



AGENDA

CITY OF SEASIDE
PLANNING COMMISSION

REGULAR MEETING
COUNCIL CHAMBER
440 Harcourt Avenue
Wednesday, January 11, 2017
7:00 PM

PLEASE TURN OFF YOUR CELL PHONES UPON ENTERING THE MEETING

1. **CALL TO ORDER**

2. **ROLL CALL - ESTABLISHMENT OF QUORUM**

John Owens	Chair
Michael Lechman	Vice Chair
Keith Dodson	Commissioner
Denise Ross	Commissioner
Arlington La Mica	Commissioner
Michael Spalletta	Commissioner
Ian Oglesby	Commissioner

3. **REVIEW OF AGENDA**

If there are any items that arose after the 72-hour posting deadline, this is the point in the meeting where a vote may be taken to add the item to the agenda. (A 2/3-majority vote is required).

4. **PUBLIC COMMENT**

Members of the public wishing to address the City Council on matters within the jurisdiction of the City of Seaside, but not on this agenda, may do so during the Public Comment period for up to three minutes. Public Comments on specific agenda items are heard under that item. For the public record, please state your name.

5. **APPROVAL OF MINUTES**

A. APPROVE THE MINUTES FROM THE DECEMBER 14, 2016 MEETING

6. **BUSINESS ITEMS**

A. FENCE EXCEPTION APPLICATION NO. FE-16-01. FENCE EXCEPTION APPROVAL FOR THE INSTALLATION OF A TWO FOOT EXTENSION ONTO THE TOP OF AN EXISTING 16-FOOT TALL CONCRETE BLOCK WALL LOCATED ALONG THE SOUTHERLY PROPERTY LINE OF THE PROJECT SITE LOCATED AT 1755 DEL MONTE BOULEVARD IN THE HEAVY COMMERCIAL (CH) ZONING DISTRICT. PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES, THE PROJECT IS CATEGORICALLY EXEMPT, CLASS 3, SECTION 15303(E), NEW CONSTRUCTION OF SMALL STRUCTURES. (ITEM CONTINUED FROM THE DECEMBER 14, 2016 PLANNING COMMISSION MEETING)

PURPOSE: In accordance with Section 17.30.020(F) of the Seaside Municipal Code (SMC) the applicant is requesting approval of a fence exception to allow for a two foot extension to an existing sixteen foot high concrete block wall located along the southerly property line of their property located at 1755 Del Monte Boulevard in the Heavy Commercial (CH) Zoning District.

RECOMMENDATION: Staff recommends approval of the proposed fence exception request subject to the Draft Resolution No.-17-XX provided as Attachment 1. Project Plans are provided as Attachment 1, Exhibit "A".

7. REPORTS FROM COMMISSIONERS

8. REPORTS FROM STAFF

9. ADJOURNMENT

Next Regularly Scheduled Meeting:
January 25, 2016
Seaside City Hall
7:00 PM

The City of Seaside is an ADA accessible facility and is committed to include the disabled in all of its services, programs and activities. Any person who requires accommodation to be able to participate in this meeting is asked to contact the office of the City Clerk at 899-6707, no fewer than two business days prior to the meeting to allow for reasonable arrangements. The City Council Chambers is equipped with a portable microphone for anyone unable to come to the podium. Assisted listening devices are also available.

Meetings that are held in the City Council Chambers are broadcast live to all Seaside residents on Comcast Channel 25 and U-verse Channel 99. Meetings are also available through live streaming at:
<http://cvp.telvue.com/player?id=T01629&video=52314&noplaylists=1&width=400&height=300> Videos of past meetings are available on demand through the City's website: <http://www.ci.seaside.ca.us>

Agenda-related writings or documents provided during public meetings are available for public inspection during the meeting or from the office of the City Clerk. This agenda is posted in compliance with California Government Code Section 54954.2(a) or Section 54956.



**CITY OF SEASIDE
STAFF REPORT**

Item No.: 6.A.

TO: Planning Commission

BY: Rick Medina, Senior Planner

DATE: January 11, 2017

SUBJECT: FENCE EXCEPTION APPLICATION NO. FE-16-01. FENCE EXCEPTION APPROVAL FOR THE INSTALLATION OF A TWO FOOT EXTENSION ONTO THE TOP OF AN EXISTING 16-FOOT TALL CONCRETE BLOCK WALL LOCATED ALONG THE SOUTHERLY PROPERTY LINE OF THE PROJECT SITE LOCATED AT 1755 DEL MONTE BOULEVARD IN THE HEAVY COMMERCIAL (CH) ZONING DISTRICT. PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES, THE PROJECT IS CATEGORICALLY EXEMPT, CLASS 3, SECTION 15303(E), NEW CONSTRUCTION OF SMALL STRUCTURES. (ITEM CONTINUED FROM THE DECEMBER 14, 2016 PLANNING COMMISSION MEETING)

PURPOSE

In accordance with Section 17.30.020(F) of the Seaside Municipal Code (SMC) the applicant is requesting approval of a fence exception to allow for a two foot extension to an existing sixteen foot high concrete block wall located along the southerly property line of their property located at 1755 Del Monte Boulevard in the Heavy Commercial (CH) Zoning District.

RECOMMENDATION

Staff recommends approval of the proposed fence exception request subject to the Draft Resolution No.-17-XX provided as Attachment 1. Project Plans are provided as Attachment 1, Exhibit "A".

BACKGROUND

- December 14, 2016 Planning Commission Meeting

On December 14, 2016, the Planning Commission conducted a public hearing on the requested fence exception and acted to continue the application to the January 11, 2017 in order for the applicant to respond to the following comments made by the Planning Commission:

1. Provide date of renovation of the existing Granite Rock Design Center and Building Materials Bins that resulted in the construction of the existing 16-foot concrete block wall on the south side of the site;
2. Provide alternative design for fence extension to include a two-foot tall cortin steel plate that would be installed at top of the wall at a 45 degree angle oriented toward the interior of the material bins.
3. Provide updated structural calculations to demonstrate that that the existing 16-foot concrete wall could support the installation of either a two-foot tall block wall extension or a two-foot tall metal plate extension on top of the wall.

- **2005 Renovation of the Granite Rock Site**

On July 6, 2005, the Board of Architectural Review recommended to the Planning Commission the approval of the architectural design for the construction of the existing 23,514 square-foot materials supply and warehouse building and a drive-through landscape supply and rock materials yard. Included with the design was the construction of the existing sixteen-foot concrete block wall on the south side and the curvilinear concrete block wall on the east side of the site facing Del Monte Boulevard which varies in height from sixteen feet at the southeast corner to four feet at the drive entrance to the site from Del Monte Boulevard at the northeast corner. It was determined that the design of the all was necessary to screen the construction material bins within the interior of the site and provide an aesthetic appearance. Site photographs of fencing that was in place prior to the 2005 site renovation are provided as Attachment 3 indicate that the fencing in place on the southern and eastern frontages of the site prior to the renovation consisted of a 3-4 foot black retaining wall with an eight-foot tall chain link fence which contained wood slats for screening. On July 13, 2005, the Planning Commission approved the final project design for the materials and supply warehouse and drive-thru landscape and material supply bins which included the construction of the existing concrete block walls on the south and east sides of the site.

The proposed fence exception is now being requested to allow for a two foot extension onto the southern 16-foot wall to help prevent building materials which back-up to the wall from spilling onto the adjacent automotive repair site to the south and public sidewalk on the east. An aerial photo provided as Attachment 4 identifies the location where the spillage of material is occurring.

SITE LOCATION AND DESCRIPTION

The site is approximately 1.8 acres in area and is developed with a two story commercial building. The remainder of the site is used primarily for parking and the outdoor storage of building materials associated with Granite Rock. Adjacent land uses consist of the Seaside Auto

Mall to the east, the Granite Rock cement plant and additional commercial businesses in Sand City to the west, The Masters to the south and Conte Generator to the north. Draft Resolution No.-17-XX is provided as Attachment 1. Project Plans are provided as Attachment 1, Exhibit "A". A Location Map is provided as Attachment 2. Site Photographs of existing site conditions are provided as Attachment 5.

PROJECT DESCRIPTION

The subject property is developed with a two-story 23,514 square foot building. This building is located near the center of the property. A design center and indoor material sales area are located on the first floor. The second floor of the building houses offices for Granite Rock. The perimeter of the site offers parking and additional product display areas as well as the storage of building materials. The driveway entrance to the site is at the north end of the building. The Del Monte Boulevard street elevation drops eight feet in the 300 foot distance from the driveway entrance to the southerly property line. The existing sixteen foot high block retaining wall was constructed as part of a 2005 renovation of the site. The height of the wall is eight feet on the Granite Rock side. Open building material storage bunkers back up to the wall. Granite Rock states that when building materials are being loaded or unloaded into their open storage bunkers, some of the material can spill over the top of the bunkers (eight foot high on the Granite Rock side) onto the adjoining site. To avoid this safety hazard, Granite Rock is requesting a fence exception to allow the height of this wall to increase by an additional two feet. The Seaside Municipal Code (SMC) allows for a maximum wall height of eight feet as measured from the lowest grade.

The applicant's statement in support of a fence exception is provided as Attachment 6. It states that:

1. An extension of the wall would serve to protect the public from a potential safety hazard by decreasing the possibility of aggregate material spilling over the wall,
2. The extension of the wall will not create a traffic-related safety hazard,
3. The extension of the wall will not impair visibility at an intersection or traffic visibility area,
4. The extension of the wall will not obstruct vision from an adjoining driveway,
5. The wall is compatible with the surrounding neighborhood.

Structural analysis of the wall construction is provided as Attachment 7.

ENVIRONMENTAL REVIEW

This project is Categorically Exempt from the California Environmental Quality Act pursuant to Section 15303(e): New Construction of Small Structures. Class 3 categorical exemptions consist of the construction of small structures including fences.

Evidence: Approval of the proposed fence exception would result in the two foot extension of an existing block wall on Del Monte Boulevard. A two foot extension of a block wall consists of a minor improvement that is categorically exempt from CEQA.

STAFF ANALYSIS AND FINDINGS

Fence exception rules are listed under SMC Section 17.30.020.F.1 and 2. The process mandates that where a physical hardship exists because of unique or unusual topographic conditions or structure location, the commission may approve a fence exception subject to the following findings:

- A general safety hazard to City residents and/or the general public would not be created.
- A traffic-related safety hazard would not be created.
- The fence or wall will not impair visibility at an intersection or traffic safety visibility area.
- The fence or wall will not obstruct vision from an adjoining driveway.
- The fence or wall is compatible with the surrounding neighborhood.

Traffic Safety

The Public Works Department has reviewed this application and has offered no objections to the proposed wall extension based on the findings listed above.

Physical Hardship

Primary issues relate to whether a physical hardship (e.g. irregular lot size, slope, building placement, utilities, unusual topographic conditions) exist which would preclude the property owner from the reasonable use of their property if the fence exception is not granted. The site was originally developed with the sixteen foot wall on the common side property line based on pre-existing grade changes. The Granite Rock side of the wall is eight feet high which is the maximum wall height allowed in a commercial zone. Within ten feet of the front property line, the maximum height is six feet. The height of the wall is measured from the side with the lowest natural grade. The Granite Rock side of the wall will be increased from eight feet to ten feet high. City staff finds that a safety hazard currently exists, there will be no obstruction of visibility at an intersection or driveway with the two foot extension, and that the wall extension is compatible with the surrounding neighborhood.

Findings for Approval of the Fence Exception Application

1. A physical hardship exists because of unique or unusual topographic conditions or structure location.

Evidence: The lot was originally developed with an eight foot grade differential between the applicant's property and the adjoining property to the south. The material storage bunkers were then built against this wall. An increase in height of the wall is necessary to protect the public health and safety.

2. A general safety hazard to City residents and/or the general public would not be created.

Evidence: The extension of the wall by two feet in height would help eliminate a general safety hazard to City residents and/or the general public.

3. The extension of the wall by two feet in height will not create a traffic-related safety hazard nor impair visibility at an intersection or adjoining driveway.

Evidence: The proposed extension of an existing sixteen foot high wall has been reviewed by the Public Works department and it has been determined that the extension of the wall will not create a traffic-related safety hazard nor impair visibility at an intersection or adjoining driveway.

