent damage of adjacent properties from deposition or erosion or to provide access for slope maintenance and drainage. Retaining walls may be used to reduce the required setbacks when approved by the building official.

(b) Setbacks from Property Lines. The tops of cuts and toes of fill slopes shall be set tack from the outer boundaries of the permit area, including sloperight areas and easements, in accordance with Figure No. 1 and Table No. 70-C.

(c) Design Standards for Setbacks. Setbacks between graded slopes (cut or fill) and structures shall be provided in accordance with Figure No. 2.



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TABLE NO. 70-C REQUIRED SETBACKS FROM PERMIT AREA BOUNDARY

5 p ===	SETBACKS	
** * H 12 Ve-	This & Say	. <b>b'</b> ⊲
Under 5 2 5 - 30 Over 30	0 H/2 15	H/5 6

Additional width may be required for interceptor drain

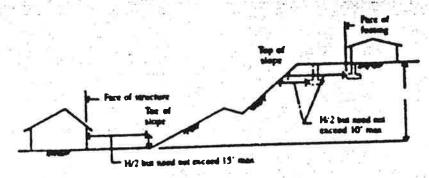


FIGURE NO. 2

Drainage and Terracing

Sec. 7012. (a) General. Unless otherwise indicated on the approved grading plan, drainage facilities and terracing shall conform to the provisions of this section.

(b) Terrace. Terraces at least 6 feet in width shall be established at not more than 30-foot vertical intervals on all cut or fill slopes to control surface drainage and debris except that where only one terrace is required, it shall be at midheight. For cut or fill slopes greater than 60 feet and up to 120 feet in vertical height, one terrace at approximately midheight shall be 12 feet in width. Terrace widths and spacing for cut and fill slopes greater than 120 feet in height shall be designed by the civil engineer and approved by the building official. Suitable access shall be provided to permit proper cleaning and maintenance.

Swales or ditches on terraces shall have a minimum gradient of 5 percent and must be paved with reinforced concrete not less than 3 inches in thickness or an approved equal paving. They shall have a minimum depth at the deepest point of 1 foot and a minimum paved width of 5 feet.

A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (projected) without discharging into a down drain.

(c) Subsurface Drainage. Cut and fill slopes thall be provided with subsurface drainage as necessary for stability.

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(d) Disposal. All drainage facilities shall be designed to carry waterasters to the nearest practicable drainage way approved by the building official anumend/or other appropriate jurisdiction as a safe place to deposit such waters. Erosion when of ground in the area of discharge shall be prevented by installation of nonerosity-osive downdrains or other devices.

Building pads shall have a drainage gradient of 2 percent toward sand approved drainage facilities, unless waived by the building official.

EXCEPTION: The gradient from the building pad may be I percent seem if all of the following conditions exist throughout the permit area:

A. No proposed fills are greater than 10 feet in maximum depth.

- B. No proposed finish cut or fill slope faces have a vertical height in excess of 10 feet.
- C. No existing slope faces, which have a slope face steeper than 10 horastic rizontally to 1 vertically, have a vertical height in excess of 10 feet.
- (e) Interceptor Drains. Paved interceptor drains shall be installed aned along the top of all cut slopes where the tributary drainage area above slopes towards are cut and has a drainage path greater than 40 feet measured horizontally. Interceptor drains shall be paved with a minimum of 3 inches of concrete or guergunite and reinforced. They shall have a minimum depth of 12 inches and a minimum mum paved width of 30 inches measured horizontally across the drain. The slopestope of drain shall be approved by the building official.

#### **Erosion Control**

Sec. 7013. (a) Slopes. The faces of cut and fill slopes shall be prepared and maintained to control against erosion. This control may consist of peof effective planting. The protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes are not subject to envererosion due to the erosion-resistant character of the materials, such protection may be omitted.

(b) Other Devices. Where necessary, check dams, cribbing, riprapayrap or other devices or methods shall be employed to control erosion and provide satisficately.

