

### **INFORMATION BULLETIN / PUBLIC - BUILDING CODE**

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# GUIDELINES FOR DETERMINING REMEDIAL GRADING EXEMPTED FROM THE BASELINE HILLSIDE ORDINANCE

#### I. Introduction

The purpose of this bulletin is to establish guidelines for determining remedial grading that is exempt from the <u>Baseline Hillside Ordinance</u> (BHO). The BHO regulates the amount of grading for projects in the Hillside Area, shown on the Department of City Planning (DCP) Hillside Area Map. *Note: The DCP's Hillside Area is not the same as the Hillside Grading Area referred to in LABC Section 7003, which is based on the latest Bureau of Engineering Basic Grid Map No. A-13372.* 

The BHO delineates the Maximum Grading Quantities (MGQ) allowed for any one property. Exempt grading is not included when determining a project's total grading that is subject to the MGQ. The types of BHO exempt grading are summarized below:

- (A) Cut and/or Fill for deepened foundation systems (such as caissons and piles), water storage tanks, required storm water retention improvements, and required animal keeping site development that do not involve the construction of any freestanding retaining walls.
- (B) Cut and/or Fill, up to 500 cubic yards, for driveways to the required parking or Fire Department turnaround closest to the accessible Street for which a Lot has ingress/egress rights.
- (C) Remedial Grading as defined in Section 12.03 of the LAMC as recommended in a Geotechnical Investigation Report, prepared in accordance with Sections 7006.2, 7006.3, and 7006.4 of the LABC, and approved by the Los Angeles Department of Building and Safety (LADBS) Grading Division.
- (D) Fill resulting from cut underneath the footprint of the main building, not to exceed 50% of said cut.

This Information Bulletin addresses only type C; Remedial Grading. Remedial grading is defined in the Los Angeles Planning and Zoning Code as:

For the purposes of Section 12.21 C.10 of this Code, Remedial Grading shall mean grading recommended by a California Licensed Geologist and/or Licensed Engineer prepared in accordance with Sections 7006.2, 7006.3 and 7006.4 of the LABC, and approved by the Department of Building and Safety Grading Division, that is necessary to mitigate a geologic or geotechnical hazard on a site (including for access driveways), including, but not limited to: 1) correction of hazardous soil and earth conditions, when notified by LADBS in accordance with Section 7005.7 of the LABC, 2) removal and recompaction of soil for a Building site to remediate expansive, compressible or seismically unstable soils, 3) grading required to provide a minimum factor of safety of 1.5 for stability of slopes, and/or 4) grading to bring existing steep non-conforming graded slopes into conformance with current Code requirements for fill and excavated slope gradients.



Although this definition is clear, various interpretations are possible. In some cases, developers and their consultants may have an interpretation of remedial grading that is not consistent with the BHO and the Grading Division's guidelines. It is the purpose of this Information Bulletin to provide a commentary on the BHO definition of Remedial Grading and thereby reduce the potential for inconsistent determinations of remedial grading for hillside development.

Remedial grading quantities are usually provided by the project civil engineer with assistance from the geotechnical consultants. Grading plans prepared by the civil engineer must show compliance with the MGQs and a summary of the allowable grading quantities, the proposed grading quantities and the exempted grading quantities (P/BC 2017-133).

### II. Categories of Remedial Grading

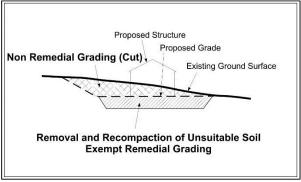
### 1) Correction of hazardous soil and earth conditions, when notified by LADBS in accordance with LABC Section 7005.7

The remedial grading included under LABC Section 7005.7 consists of reparation of hazardous conditions that cause immediate danger. LABC Section 7005.7 states, "Whenever the Department determines by inspection that any land or any existing excavation or fills have, from any cause, become a menace to life or limb, or endangers public or private property, or affects the safety, usability or stability of public or private property, the owner or other person in legal control of the property concerned shall, upon receipt of a written notice thereof from the Department, correct such condition in accordance with the provisions of this chapter and the requirements and conditions set forth in the notice so as to eliminate the hazardous condition."

## 2) Removal and recompaction of soil for a building site to remediate expansive, compressible or seismically unstable soils

The remedial grading included under this category includes the routine removal and recompaction of unsuitable soil that is necessary for essentially all grading projects where new certified fill is placed. This includes, but is not limited to, uncertified fill, loose and porous alluvium and colluvium, and highly expansive soil. Determining the quantity of this category of remedial grading is relatively straight forward. However, this exempted remedial grading is limited only to the removal of unsuitable soil or bedrock below the finished grade elevation (See Figure 1). The removal of any soil or bedrock above the finished grade elevation is not considered exempt. In addition, the fill placed above the original grade is not considered remedial or exempt (See Figure 2).







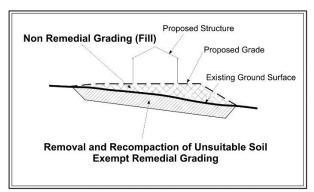


Figure 2

### 3) Grading required to provide a minimum factor of safety of 1.5 for stability of slopes.

Remedial grading to stabilize slopes for the construction of a dwelling ranges from minor grading, such as slope trimming to reduce gradients, to significant grading including the construction of stabilization or buttress fill slopes and landslide removal. Determining the quantity of remedial grading related to slope stability is occasionally difficult when it is combined with non-exempt grading. For example, if a fill is used to stabilize a slope with a landslide or a slope with a calculated factor of safety less than 1.5 (or <1.0 for seismic analysis) and is combined with a large building pad, not all of the fill would be considered remedial. For these cases, the geotechnical consultants may be required to determine the actual fill mass required to stabilize the slope by specific slope stability analyses. These analyses can be used to show a separation between the non-exempt and remedial grading so that accurate quantities can be determined (See Figure 3). In the case for construction of fill against slopes that are grossly stable, but have surficial instability, the remedial grading is limited to the removal of unstable natural soil as in category 2 discussed on page 2. The additional fill placed against the slope is not considered remedial.

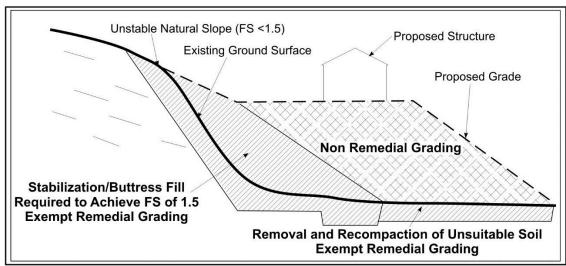


Figure 3



## 4) Grading to bring existing steep non-conforming graded slopes into conformance with current Code requirements for fill and excavated slope gradients

The remedial grading to bring existing graded slopes into conformance with the Code requirements usually consists of slope trimming; 2:1 (horizontal to vertical) for fill slopes or cut slopes exposing natural soil and 1.5:1 (horizontal to vertical) for cut slopes exposing competent bedrock. Determining the quantities of such trimming is usually straight forward.

### III. Reporting Remedial Grading

Geotechnical reports for projects in the hillside area that exceed the BHO's MGQ based on the exemption of remedial grading are encouraged to provide specific descriptions of the remedial grading. This information will help civil engineers to determine accurate remedial grading quantities and provide the Grading Division with an opportunity to review and clarify any questions regarding the classification of Remedial Grading on the project. Reports that assert all of the grading for a particular project as "remedial", and do not justify with sufficiently detailed analysis, could cause confusion later when the grading plan is with Plan Check and/or under review by the DCP, and the Grading Division does not agree with the remedial quantities shown on the plan.