4. The wall is compatible with the surrounding neighborhood.

Evidence: The proposed wall extension will be constructed of the same material and colors as the existing wall. The increase in height will not disrupt the character or appearance of the existing commercial development patterns.

CONCLUSION

Based on the above analysis, staff recommends approval of Fence Exception Application No. FE-16-01 in accordance with the findings and evidence listed in the draft resolution.

FISCAL IMPACT

There is no fiscal impact associated with this item.

ATTACHMENTS

1. Attachment 1 - Draft Resolution
 2. Attachment 1 - Exhibit A Project Plans
 3. Attachment 2 - Location Map
 4. Attachment 3 - Site Photo Comparison between 2005 and 2017
 5. Attachment 4 - Aerial Site Photo
 6. Attachment 5 - Existing Site Photographs
 7. Attachment 5 - Existing Site Photographs
 8. Attachment 6 - Applicant's Statement
 9. Attachment 7 - Structural Specifications for Wall Extension
-

Meeting Date: January 11, 2017

Attachment 1

**PLANNING COMMISSION
RESOLUTION NO. 17-XX**

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SEASIDE, STATE OF CALIFORNIA, APPROVING FENCE EXCEPTION APPLICATION NO. FE-16-01 TO ALLOW FOR A TWO FOOT EXTENSION TO AN EXISTING SIXTEEN FOOT HIGH BLOCK WALL LOCATED ALONG THE SOUTHERLY PROPERTY LINE LOCATED AT 1755 DEL MONTE BOULEVARD (APN: 011-532-005).

WHEREAS, Granite Rock Company, applicant and property owner, has applied for approval of a Fence Exception permit to allow for a two foot extension to an existing sixteen foot high block wall located along the southerly property thereby exceeding the maximum height requirements of Zoning Code Section 17.30.020.B.2 along the interior side property line and within ten feet of the front property line; and

WHEREAS, the proposed project requires approval by the Planning Commission, and based on the fact that the sixteen foot block wall has already been constructed; and

WHEREAS, it is the responsibility of the Planning Commission to consider and weigh the merits of the application and public input in relation to the policies, standards and intent of the Seaside General Plan and Seaside Municipal Code in relation to the proposed Fence Exception; and

WHEREAS, the Planning Commission considered written information concerning the proposed exception at a duly noticed public hearing held on December 16, 2016; and

WHEREAS, the project is exempt from environmental review subject to Class 3, Section 15303(e): New Construction of Small Structures:

Evidence: Approval of the proposed wall exception would result in the two foot extension of an existing block wall on Del Monte Boulevard. A two foot extension of a block wall consists of a minor improvement that is categorically exempt from CEQA.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission adopts the following findings for the approval of Fence Exemption Application No. FE-16-01:

1. A physical hardship exists because of unique or unusual topographic conditions or structure location.

Evidence: The lot was originally developed with an eight foot grade differential between the applicant's property and the adjoining property to the south. The material storage bunkers were then built against this wall. An increase in height of the wall is necessary to protect the public health and safety.

2. A general safety hazard to City residents and/or the general public would not be created.

Evidence: The extension of the wall by two feet in height would help eliminate a general safety hazard to City residents and/or the general public.

3. The extension of the wall by two feet in height will not create a traffic-related safety hazard nor impair visibility at an intersection or adjoining driveway.

Evidence: The proposed extension of an existing sixteen foot high wall has been reviewed by the Public Works department and it has been determined that the extension of the wall will not create a traffic-related safety hazard nor impair visibility at an intersection or adjoining driveway.

4. The wall is compatible with the surrounding neighborhood.

Evidence: The proposed wall extension will be constructed of the same material and colors as the existing wall. The increase in height will not disrupt the character or appearance of the existing commercial development patterns.

BE IT FURTHER RESOLVED, that the Planning Commission hereby grants Fence Exception No. FE-16-01 subject to the following terms and conditions:

Project Specific:

Planning:

1. Except as modified by required conditions of approval, plans submitted for a building permit shall substantially conform to the plans identified as "24" Back Bin Wall Extension for: Granite Rock Company" stamped as received on "December 30, 2016" and approved on January 11, 2017. The project plans are attached as Exhibit "A".

Public Works:

2. Install wall per plans by Pacific Engineering Group, Inc. dated December 21, 2017.

Building:

3. Submit Structural Calculations for the wall.
4. Comply with the 2016 California Building Code.

Standard:

1. The applicant agrees as a condition and in consideration of the approval of this discretionary permit that it will defend, indemnify and hold harmless the City of Seaside or its agents, officers and employees from any claim, action or proceeding against the City or its agents, officers or employees to attack, set aside, void, or annul this approval. The applicant will reimburse the City for any court costs and attorney's fees, which the City may be required by a court to pay as a result of such action. City may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of his obligations under this condition. The City shall promptly notify the applicant of any such claim, action, or proceeding, and the City Shall cooperate fully in the defense thereof.
2. The permit shall have no force or effect unless and until accepted, and the terms thereof agreed to, in writing, by the applicant and property owner within fifteen (15) days from the date of its approval.
3. This Fence Exception approval will become null and void if any required building permit is not obtained within one (1) year from the date of approval.

NOW BE IT FURTHER RESOLVED, the Planning Commission hereby approves Fence Exception Application No. FE-16-01.

AYES:

NOES:

ABSENT:

ABSTAIN:

John Owens, Chairperson

ATTEST:

Planning Commission Secretary

STRUCTURAL NOTES

1. ALL CONSTRUCTION not specifically detailed shall conform to the requirements of the 2013 California Building Code (CBC) and any local code requirements. All details, sections and notes shown on the drawings are intended to be typical and shall apply to similar situations elsewhere unless otherwise noted.
2. CHECK ALL DIMENSIONS in relation to site conditions before starting work. The contractor shall coordinate work of all trades. All discrepancies shall be called to the attention of the engineer and resolved before proceeding with work. During construction phase the contractor is responsible for the safety of the building and personnel. Provide adequate shoring and/or bracing in accordance with appropriate Local, State and National safety codes.
3. CONCRETE MASONRY UNITS shall be hollow concrete units, grade N, conforming to CBC Section 2103. Grout shall be proportioned to give a minimum 28 days compressive strength of 2000 psi. All cells shall be grouted solid. Reinforcing steel shall be accurately placed and positively retained in position during grouting. All horizontal reinforcing steel larger than #2 bars shall be placed in bond beam units. Units shall be placed in type M or S (1500 psi) mortar in running bond. Reinforcing steel shall be as noted on the plans, except that all openings shall be reinforced with two #5 bars along each boundary and extending 24" beyond all corners or through dowels to foundation. Hook horizontal reinforcement around vertical reinforcement at jambs or wall ends with standard hook. Construction shall conform to Chapter 21 of the CBC.
4. REINFORCING BARS shall be deformed bars conforming to ASTM standard specification A615-68 Grade 60. #4 and smaller bars may be Grade 40. Bars shall be placed in as long lengths as possible and shall lap 40 diameter at splices in Concrete (72 diameter at splices in Concrete Masonry per CBC 2108.2) unless otherwise shown or noted on plans. Splices shall be staggered and bars may be wired together at splices. All steel shall be rigidly held in place with approved metal devices.
- Bar coverage (face of bar to face of concrete) shall be as follows:
- | | |
|--------------------------------|--------------|
| Concrete slab on grade | 1-1/2" min. |
| Concrete surface against earth | 3" min. |
| When poured against forms | 2" min. |
| All others | see details. |
5. EPOXY ANCHORS shall be Simpson "SET-XP" (UES Evaluation Report #265), with 1/2" threaded rod (Grade A36) at 16" o.c. into top of existing 12" thick (fully grouted) CMU Wall. Epoxy anchors shall be installed per manufacturer's specifications; special inspection is required per Chapter 17 of the 2013 CBC & above referenced evaluation report.

DESIGN LOADS

SCOPE: EXTEND EXISTING 12" CMU BIN END-WALL VERTICALLY 24" (FROM EXISTING 8'-0" HEIGHT TO 10'-0" MAXIMUM HEIGHT). THE PURPOSE OF THE EXTENSION IS TO HELP PREVENT OVER FLOW OF PRODUCT FROM DUMPING OVER OPPOSITE SIDE OF WALL & ONTO ADJACENT PROPERTY. SINCE THE SIDE BIN WALLS WILL REMAIN AT 8'-0", THE MAXIMUM RETAINED HEIGHT OF BACK BIN WALL IS STILL ASSUMED TO BE 8'-0" (+/-).

SECTION 1604.5 & TABLE 1604.5: RISK CATEGORY I

SECTION 1606 - DEAD LOADS 140 PSF

SECTION 1607 - LIVE LOADS N.A.

SECTION 1608 - SNOW LOAD N.A.

SECTION 1609 - WIND DESIGN DATA 115

BASIC WIND SPEED 115

WIND EXPOSURE C

SECTION 1613 - EARTHQUAKE DESIGN DATA 0.538 g

LATITUDE	36.61°
LONGITUDE	-121.84°
SITE CLASS	D
SPECTRAL RESPONSE @ 0.2 SEC PERIOD, S_s	1.485 g
SPECTRAL RESPONSE @ 1.0 SEC PERIOD, S_1	0.538 g
SHORT PERIOD SITE COEFFICIENT @ 0.2 SEC PERIOD, F_a	1.0
LONG PERIOD SITE COEFFICIENT @ 1.0 SEC PERIOD, F_v	1.5
MODIFIED SPECTRAL RESPONSE @ 0.2 SEC PERIOD, S_{ms}	1.485 g
MODIFIED SPECTRAL RESPONSE @ 1.0 SEC PERIOD, S_{m1}	0.807 g
DESIGN SPECTRAL RESPONSE COEFFICIENTS, S_{ps}	1.00
	0.538 g

CHAPTER 13: ELEMENTAL DESIGN (ASCE 7-10 SECTION 13.3.1)

SEISMIC DESIGN CATEGORY D

BASIC SEISMIC FORCE RESISTING SYSTEM (TABLE 13-5-1) EXTERIOR (NON-STR.)

SEISMIC IMPORTANCE FACTOR, I_e 1.0

AMPLIFICATION FACTOR, A_p 1.0 & 2.5

RESPONSE MODIFICATION FACTOR, R_e (TABLE 13.6-1) 2.5

HEIGHT FACTOR, z/h (AT BASE OF WALL AT SLAB; $z=0$) 0.0

HEIGHT FACTOR, z/h (AT TOP OF WALL; $z=h$) 1.0

SEISMIC DESIGN FORCE, F_p $F_p = \frac{0.4 \alpha S_1 W_p}{(R_e/L)} [1 + 2 \frac{z}{h}]$

