



INSPECTION BUREAU

GRADING INSPECTION DIVISION OVERVIEW

The Grading Division was formed in 1952. Its primary mission, to reduce failure of hillside property by implementing foundation and inspection criteria beyond normal code requirements. This criteria has also been incorporated into development for foundations of all properties throughout Los Angeles. The first inspection for all hillside properties (grading pre-inspection) compares plans submitted to plan check (prior to permit issuance) to actual site conditions. This ensures plans and site conditions are compatible. Inspectors also compare actual site conditions to soils and geology reports submitted to the Grading Division. Grading inspectors work closely with the Grading Division Geotechnical staff to ensure quality and integrity of the building site through inspections and approved geotechnical reports. Grading inspectors are responsible for review and issuance of approval letters for all compaction reports throughout Los Angeles.

The Standard Operations Procedures (SOP) listed in this Annex are to be used in addition to the applicable Code Sections of the City of Los Angeles Grading and City of Los Angeles Building Code and the Inspection Bureau Operations Manual.

The SOP's are intended to be a quick reference to the most important aspects of the type of inspection being conducted to help standardize inspection procedures and to make sure that inspectors perform their inspections in a thorough and safe manner.

Inspectors are required to perform complete, accurate and thorough inspections. Documentation that is complete, accurate and thorough aids the constituent, contractor, developer and the inspector who may be assigned to make an inspection during the absence of the district inspector. In addition, the supervisor can have readily available and clear information if he or she must respond to requests for information during or after the construction.



INSPECTION BUREAU

GRADING INSPECTION

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GRADING INSPECTION

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INSPECTION BUREAU - GRADING INSPECTION

IB - G1	GPI	Reviewed: 3/08	Next Review: 10/10
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PROCEDURE: Grading Pre-Inspection Input (GPI)

PERFORMED BY: District Inspectors

APPROVALS REQUIRED: None

OTHER DIVISIONS / AGENCIES: None

The term "Grading Pre-Inspection" also known as GPI refers to a field inspection procedure conducted on each property located in the designated "Hillside Grading Ordinance Area" in Los Angeles. Each plan submitted to plan check for property located within the Hillside Grading Ordinance area is automatically routed to the grading division for a Pre-Inspection of the property. The Pre-inspection allows LADBS inspection staff to visit each building site prior to the issuance of any permits. The Pre-Inspection conducted at each site allows LADBS staff to compare each plan to the actual site conditions. This inspection generates a written report for each property inspected and becomes a portion of the correction requirements generated by plan check staff. The following steps are required to be followed by inspection staff to complete the GPI.

ACTIONS REQUIRED:

1. After GPI has been distributed to district inspectors, the inspector prioritizes GPIs, usually, by date entered or by expedite tag.
2. GPI with expedite tag should be completed within 3 days of the date they were received by the inspector.
3. The inspector is responsible to input all pertinent information into PCIS and schedule inspection.
4. During site inspection, the inspector determines if any unique or special requirements will be necessary; such as geology or soils report, shoring, offsite agreements, etc.
5. Results of pre-inspection shall be recorded electronically the following working day, upon the inspector's return to the office.
6. The inspector is responsible for forwarding a copy of the final GPI report to clerical staff for distribution.



INSPECTION BUREAU - GRADING INSPECTION

IB - G2 COMPACTION REPORTS Reviewed: 3/08 Next Review: 10/10

PROCEDURE: Compaction Reports

PERFORMED BY: District Grading Inspector / Senior Grading Inspector

APPROVALS REQUIRED: Inspection Staff

OTHER DIVISIONS / AGENCIES: None

Chapter 70 of the Los Angeles Building Code requires a compaction report for any job where soil has been removed and re-compacted on a job site, or where a retaining wall has been constructed and the void behind the retaining wall must be filled in with certified compacted fill. The compaction report is prepared by a State Licensed Geo-technical engineering firm. The compaction report is a compilation of all test data obtained during the removal and re-compaction process. The report will include depth of fill, elevation and location for each test conducted. The number of tests depends on the size of the job and may range from 3 or 4 tests for a simple job, to over 100 hundred for large complex jobs. The following steps must be followed to accept and approve the compaction report.

