

**Meeting of the Central Valley Flood Protection Board
May 26, 2011**

Staff Report – Encroachment Permit

**Keeley Family Limited Partnership
Six Steel Grain Storage Bins, Glenn County**

1.0 – ITEM

Consider approval of Permit No. 18661 (Attachment B)

2.0 – APPLICANT

Keeley Family Limited Partnership

3.0 – LOCATION

The project is located approximately 2.25 miles north of State Highway 162 at 1559 County Road Z, Butte City, CA, 95920.
(Butte Basin, Glenn County, see Attachment A)

4.0 – DESCRIPTION

The applicant proposes to construct and install six (6) 48-foot diameter steel grain storage bins, to include a steel loop conveyor system, aligned in a north-south direction inside of the Butte Basin.

5.0 – PROJECT ANALYSIS

The proposed project involves constructing six (6) 48 ft. diameter steel grain storage bins with a steel loop conveyor system and catwalk within the Butte Basin (see section 5.3 for description). The grain bins will be aligned in a north-south direction with 7-foot of spacing between each grain bin for a total overall length of approximately 370-feet. The loop conveyor system will be located above the storage bins and the overall height of the grain bins and the conveyor will be approximately 45-feet. Each grain bin will be

anchored to a reinforced concrete foundation. The grain bins will be compliant with all Title 23 standards.

5.1 – Hydraulic Analysis

The Butte Basin is approximately 7-miles wide (per figure 8.12, Title 23) at the latitude of the proposed project site. Any hydraulic blockage resulting from the grain bins is considered to be insignificant. Therefore a hydraulic analysis is not required for the project.

5.2 – Geotechnical Analysis

The grain bins will be located approximately 2.7-miles east of the left (east) bank levee of the Sacramento River. Therefore a geotechnical analysis is not required.

5.3 – Additional Staff Analysis

The Butte Basin is a natural overflow area for the Sacramento River and is an integral part of the Sacramento River Flood Control Project (SRFCP). The project levees downstream from Ord Ferry are designed to carry 160,000 cfs, while the design capacity of the Sacramento River, just 10 miles upstream, is 260,000 cfs. Three flood relief structures near Golden State Island (RM 191) allow excess Sacramento River flows to exit the channel and enter into the Butte Basin.

The standards for the Butte Basin are contained in Title 23, Section 135. In general, these standards require approval from the Board for any encroachment that could reduce or impede floodflows, or would reclaim any of the floodplain within the Butte Basin.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- Reclamation District No. 2106 endorsed this project on March 30, 2011 with no comments or conditions.
- The U.S. Army Corps of Engineers 208.10 comment letter has not yet been received for this application. Upon receipt of a favorable letter and review by Board staff the letter will be incorporated into the permit as Exhibit A.

7.0 – CEQA ANALYSIS

The County of Glenn, as lead agency under CEQA, approved the project (Site Plan Review 2011-004, Glenn County Clerk - Recorder No. 2011EIR025) on April 21, 2011 and determined that the project was categorically exempt under a Class 3 Categorical Exemption (CEQA Guidelines Section 15303 (e)) covering new construction or conversion of small accessory structures.

The Board, acting as a responsible agency under CEQA, has reviewed the County of Glenn's determination and has independently determined that the project is exempt from CEQA under Class 3 (CEQA Guidelines Section 15303 (e)) covering new construction or conversion of small accessory structures.

8.0 – SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

Effects from the proposed project on the State Plan of Flood Control will be insignificant.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

There will be no effects from reasonable projected future events on the proposed project.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA Findings, approve Permit No. 18661 conditioned upon receipt of a USACE 208.10 letter of determination confirming that the Corps has no objection to the project, and direct the Executive Officer to take necessary actions to execute the permit and to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18661
- C. Design Drawings

