



Town of Yucca Valley
 Community Dev./Public Works Dept.
 Engineering Division
 58928 Business Center Drive
 Yucca Valley, California 92284
 Phone: 760-369-6575
 Fax: 760-228-0084

APPLICATION & PERMIT FOR

ON-SITE GRADING

Rough

Precise

OTHER _____

This is a valid permit only when the application is complete, all fees and deposits have been paid, and it is signed by a Town Representative, the Applicant, and Contractor. **Original signatures only - No faxed copies.**

PERMIT NO. GPMT - _____

Date Rec'd (Town Use Only): _____

1. APPLICANT INFORMATION

 Applicant/Owner Name

 Company/Utility Co./Organization Name

 Street Address

 City, State, Zip Code

 Home/Office Phone Number - Cell Phone Number

 Fax Number

2. CONTRACTOR INFORMATION

 Contractor

 Company Name

 Street Address

 City, State, Zip Code

 Office Phone Number - Cell Phone Number

 Contractor's License Number

ACKNOWLEDGEMENT AND ACCEPTANCE

I certify under penalty of perjury that I have read this application and state that the information herein is true; that I acknowledge, understand, and accept the standard provisions and special provisions of this permit, and that I will abide by all applicable County and Town Ordinances. I further agree to pay for removal and replacement of any additional items in excess of the amounts shown herein that may be cut or damaged as a result of any work accomplished under this permit. The Applicant and Contractor shall comply with all provisions of Underground Service Alert (Government Code § 4216) in regard to the contact of a regional notification center (1-800-227-2600) before excavating.

 Signature of Applicant

 Date

 Signature of Contractor

 Date

PERMIT APPROVAL

Subject to the provisions and requirements of Yucca Valley Ordinances, the standard provisions and any special provisions that are attached hereto, permission is hereby granted for the purpose of performing indicated grading operations or other work on-site at the designated location. This permit is to be strictly construed and no work other than that specifically mentioned herein is authorized hereby. Performance of the work shall be deemed to be acceptance by the applicant and contractor of all terms and conditions of this permit.

 Signature of Town Designee

 Date (Note: This permit expires 60 days from the date of issuance)

PERMIT NO. GPMT - _____

3. LOCATION OF WORK: _____

4. APN / TRACT - LOT NO: _____

5. DESCRIPTION OF WORK: _____

6. GRADING C.Y. CUT _____ GRADING C.Y. FILL _____

7. EXCAVATION - LF LENGTH _____ X LF WIDTH _____ 8. S.F. PAVEMENT CUT _____

9. PERSON IN CHARGE OF WORK: _____ 10. PHONE: _____

11. ESTIMATED TOTAL COST/VALUE OF WORK: \$ _____

FEE CALCULATION (BY TOWN STAFF)

<u>INSPECTION FEE FOR</u>	<u>DIMENSIONS/DESCRIPTION</u>	<u>FEE</u>
GRADING	_____	_____
RETAINING WALL	_____	_____
TRENCH EXCAVATION	_____	_____
OTHER	_____	_____
OTHER	_____	_____
OTHER	_____	_____
OTHER	_____	_____
	APPLICATION FEE =	_____
	TOTAL PERMIT FEE =	_____

INSPECTION REQUESTS CALL (760) 369-6575 ext. 303 - 48 HOURS NOTICE REQUIRED.

STANDARD PROVISIONS

PERMIT NO. GPMT-_____

1. All work shall be performed in accordance with the most recent edition of the "GREENBOOK" Standard Specifications for Public Works Construction (published and updated by Public Works Standards, Inc. every three years), the standard specifications of the Town of Yucca Valley, the San Bernardino County specifications for trench repair, the approved plans, and the standard and special provisions set forth in the approved permit.
2. Traffic control shall be per current Caltrans "Manual of Traffic Controls" and the "WATCH" Handbook. When construction results in only one traffic lane being opened to traffic, a minimum of two flagmen shall be provided. Contractor shall be responsible for traffic control at all times, including weekends and non-working hours. The requirements for traffic control shall apply to all public right of way, whether paved or not. If deemed necessary by the Town Engineer, the contractor shall provide additional traffic control other than as described above.
3. Inspection requests shall be made at least 48 hours in advance. Minimum inspection requirements include trench backfill and final paving. Inspections may be canceled without penalty by notifying the Town at (760) 369-6579 or at (760) 369-6575 a minimum of two hours prior to the scheduled inspection. Applicant will be responsible for additional costs for re-inspections for work not ready as scheduled or for incomplete work.
4. Minimum compaction of trench backfill shall be 90%, except for the top 6" of backfill beneath the pavement, which shall be 95%. Minimum compaction outside of paved roadway shall be 90%.
5. Existing pavement to be removed shall be sawcut. Unless otherwise approved by the Town Engineer final replacement paving shall consist of 4" thick (minimum) hot mix (Type B, PG 70-10, 3/4" maximum). Width of pavement resurfacing shall be a minimum of 4' wider (2' each side) than the width of the trench. Final paving surface shall be per Town Standard Drawing No. 241. Applicant shall be responsible for the trench for the life of the trench.
6. Subject to prior approval by Town Engineer, temporary "cold mix" patching may be used. Minimum thickness of temporary cold mix shall be 3". Duration of temporary patch shall be as approved by the Town Engineer. Maintenance of temporary patching shall be the responsibility of the Applicant. Cold mix shall be SC800 or as otherwise approved by the Town Engineer. Hot mix overlay shall be Type B, AR4000, 3/4" maximum.
7. Applicant shall provide for compaction testing for all backfill by a licensed engineer or testing laboratory. A minimum of one test shall be taken for each 300' of trench or fraction thereof. Additional testing may be required by the Town Engineer based on actual conditions or completeness of the compaction efforts.
8. All existing landscaping and native plants are to be protected in place. Prior to backfilling the trench, the contractor shall notify the Town Engineer for inspection of the impact, if any, on any existing Joshua trees within the construction zone. Any damage to Joshua trees by the contractor shall require replacement of the trees under separate permit.
9. Contractor shall submit his proposed work schedule for review by the Town Engineer prior to issuance of the grading permit and shall notify the Town Engineer in the event of any deviation from the schedule. Contractor shall notify Town 24 hours prior to beginning work and within 48 hours of completing work.
10. In the event work is completed without proper inspection, the Applicant may be required to submit evidence sufficient to satisfy the Town Engineer that the work was performed in accordance with the requirements of this permit. At the discretion of the Town Engineer, work completed without proper inspection may be subject to removal and replacement under proper inspection. In any event, Applicant will be responsible for the additional costs associated with approval of any work completed without proper inspection.