SEISMIC DESIGN FORCE, F_p (GENERAL ELEMENT WALL DESIGN; $A_p=1.0$) 0.480W

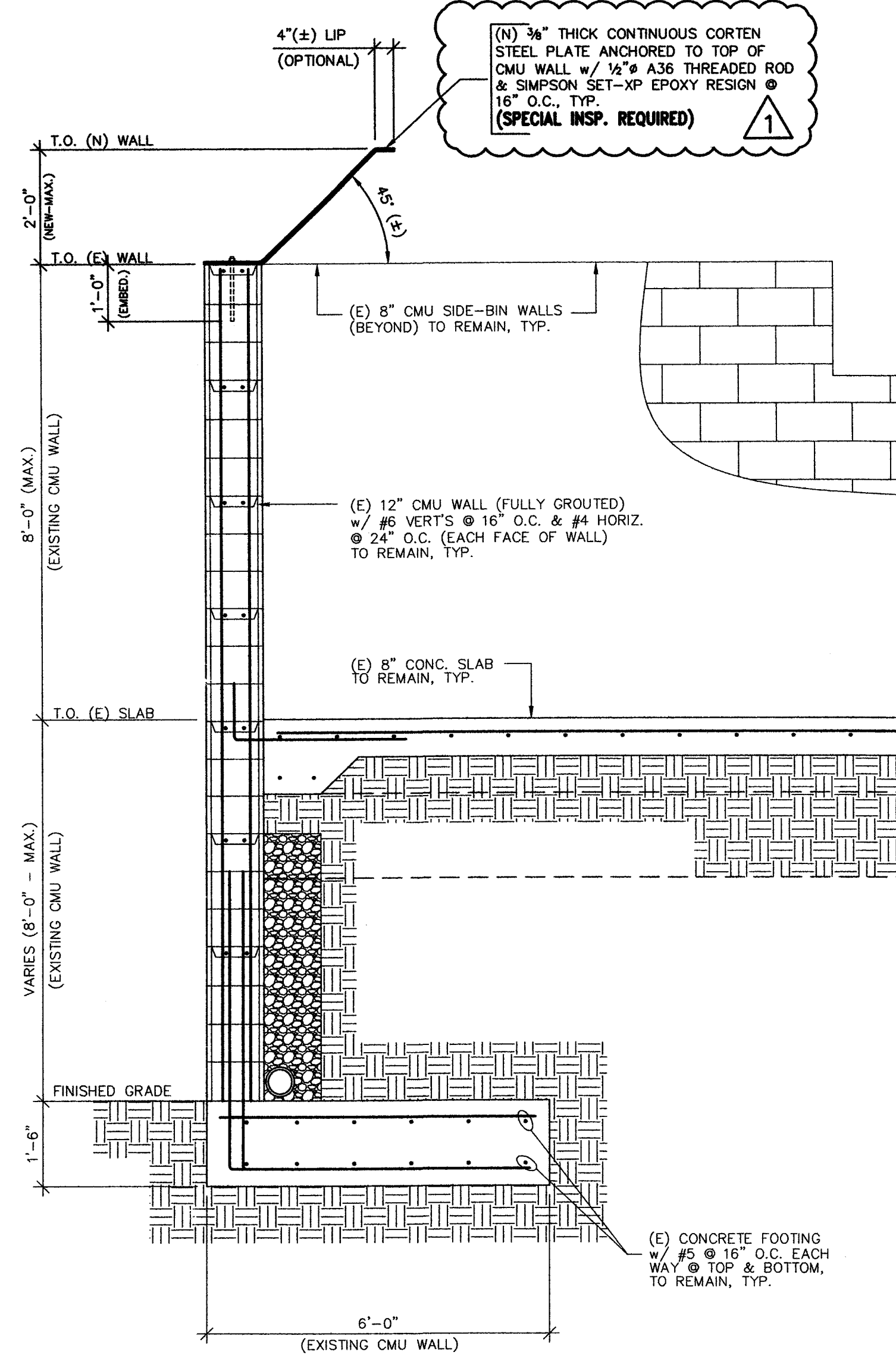
SEISMIC DESIGN FORCE, F_p (NEW CANTILEVERED WALL EXTENSION AT TOP OF WALL; $A_p=2.5$) 1.20 W

MINIMUM SEISMIC DESIGN FORCE, $F_{p(min)}$ $F_{p(min)} = 3(Sds)(\psi W_p) = 0.3 W_p$

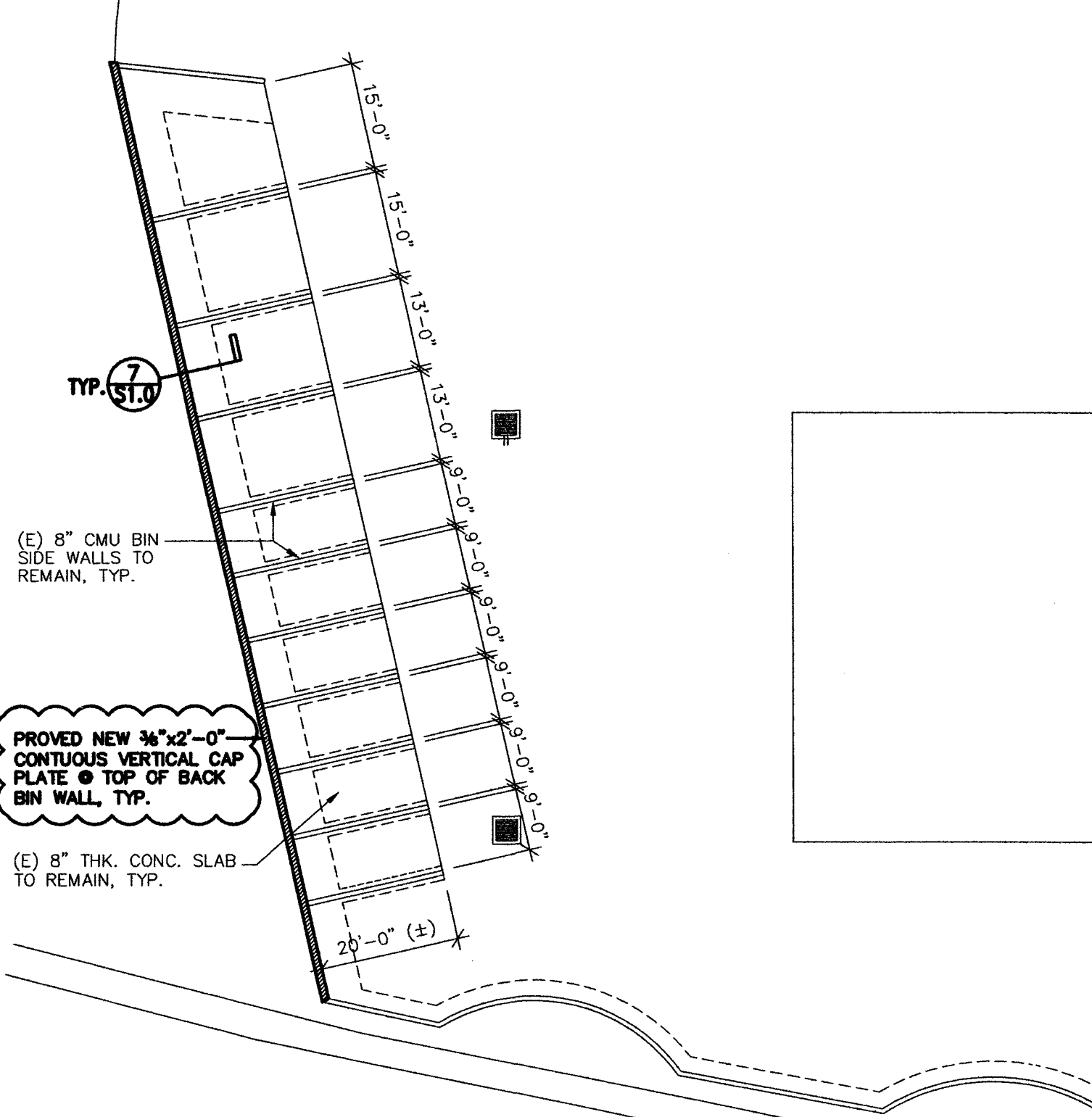
SPECIAL TESTS & INSPECTION SCHEDULE

THE FOLLOWING ITEMS SHALL BE INSPECTED. "SPECIAL INSPECTION" SHALL CONFORM TO 2013 CBC 1705. SPECIAL INSPECTION AGENCIES AND/OR INDIVIDUALS SHALL BE RETAINED BY THE OWNER AND APPROVED BY THE BUILDING OFFICIAL PRIOR TO ANY WORK. FOR MATERIAL TESTING REQUIREMENTS, SEE SPECIFICATIONS AND/OR GENERAL NOTES. TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE BUILDING OFFICIAL AND ENGINEER.

ITEM	REQD	REMARKS
EPOXY DOWELS	YES	VISUAL - INSTALLATION PROCEDURES; PERIODIC INSPECTIONS



7 BIN END-WALL - 24" EXTENSION
S1.0 SCALE: 1/2" = 1'-0"



5 CMU BIN WALLS (EXISTING PLAN)
S1.0 SCALE: 1" = 20'-0"

BY:	AW
DESCRIPTION:	REVISIONS PER PLANNING DEPARTMENT
DATE:	12/21/16
REV:	1
SCALE:	AS NOTED
DATE:	8/17/16
DRAWN:	A.W.
DESIGN:	A.W.

REGISTERED PROFESSIONAL ENGINEER
N. 060615
EX. 12-21-18
12/21/16
CIVIL
STATE OF CALIFORNIA

VALID WITH NET SIGNATURE ONLY

Pacific Engineering Group, Inc.
Monteey, CA 93840
FOR: (831) 333-0644
(P&E JOB #14-189)

30 RYAN COURT, SUITE 200
P.O. BOX 1333
MONTEEY, CA 93844
(831) 333-0644
(P&E JOB #14-189)

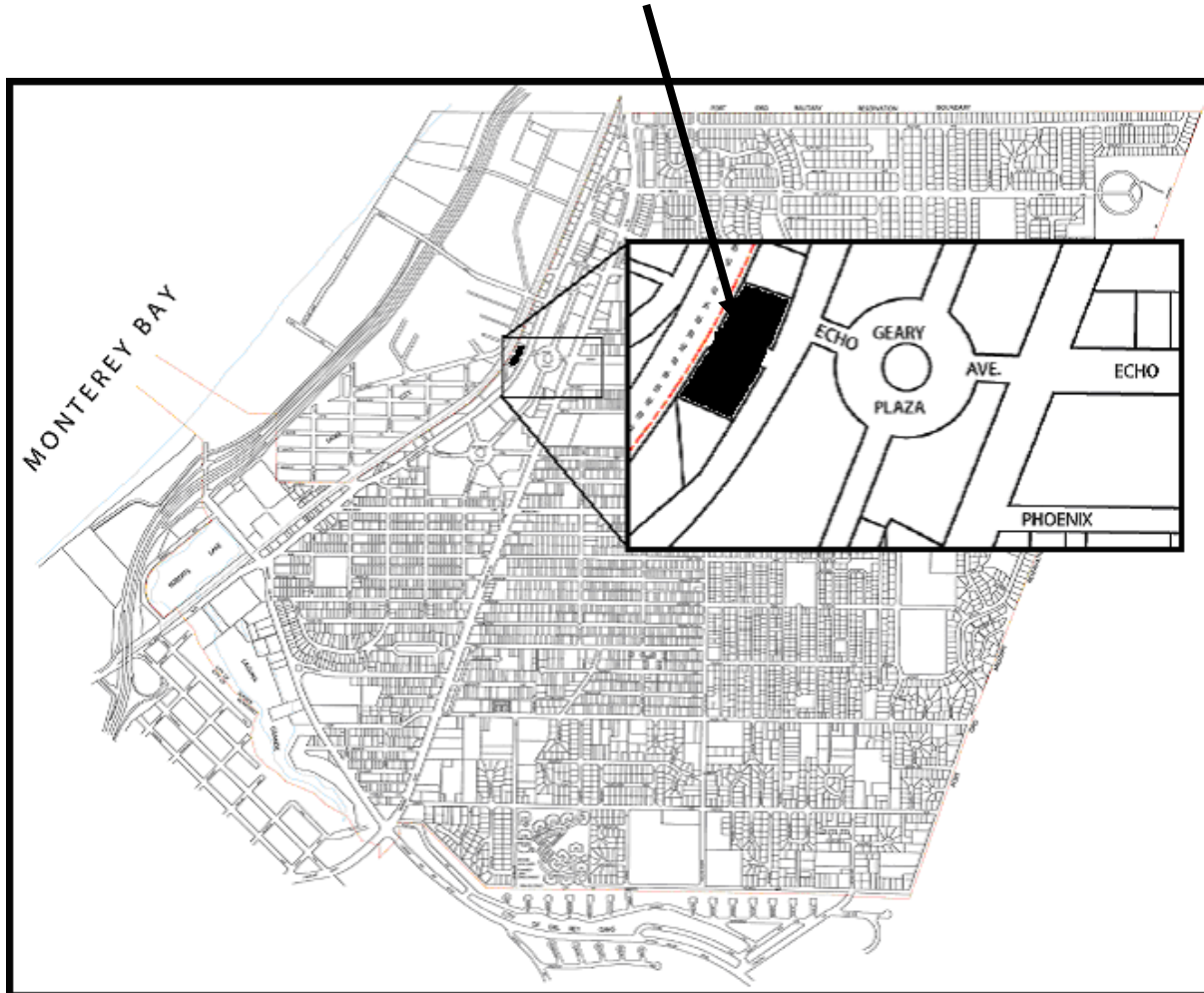
Graniterock
NATIONAL BRANCHES - LOS ANGELES, CALIFORNIA 90015