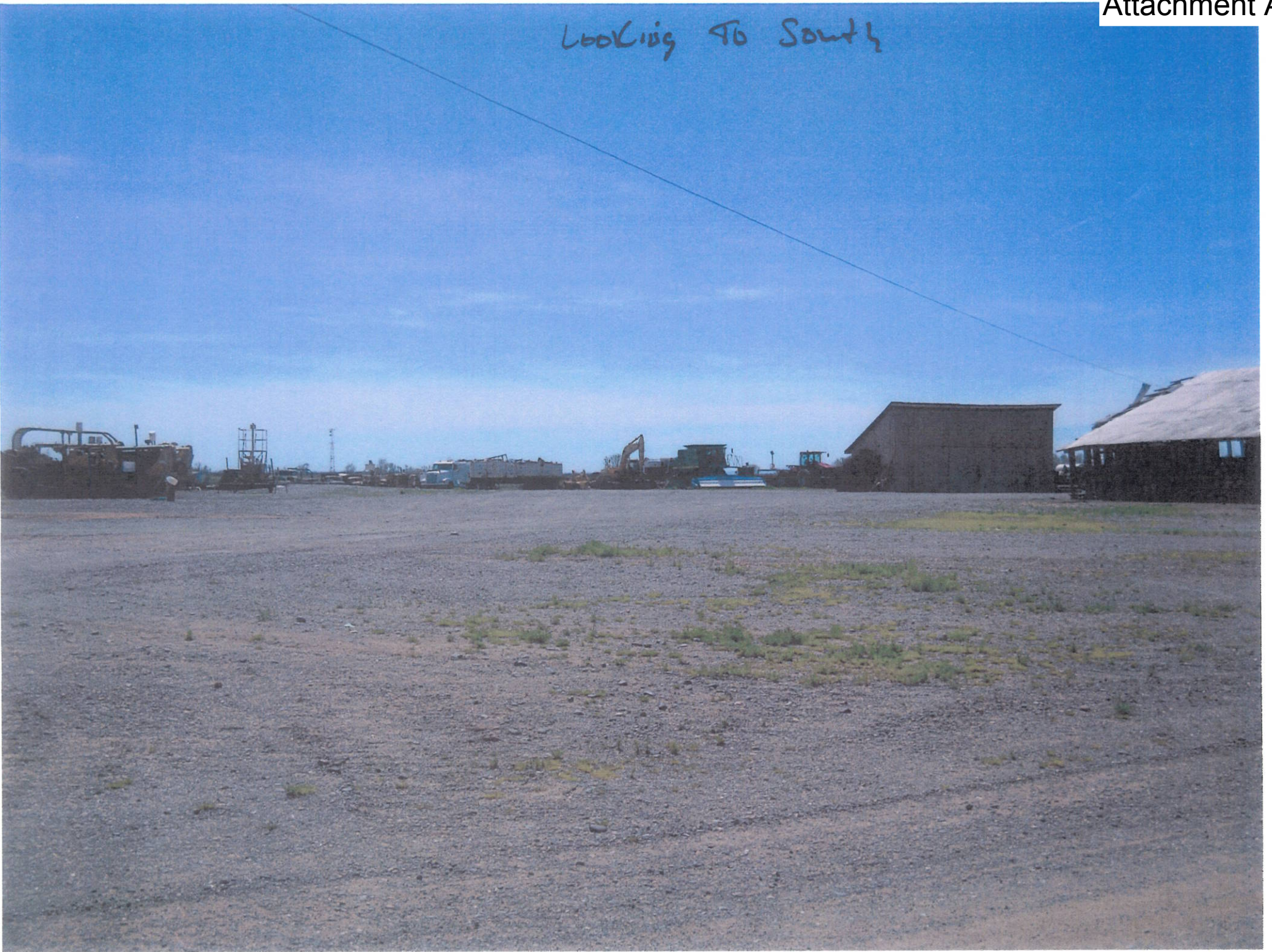
Design Review:	Gary W. Lemon P.E.
Environmental Review:	James Herota
Document Review:	Mitra Emami P.E., Len Marino P.E.



2.25m ↑

Site Location

Looking To South



Looking North

Attachment A



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DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18661 BD

This Permit is issued to:

Keeley Family Limited Partnership
P.O. Box 907
Colusa, California 95932

To construct and install six (6) 48-foot diameter steel grain storage bins, to include a steel loop conveyor system, aligned in a north-south direction inside of the Butte Basin. The project is located approximately 2.25 miles north of State Highway 162 at 1559 County Road Z, Butte City, CA, 95920 (Section 25, T19N, R1W, MDB&M, Reclamation District 2106, Butte Basin, Glenn County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15

Page 1 of 3

days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18661 BD

THIRTEEN: The permittee acknowledges that the proposed grain bins are located within the Butte Basin and may be subject to periodic flooding.

FOURTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FIFTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion

SIXTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SEVENTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Reclamation District No. 2106 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: No construction work of any kind shall be done during the flood season from November 1st to April 15th without prior approval of the Central Valley Flood Protection Board.

NINETEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

TWENTY: Cleared trees and brush shall be completely burned or removed from the Butte Basin.

TWENTY-ONE: The proposed grain bins shall be properly anchored to prevent floatation in the event of high water.

TWENTY-TWO: The project site shall be restored to at least the same condition that existed prior to commencement of work.

TWENTY-THREE: If the grain bins result(s) in an adverse hydraulic impact, the permittee shall provide appropriate mitigation measures, to be approved by the Central Valley Flood Protection Board, prior to implementation of mitigation measures.

TWENTY-FOUR: Debris that may accumulate on the permitted encroachment(s) and related facilities shall be cleared off and disposed of outside the Butte Basin after each period of high water.

TWENTY-FIVE: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

TWENTY-SIX: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

TWENTY-SEVEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

TWENTY-EIGHT: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

TWENTY-NINE: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated June XX, 2011, which is attached to this permit as Exhibit A and is incorporated by reference.

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KEELEY FAMILY LIMITED PARTNERSHIP

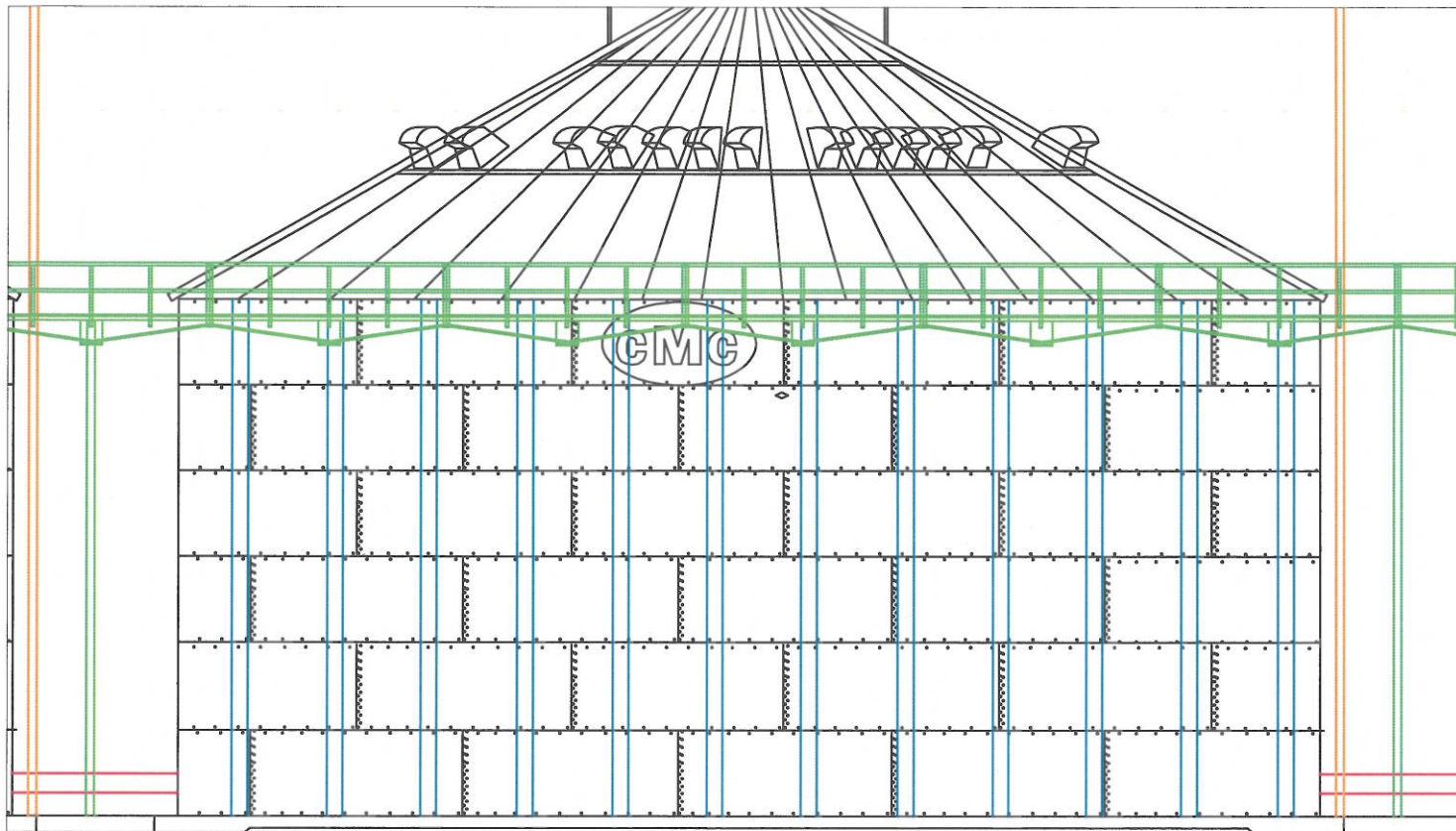
1459 COUNTY ROAD Z, BUTTE CITY, CA 95920