11. Encroachment permit and inspection fees paid for work ultimately not completed or for work completed without proper inspections will be forfeited.
12. All provisions of this permit are continuous for the life of the project. Failure to conform may be grounds for revoking the permit. If the permit is revoked, the Contractor shall cease all work until such time as a new permit is issued. Issuance of a new permit may be subject to repayment of fees. In the event that the work is delayed beyond the expiration date, Contractor shall request an extension. Time extensions before the expiration date will be granted without additional cost.
13. No materials may be stockpiled within the public right of way without the prior approval of the Town Engineer. If approval is given, the Contractor shall be solely responsible for any and all damages resulting from stockpiling of materials within the public right of way. No materials shall be stockpiled in the traveled way or in a manner that constitutes a hazard. Upon request, the Contractor shall furnish written permission from any affected property owner(s) for stockpiling of materials outside the public right of way.
14. The Contractor shall be solely responsible for any and all damage to both public and private property resulting from his operations. The Contractor shall immediately stop any and all operations as deemed by the Town Engineer to be causing damage to adjacent property.
15. The Town Engineer reserves the right to make any additions or changes to a permit after issuance if such changes or additions are believed necessary for the protection of the roads or for the safety and convenience of the public.
16. The Contractor shall be responsible for cleaning the streets of all dirt and debris resulting from the work and for providing dust control to the satisfaction of the Town Engineer.
17. No Street may be closed to through traffic without the prior approval of the Town Engineer. A minimum of one lane of traffic shall be maintained at all times for the adjoining property owners and for emergency vehicles. If approval for full street closure is given, the Contractor shall be responsible for notifying all emergency response agencies of the location and duration of the closure.
18. Subject to approval by the Town Engineer, dirt shoulders may be used as temporary traveled lanes. This approval may include the requirement to grade, compact, and maintain the shoulder surface.
19. Applicant or Contractor shall provide documentation for the disposal of all A.C. pavement removed in conjunction with his project.
20. No water boring shall be allowed in the public right of way without prior approval by the Town Engineer.
21. No work shall be undertaken between the hours of 5:00 p.m. and 7:00 a.m. within one-half mile of a residential area and 5:00 p.m. to 6:00 a.m. in all other areas of the Town without prior approval of the Town Engineer. This requirement includes start-up and maintenance of equipment.
22. Original Rough and Precise Grading Certifications attached to this permit shall be completed and submitted to the Town of Yucca Valley for review and approval prior to the issuance of a building permit.
23. Project Recordkeeping/Report: Record all activities, contracts and materials purchases associated with blowsand/fugitive dust program. Weekly reports should be submitted to the Public Works Department for review. This “feedback” will eventually help the Town to determine what methods of dust control are most cost effective in both short term and long term situations.

24. Phase “A” Rough Grading (Site Prep & Mobilization) general requirements:

a. Written and notarized permission letters shall be submitted to the Public Works Department from any adjacent land owners whose property will be used in any manner for construction, staging, access, etc., prior to any such usage. The owner and authorized dust controller for this project will be responsible for the dust control on any off-site disturbed areas, as well as on this project. A dust control security, as approved by the Town Official, shall be posted for all areas to be disturbed by the project, both on-site and off-site. Disturbance of site areas not included in this agreement shall be reason for the Town to assess additional charges, and possibly stop all work at the site until the extent of the disturbance is measured. Therefore, if it is suspected that off-site areas may be disturbed during the work, show them on this plan and make the appropriate arrangements in advance.

b. Sand fencing, of either the wood and wire or the plastic type, shall be installed around the perimeter of the project on all sides that do not have existing masonry walls or similar solid fencing or hedges. This serves the multiple purposes of: catching some windblown dust, reducing wind speeds on the project perimeter and restricting vehicular access points into the project. This restricted access helps reduce damage to any “crust” of stabilized soil on the project, and allows placing of the exit where “track out” can be stopped per item “e” below.

c. Pre-watering shall commence at least three (3) days prior to actual grading using a temporary on-site irrigation system. Connection to any existing water system shall be done in compliance with Hi-Desert Water District (HDWD). Temporary water lines shall be installed with a minimal disturbance of any off-site areas they pass through. When the grading begins, a sprinkler system shall be placed around the perimeter of the project, with frequent watering, especially in the typically windy evenings. Placing the perimeter sprinklers on the sand fence keeps them safe and effective. Watering for areas not covered by the sprinklers shall be provided by water trucks. (One truck per 8 acres for 8 hour workdays.)