EXISTING BIN WALL PLAN, STRUCTURAL
NOTES, PROJECT DATA & DETAILS
24" BACK BIN WALL EXTENSION
FOR:
GRANITE ROCK COMPANY
1763 DEL MONTE AVENUE
SEASIDE, CA

PROJ. NO. 16-142
SHEET NUMBER
S1.0
1 OF 1 SHEETS

Attachment 2

Location Map: 1755 Del Monte Boulevard



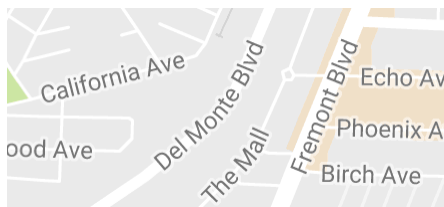
Google Maps 1741 Del Monte Blvd



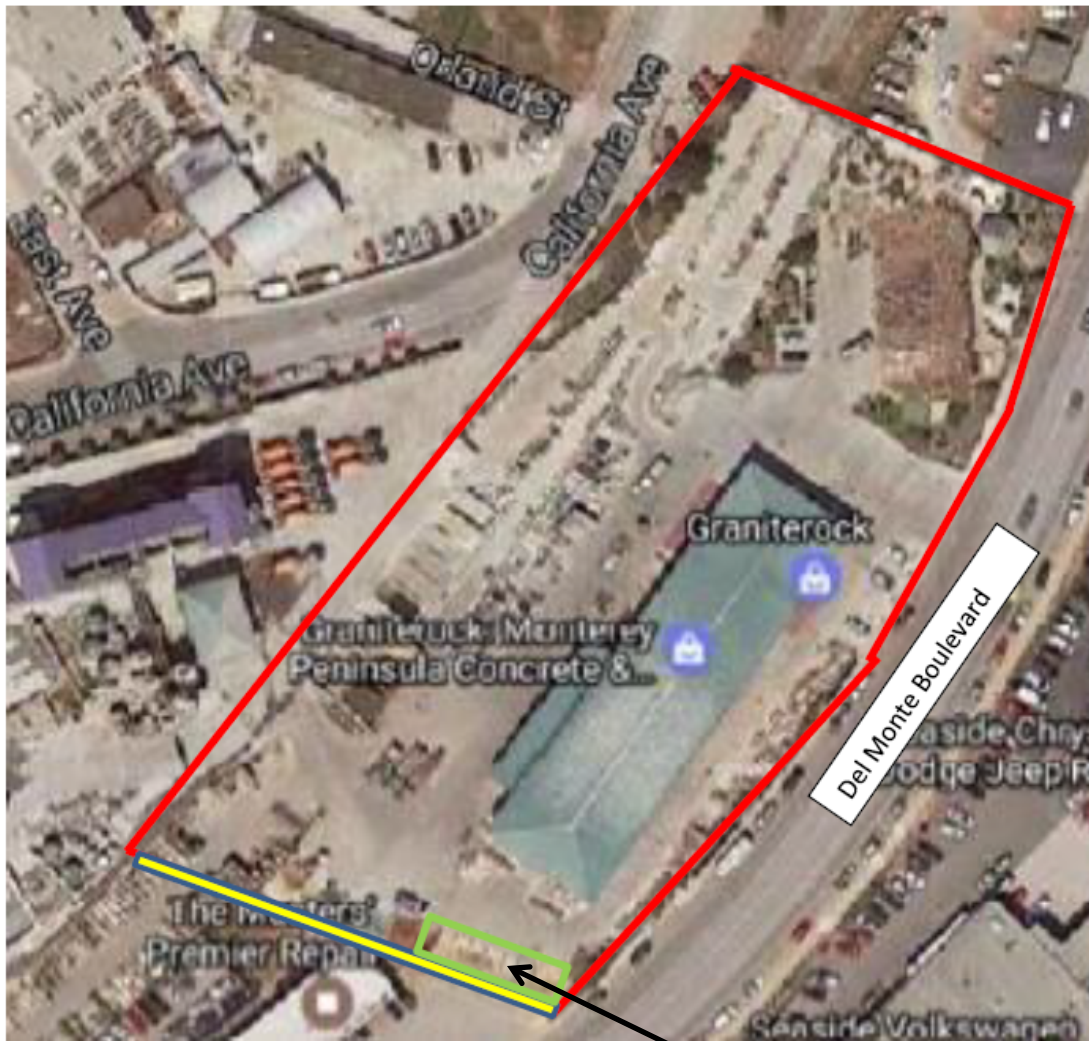
Image capture: Apr 2015 © 2017 Google

Seaside, California

Street View - Apr 2015



Aerial Photograph



Property Boundaries – 

Location of proposed fence exception - 

Location of Material Bins - 

Area of Building Material spillage

Attachment 3 – Site Photographs #2



Street View from Del Monte Boulevard showing netting



Street View from Del Monte Boulevard

Attachment 3 – Site Photographs #1



Open Storage Containers Against South Wall



View of Open Storage Containers from Del Monte Boulevard



P. O. Box 50001
Watsonville, CA 95077
(831) 768-2000
Fax (831) 768-2201

Wall Exception for 1755 Del Monte Blvd.

Bob Larsen
City of Seaside Planning Dept.

Granite Rock Company (Graniterock) is requesting an exception to City of Seaside Municipal Code, Title 17 for the height of the wall bordering its property on 1755 Del Monte Boulevard. Presently, Graniterock has an 16' high concrete block wall at the edge of the property which borders the property owned by Master Mechanics. The wall serves as an aggregate storage bunker on Graniterock's side of the property and frames the parking lot for the Master Mechanics facility is located on the other side. In the past, the aggregate stored on Grantierock's side of the wall has made it over the top of the concrete wall and has fallen into the Master Mechanics parking lot. To avoid this potential safety hazard and property damage, Graniterock requests permission to extend the height of the concrete block wall by an additional 2 feet.

We understand that the Planning Commission will consider the following factors in connection with Graniterock's request:

- A general safety hazard to City residents and/or the general public would not be created. Here, the extension of the height of the current concrete block wall would serve to protect the public from a potential safety hazard. Raising the height of the wall would decrease the possibility of aggregate material spilling from Grantierock's property in to the neighboring parking lot.
- A traffic-related safety hazard would not be created. The extension of the current wall would have no effect on traffic in the area. The wall separates the Graniterock property from Master Mechanics and has no relation to traffic in the area.
- The fence or wall will not impair visibility at an intersection or traffic safety visibility area. Raising the height of the current wall will have no effect on the traffic safety as the wall serves only to separate Graniterock's facility from the neighboring property and will not impair visibility for drivers or pedestrians.
- The fence or wall will not obstruct vision from an adjoining driveway. Extending the wall an additional two feet will not create any additional obstruction from any driveway areas.
- The fence or wall is compatible with the surrounding neighborhood. The extension of the height of the existing wall by an additional two feet will not impact the surrounding neighborhood in any manner.

Thank you for taking the time to meet with me to discuss this application. With this information, we trust that the Planning Commission can consider our application for an exception. Should you need any additional information to process our application, please let me know.

Mike Edelmaier
Project Manager
Granite Rock Co.

A handwritten signature in blue ink that reads "Mike Edelmaier". The signature is fluid and cursive, with a horizontal line extending from the end of the name.

Pacific Engineering Group, Inc.

30 Ryan Court, Suite 200, Monterey, CA 93940 ph: (831) 333-0644 fax: (831) 333-0645

December 21, 2016

Structural Calculations

24" Maximum Cap Plate Extension to Existing 8'-0" High CMU Bin Screen Wall

For:

Granite Rock Company

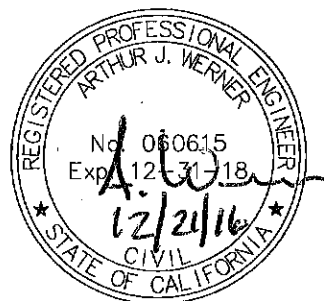
1763 Del Monte Avenue
Seaside, CA

(PEG Job #16 - 142)

Contents:

I.	<u>Basis of Design:</u>	B1 - B2
II.	<u>Lateral Analysis:</u>	
	A. Steel Cap Plate - Forces & Thickness Requirements	L1
	B. Epoxy Anchors on top of Existing CMU Wall	L2
	C. Global Retaining Wall Check (2013 CBC Check)	L3 - L7
III.	<u>Appendix:</u>	
	A. Existing Permitted CMU Wall Drawings (S1.1-Dated 2006)	A1
	B. Simpson SET-XP Evaluation Report (Top of Masonry Wall)	A2 - A4
	C. Soils Report Excerpts (2006)	A5 - A8

ARTHUR J. WERNER, P.E. for
PACIFIC ENGINEERING GROUP, INC.
30 RYAN COURT SUITE 200
MONTEREY, CA 93940



I. Basis of Design: 2013 CBC**1. Scope:**

Extend existing 8'-0" high CMU Back Bin-Wall Vertically 24" (10'-0" Maximum Height) using a bent steel cap plate as proposed by the City of Seaside. The purpose of the extension is to help prevent product from being dumped over the wall and onto adjacent property. Because the side bins are being left at 8'-0", the maximum retained height is still 8'-0".

2. Weight of 12" Thick CMU Bin Screen Wall:

$$Wt. = .140 \text{ K/Ft}^3$$

3. Weight of New Steel Cap Plate:

$$Wt. = .490 \text{ K/Ft}^3$$

4. Wind Loading (ASCE 7-10; Section 29.4)

$$S=H(\text{Wall}) = 10 \text{ Ft.}; B=10$$

Wind Exposure: "C"

$$F = [(q_h)(G)(C_f)] (A_s) \quad (\text{Equation 29.4-1})$$

$$q_h = .00256(K_z)(K_{zt})(K_d)(V^2) \quad (\text{Equation 29.3-1})$$

V	=	110	MPH	(Basic Wind Speed; Risk Category 2; Figure 26.5-1A)
K _z	=	0.85		(Velocity Exposure Coefficient; Exposure C; Table 29.3-1)
K _{zt}	=	1.0		(Topographic Factor (Flat); Section 26.8.2)
K _d	=	0.85		(Directionality Factor; Table 26.6-1)

$$q_h = 22.4 \text{ PSF}$$

G	=	0.85	(Gust Factor; Section 26.9.1)
C _f	=	1.45	(Force Coef.; Case "A": S/H=1; B/S=1.0; Figure 29.4-1)
A _s	=	Variable	(Tributary Area of Design Element)

$$F = [(q_h)(G)(C_f)(A_s)] = [27.6 \text{ PSF}](A_s)$$

$$P_u = [27.6 \text{ PSF}](A_s) \quad (\text{Ultimate Design Wind Pressure})$$

5. Seismic Coefficients:

$$S_{ds} = .990g \text{ (Use } S_{ds} = 1.0g) \text{ ***See next Page}$$

6. Soil Pressures:

(Soils Report; Haro, Kasunich, & Associates; See Appendix, Pg's A2 - A4)

σ	=	(2500 PSF)(1.33) = 3325 PSF	(Wind & Seismic - Per Spols Report)
P _a	=	30.0 PCF	(Product Active Pressure - Service Load)
P _a	=	60 PCF	(2013 CBC; Table 1601.1)
P _p	=	300 PCF	(Per Soils Report)
U	=	0.35	(Per Soils Report)