ACTIONS REQUIRED:

1. Counter staff assists customers in completing application for review of technical reports with the necessary information.
2. Three copies of the report (one original, wet stamped, signed in ink and two photo copies) are required for submittal.
3. Counter staff are to verify copies and review that application is complete. Staff assesses appropriate fees, according to fee chart maintained at the counter. Customer proceeds to the cashier and returns to the Grading counter with the original copies of the report and paid receipt.
4. Using "GRADING TIME SHEET" and "LOG BOOK" programs, the report and application is assigned a log number.
5. Each report submittal receives a log number. A response to a correction letter receives the original number followed by a "- 1" in arithmetic progression.
6. After a report is logged in, it is distributed to the appropriate office and district grading inspector.

Review of compaction reports involves the following process:

1. Review report and make relevant notes. The review and notes should include: type of fill, soil used for fill, bearing values, density tests, mechanical equipment used, and inspections required. A plot plan is required. Verify legal description is correct and is consistent with grading permit. An engineer's certificate of compliance should be provided and checked for accuracy. If import soil is used, check shear value chart and soil classification table.
2. Review soils and geology reports and any supplements or addendum. Document by noting relevant points pertaining to the compaction report.
3. Review department approval letter; note points related to the compaction report.
4. Review job file and inspection notes made by the district grading inspector or B163 form submitted by grading inspector.
5. Approval or denial of the compaction report is based on a review of all documents and notes listed above.
6. If the report is approved, an approval letter is prepared. A standard approval form is available for the following types of engineered compacted fill; primary structural, secondary structural, or non-structural.
7. If the report is denied, a correction letter is prepared. A standard form is available for correction letter, detailing all corrections with code sections provided.
8. A copy of the correction letter along with a copy of the compaction report is to be kept on file by the reviewing inspector until a response to the correction letter has been received and the compaction report is approved.
9. Staff are to be available to customers and provide and assist with information which will enable applicant to properly address the departments requests for information or the filing of modifications or affidavits.



INSPECTION BUREAU - GRADING INSPECTION

IB - G3	MINES	Reviewed: 3/08	Next Review: 10/10
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PROCEDURE: Annual Mines Inspection

PERFORMED BY: Senior Grading Inspector

APPROVALS REQUIRED: None

OTHER DIVISIONS / AGENCIES: Vulcan Materials Company

Department of Conservation State of California,
Planning Department City of Los Angeles

The State of California Surface Mining and Reclamation Act of 1973 known as SMARA, operates as a division under California Department of Conservation. An inspection of each mine operation within the State of California must be conducted annually to be in compliance with State and Federal regulations. Los Angeles currently has one area of surface mines and they are located in Sunland Tujunga. Vulcan Materials Incorporated is licensed by SMARA to operate five mine sites in this area. Two sites are in various stages of restoration and three sites remain active for extraction of rock, sand and gravel for construction purposes, the following items are required to complete the annual inspection report.

ACTIONS REQUIRED:

1. Make an appointment with Vulcan Mine representative to conduct the annual inspection.
2. All forms are provided by SMARA and must be used to conduct this inspection and report. The forms must be forwarded to this state agency at the completion of the annual inspection. Offices for SMARA are located in Sacramento California only. Forms may be obtained from SMARA 's web site.
3. Surface Mining and Reclamation Act; (SMARA), provides updated information each year regarding Surface Mining and Reclamation, Annual Inspection, Inspection Reporting and Financial Responsibility as well as many other aspects relating to this industry and inspection.
4. Grading Division conducts an annual inspection of each mine and reports to SMARA using forms provided by SMARA along with a written evaluation of each mine by Grading inspection staff.

5. Vulcan Materials Company is required to provide a detailed report to the Department of Building and Safety describing all activities of each mine once a year.
6. Based upon Vulcan's report and an annual inspection report by LADBS of the Vulcan Mines Sites, a combined report is prepared and submitted to SMARA.
7. Reports shall contain a Financial Assurance document for each mine. Financial Assurance will be provided in bond form.
8. The Grading Division is also required to comment (approve or deny) all financial assurances. SMARA provides a guide to use when determining appropriate financial assurances.
9. Upon completion of the annual inspection report, a fee is charged to the Vulcan Materials Company through LADBS financial services, to cover inspection and report costs.



INSPECTION BUREAU - GRADING INSPECTION

IB - G4	OWTS	Reviewed: 3/08	Next Review: 10/10
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PROCEDURE: On Site Waste Water Treatment System (O.W.T.S.)