d. Activity areas such as: equipment storage area, materials storage area, temporary office trailers and employee parking should be located, if possible, on existing paved surfaces, if traffic would not be affected. In lieu of existing paving, a soil stabilizer that does not require constant watering, such as washed gravel or “biodegradable oil” could be used for the initial staging area. Any chemicals used must be cleared with the Town and Regional Water Quality Control Board.

e. The tires of vehicles being used on-site should be inspected and washed if necessary to stop the tracking of dirt onto public streets. If extensive export or import of dirt is to be done, a paved or graveled wheel washing area at least 12’ wide by 100’ long should be provided at the exit, to facilitate the inspection and cleaning of tires. “Rumble strips” made from lumber, railroad track, or similar materials can help reduce the mud getting onto the cleaning area. Street sweeping and washing is still typically required, but may be reduced by proper use of a “wheel washing area” like this. They are required on projects over 5 acres or with over 5,000 cubic yards of import or export.

f. A standard sign with the following information must be posted on the site, at least one sign per fronting street. The sign must include: the grading permit number, the project name, map number (if appropriate), the authorized dust controller phone number(s), the Town phone number and the Mojave Desert Air Quality Management District (MDAQMD) phone number. The signs must be obtained and installed by the developer using the sample format. The signs must be present at the pre-construction meeting or the grading permit will not be issued. The developer must keep the contact name and phone number active and current at all times. Failure of the contact system may be considered grounds for temporary or permanent cancellation of the permit.

g. Vehicles traveling on dirt and/or unpaved roads should restrict their speed to 15 mph maximum. Signs to that effect should be placed at the project entrance on projects over 5 acres to improve compliance.

h. When wind speeds exceed 25 mph, by continuous anemometer reading, or in gusts at least twice within a thirty (30) minute period, measured on the site, vehicular activity on the site shall cease, either voluntarily or by the Town or MDAQMD inspector notification, except for water trucks and sprinkler-tending vehicles, if any.

- 25. Abatement of Dust Mitigation Failure.** An irrevocable license is hereby granted or caused to be granted to permit the Town or their designee to enter upon the site under the following circumstances:
- a. In the event that wind speeds in excess of 25 mph are forecasted to occur by the Mojave Desert Air Quality Management District (MDAQMD) for a particular day;
 - b. In the event of an on-site anemometer that conforms to all MDAQMD standards registering two (2) wind gusts in excess of 25 mph within a consecutive 30 minute period; or
 - c. In the event fugitive dust emissions are visible for a distance of 50 feet from any boundary line; or
 - d. The Town is unable, by telephone, to establish a personal contact with the “authorized dust controller” after a 60 minute consecutive period which shall start with the first telephone call, whether answered or not; then the Town will undertake to initiate one or all of the below listed actions:
 - i. The Town will cause the cessation of any on-site activity, including but not limited to earth moving, construction, demolition, vehicular movement and maneuvering. Any watering trucks or vehicles servicing sprinklers would continue.
 - ii. In the event that an on-site irrigation system is not installed and/or operational, the Town will cause the site to be watered or treated with dust control chemicals. The dust control security will be utilized first to cover any costs incurred. If costs exceed the dust control security remaining, additional costs may be assessed against the owner of the project.
 - iii. In the event an on-site irrigation system is installed, but its control clock has not turned the system on when needed, the Town may take all necessary steps to turn on the system. If it is inaccessible behind locked gates or locked control boxes, and the Town cannot find the appropriate keys, the Town may cut or break locks as necessary.
 - e. If, in the opinion of the Town Engineer or his designee the intensity, frequency or duration of the fugitive dust emissions from the site constitutes a hazard to the safety of the public, by intrusion beyond the project boundary, the Town Engineer or his designee or agent may immediately enter upon the site or immediately take other such action as may be necessary to remedy the hazard, such as, but not limited to commencing watering on the site or ordering the cessation of any emission-generating activity occurring on-site.
 - f. Any of the above actions may be construed as an abatement for which the Town will “back charge” the general contractor, developer, and/or the owner as the Town shall deem appropriate.
- 26. Application Consent.** Application for approval of a Local Air Quality Management Plan (LAQMP) is hereby made to the Town Engineer or his designee, as part of the grading permit application, subject to the conditions and restrictions set forth herein:
- a. Each person upon whose behalf this application is made and each person at whose request and for whose benefit work is performed under and pursuant to any permit issued as a result of this application agrees to, and shall indemnify and hold harmless the Town of Yucca Valley, its officers, agents and employees.
 - b. Any permit issued as a result of this application becomes null and void if work is not commenced within 60 days from the date of issuance of such permit.
 - c. The applicant, owner, contractor(s), subcontractor(s), or other agents, heirs or assignees shall conform to the attached dust control plan as approved by the Town. Said plan includes notes and/or drawings of temporary or permanent control methods or devices proposed to be used. This LAQMP shall be considered an addendum to, and a necessary part of, any grading, stockpile, improvement or demolition plan otherwise required for Town permits.

d. By agreeing to conform to this plan as approved by the Town, the owner and designated “authorized dust controller” do also agree to abide by the provisions of the abatement procedures as shown above.

27. OWNERS CERTIFICATION: I certify that I have read this application and understand that I am responsible for the compliance of this project to the dust control provisions noted or referenced here. I understand that the dust control security that I’ve posted with the Town may be used by the Town, plus additional charges if needed, if I fail to keep the dust under control. I understand that dust control is required 24 hours per day, 7 days per week, from the time that the site is disturbed in any way from the natural vegetated condition, and must continue until the time that the project site is acceptably re-vegetated or paved. Responsibility for the dust control on this site cannot be transferred solely by transferring all or a portion of this property to other people. A replacement LAQMP and dust control security must be submitted for any transferred portion. I hereby authorize the person listed below as “authorized dust controller” to be my representative and contact person for all dust complaints involving this project. I certify that I have read this application and that the information contained herein is true and correct. I agree to comply with the Town grading ordinance and all laws relating to grading operations. I authorize representatives of the Town of Yucca Valley to enter upon the above-mentioned property for inspection and/or abatement purposes, and I agree to hold harmless the Town of Yucca Valley and its representatives from liability for any actions related to this permit.