PROJECT SCOPE:
 6 - 48' DIA 6 RING GRAIN BINS
 1 - 10" LOOP CONVEYOR SYSTEM

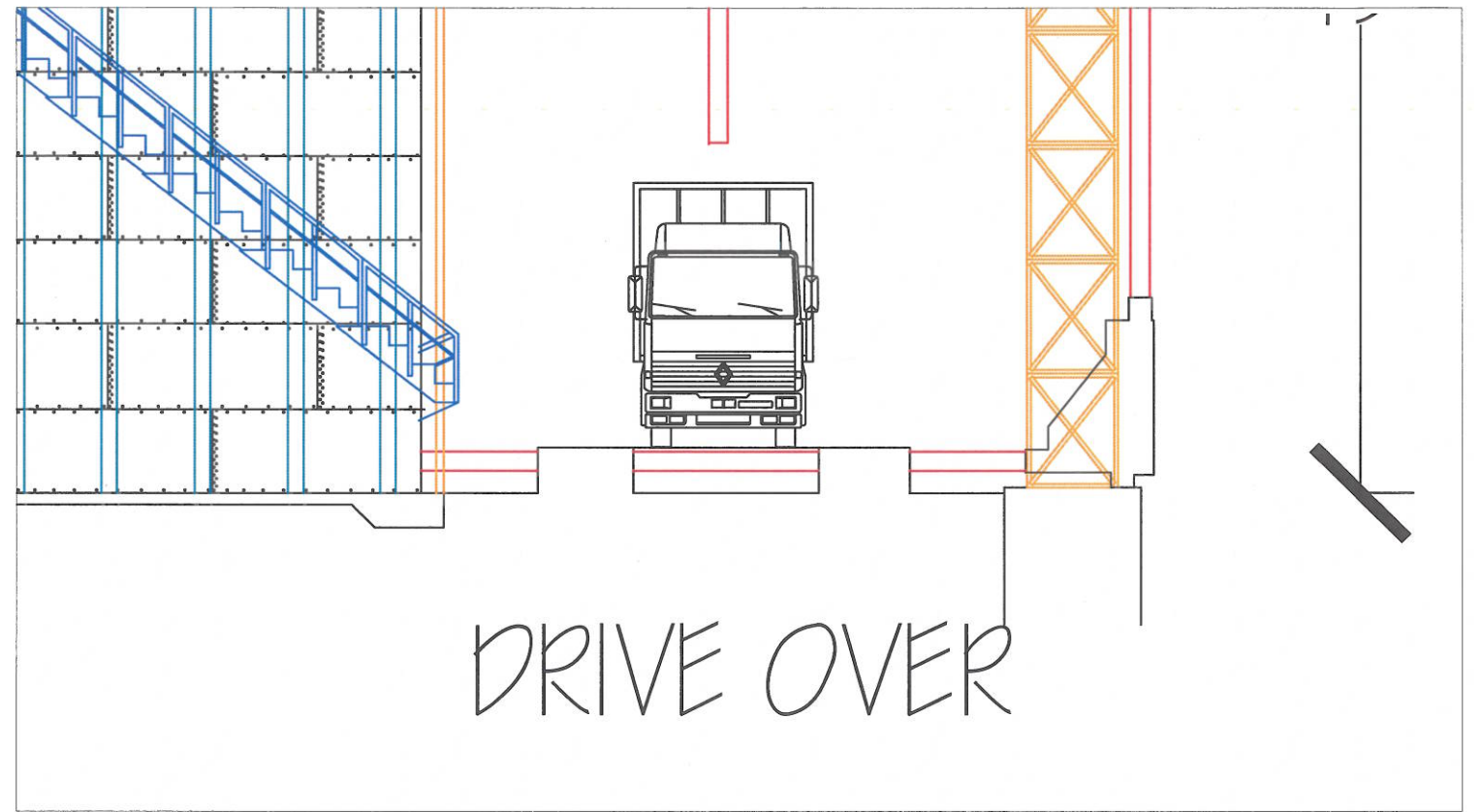
SCALE $\frac{1}{64}'' = 1'$

CUSTOM MARKETING CO., LLC.
 1126 WEST MAIN AVE.
 WEST FARGO, ND 58078

DATE : MARCH 1ST 2011
 DRAWN BY: BRIAN TOLLEFSON

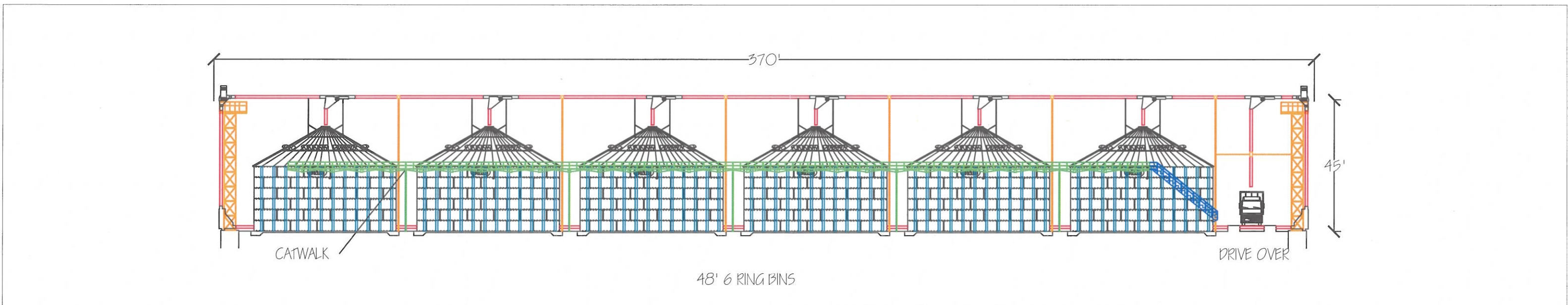


GRAIN BIN - SCALE $\frac{1}{8}'' = 1'$



DRIVE OVER

TRUCK DRIVE OVER DUMP - SCALE $\frac{1}{8}'' = 1'$