PERFORMED BY: Senior Grading Inspector, Grading Inspector

APPROVALS REQUIRED: Public Works, Sanitation Department and Los Angeles County
Regional Water Quality Control Board

OTHER DIVISIONS / AGENCIES: Public Works, Sanitation Department

When mainline sewer is not available a OWTS system must be installed and approved prior to any permits for a new dwelling being issued. Many hillside and flat land areas of Los Angeles lack a mainline sewer. In order to accommodate these properties OWTS systems were developed and are covered in detail in the 2008 City of Los Angeles Plumbing Code. Previous to the 2008 Plumbing Code the private sewage systems were known as PSDS systems (Private Sewage Disposal Systems). OWTS provide onsite sewage treatment for existing dwellings as well as new dwellings. A simple OWTS system is comprised of a two compartment septic tank and attached seepage pit. A more complex system will be comprised of a seepage pit and a larger multi-compartment septic tank fitted with sensors, pumps and bacteria elements to treat sewage and are monitored 24 hours a day with a connection to a modem and alarm system. The alarm will give ample warning to customer to replace parts prior to complete failure of a component. You will find this system located in sensitive water shed areas. The Regional Water Board must approve any system located in sensitive canyon areas, known as "Blue Ribbon Streams," prior to obtaining permits from LADBS. Public Works Sanitation Department must sign off on all projects for OWTS and provides mapping for Blue Ribbon Streams and Canyons.

ACTIONS REQUIRED:

1. On Site Waste Water Treatment System (O.W.T.S.), will require separate permits for the Seepage Pit, Septic Tank and electrical permit for pumps on more sophisticated systems.
2. Inform the customer of all necessary documents and reports that will be required to obtain permit and Department approval.
3. Inform the customer of clearances required from other departments. Note, that if the property is within 200 feet of the public sewer, an O.W.T.S. system may not be permitted. Reference Plumbing Code Sec. 713.4.

4. A floor plan, plot plan, survey, Approved Geology Report, with the approval letter, (if geology report is required), and clearances from Public Works, Sanitation Department and a clearance from County Regional Water are required prior to issuing permit.
5. Geology report may not be required if the property is not located in a Hillside Grading Area or has a gentle slope of 10 horizontal to 1 vertical or flatter.
6. The number of bedrooms determines size of the Septic Tank.
7. A Grading permit for a O.W.T.S. will be issued only by Plan Check Engineers in the Grading Division.
8. Grading division inspector will inspect seepage pit location and installation based on documents submitted and approved. Documents submitted will indicate diameter of proposed seepage pit.
9. Percolation rate testing shall be observed by Grading Inspection staff. Grading staff will determine if percolation rate meets Plumbing Code minimum requirements for proposed dwelling.
10. The Percolation rate (Perc Test) is conducted over a 24 hour period. The primary method of testing is the drop test. The pit is filled to capacity and time of day noted. The inspector returns in 24 hrs. and measures the distance from the lid to the water level. Each vertical foot of drop produces the number of gallons. This is determined by a chart listed in Information Bulletin # 27.
11. If the pit percolates the required number of gallons in 24 hours, the seepage passes and the grading inspector enters this information into PCIS. With this approval, plan check can issue permits for the proposed dwelling.



INSPECTION BUREAU - GRADING INSPECTION

IB - G5	EROSION	Reviewed: 3/08	Next Review: 10/10
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PROCEDURE: Erosion Control

PERFORMED BY: Grading Inspector and Senior Grading Inspector

APPROVALS REQUIRED: Public Works

OTHER DIVISIONS / AGENCIES: Public Works

Each year the Grading Division prepares a list of current grading projects that will require erosion control measures during the official rainy season, October 1, through April 15. This list is transferred to Public Works by July 1 each year. Public works utilizes the information to prepare and mail Orders to Comply to each property owner on the Erosion Control List by August 31. Permits issued after July 1 will be addressed by Grading Inspection Staff in the form of an Order to Comply throughout the official rainy season. In all cases erosion control plans are prepared by a licensed engineer and submitted to Public Works for approval. Public works forwards a copy of the approved erosion control plan to the Grading Division to aid inspection staff during inspection of erosion control measures.

ACTIONS REQUIRED:

1. Erosion Control measures apply to properties under construction located in Hillside Grading Ordinance Areas, as defined by the Building Code. Any grading project located outside of the Hillside Grading Ordinance area that exceeds 200 cubic yards is also subject to these rules and regulations.
2. The district grading inspector shall notify the owner in writing by issuing an Order to Comply (OTC). The OTC will state that the subject property is required to provide erosion control measures during rainy season; (Oct 1 thru Apr. 15), and the owner is required to maintain these measures in working order during the official rainy season.
3. Upon receiving written notice, the property owner is required to prepare an erosion control plan.
4. The owner of the property, shall submit seven sets of plans to Public Works for approval.
5. A copy of this plan after receiving approval by Public Works, is sent to the district grading inspector for inspection.