OWNER’S NAME(S) _____

OWNER’S ADDRESS _____

OWNER’S SIGNATURE(S) _____

DATE _____

28. AUTHORIZED DUST CONTROLLER CERTIFICATION: # _____

I certify that I have read this application and understand that I am responsible for the compliance of this project to the dust control provisions noted or referenced here. As the “authorized dust controller” for this project I will have my phone number on the required signs, and will respond to dust complaints within the one (1) hour time limit. I understand that dust control is required 24 hours per day, 7 days per week, from the time that the site is disturbed in any way from the natural vegetated condition, and must continue until the time that the project site is acceptably re-vegetated or paved.

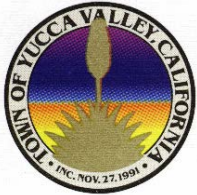
DUST CONTROLLER NAME (PRINT) _____

DUST CONTROLLER ADDRESS _____

DUST CONTROLLER SIGNATURE _____ DATE _____

CONTACT PHONE NUMBERS (24 HOUR) _____

29. Grading activity authorized by this grading permit shall be conducted in accordance with the sediment and erosion control plan dated _____ and approved by the Town of Yucca Valley.



ROUGH GRADING CERTIFICATE (PRIOR TO ANY BUILDING PERMITS)

Location: _____

Property Owner: _____ Permit No. GPMT - _____

Required Rough Grading Certifications

By Soils Engineer

I certify that the rough grading work incorporates all recommendations contained in the report or reports for which I am responsible and all recommendations that I have made based on field inspection of the work and testing during grading. I further certify that where the reports of an Engineering Geologist, relative to this site, have recommended the installation of buttress fills or other similar stabilization measures, such as earthwork construction has been in accordance with the approved design. See report dated _____ for compaction data and procedure, recommended allowable soil bearing values and other special recommendations.

Date: _____

Lot Numbers or _____

Specific Area: _____

Remarks: _____

Soils Engineer: _____

(Signature)

(Seal & Signature)

By Engineering Geologist

I certify that the rough grading work incorporates all of the recommendations contained in the report or reports for which I am responsible and all recommendations that I have made based on field inspection of the work during grading. See report dated _____ for compaction data and procedure, recommended allowable soil bearing values and other special recommendations.

Date: _____

Lot Numbers or _____

Specific Area: _____

Remarks: _____

Engineering
Geologist: _____

(Signature)

Seal & Signature)

By Civil Engineer

I certify to the satisfactory completion of rough grading including:

Grading to approximate final elevations; property lines located and staked; cut and fill slopes correctly graded and located in accordance with the approved design; swales and terraces graded ready for paving; berms installed; and required drainage slopes provided on the building pads. I further certify that where report or reports of an Engineering Geologist and/or Soils Engineer have been prepared relative to this site, the recommendations contained in such reports have been incorporated in the design.

By Civil Engineer

Date: _____

Lot Numbers or _____

Specific Area: _____

Remarks: _____

Civil Engineer: _____

(Signature)

(Seal & Signature)

By Grading Contractor

I certify that the grading was done in accordance with the plans and specifications, the grading ordinance, and the recommendations of the Civil Engineer, Soils Engineer and Engineering Geologist. It is understood that this certification includes only those aspects of the work that can be determined by me, as a competent grading contractor

Date: _____

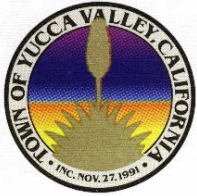
Lot Numbers or _____

Specific Area: _____

Remarks: _____

Grading Contractor: _____

(Signature)



PRECISE GRADING CERTIFICATE (PRIOR TO ANY BUILDING PERMITS)

Location: _____

Property Owner: _____ Permit No. GPMT - _____

Required Precise Grading Certifications

By Civil Engineer

I certify to the satisfactory completion of grading in accordance with the approved plans. All drainage devices required by the Grading Permit, grading plans and Grading Ordinance have been installed. Erosion treatment of slopes and irrigation systems (where required) have been installed. Adequate provisions have been made for drainage of surface waters from each building site except where building permits have been issued.

Date: _____

Lot Numbers or _____

Specific Area: _____

Remarks: _____

Civil Engineer: _____

(Signature)

(Seal & Signature)

By Grading Contractor

I certify that the grading was done in accordance with the plans and specifications, the trading ordinance, and the recommendations of the Civil Engineer, Soils Engineer and Engineering Geologist. It is understood that this certification includes only those aspects of the work that can be determined by me, as a competent grading contractor.