### **Grading Inspection**

- Sec. 7014. (a) General. All grading operations for which a permit is mit is required shall be subject to inspection by the building official. When requires united by the building official, special inspection of grading operations and special testar testing shall be performed in accordance with the provisions of Section 200 and Subsection 7014 (c).
- (b) Grading Designation. All grading in excess of 5000 cubic yardswards shall be performed in accordance with the approved grading plan prepared bred by a civil engineer, and shall be designated as "engineered grading." Grading thing involving less than 5000 cubic yards shall be designated "regular grading" unless the permittee, with the approval of the building official, chooses to have these the grading performed as "engineered grading."
- (c) Engineered Grading Requirements. For engineered grading thing, it shall be the responsibility of the civil engineer who prepares the approved grading plan to incorporate all recommendations from the soils engineering and engagengineering

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geology reports into the grading plan. He also shall be responsible for the professional inspection and approval of the grading within his area of technical specialty. This responsibility shall include, but need not be limited to, inspection and approval as to the establishment of line, grade and drainage of the development area. The civil engineer shall act as the coordinating agent in the event the need arises for liaison between the other professionals, the contractor and the building official. The civil engineer also shall be responsible for the preparation of revised plans and the submission of as-graded grading plans upon completion of the work. The grading contractor shall submit in a form prescribed by the building official a statement of compliance to said as-built plan.

Soils engineering and engineering geology reports shall be required as specified in Section 7006. During grading all necessary reports, compaction data and soil engineering and engineering geology recommendations shall be submitted to the civil engineer and the building official by the soils engineer and the engineering geologist.

The soils engineer's area of responsibility shall include, but need not be limited to, the professional inspection and approval concerning the preparation of ground to receive fills, testing for required compaction, stability of all finish slopes and the design of buttress fills, where required, incorporating data supplied by the engineering geologist.

The engineering geologist's area of responsibility shall include, but need not be limited to, professional inspection and approval of the adequacy of natural ground for receiving fills and the stability of cut slopes with respect to geological matters and the need for subdrains or other groundwater drainage devices. He shall report his findings to the soils engineer and the civil engineer for engineering analysis.

The building official shall inspect the project at the various stages of the work requiring approval and at any more frequent intervals necessary to determine that adequate control is being exercised by the professional consultants.

(d) Regular Grading Requirements. The building official may require inspection and testing by an approved testing agency.

The testing agency's responsibility shall include, but need not be limited to, approval concerning the inspection of cleared areas and benches to receive fill, and the compaction of fills.

When the building official has cause to believe that geologic factors may be involved the grading operation will be required to conform to "engineered grading" requirements.

- (e) Notification of Noncompliance. If, in the course of fulfilling his responsibility under this chapter, the civil engineer, the soils engineer, the engineering geologist or the testing agency finds that the work is not being done in conformance with this chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the person in charge of the grading work and to the building official. Recommendations for corrective measures, if necessary, shall be submitted.
- (f) Transfer of Responsibility for Approval. If the civil engineer, the soils engineer, the engineering geologist or the testing agency of record is changed during the course of the work, the work shall be stopped until the replacement has

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egreed to accept the responsibility within the area of his technical competence. For approval upon completion of the work.

Completion of Work

Sec. 7915. (a) Final Reports, Upon completion of the rough grading work and at the final completion of the work the building official may require: the following reports and drawings and supplements thereto:

1. An as-graded grading plan prepared by the civil engineer including original ground surface elevations, lot draimage patterns and lucations and elevations of all surface and subsurface draimage (acilities. He shall provide approval that the work was done in accordance with the

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2. A soil grading report prepared by the soils engineer including locations and elevations of field density tests, summaries of field and laboratory tests and other substantiating data and comments on any changes made during grading and! their effect on the recommendations made in the soils engineering investigation resport effect on the recommendations made in the soils engineering investigation resport. He shall provide approval as to the adequacy of the site for the intended use.

3. A geologic grading report prepared by the engineering geologist including a closed during the grading and the effect of same on recommendations incorporated to the grading and the effect of same on recommendations incorporated in the grading plan. He shall previde approval as to the adecquarcy rated in the approved grading plan. He shall previde approval as to the adecquarcy

of the sace for the intended use as affected by geologic factors.

(b) Nettherston of Completion. The permittee or his agent shall notify the

building official when the grading operation is ready for final inspections. Final approval shall not be given until all work including installation of all drasinage facilities and their protective devices and all erosion-control measures have been facilities and their protective devices and all erosion-control measures have been exempleted in accordance with the final approved grading plan and the resquired

reports have been submitted