B2

Design Maps Summary Report

User-Specified Input

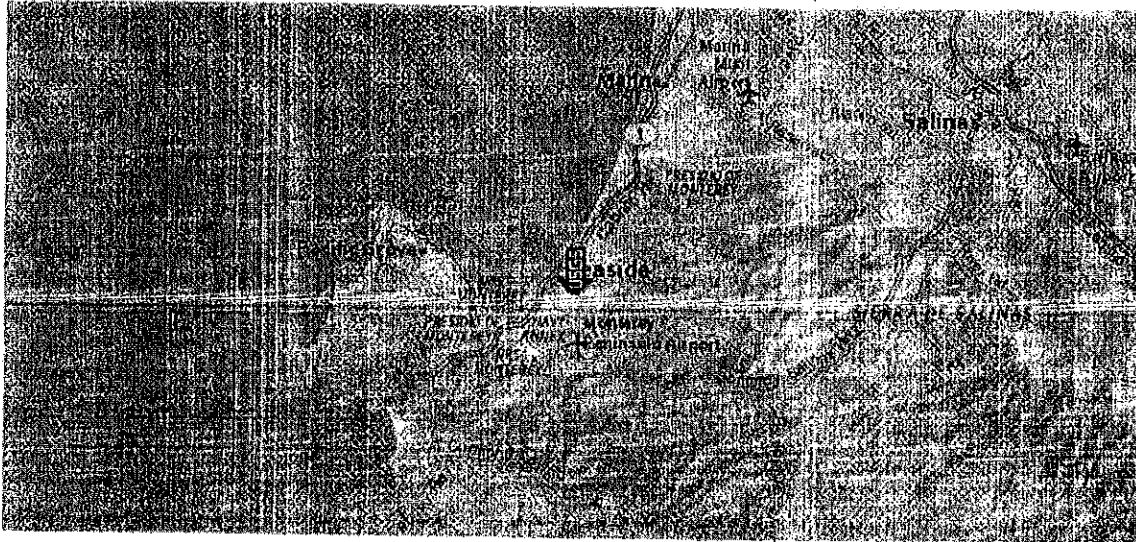
Report Title Granite Rock - 1763 Del Monte Ave., Seaside, CA
Mon August 15, 2016 17:42:38 UTC

Building Code Reference Document ASCE 7-10 Standard
(which utilizes USGS hazard data available in 2008)

Site Coordinates 36.61434°N, 121.84492°W

Site Soil Classification Site Class D - "Stiff Soil"

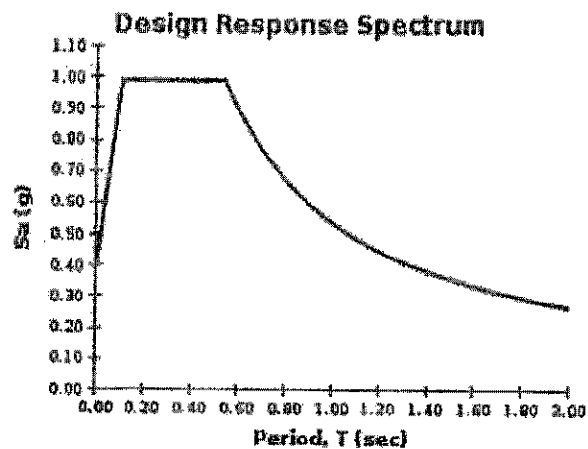
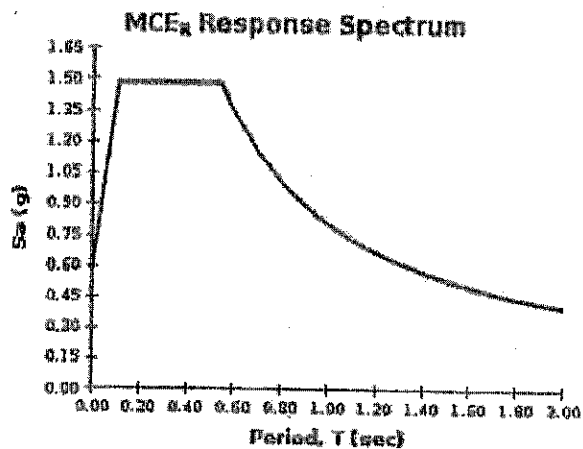
Risk Category I/II/III



USGS-Provided Output

$S_g = 1.485 \text{ g}$	$S_{H5} = 1.485 \text{ g}$	$S_{05} = 0.990 \text{ g}$
$S_1 = 0.538 \text{ g}$	$S_{H1} = 0.807 \text{ g}$	$S_{01} = 0.538 \text{ g}$

For information on how the S_S and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



For PGA_M , T_i , C_{R5} , and C_{R1} values, please [view the detailed report](#).

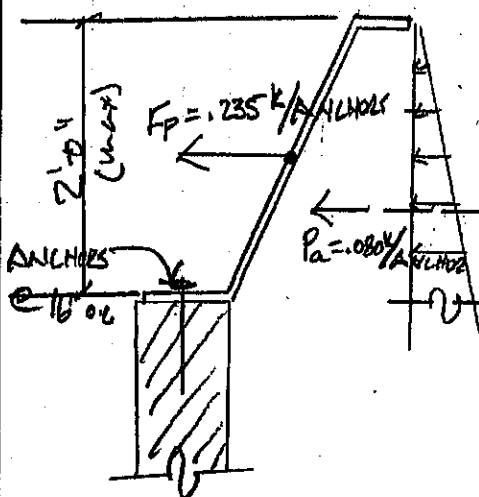
II. LATERAL ANALYSIS:A. NEW 24" EXTENSION @ TOP OF WALL (STEEL PLATE OPTION)a) WIND FORCE @ TOP OF WALL (EPOXY ANCHORS @ 16" O.C.)

$$P_v = (27.6 \text{ PSF})(2 \text{ ft})(1.33 \text{ ft/ANCHOR}) = 73.4 \text{ \#/ANCHOR (16" O.C.)}$$

$$M_v = (.0734 \text{ K/ANCHOR}) \left(\frac{2 \text{ ft}}{2} \right) = .0734 \frac{\text{K} \cdot \text{ft}}{\text{ANCHOR}} \left(\frac{12 \text{ in}}{\text{ft}} \right) = \frac{.880 \text{ K} \cdot \text{in}}{\text{ANCHOR}}$$

b) SOIL & SEISMIC FORCES @ TOP OF WALL (EPOXY ANCHORS @ 16")

*NOTE: SINCE SIDEBINS WILL REMAIN AT 8'-0", THERE WILL BE NO SIGNIFICANT SOIL RETENTION @ 24" EXTENSION FOR MAIN WALL; DESIGN STEEL PLATE THICKNESS AS IF SOIL RETENTION OCCURS.



$$P_a = \frac{(1030 \text{ K/ft}^3)(1.33 \text{ ft/ANCHOR})(2')^2}{2} = .680 \text{ K/ANCHOR}$$

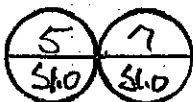
$$F_p = \frac{(1.4)(1.0)(1.0)}{\left(\frac{2.5}{1.0} \right)} \left[1 + 2(1.0) \right] \left(\frac{.490 \text{ K/ft}^3}{(1.375')} \right) (2 \text{ ft}) (1.33 \text{ ft/ANCHOR}) = 1.235 \text{ K/ANCHOR}$$

$$M_v = 1.6 \left(.680 \text{ K/ANCHOR} \right) \left(\frac{2'}{2} \right) + 1.0 \left(1.235 \text{ K/ANCHOR} \right) \left(\frac{2'}{2} \right) = .320 \text{ K} \cdot \text{ft}$$

$$M_v = \frac{3.84 \text{ K} \cdot \text{in}}{\text{ANCHOR}} > \text{WIND} = \frac{.880 \text{ K} \cdot \text{in}}{\text{ANCHOR}}$$

c) FIND REQ'D THICKNESS OF STEEL TOP PLATE: ($M_v = 3.84 \text{ K} \cdot \text{in}$)

$$t_r = \sqrt{\frac{6(3.84 \text{ K} \cdot \text{in})}{(16'')(\phi = .9)(36 \text{ K/in}^2)}} = .21'' \text{ (SAY } 1/4'' \text{ THK. MIN.)}$$



USE CONT. 2' FT HIGH X 1/4" THK (MIN.) TOP PLATE ANCHORED TO TOP OF (E) CMU WALL @ 16" O.C.

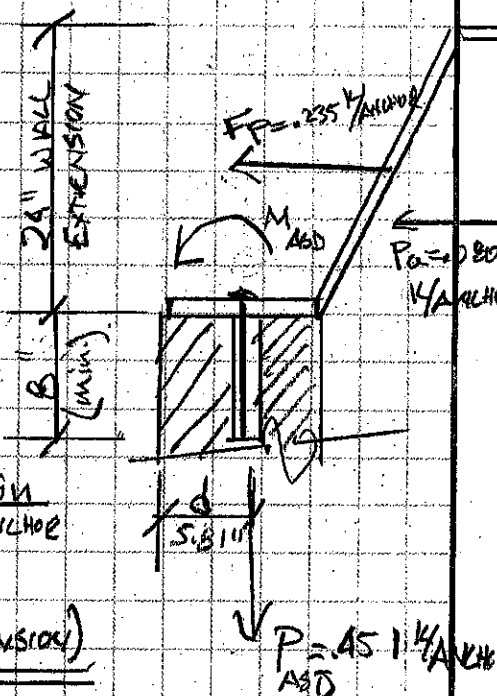
II. LATERAL ANALYSIS - CONTINUEDB. HA EPOXY ANCHORS @ 16" o.c.FROM PREVIOUS PAGE (L1) $\rightarrow P_C = .080 \text{ k/ANCHOR}$; $V_F = .235 \text{ k/ANCHOR}$

$$V_{ASD} = (.080 \text{ k/ANCHOR}) + .7(.235 \text{ k/ANCHOR}) =$$

$$V_{ASD} = .245 \text{ k/ANCHOR (SHEAR)}$$

$$M_{ASD} = [.080 \text{ k} \left(\frac{2\frac{1}{2}}{3}\right) + .7(.235 \text{ k} \left(\frac{2\frac{1}{2}}{2}\right)] (12 \text{ in}) = 2.62 \text{ k.in ANCHOR}$$

$$P_{ASD} = \frac{2.62 \text{ k.in}}{d = 5.81 \text{ in}} = .451 \text{ k/ANCHOR (ASD TENSION)}$$

PER UES EVALUATION REPORT (1/2" Ø W/ SET-XP IN TOP OF FULLY GROUTED CMU WALL)

* SEE APPENDIX, PAGES A2, A3, A4:

FROM Pg. A4

ALL EDGE, END, & SPALLING DISTANCES ARE G.T. S_u (SEE Pg. 13 "A2 & A3")

$$V'_{ASD} = (.590 \text{ k/ANCHOR}) (1.0) (1.0) (1.0) = .590 \text{ k/ANCHOR}$$

FROM PAGES "A2 & A3"

$$V_{ASD} = .245 \text{ k/ANCHOR (OK)}$$

$$P'_{ASD} = (1.485 \text{ k/ANCHOR}) (1.0) (1.0) (1.0) = 1.485 \text{ k/ANCHOR}$$

$$P_{ASD} = .451 \text{ k/ANCHOR}$$

COMBINED TENSION & SHEAR:

$$\frac{V_{ASD} = .245 \text{ k}}{V' = .590 \text{ k}} + \frac{P_{ASD} = .451 \text{ k}}{P' = 1.485 \text{ k}} = .72 < 1.0 \text{ (OK)}$$

SEE



USE 3/8" X 2'-0" BENT CAP PLATE W/ 1/2" Ø X 8" EMBED. SIMPSON "SET-XP" EPOXY DOWELS @ 16" O.C. INTO TOP OF (E) 12" FULLY GROUTED CMU WALL

II. LATERAL ANALYSIS (CONTINUED)C. CHECK EXISTING GLOBAL WALL CONDITION: (2013 CBC)

NOTE: BECAUSE BIN SIDE WALLS REMAIN @ 8'-0" HT.,
THE MAX. RETAINED HEIGHT FOR 10'-0" BACK WALL
IS STILL ONLY 8'-0" (NO INCREASED RETENTION)
*** WALL ALSO SPANS HORIZ. b/w SIDE BINS - NEGLECT FOR
a) DESIGN PARAMETERS THIS ANALYSIS (CONSERVATIVE) ***

* BIN WALL ABOVE SLAB

PRODUCT ON TOP
OF SLAB (SERVICE
LEVEL)

$$\left\{ \begin{array}{l} P_a = 30 \text{ #/ft}^3 \text{ (PRODUCT PRESSURE - UNCONFINED)} \\ P_u = \frac{(1030 \text{ #/ft}^3)(1')}{2}(8')^2 = .96 \text{ K (PER LINEAR FOOT OF WALL)} \end{array} \right.$$

$$K_p = \frac{(1.4)(1.0)(1.0)}{\left(\frac{2.5}{1.0}\right)} \left[1 + 2(10) \right] W_p = .48 W_p \text{ (STRENGTH)}$$

$$P_{QE} = (1.0)(.48) \left[(.140 \text{ K/ft}^3)(1')(1')(8' + 2' \text{ EXTENSION}) \right] = .672 \text{ K/ft}$$

$$P_{QE} = .672 \text{ K (STRENGTH FORCE)}$$

PUSH LOAD: ASSUME 500# PER LINEAR FOOT
(STR. FORCE) PUSH LOAD (NOT TO BE ADDED CONCURRENTLY
W/ SEISMIC FORCE)