Date: _____

Lot Numbers or _____


Specific Area: _____

Remarks: _____

Grading Contractor: _____

(Signature)

COPYRIGHTED TOWN LOGO



PERMIT #
DEVELOPER'S NAME
PROJECT NAME / TRACT #####
IF YOU SEE DUST COMING FROM
THIS PROJECT CALL:
24 HR. NAME, PH. ###-###-####
IF YOU DO NOT GET A RESPONSE WITHIN ONE HOUR, PLEASE CALL
THE TOWN OF YUCCA VALLEY PUBLIC WORKS AT 760-369-6575

CONTRASTING COLOR, TYPICALLY BLACK LETTERS ON WHITE BACKGROUND

SIGN AND LETTER SIZE CRITERIA			
PROJECT SIZE	0-1 ACRE	1-10 ACRE	OVER 10 ACRE
SIGN SIZE	24"Hx36"W	36"Hx48"W	48"Hx96"W
	2"	3"	4"
	2"	3"	4"
	2"	3"	4"
	2"	3"	4"
	2"	3"	4"
	3"	4.5"	6"
	1.5"	2.25"	3"
	1.5"	2.25"	3"
	1.5"	2.25"	3"

DUST CONTROL SIGN CRITERIA

adkan ENGINEERS

CML ENGINEERING • SURVEYING • PLANNING

6820 AIRPORT DRIVE, RIVERSIDE, CA 92504
TEL: (951) 688-0241 • FAX: (951) 688-0599
www.adkan.com

December 03, 2010

TOWN OF YUCCA VALLEY
57090 29 Palms Highway
Yucca Valley, CA 92284

Regarding: Sonic Drive-In, Yucca Valley, CA
Subject: Pad Certification

Dear Sir or Madam:

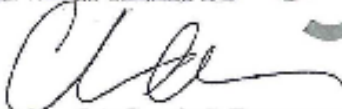
Per a field survey performed under my supervision on December 02, 2010, we have found that the aforementioned pad at the above-referenced project has been built 8" below finish floor at an elevation of 37.73 per the Structural Plan.

This certification constitutes an expression of professional opinion regarding the facts contained herein, and does not constitute a warranty or guarantee, either expressed or implied (reference *Business and Professions Code Section 6735.3*).

If you have any questions, please contact Dave Klug of this office.

Sincerely,

**adkan
ENGINEERS**



Charissa J.A. Leach, P.E.
Executive Vice President
RCE 53390



CL:DK:le

7964.ct

"Celebrating 25 years of Client Satisfaction"



TOWN OF YUCCA VALLEY
ENGINEERING DIVISION

ROUGH GRADING CERTIFICATE

Location: 58181 29 Palms Highway, Yucca Valley, CA 92284
Property Owner: Jim & Kerri DePiero Permit No: GIPM-02-09

Required Rough Grading Certifications

By Soils Engineer

I certify that the rough grading work incorporates all recommendations contained in the report or reports for which I am responsible and all recommendations that I have made based on field inspection of the work and testing during grading. I further certify that where the reports of an Engineering Geologist, relative to this site, have recommended the installation of buttress fills or other similar stabilization measures, such as earthwork construction has been in accordance with the approved design. See report dated December 2, 2010 for compaction data and procedure, recommended allowable soil bearing values and other special recommendations.

Date: December 2, 2010
Lot Numbers or Specific Area: The Building Pad
Remarks: _____
Soils Engineer: _____
(Signature)



(Seal & Signature)

By Engineering Geologist

I certify that the rough grading work incorporates all of the recommendations contained in the report or reports for which I am responsible and all recommendations that I have made based on field inspection of the work during grading. See report dated December 2, 2010 for compaction data and procedure, recommended allowable soil bearing values and other special recommendations.

Date: December 2, 2010
Lot Numbers or Specific Area: The Building Pad
Remarks: _____
Engineering Geologist: _____
(Signature)



(Seal & Signature)

By Civil Engineer

I certify to the satisfactory completion of rough grading including:

Grading to approximate final elevations; property lines located and staked; cut and fill slopes correctly graded and located in accordance with the approved design; swales and terraces graded ready for paving; berms installed; and required drainage slopes provided on the building pads. I further certify that where report or reports of an Engineering Geologist and/or Soils Engineer have been prepared relative to this site, the recommendations contained in such reports have been incorporated in the design.

By Civil Engineer

Date:

Lot Numbers or

Specific Area:

Remarks:

Civil Engineer:

(Signature)

(Seal & Signature)

By Grading Contractor

I certify that the grading was done in accordance with the plans and specifications, the grading ordinance, and the recommendations of the Civil Engineer, Soils Engineer and Engineering Geologist. It is understood that this certification includes only those aspects of the work that can be determined by me, as a competent grading contractor

Date:

Lot Numbers or

Specific Area:

Remarks:

Grading Contractor:

(Signature)

Dec 2, 2010

The Building Pad

[Handwritten Signature]



SALEM Engineering Group, Inc.

CERTIFICATE
ENGINEERED GRADING INSPECTION
SONIC DRIVE-IN
TWENTY-NINE PALMS HWY / Balsa Ave.
YUCCA VALLEY, CA

THIS IS TO CERTIFY THAT SALEM ENGINEERING GROUP, INC. HAS PERFORMED COMPACTION TESTING AT THE SONIC DRIVE-IN. THE COMPACTION TESTING / INSPECTION WAS LIMITED TO

THE BUILDING PAD

TO THE BEST OF OUR KNOWLEDGE, BASED UPON OUR OBSERVATION AND WRITTEN REPORTS OF THIS WORK, IT IS OUR OPINION THAT THE COMPACTION TESTING / INSPECTION WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND THE 2007 CALIFORNIA BUILDING CODE. BASED ON THE RESULT OF THE IN-PLACE DENSITY TESTS, AS WELL AS OUR OBSERVATIONS, IT IS CONCLUDED THAT THE FILL HAS BEEN PLACED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE AND HAS BEEN COMPACTED IN SUBSTANTIAL CONFORMANCE TO THE RECOMMENDATIONS PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT.

Respectfully submitted,
SALEM Engineering Group, Inc.

Clarence T. Jang
Project Engineer
RCE No. 50233 / RGE No. 2477





SALEM Engineering Group, Inc.