SYSTEM LAYOUT SCALE $1/32'' = 1'$



KEELEY FAMILY LIMITED PARTNERSHIP

1459 COUNTY ROAD Z, BUTTE CITY, CA 95920

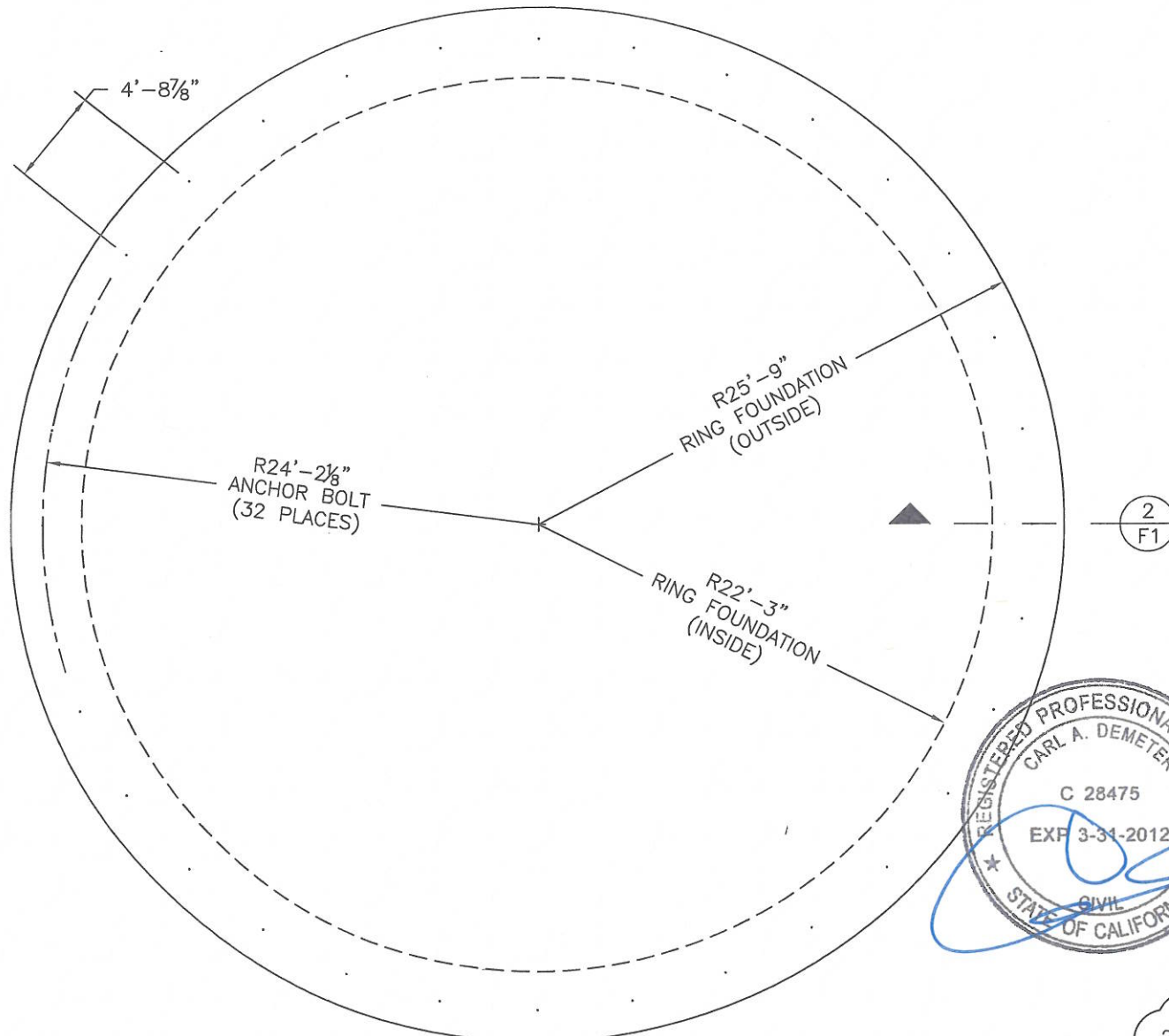
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CUSTOM MARKETING CO. LLC.
1126 WEST MAIN AVE.
WEST FARGO, ND 58078

DATE : MARCH 1ST 2011
DRAWN BY: BRIAN TOLLEFSON

LOAD CONDITIONS (2010 CA STATE BUILDING CODE)

- PEAK LOAD: 6000 LBF
- UNCOMPACTED GRAIN DENSITY: 48 PCF
- ROOF LIVE LOAD: 17.1 PSF
- GROUND SNOW LOAD: 30 PSF
- WIND SPEED & EXPOSURE: 90 MPH EXP. C
- MAPPED SPECTRAL RESPONSE ACCELERATIONS: $S_s = 61.8$, $S_1 = 25.0$



1 FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

STRUCTURAL DESIGN & MANAGEMENT, INC.



11757 W. Ken Caryl Ave.
Suite F, #121
Littleton, CO 80127

Phone: (303) 972-6512
Fax: (775) 655-5831
cademeter@comcast.net

Carl A. Demeter SE., PE.