INSPECTION BUREAU - GRADING INSPECTION

IB - G6	RECORD	Reviewed: 3/08	Next Review: 10/10
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PROCEDURE: Record Certificate of Substandard

PERFORMED BY: District Inspector and Senior Inspectors

APPROVALS REQUIRED: Bureau Chief

OTHER DIVISIONS / AGENCIES: Los Angeles County Recorder

When the owner of property has received notice to make repairs to his/her property and has not immediately complied within the time limit specified in notice, and the property contains Hazardous Soil and Earth Conditions, LADBS shall file a notice with the County Recorder stating the property is "Sub Standard and the owner has been notified".

ACTIONS REQUIRED:

1. An Order to Comply (OTC) shall be issued on a property where a hazardous excavation or soil condition exists and compliance is not achieved. A Certificate of Substandard may be issued.
2. Clerical staff will prepare the Substandard notice for signature of Bureau Chief. Substandard notice form can be found on LADBS web site.
3. LADBS files the Certificate of Substandard with the County Recorder office. A copy of each notice is maintained in each district office where the violation occurred.



INSPECTION BUREAU - GRADING INSPECTION

IB - G7 SUBSTANDARD Reviewed: 3/08 Next Review: 10/10

PROCEDURE: Release Certificate of Substandard

PERFORMED BY: District and Senior Inspectors

APPROVALS REQUIRED: Bureau Chief

OTHER DIVISIONS / AGENCIES: Los Angeles County Recorder

When the hazardous Soil and Earth Condition has been corrected by filing proper reports, plans and obtaining necessary permits and the required inspections have been conducted to the departments satisfaction, a certificate specifying that the conditions creating the substandard classification have been corrected and the property is no longer considered substandard. A certificate will be filed on behalf of the owner of said property canceling the substandard notice.

ACTIONS REQUIRED:

1. Verify the substandard condition has been corrected by conducting required inspections.
2. Upon verification of corrective work, Inspector completes Certificate of Correction of Substandard Property Notice. Certificate of Correction is located on the LADBS web site.
3. Owner pays required fee to LADBS for recordation purposes.
4. Bureau Chief signs completed form and LADBS staff submit certificate to Los Angeles County Recorder office for recordation.



INSPECTION BUREAU - GRADING INSPECTION

IB - G8	SWPPP	Reviewed: 3/08	Next Review: 10/10
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PROCEDURE: Storm Water Pollution Prevention Program (SWPPP)

PERFORMED BY: Grading Inspectors / Senior Grading Inspectors

APPROVALS REQUIRED: Public Works

OTHER DIVISIONS / AGENCIES: Public Works-Bureau Of Engineering

Grading staff are required to conduct one called inspection each year during the official rainy season (October 1 through April 15) for each grading permit containing SWPPP as a requirement. Forms are provided by Department of Public Works Sanitation Department Watershed Protection Division. This inspection is conducted to verify the job site in compliance with "Storm Water Pollution Prevention Program" often referred to as SWPPP. Grading staff complete the inspection on the forms provided by Public Works and fax copies to the Watershed Protection Division the following day. A photo copy of each inspection is maintained in each district office during the year.

ACTIONS REQUIRED:

1. SWPPP is the acronym for Storm Water Pollution Prevention Program.
2. Identify all grading permits which require SWPPP inspection.
3. Sites that require grading and are subject to possible soil erosion and discharge of pollutants into the street drainage system are required to prepare plans and make adequate arrangements per city approved plans to prevent, soil or other pollutants from discharge into the street drainage system.
4. Any violations found during our annual inspection will be noted on forms provided. No follow up by LADBS staff is required. The watershed protection division will follow up on all violations by issuing appropriate notices utilizing its own inspection staff.
5. Upon completion of the annual inspection, the district grading inspector is required to complete and forward a report on the form provided with a copy of the Grading permit attached to Public Works Bureau of Engineering Watershed Protection Division.

6. A copy of the report is maintained by the Grading Division on yearly basis.
7. The grading inspector is responsible to record actions in the job file and also in the Grading Division SWPPP file.