December 2, 2010

SALEM Project No. 3-610-0080

Mr. Ken Redfern
RD Builders, Inc.
4075 Leaverton Court
Anaheim, CA 92807

**Subject: Final Soils Report – Building Pad Only
Sonic Drive-In
Twenty-Nine Palms Hwy and Balsa Ave.
Yucca Valley, California**

Dear Mr. Redfern:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM), has prepared this Final Soils Report for the building pad located at the site of the proposed Sonic Drive-In to be located at the above-referenced address. SALEM had previously conducted a Geotechnical Engineering Report for the above-referenced site (Job No. 3-208-0233, dated April 10, 2008).

1.0 PROJECT DESCRIPTION

It is understood that the proposed development will include construction of a 3,200 square foot fast food restaurant. The proposed building will be a single-story structure with concrete slabs-on-grade. Building loads are anticipated to be relatively light. On-site parking, access drive, and landscaping are planned to be associated with the development.

2.0 SITE LOCATIONS AND DESCRIPTION

The site is located on the southeast corner of the intersection of Twentynine Palms Highway and Balsa Avenue in the City of Yucca Valley, San Bernardino County, California. Predominantly commercial and residential developments surround the site.

3.0 SITE PREPARATION AND GRADING

The grading work was performed between November 30, 2010 and December 1, 2010. A representative of Salem Engineering Group, Inc. made observation and Testing. A total of 24 in-place density tests were conducted. The individual test data are summarized in the attached Table. One sample of the on-site soil was tested in our laboratory for maximum dry density and sieve analyses tests. Results of the laboratory tests are also shown on the attached table.

3.1 Test Procedures

The soil was sampled and visually classified in accordance with the Unified Soil Classification System. The soil was then tested in the laboratory per ASTM Test Method D1557 and the results are shown in the attached Table. The depth and frequency of testing was directed at providing a preliminary evaluation of the backfill compaction. The in-place density and moisture tests were performed using a nuclear gauge in accordance with ASTM Test Methods D2922 and D3017. The locations were determined by pacing and steel tape and should be considered accurate to within 0.5 and 5 feet in vertical and lateral dimension, respectively.

3.2 Grading Observation and Testing

The upper 2 to 4 inches of the soils containing asphaltic concrete, vegetation, roots and other objectionable organic matter encountered at the time of grading was stripped and removed from the building and pavement areas and at least 5 feet outside the building perimeter. Following stripping and debris removal operations, the on-site soil within the proposed building area was excavated to the desired elevation. The bottom of the excavation was scarified to an approximate depth of 12 inches and recompact to 95% relative compaction. The on-site soil material was moisture-conditioned as necessary and compacted to a minimum of 95 percent of maximum density based on ASTM Test Method D1557. Limits of re-compaction were extended 5 feet beyond structural elements. As recommended in the geotechnical engineering investigation report, the site was excavated to a minimum depth of 4 feet below existing grade, except for the canopy pad area which was excavated to 2 feet below bottom of proposed concrete slab, fill material was placed in thin lifts, worked until uniform and free from large clods, moisture-conditioned as necessary and recompact to a minimum of 95 percent of maximum density based on ASTM D1557 Test Method. Moisture conditioning was applied as needed. A self-loading front loader applied compaction effort.

Conclusion

Based on the result of the in-place density tests, as well as our observations, it is concluded that the fill has been placed in accordance with accepted engineering practice and has been compacted in substantial conformance to the recommendations presented in the above-referenced geotechnical engineering investigation report. The compaction tests results, a Site Plan showing the location of the compaction tests, as well as, a Certificate of Engineered Grading Inspection are attached.

4.0 GEOTECHNICAL RECOMMENDATIONS

Based upon the data collected during our investigation, and from a geotechnical engineering standpoint, it is our opinion that the site is suitable for the proposed construction. The proposed building may be supported on shallow reinforced concrete foundations provided that the recommendations presented herein are incorporated in the design and construction of the project.

4.1 Surface Drainage Control

The ground surface should slope away from building pad and pavement areas toward appropriate drop inlets or other surface drainage devices. It is recommended that adjacent exterior grades be sloped a minimum of 2 percent for a

minimum distance of 5 feet away from structures. Subgrade soils in pavement areas should be sloped a minimum of 1 percent and drainage gradients maintained to carry all surface water to collection facilities and off site. These grades should be maintained for the life of the project. Roof drains should be installed with appropriate downspout extensions out-falling on splash blocks so as to direct water a minimum of 5 feet away from the structures or be connected to the storm drain system for the development.

4.2 Foundations

Bearing wall footings considered for the structure should be continuous with a minimum width of 15 inches and extend to a minimum depth of 18 inches below the lowest adjacent grade. Isolated column footings should have a minimum width of 24 inches and extend a minimum depth of 18 inches below the lowest adjacent grade.

Footing concrete should be placed into neat excavation. The bottom of footing excavations should be maintained free of loose and disturbed soil. Footings constructed as recommended herein may be designed for the maximum bearing capacity shown below.

Load	Allowable Loading
Dead Load Only	2,500 psf
Dead-Plus-Live Load	3,000 psf
Total Load, Including Wind or Seismic Loads	4,000 psf

For design purposes, total settlement due to static loading on the order of $\frac{1}{2}$ to $\frac{3}{4}$ inch may be assumed for shallow foundations. Differential settlement due to static loading, along a 20-foot exterior wall footing or between adjoining column footings, should be $\frac{1}{4}$ to $\frac{1}{2}$ inch, producing an angular distortion of 0.002.