∴ CONTROLLING FORCE IS:

$$F_1 = 1.6(.96) + .672 \text{ K} = \underline{2.208 \text{ K (PRODUCT + SEISMIC)}}$$

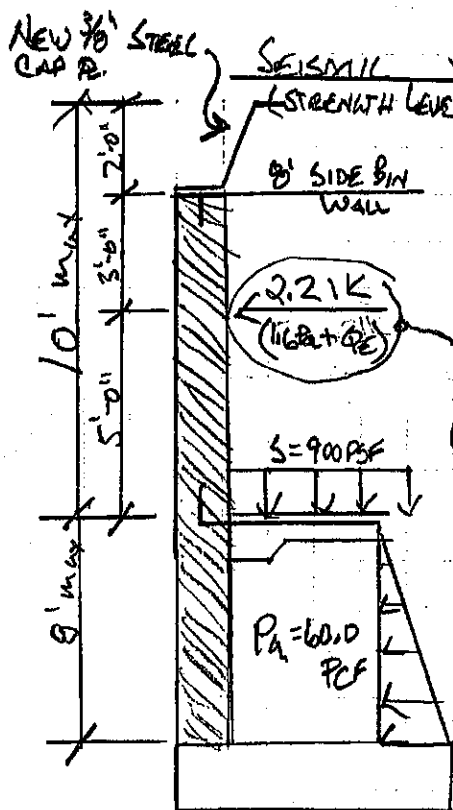
$$F_2 = 1.6(.96) + .50 \text{ K} = \underline{2.036 \text{ K (PRODUCT + PUSH)}}$$

SURCHARGE: $\gamma_{\text{PRODUCT}} \approx .110 \text{ K/ft}^3$ (W/ VOID SPACES)

$$S = (.110 \text{ K/ft}^3)(8 \text{ ft}) = .880 \text{ K/ft} \text{ (SAY } 900 \text{ #/ft}^2)$$

ACTIVE PRESSURE (BELOW SLAB): NO SOILS REPORT

∴ USE $P_a = 60.0 \text{ PSF}$ (2013 CBC; TRL 1610.1)



Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title GRANITE ROCK

Job # :

Dsgnr: AW

Description....

12" CANTILEVERED RETAINING WALL (RESTRAINED BY SLAB)

Page : 1

Date: 16 AUG 2016

L4

This Wall in File: Z:\002_Project Docs\2016\Jobs\16-142 Granite Rock Bin Wall Extension\retaining w

RetainPro (c) 1987-2016, Build 11.16.07.15

License : KW-06057011

License To : PACIFIC ENGINEERING GROUP, INC

Restrained Retaining Wall

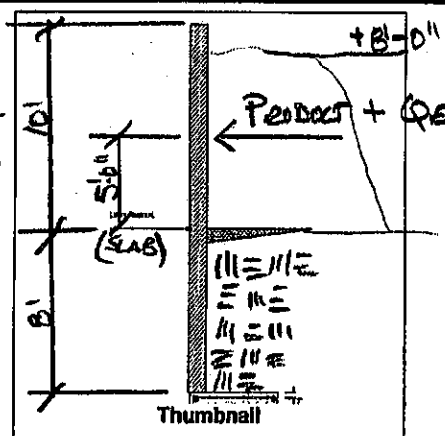
Code: CBC 2013, ACI 318-11, ACI 530-11

Criteria

Retained Height	=	8.00 ft	✓
Wall height above soil	=	10.00 ft	✓
Total Wall Height	=	18.00 ft	✓
Top Support Height	=	8.00 ft	✓
Slope Behind Wal	=	0.00	✓
Height of Soil over Toe	=	6.00 in	✓

Soil Data

Allow Soil Bearing	=	3,333.0 psf	✓
Equivalent Fluid Pressure Method			
At-rest Heel Pressure	=	60.0 psf/ft	✓
Passive Pressure	=	300.0 psf/ft	✓
Soil Density	=	110.00 pcf	✓
Footing Soil Friction	=	0.350	✓
Soil height to ignore for passive pressure	=	12.00 in	✓



Surcharge Loads

Surcharge Over Heel	=	900.0 psf	✓
>>>Used To Resist Sliding & Overturning			
Surcharge Over Toe	=	0.0 psf	✓
Used for Sliding & Overturning			

Axial Load Applied to Stem

Axial Dead Load	=	0.0 lbs	✓
Axial Live Load	=	0.0 lbs	✓
Axial Load Eccentricity	=	0.0 in	✓

Earth Pressure Seismic Load

Stem Weight Seismic Load

Uniform Lateral Load Applied to Stem

Lateral Load	=	2,210.0 #/ft	✓
...Height to Top	=	13.50 ft	✓
...Height to Bottom	=	12.50 ft	✓

Load Type	=	Seismic (E)	✓
	=	Uniform Load	

Wind on Exposed Stem	=	0.0 psf	✓
(NOT SIGNIFICANT)			

K _h Soil Density Multiplier	=	0.200 g	✓
--	---	---------	---

F _p /W _p Weight Multiplier	=	0.000 g	✓
--	---	---------	---

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs	✓
Footing Width	=	0.00 ft	✓
Eccentricity	=	0.00 in	✓
Wall to Ftg CL Dist	=	0.00 ft	✓
Footing Type	=	Line Load	✓
Base Above/Below Soil at Back of Wall	=	0.0 ft	✓
Poisson's Ratio	=	0.300	✓

INCLUDED
IN FORCES
PROVIDED

Design Summary

Total Bearing Load	=	11,642 lbs	✓
...resultant ecc.	=	1.89 in	✓
Soil Pressure @ Toe	=	2,480 psf	OK
Soil Pressure @ Heel	=	1,753 psf	OK
Allowable	=	3,333 psf	✓
Soil Pressure Less Than Allowable			
ACI Factored @ Toe	=	2,976 psf	✓
ACI Factored @ Heel	=	2,104 psf	✓
Footing Shear @ Toe	=	0.0 psi	OK
Footing Shear @ Heel	=	7.9 psi	OK
Allowable	=	75.0 psi	✓
Reaction at Top	=	6,137.6 lbs	✓
Reaction at Bottom	=	3,442.5 lbs	✓

Masonry Stem Construction

Thickness	=	12.00 in	✓
Wall Weight	=	133.0 psf	✓
Stem is FIXED to top of footing			
Block Type	=	Normal Weight	✓
Design Method	=	LRFD	✓
Solid Grouted			

	@ Top Support	Mmax Between Top & Base	@ Base of Wall
Design Height Above Ftg	= 8.00 ft	3.08 ft	0.00 ft
Rebar Size	= # 6	# 6	# 6
Rebar Spacing	= 16.00 in	16.00 in	16.00 in
Rebar Placed at	= Edge	Edge	Edge
Rebar Depth 'd'	= 9.00 in	9.00 in	9.00 in

Design Data

fb/FB + fa/Fa	=	0.903	0.186	0.330
Moment....Actual	=	11,050.0 ft-#	2,271.1 ft-#	4,035.5 ft-#
Moment....Allowable	=	12,230.6 ft-#	12,230.6 ft-#	12,230.6 ft-#
Shear Force @ this height	=	5,067.9 lbs		4,313.0 lbs
Anet	=	139.50 in2		139.50 in2
Shear....Actual	=	36.33 psi		30.92 psi
Shear....Allowable	=	69.71 psi		69.71 psi

Other Acceptable Sizes & Spacings:

Toe: # 5 @ 18.00 in	-or-	Not req'd: Mu < phi*5*lambda*sqrt(fc)*Sm
Heel: # 5 @ 16.00 in	-or-	Not req'd: Mu < phi*5*lambda*sqrt(fc)*Sm
Key: No key defined	-or-	No key defined

Vertical component of active lateral soil pressure IS considered in the calculation of soil bearing pressures.

Load Factors

Building Code	CBC 2013, ACI
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title GRANITE ROCK
Job # :
Description...
12" CANTILEVERED RETAINING WALL (RESTRAINED BY SLAB)

Page: 2
Date: 16 AUG 2016

L5

This Wall In File: Z:\002_Project Docs\2016\Jobs\16-142 Granite Rock Bin Wall Extension\retaining w

RetainPro (c) 1987-2016, Build 11.16.07.15

License : KW-08057011

License To : PACIFIC ENGINEERING GROUP, INC

Restrained Retaining Wall

Code: CBC 2013, ACI 318-11, ACI 530-11

Footing Strengths & Dimensions

Toe Width = 0.00 ft
Heel Width = 5.50
Total Footing Width = 5.50
Footing Thickness = 18.00 in
Key Width = 0.00 in
Key Depth = 0.00 in
Key Distance from Toe = 0.00 ft
fc = 2,500 psi Fy = 60,000 psi
Footing Concrete Density = 150.00 pcf
Min. As % = 0.0018
Cover @ Top = 3.00 in @ Btm. = 3.00 in

Footing Design Results

Factored Pressure = 2,976 2,104 psf
Mu' : Upward = 0 26,567 ft-#
Mu' : Downward = 0 31,204 ft-#
Mu: Design = 0 4,637 ft-#
Actual 1-Way Shear = 0.00 7.90 psi
Allow 1-Way Shear = 0.00 75.00 psi

Min footing T&S reinf Area 2.14 in2
Min footing T&S reinf Area per foot 0.39 in2 /ft

If one layer of horizontal bars:

#4@ 6.17 in
#5@ 9.57 in
#6@ 13.58 in

If two layers of horizontal bars:

#4@ 12.35 in
#5@ 19.14 in
#6@ 27.16 in

#5 @ 16" o.c. (Top & Bottom)
(OK) — $A_s = (2 \text{ in}^2) \cdot 3 \text{ ft}^2$
(OK) —

Summary of Forces on Footing : Slab is NOT providing sliding, stem is FIXED at footing

Forces acting on footing for sliding & soil pressure....

Sliding Forces

Stem Shear @ Top of Footing = -1,918.7 lbs
Heel Active Pressure = -1,523.9
Sliding Force = 3,442.5 lbs