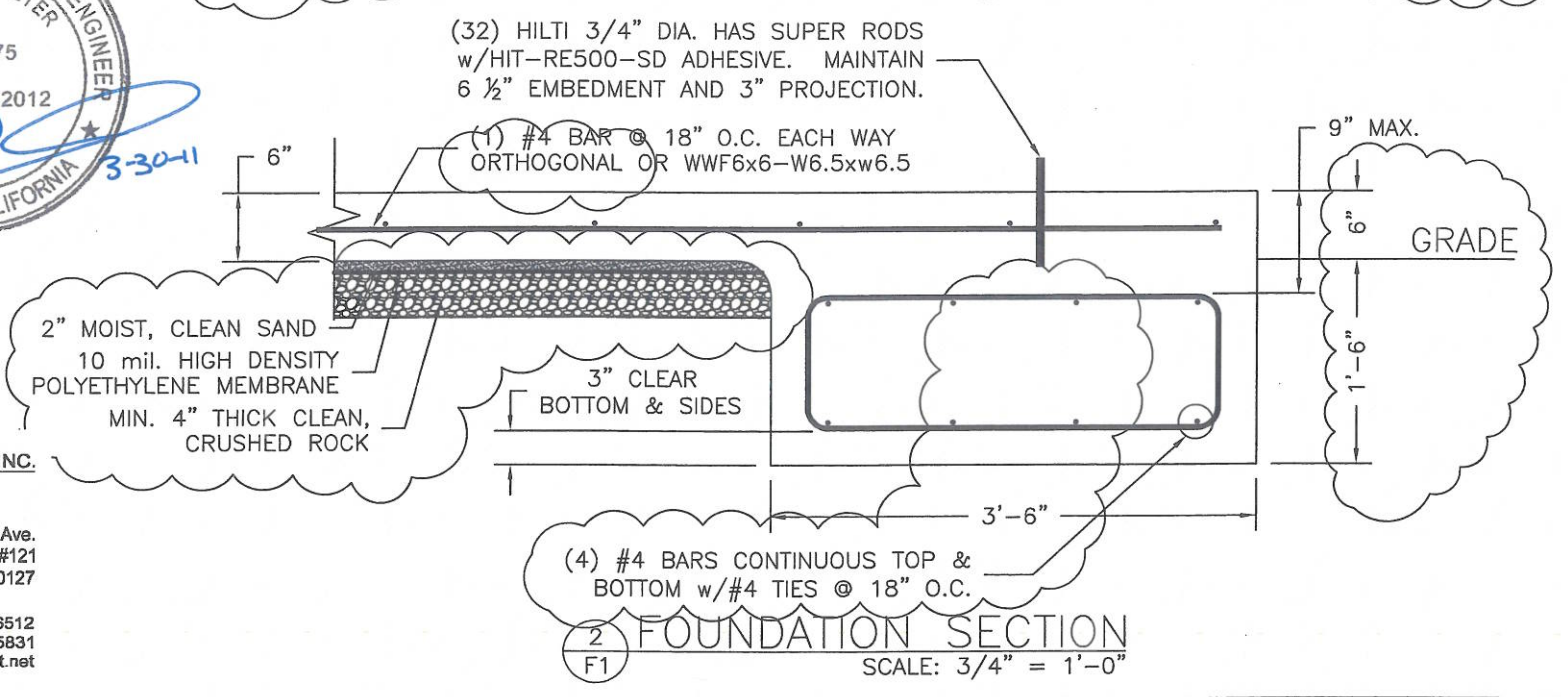


GENERAL NOTES

1. INSTALLATION TO COMPLY WITH ALL APPLICABLE (2010 CBC) STANDARDS AND ACI CODES ADOPTED BY REFERENCE THEREIN.
2. FOUNDATION DESIGN BASED ON 1500 PSF SOIL BEARING UNDER THE RING FOOTING AND 1200 PSF SOIL BEARING UNDER THE SLAB. IT IS THE OWNER'S RESPONSIBILITY TO ENSURE THAT THESE ALLOWABLE BEARING PRESSURES EXIST AT THE SITE.
3. CONCRETE COMPRESSIVE STRENGTH TO BE 2500 PSI @ 28 DAYS.
4. REINFORCING BARS SHALL COMPLY WITH ASTM A615 GRADE 40. WOVEN WIRE FABRIC SHALL COMPLY WITH ASTM A185.
5. SPLICES IN REINFORCING STEEL SHALL HAVE A MINIMUM LAP LENGTH OF 45 BAR DIAMETERS.
6. ASTM A193 B7 OR ASTM F1554 GRADE 105 FULLY THREADED RODS MAY BE SUBSTITUTED FOR THE HILTI HAS SUPER RODS.
7. THE MAPPED SPECTRAL RESPONSE ACCELERATIONS CORRESPOND TO THE LOCATION OF BUTTE CITY, CA.

SOIL REPORT NOTES (PER STREAMLINE ENGINEERING REPORT #1309)