Most of the settlement is expected to occur during construction as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated. The footing excavations should not be allowed to dry out any time prior to pouring concrete.

Resistance to lateral footing displacement can be computed using an allowable friction factor of 0.50 acting between the base of foundations and the supporting subgrade. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 400 pounds per cubic foot acting against the appropriate vertical footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance.

4.3 Concrete Slabs-on-Grade

We recommend that non-structural slabs-on-grade be a minimum of 4 inches thick. In areas where it is desired to reduce floor dampness where moisture-sensitive coverings are anticipated, slab-on-grade construction should have a suitable waterproof membrane (a minimum of 6 mil — preferably 10 mil) incorporated into the floor slab design. Interior slabs-on-grade should have at least 2 inches of clean free-draining concrete sand placed below the floor slab.

The sand should conform to ASTM C33 requirements for fine aggregate. An impervious membrane (vapor barrier) should be placed under the 2 inches of sand. Because of the importance of the membrane, joints and perforations should be properly sealed. This system of 2 inches of sand and a vapor barrier should be underlain by an additional 2 inches of clean concrete sand to prevent capillary moisture rise and to facilitate concrete placement and curing.

The subgrade should be kept in a moist condition until time of slab placement. It is recommended that the concrete slab be reinforced to reduce crack separation and possible vertical offset at the cracks. The concrete slab should be reinforced using a No. 3 reinforcing bar placed on 24-inch centers.

The exterior floors should be poured separately in order to act independently of the walls and foundation system. Exterior finish grades should be sloped a minimum of 1 to 1½ percent away from all interior slab areas to preclude ponding of water adjacent to the structures. All fills required to bring the building pads to grade should be Engineered Fills.

Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor can travel through the vapor membrane and penetrate the slab-on-grade. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To minimize moisture vapor intrusion, it is recommended that good construction practices be performed to create a vapor membrane. It is recommended that the utility trenches within the structure be compacted, as specified in our report, to minimize the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the building is recommended. Positive drainage should be established away from the structure and should be maintained throughout the life of the structure. Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed. In addition, ventilation of the structure is recommended to reduce the accumulation of interior moisture.

Slabs subject to structural loading may be designed utilizing a modulus of subgrade reaction K of 200 pounds per square inch per inch. The K value was approximated based on inter-relationship of soil classification and bearing values (Portland Cement Association, Rocky Mountain Northwest). In order to regulate cracking of the slabs, we recommend that full depth construction joints or control joints be provided at a maximum spacing of 15 feet in each direction for 5-inch thick slabs and 12 feet for 4-inch thick slabs. Control joints should have a minimum of one-quarter of the slab thickness.

The exterior floors should be poured separately in order to act independently of the walls and foundation system. Exterior finish grades should be sloped a minimum of 1 to 1½ percent away from all interior slab areas to preclude ponding of water adjacent to the structures. All fills required to bring the building pads to grade should be Engineered Fills.

4.4 Lateral Earth Pressures and Frictional Resistance

Active, at-rest and passive unit lateral earth pressures against footings and walls are presented below:

Lateral Pressure Conditions	Equivalent Fluid Pressure, pcf
Active Pressure, Drained	32
At-Rest Pressure, Drained	50
Passive Pressure	400

Active pressure applies to walls, which are free to rotate. At-rest pressure applies to walls, which are restrained against rotation. The preceding lateral earth pressures assume sufficient drainage behind retaining walls to prevent the build-up of hydrostatic pressure. The top one-foot of adjacent subgrade should be deleted from the passive pressure computation. A coefficient of friction of 0.50 may be used between soil subgrade and footings or slabs.

The foregoing values of lateral earth pressures and frictional coefficients represent ultimate soil values and a safety factor consistent with the design conditions should be included in their usage. For stability against lateral sliding, which is resisted solely by the passive pressure, we recommend a minimum safety factor of 1.5. For stability against lateral sliding, which is resisted by the combined passive and frictional resistance, a minimum safety factor of 2.0 is recommended. For lateral stability against seismic loading conditions, we recommend a minimum safety factor of 1.1.

4.5 Retaining Walls

Retaining and/or below grade walls should be drained with either perforated pipe encased in free-draining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic-concrete or other suitable backfill to minimize surface drainage into the wall drain system. The aggregate should be washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, and should conform to ASTM D448, Size 57, with 100 percent passing a 1½-inch sieve and not more than 5 percent passing a No. 4 sieve. Prefabricated drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturers' recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.

Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The top of the perforated pipe should be placed at or below the bottom of the adjacent floor slab or pavements. The pipe should be placed in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Slots should be no wider than 1/8-inch in diameter, while perforations should be no more than ¼-inch in diameter. If retaining walls are less than 6 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing.

The weep holes should consist of 4-inch diameter holes (concrete walls) or unmortared head joints (masonry walls) and placed no higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile

fabric (conforming to Section 88-1.03 of the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.

During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall, or within a lateral distance equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

4.6 Utility Pipe Bedding and Backfilling

Utility trenches should be excavated according to accepted engineering practice following OSHA (Occupational Safety and Health Administration) standards by a contractor experienced in such work. The responsibility for the safety of open trenches should be borne by the contractor. Traffic and vibration adjacent to trench walls should be minimized; cyclic wetting and drying of excavation side slopes should be avoided. Depending upon the location and depth of some utility trenches, groundwater flow into open excavations could be experienced, especially during or following periods of precipitation.

Sandy soil conditions were encountered at the site. These cohesionless soils have a tendency to cave in trench wall excavations. Shoring or sloping back trench sidewalls may be required within these sandy soils. Utility trench backfill should be compacted to at least 95 percent of maximum density based on ASTM D1557-02 Test Method. Pipe bedding should be in accordance with pipe manufacturer recommendations.

The contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

5.0 LIMITATION

It should be noted that the precision of the field density and laboratory maximum dry density test results are subject to variation inherent with testing procedures and heterogeneous soil characteristics. Quantitative values of testing precision have been documented by the American Society of Testing and Materials. Results indicate the accuracy of the ASTM D-1557 test to be plus or minus four percent of the mean density. Based on this information, relative compaction results should be as approximate values subject to variations in lateral and vertical directions. Survey lines and elevations relative to grade modification, locations of various elements, etc. were established by others.

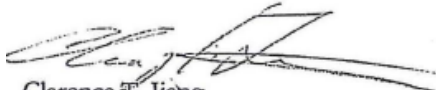
The tests procedure used complied with generally accepted methods practiced in the industry. The data represented in this report are provided for informational purposes only. We do not undertake the guarantee of construction nor do we relieve the contractor of his primary responsibility to produce a completed project in accordance with the plans and specification. We claim no responsibility or liability for the damages originating from improper use of these results. Our

services were performed, our findings obtained and results presented in accordance with generally accepted testing principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

The findings and recommendations presented in this report are valid as of the present and for the proposed construction. If site conditions change due to natural processes or human intervention on the property or adjacent to the site, or changes occur in the nature or design of the project, or if there is a substantial time lapse between the submission of this report and the start of the work at the site, the conclusions and recommendations contained in our report will not be considered valid unless the changes are reviewed by SALEM and the conclusions of our report are modified or verified in writing. The validity of the recommendations contained in this report is also dependent upon an adequate testing and observations program during the construction phase. Our firm assumes no responsibility for construction compliance with the design concepts or recommendations unless we have been retained to perform the on-site testing and review during construction.

We appreciate the opportunity to assist you with this project. Should you have questions regarding this report or need additional information, please contact the undersigned at (909) 980-6455.

Respectfully submitted,
SALEM Engineering Group, Inc.


Clarence T. Jiang
Project Engineer
RCE No. 50233 / RGE No. 2477



SUMMARY OF COMPACTION TEST RESULTS - CANOPY PAD

Sonic Drive-In

Twenty - Nine Palms Hwy / Balsa Ave., Yucca Valley, CA

Curve No.	Depth (ft)	Optimum Moisture (%)	Maximum Dry Density (pcf)	Sample Location	Soil Description		Pass or Fail	Location	Test Date
					On-Site	(SM) Silty Sand			
Test Boring	Elevation (ft)	In-Place Moisture (%)	In-Place Dry Density (pcf)	Maximum Dry Density (pcf)	Relative Compaction (%)	Required Compaction (%)			
1	3.0'-4.0'	10.2	119.3	124.0	96.2	95%	Pass	Building Pad	11/30/2010
2	3.0'-4.0'	10.0	119.0	124.0	96.0	95%	Pass	Building Pad	11/30/2010
3	3.0'-4.0'	10.1	119.1	124.0	96.0	95%	Pass	Building Pad	11/30/2010
4	3.0'-4.0'	10.2	119.2	124.0	96.1	95%	Pass	Building Pad	11/30/2010
5	3.0'-4.0'	10.1	119.2	124.0	96.1	95%	Pass	Building Pad	11/30/2010
6	3.0'-4.0'	10.0	119.3	124.0	96.2	95%	Pass	Building Pad	11/30/2010
7	2.0'-3.0'	10.3	119.8	124.0	96.6	95%	Pass	Building Pad	11/30/2010
8	2.0'-3.0'	10.0	119.5	124.0	96.4	95%	Pass	Building Pad	11/30/2010
9	2.0'-3.0'	10.0	119.2	124.0	96.1	95%	Pass	Building Pad	11/30/2010
10	2.0'-3.0'	10.2	119.6	124.0	96.5	95%	Pass	Building Pad	11/30/2010
11	2.0'-3.0'	10.1	119.9	124.0	96.7	95%	Pass	Building Pad	11/30/2010
12	2.0'-3.0'	10.1	120.1	124.0	96.9	95%	Pass	Building Pad	11/30/2010
13	1.0'-2.0'	9.5	119.4	124.0	96.3	95%	Pass	Building Pad	12/1/2010
14	1.0'-2.0'	9.3	119.3	124.0	96.2	95%	Pass	Building Pad	12/1/2010
15	1.0'-2.0'	9.4	119.5	124.0	96.4	95%	Pass	Building Pad	12/1/2010
16	1.0'-2.0'	9.4	119.5	124.0	96.4	95%	Pass	Building Pad	12/1/2010
17	1.0'-2.0'	9.3	119.2	124.0	96.1	95%	Pass	Building Pad	12/1/2010
18	1.0'-2.0'	9.1	119.3	124.0	96.2	95%	Pass	Building Pad	12/1/2010
19	0.0'-1.0'	10.2	119.9	124.0	96.7	95%	Pass	Building Pad	12/1/2010
20	0.0'-1.0'	10.2	120.0	124.0	96.8	95%	Pass	Building Pad	12/1/2010
21	0.0'-1.0'	10.3	119.8	124.0	96.6	95%	Pass	Building Pad	12/1/2010
22	0.0'-1.0'	10.1	119.5	124.0	96.4	95%	Pass	Building Pad	12/1/2010
23	0.0'-1.0'	10.1	119.3	124.0	96.2	95%	Pass	Building Pad	12/1/2010
24	0.0'-1.0'	10.4	119.8	124.0	96.6	95%	Pass	Building Pad	12/1/2010