Net Moment User For Soil Pressure Calculations

1,831.8 ft-#

Load & Moment Summary For Footing : For Soil Pressure Calcs

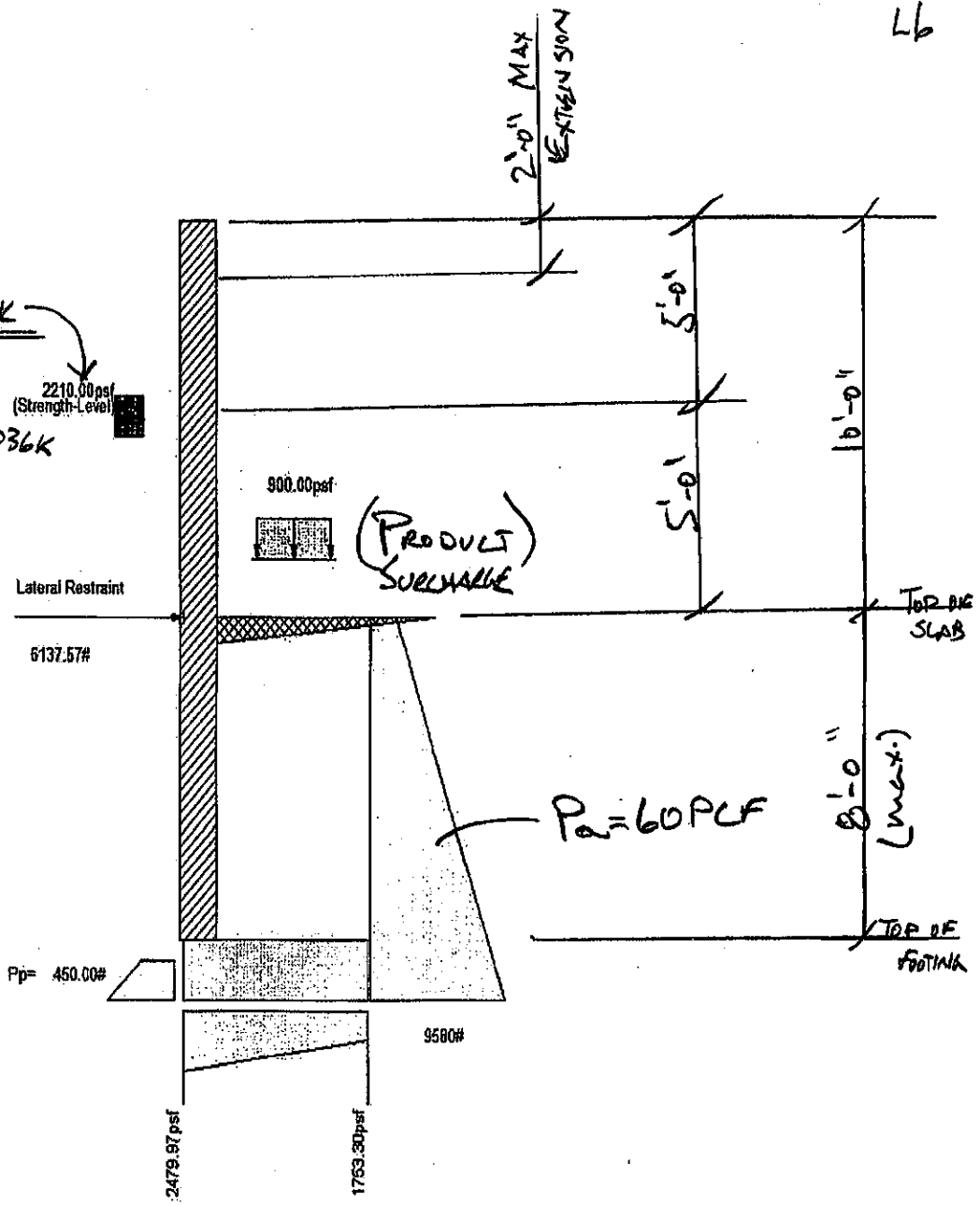
Moment @ Top of Footing Applied from Stem	=	-450.3 ft-#
Surcharge Over Heel	4,050.0	3.25 13,162.5
Adjacent Footing Load	=	lbs ft ft-#
Axial Dead Load on Stem	=	lbs ft ft-#
Soil Over Toe	=	lbs ft ft-#
Surcharge Over Toe	=	lbs ft ft-#
Stem Weight	=	2,394.0 lbs 0.50 ft 1,197.0 ft-#
Soil Over Heel	=	3,960.0 lbs 3.25 ft 12,870.0 ft-#
Footing Weight	=	1,237.5 lbs 2.75 ft 3,403.1 ft-#
Total Vertical Force	=	11,641.5 lbs Base Moment = 30,182.3 ft-#

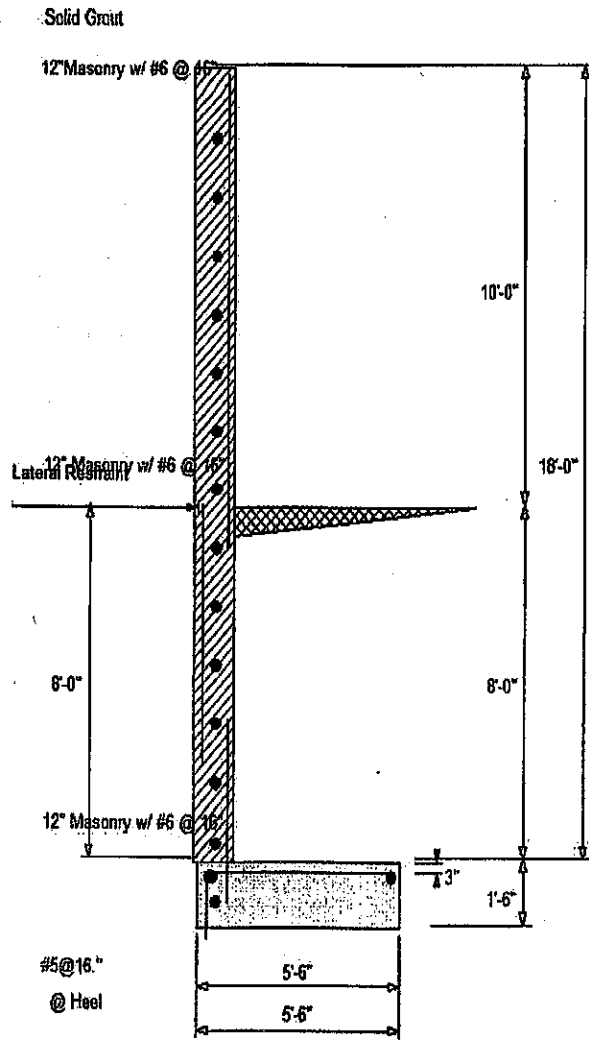
Vertical component of active lateral soil pressure IS considered in the calculation of Sliding Resistance.

From Page "L2":

$$F_1 = 1.6 P_a + 1.0 Q_E = 2.208K$$

$$F_2 = 1.6 P_a + 1.0 (PUSH F_{max}) = 2.036K$$





Graniterock
MATERIALS
SUPPLY &
SHOWROOM
1785 DEL MONTE AVE
SUNLAND, CA

**THE
PAUL DAVIS
PARTNERSHIP**
ARCHITECTS & PLANNERS

Pacific Engineering Group, Inc.
STRUCTURAL ENGINEERS
10000 Wilshire Blvd., Suite 1000
Beverly Hills, CA 90210
Tel: 310-274-1111
Fax: 310-274-1112
www.pacificengr.com

Drawn By: E.E. 01-2008
Drawing Date: AUG 2008
Scale: AS NOTED
Job Number: PEC 05-170

Revision	Date	Description
1	01/10/08	PHASE 2 - 2nd FLOOR
2	01/10/08	FOR PLAN CHECK
3	01/10/08	COORDINATION REVISIONS
4	01/10/08	COORDINATION REVISIONS
5	01/10/08	COORDINATION REVISIONS

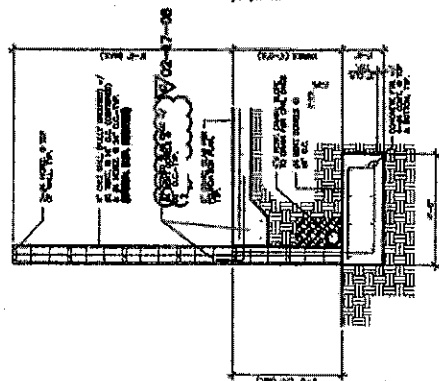
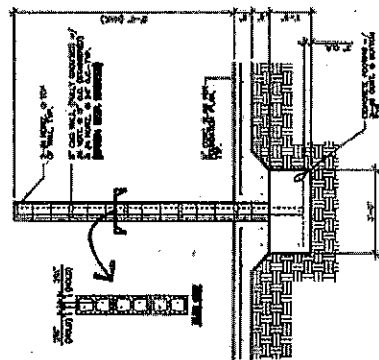
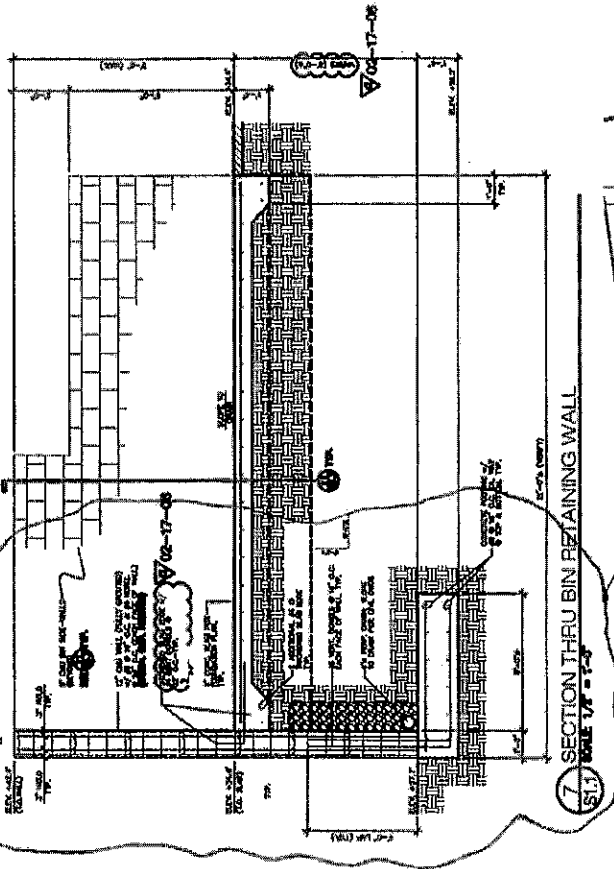
The Engineer has prepared this drawing in accordance with the California Building Code, 1997 Edition, and the American Institute of Steel Construction, Inc. Specification for Structural Steel Buildings, 4th Edition, 1989. The Engineer has not performed a site inspection of the project and has not observed the construction of the project. The Engineer's responsibility is limited to the design of the structure shown on this drawing.

**STRUCTURAL KEY SITE PLAN
& RETAINING WALL DETAILS**

SHEET NUMBER
S1.1

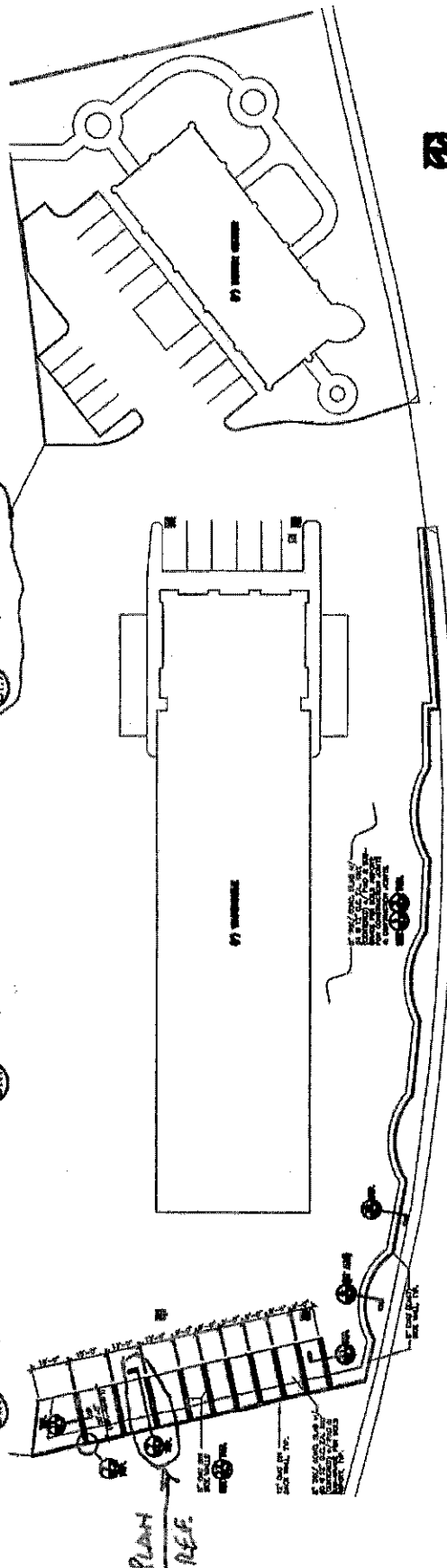
(A)

ORIGINAL PERMITTED QMU-BIN
WALL DETAIL W/ EXISTING
REINFORCING



11 SECTION THRU BIN SIDE WALL
SCALE 1/8" = 1'-0"

15 SECTION THRU SITE WALL
SCALE 1/8" = 1'-0"





EVALUATION REPORT

Number:

A2

Originally Issued: 01/18/2013

Revised: 03/25/2016

Valid Through: 01/31/2017

TABLE 4 - EDGE AND END DISTANCE REQUIREMENTS AND ALLOWABLE LOAD REDUCTION FACTORS FOR THREADED ROD AND REBAR WITH SET-XP® EPOXY ADHESIVE IN THE TOP OF FULLY GROUTED CMU WALL CONSTRUCTION^{1,4,5}