1. THE SITE SHALL BE CLEARED AND GRUBBED OF ALL SURFACE VEGETATION, ORGANIC MATERIAL, AND DEBRIS PRIOR TO EXCAVATION. THIS MATERIAL SHOULD NOT BE USED FOR CONSTRUCTING ENGINEERED FILLS. EXISTING FOUNDATIONS, UTILITIES, SEPTIC TANKS, AND LEACH FIELDS MUST BE LOCATED AND REMOVED PRIOR TO GRADING THE SITE. TREE STUMPS AND ROOTS LARGER THAN 1" IN DIAMETER SHALL BE REMOVED FROM THE BUILDING PAD AREA AND REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL. ALL VOIDS RESULTING FROM THE REMOVAL OF FOREIGN OBJECTS SHALL BE REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL.
2. AFTER COMPLETING SITE CLEARING AND GRUBBING, THE EXPOSED NATIVE SOIL TO RECEIVE ENGINEERED FILL SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 8" AND THEN UNIFORMLY MOISTURE CONDITIONED TO WITHIN +/- 4% OF THE ASTM D1557 OPTIMUM MOISTURE CONTENT. THE NATIVE SOIL SHOULD THEN BE COMPACTED TO ACHIEVE A MINIMUM OF 90% OF THE ASTM D1557 MAXIMUM DRY DENSITY. ALL SURFACE GRADES SHALL BE CONSTRUCTED TO DRAIN SURFACE WATER AWAY FROM THE STRUCTURE PAD FOR A MINIMUM OF 10' ON ALL SIDES. ROOF DRAIN DISCHARGE SHOULD BE COLLECTED AND DIRECTED TO DISCHARGE DOWN SLOPE FROM THE BUILDING PAD A MINIMUM OF 10' AWAY FROM THE BUILDING.
3. WHERE ENGINEERED FILLS ARE USED TO SUPPORT THE PROPOSED STRUCTURE THEY SHALL BE CONSTRUCTED AS NOTED BELOW:
 - 3.1. THE FILL MATERIAL SHALL BE NON EXPANSIVE SOIL AND ROCK THAT IS PREDOMINATELY LESS THAN 1/2" IN GREATEST DIMENSION. ORGANIC MATERIAL OR ROCKS GREATER THAN 4" IN LARGEST DIMENSION SHALL NOT BE USED FOR FILL.
 - 3.2. THE SOIL SHOULD HAVE A PLASTICITY INDEX OF LESS THAN OR EQUAL TO 15% AS DETERMINED BY ASTM D4318.
 - 3.3. FILLS SHALL BE MOISTURE CONDITIONED TO WITHIN 3% OF THE ASTM D1557 OPTIMUM MOISTURE CONTENT.
 - 3.4. FILLS SHALL BE CONSTRUCTED BY PLACING FILL MATERIAL MEETING THE ABOVE REQUIREMENTS IN MAXIMUM 8" LIFTS PRIOR TO COMPACTING.
 - 3.5. THE FILL MATERIAL SHALL BE COMPACTED TO ACHIEVE MINIMUM RELATIVE COMPACTION OF 90% OF THE ASTM D1557 MAXIMUM DRY DENSITY.
 - 3.6. AN APPROVED TESTING AGENCY SHALL MONITOR THE CONSTRUCTION OF FILLS AND PROVIDE COMPACTION TESTING AS REQUIRED BY THE ASTM. THE TESTING AGENCY SHALL PROVIDE THE OWNER WITH WRITTEN CERTIFICATION OF THE FILL. AT THE OWNER'S OPTION THE FINISHED FLOOR ELEVATION CAN BE RAISED WITH SELF COMPACTING PEA GRAVEL. IF PEA GRAVEL IS USED IT SHALL BE BOUNDED ON ALL SIDES BY AN ENGINEERED CONCRETE STEMWALL. COMPACTION TESTS WILL NOT BE REQUIRED FOR PEA GRAVEL FILLS CONSTRUCTED IN THIS MANNER.



2 FOUNDATION SECTION
SCALE: 3/4" = 1'-0"

All dimensions must be field verified by the contractor. Pyramid1, Inc. shall not be responsible for any discrepancies which have not been brought to their attention prior to construction.	
This drawing and all information contained herein is the property of Pyramid1, Inc. and is not to be reproduced without the expressed written permission of Pyramid1, Inc. Pyramid1, Inc. assumes no responsibility for unauthorized use.	
DESCRIPTION FCDL48-6 BIN FOUNDATION	CLIENT CUSTOM MARKETING CO.
LOCATION GLENN COUNTY, CA	19260 C.R. 46, P.O. BOX 463 NEW PARIS, INDIANA, 46553 TEL: (674) 831-4200 FAX: (674) 831-4209 www.pyramid1inc.com
DWG. BY: JWF FILE: 10-0793-F1 DATE: 2/8/11 SCALE: 1/8" = 1'-0" U.N.O. JOB NO.	REVISION DATE 2/24/11 2010 CBC, CLARIFY REBAR DIRECTION
SEAL AND SIGNATURE	SHEET NO. F1 CUSTOM MARKET. 10-0793