Rod Dia. (inch) or Rebar Size No.	Min. Embed. Depth (inches)	Critical Edge and End (Full Anchor Capacity)			Minimum End (Reduced Anchor Capacity)				Minimum Edge (Reduced Anchor Capacity)			
		Critical Edge, c_{cr} (inches)	Critical End, c_{en} (inches)	Allowable Load Reduction Factor	Min. End, c_{min} (inches)	Min. End Allow. Load Reduction Factor			Min. Edge, c_{ed} (inches)	Min. Edge Allow. Load Reduction Factor		
						Load Direction				Load Direction		
Tension or Shear	Tension or Shear	Tension or Shear	Tension or Shear	Tension	Shear		Tension or Shear	Tension	Shear			
						Perp.	Para.			Perp.	Para.	
1/2	4 1/2	2 3/4 ✓	20 ✓	1.00	3 13/16	0.88	0.84	0.66	1 3/4	0.83	0.63	0.77
	12	2 3/4 ✓	20 ✓	1.00	3 13/16	0.64	0.91	0.34	1 3/4	0.95	0.55	0.69
5/8	5 5/8	2 3/4	20	1.00	4 1/4	0.90	1.00	0.80	1 3/4	0.82	0.57	0.74
	15	2 3/4	20	1.00	4 1/4	0.38	0.85	0.29	1 3/4	0.91	0.72	0.75
7/8	7 7/8	2 3/4	20	1.00	4 1/4	0.98	0.72	0.57	--	--	--	--
	21	2 3/4	20	1.00	4 1/4	0.63	0.96	0.64	--	--	--	--
#4	4 1/2	2 3/4	20	1.00	3 1/4	0.96	0.90	0.76	--	--	--	--
	12	2 3/4	20	1.00	3 1/4	0.38	1.00	0.46	--	--	--	--
#5	5 5/8	2 3/4	20	1.00	4 1/4	1.00	0.86	0.60	--	--	--	--
	15	2 3/4	20	1.00	4 1/4	0.41	0.76	0.49	--	--	--	--

For SI: 1 inch = 25.4 mm.

- Edge and end distances (c_{cr} or c_{en}) are the distances measured from anchor centerline to edge or end of CMU masonry wall. Refer to Figures 3A and 3B for illustrations showing critical and minimum edge and end distances.
- Critical edge and end distances, c_{cr} , are the least edge distances at which tabulated allowable load of an anchor is achieved where a load reduction factor equals 1.0 (no load reduction).
- Minimum edge and end distances, c_{min} , are the least edge distances where an anchor has an allowable load capacity, which shall be determined by multiplying the allowable loads assigned to anchors installed at critical edge distance, c_{cr} , in Table 6 by the load reduction factors shown above.
- Reduction factors are cumulative. Multiple reduction factors for more than one spacing (Table 5) or edge or end distance shall be calculated separately and multiplied.
- Load reduction factor for anchors loaded in tension or shear with edge and end distances between critical and minimum shall be obtained by linear interpolation.
- Perpendicular shear loads act towards the edge or end. Parallel shear loads act parallel to the edge or end (see Figure 5). Perpendicular and parallel shear load reduction factors are cumulative when the anchor is located between the critical and minimum edge and end distance.



EVALUATION REPORT Number: A3

Originally Issued: 01/18/2013

Revised: 03/25/2016

Valid Through: 01/31/2017

**TABLE 5 – SPACING DISTANCE REQUIREMENTS AND ALLOWABLE LOAD REDUCTION FACTORS
FOR THREADED ROD AND REBAR WITH SET-XP® EPOXY ADHESIVE IN THE TOP OF FULLY
GROUTED CMU WALL CONSTRUCTION^{1,4,5}**

Rod Dia. (inch) or Rebar Size No.	Min. Embed. Depth (inches)	Critical Spacing (Full Anchor Capacity)		Minimum Spacing (Reduced Anchor Capacity)		
		Critical Spacing, s_{cr} (inches)	Allowable Load Reduction Factor	Minimum Spacing, s_{min} (inches)	Allowable Load Reduction Factor	
Load Direction		Load Direction				
Tension or Shear	Tension or Shear	Tension or Shear	Tension	Shear		
1/2	4 1/2	18	1.00	8	0.80	0.92
	12	48	1.00	8	0.63	0.98
5/8	5 5/8	22.5	1.00	8	0.80	1.00
	15	60	1.00	8	0.56	1.00
7/8	7 7/8	31.5	1.00	8	0.84	0.82
	21	84	1.00	8	0.51	0.98
#4	4 1/2	18	1.00	8	0.92	0.95
	12	48	1.00	8	0.75	1.00
#5	5 5/8	22.5	1.00	8	1.00	1.00
	15	60	1.00	8	0.82	1.00

For SI: 1 inch = 25.4 mm.

1. Anchor spacing (s_{cr} or s_{min}) is the distance measured from centerline to centerline of two anchors.
2. Critical spacing, s_{cr} , is the least anchor spacing at which tabulated allowable load of an anchor is achieved such that anchor performance is not influenced by adjacent anchors.
3. Minimum spacing, s_{min} , is the least spacing where an anchor has an allowable load capacity, which shall be determined by multiplying the allowable loads assigned to anchors installed at critical spacing distance, s_{cr} , in Table 6 by the load reduction factors shown above.
4. Reduction factors are cumulative. Multiple reduction factors for more than one spacing or edge or end (Table 4) distance shall be calculated separately and multiplied.
5. Load reduction factor for anchors loaded in tension with spacing between critical and minimum shall be obtained by linear interpolation.



EVALUATION REPORT Number:

Originally Issued: 01/18/2013

Revised: 03/25/2016

Valid Through: 01/31/2017

TABLE 6 - ALLOWABLE TENSION AND SHEAR VALUES FOR THREADED ROD AND REBAR WITH SET-XP® EPOXY ADHESIVE IN THE TOP OF FULLY GROUTED CMU WALL CONSTRUCTION^{1,2,4,5,6,7,9,10,11,12}

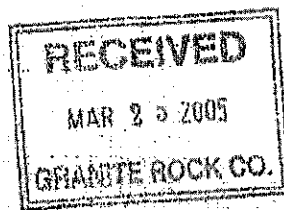
Diameter (inch) or Rebar Size No.	Drill Bit Diameter (inch)	Minimum Embedment (inches)	Allowable Load based on Bond Strength ³ (pounds)		
			Tension	Shear Perp.	Shear Parallel
Threaded Rod Installed in the Top of CMU Wall					
1/2	5/8	4 1/2	1,485	590	1,050
		12	2,440	665	1,625
5/8	3/4	5 5/8	1,700	565	1,435
		15	2,960	660	1,785
7/8	1	7 7/8	1,610	735	1,370
		21	4,760	670	1,375
Rebar Installed in the Top of CMU Wall					
#4	5/8	4 1/2	1,265	550	865
		12	2,715	465	1,280
#5	3/4	5 5/8	1,345	690	1,140
		15	3,090	590	1,285

For SI: 1 inch = 25.4 mm, 1 psi = 6.89 kPa, 1 lbf = 4.48 N.

1. Allowable load shall be the lesser of bond values given in Table 6 and steel values given in Tables 9 or 10 of this report as applicable.
2. Allowable loads are for installations in the grouted CMU core opening.
3. Embedment depth is measured from the horizontal surface of the grouted CMU core opening on top of the masonry wall.
4. Critical and minimum edge distance and spacing shall comply with Tables 4 and 5. Refer to Figures 3A and 3B for illustrations showing critical and minimum edge and end distances.
5. Minimum allowable nominal width of CMU wall shall be 8 inches (203 mm).
6. Anchors are permitted to be installed in the CMU core opening shown in Figures 3A and 3B. Anchors are limited to one installation per CMU core opening.
7. Tabulated load values are for anchors installed in fully grouted masonry walls constructed from materials per Section 3.2.6 of this report.
8. Tabulated allowable loads are based on a safety factor of 5.0 for installations under the IBC and the IRC.
9. Tabulated allowable load values shall be adjusted for increased base material temperatures in accordance with Figure 1, as applicable.
10. Threaded rod and rebar installed in fully grouted masonry walls with SET-XP adhesive are permitted to resist dead, live, seismic and wind loads. Refer to Section 4.1 of this report for design requirement details.
11. Threaded rods shall meet or exceed the tensile strength of ASTM F1554, Grade 36 steel, which is 58,000 psi.
12. For installations exposed to severe, moderate or negligible exterior weathering conditions, as defined in Figure 1 of ASTM C62 (IBC or IRC), allowable tension loads shall be multiplied by 0.80 and stainless steel or zinc coated anchors per section 5.9 of this report shall be used.

AS

GEOTECHNICAL INVESTIGATION
for
PROPOSED COMMERCIAL DEVELOPMENT
1763 Del Monte Blvd.
Seaside, California



Prepared For
Graniterock

Prepared By
HARO, KASUNICH AND ASSOCIATES, INC.
Geotechnical & Coastal Engineers
Project No. M8774
March 2005

Ab

HARO, KASUNICH AND ASSOCIATES, INC.

CONSULTING GEOTECHNICAL & COASTAL ENGINEERS

Project No. M8774
24 March 2005

GRANITEROCK
P.O. Box 50001
Watsonville, California 95077-5001

Attention: Thomas McGuinness
Subject: Geotechnical Investigation
Reference: Commercial Development
1763 Del Monte Blvd.
Seaside, California

Dear Mr. McGuinness:

The following report presents the results and conclusions of our Geotechnical Investigation for the proposed commercial development. This report includes design criteria and recommendations addressing the geotechnical aspects of the proposed development.

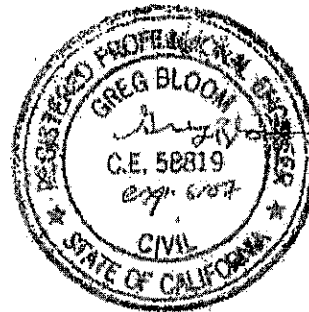
The results of our investigation indicate there are no significant geotechnical concerns at the site provided the recommendations presented in this report are followed in development of project plans and specifications.

If you have any questions concerning the data or conclusions presented in this report, please call our office.

Very truly yours,

HARO, KASUNICH & ASSOCIATES, INC.

Greg Bloom
C.E. 58819



GB/jm

Copies: 5 to Addressee

Project No. M8774
24 March 2005

10. After the earthwork operations have been completed and the geotechnical engineer has finished his observation of the work, no further earthwork operations shall be performed except with the approval of and under the observation of the geotechnical engineer.

Conventional Shallow Foundations

The proposed structures may be founded on a minimum of 24 inches of engineered fill.

11. The proposed structure may be supported on conventional spread footings founded on a minimum of 24 inches of engineered fill as outlined in the grading section of this report. Footing dimensions should be determined in accordance with anticipated use and applicable design standards, but should be a minimum of 15 inches wide and be embedded a minimum of 12 inches for one-story structures and 18 inches for two-story structures. The footings should be reinforced as required by the structural designer based on the actual loads transmitted to the foundation.

12. Foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 2,500 psf for dead plus live loads. This value may be increased by one-third to include short-term seismic and wind loads.

Project No. M8774
24 March 2005

13. Lateral load resistance for the buildings supported on footings may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.25 is considered applicable. ~~Passive resistance of 300 pcf may be used below a~~ depth of 12 inches against engineered fill.

1997 UBC Seismic Design Considerations

For purposes of design of structural features for the proposed project seismic coefficients may be used based on a soil profile ~~So~~ as described in Table 16-J of the 1997 UBC. The coefficients should be based on the 1997 UBC and the Monterey Bay-Tularcitos Fault ~~(Type B at a distance of 3 kilometers).~~

Slabs-on-Grade

14. Concrete slabs-on-grade planned for the site should be constructed on a minimum of 24 inches of engineered fill as outlined in the grading section of this report. Prior to construction of the slab, the subgrade surface should be proof-rolled to provide a smooth, firm, uniform surface for slab support. Slab reinforcement should be provided in accordance with the anticipated use and loading of the slab. As a minimum, we recommend the use of number 4 bars placed within the slab at 18 inches on center. Slab joints should be spaced no more than 15 feet on center to minimize random cracking. While some movement of slabs is likely, a well-prepared subgrade including pre-moistening prior to pouring concrete, adequately spaced expansion joints, and good