STRUCTURAL NOTES

GENERAL:

1. DETAILS AND DIMENSIONS OF CONSTRUCTION SHALL BE VERIFIED AT THE SITE BY THE CONTRACTOR AND ANY DISCREPANCY BETWEEN THE PLANS AND THE INTENT OF THE PROJECT SHALL BE PROMPTLY REPORTED TO THE ENGINEER. DO NOT SCALE DRAWINGS.

2. OWNERSHIP OF DOCUMENTS: THESE DOCUMENTS, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF CB ENGINEERING AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CB ENGINEERING.

3. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL, COUNTY, STATE, OR FEDERAL AGENCIES HAVING JURISDICTION. CB ENGINEERING ASSUMES NO RESPONSIBILITY FOR SUPERVISION OF CONSTRUCTION OR PROPER EXECUTION OF THE WORK SHOWN ON THESE DRAWINGS. SAFETY METHODS AND TECHNIQUES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY DEVIATIONS OR UNAUTHORIZED CHANGES TO THESE DRAWINGS ARE NOT THE RESPONSIBILITY OF CB ENGINEERING. DEVIATIONS FROM THE ORIGINAL DRAWINGS MUST BE APPROVED IN WRITING PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF THE PROGRESS OF THE PROJECT TO FACILITATE OUR ON-SITE VISITS TO ANSWER QUESTIONS AND VIEW THE PROGRESS AND QUALITY OF WORK.

4. THE CONTRACTOR SHALL NOTIFY OUR OFFICE 48 HOURS PRIOR TO THE FOLLOWING PHASES OF CONSTRUCTION: A) FOUNDATION POURS B) AFTER THE ERECTION OF THE SUPERSTRUCTURE AND PRIOR TO CLOSING-IN OF ANY PHASE.

5. ALL STRUCTURAL MEMBERS SHOWN ON THE PLANS ARE DESIGNED AS IN THEIR FINAL LOCATION. CB ENGINEERING DOES NOT PERFORM CONSTRUCTION ENGINEERING OR ENGINEERING NECESSARY TO PLACE ANY STRUCTURAL MEMBERS IN THEIR FINAL LOCATION.

DESIGN CRITERIA:

1. THIS BUILDING HAS BEEN DESIGNED TO SUSTAIN, WITHIN THE LIMITATIONS SPECIFIED IN THE CALIFORNIA BUILDING CODE (CBC), ALL DEAD LOADS AND OTHER APPLICABLE LOADS SPECIFIED IN CHAPTER 16 OR ELSEWHERE IN THE CBC.

2. ALL ALLOWABLE STRESSES AND SOIL-BEARING VALUES SPECIFIED IN THE CBC FOR WORKING STRESS DESIGN HAVE BEEN INCREASED ONE THIRD WHEN CONSIDERING WIND OR EARTHQUAKE FORCES EITHER ACTING ALONE OR WHEN COMBINED WITH VERTICAL LOADS. NO INCREASE HAS BEEN TAKEN FOR VERTICAL LOADS ACTING ALONE.

3. EACH COMPONENT HAS BEEN DESIGNED TO RESIST THE MOST CRITICAL EFFECT RESULTING FROM THE COMBINATION OF LOADS PER 2013 CBC (ASD) LOAD COMBINATIONS.

4. GRAVITY LOADS:
   A) ROOF DEAD LOADS:
      SUPERIMPOSED = 2.25 PSF
      COLLATERAL = 2.00 PSF
   B) LIVE LOADS:
      ROOF LIVE LOAD = 20 PSF (REDUCIBLE)

5. WIND:

   A) BASIC WIND SPEED (3-SECOND GUST) 85 MILES PER HOUR
   B) WIND IMPORTANCE FACTOR, I=1.0 AND OCCUPANCY CATEGORY II.
   C) WIND EXPOSURE = C
   D) THE APPLICABLE INTERNAL PRESSURE COEFFICIENT = N/A, ENCLOSED
   E) COMPONENTS AND CLADDING. NOT APPLICABLE.

6. SEISMIC:

   A) SEISMIC IMPORTANCE FACTOR, I=1.0 OCCUPANCY CATEGORY II.
   B) BASIC SEISMIC-FORCE-RESISTING SYSTEM(S). OMF & OCBF
   C) ANALYSIS PROCEDURE USED: 2013 CBC (ASD) LOAD COMBINATIONS

PARAMETER	VALUE		2013 CBC REFERENCE
S_S	1.895		SECTION 1613.5.1 - (g) 0.2 SEC RESPONSE
S_1	0.623		SECTION 1613.5.1 - (g) 1.0 SEC RESPONSE
SITE CLASS	E		TABLE 1613.5.2
F_a	0.893		TABLE 1613.5.3 (1) - SITE COEFFICIENT
F_v	2.385		TABLE 1613.5.3 (2) - SITE COEFFICIENT
S_{MS}	1.692		SECTION 1613.5.3 - MAXIMUM CONSIDERED EARTHQUAKE ACCELERATION
S_{M1}	1.486		
S_{DS}	1.263		SECTION 1613.5.4 - DESIGN SPECTRAL ACCELERATION
S_{D1}	0.623		
SDC	D		SEISMIC DESIGN CATEGORY
ρ	1.3		ASCE 7-05 12.3.4.2 - REDUNDANCY FACTOR
	OMF	OCBF	
R	3.50	3.25	RESPONSE MODIFICATION COEFFICIENT
C_s	0.286	0.308	SEISMIC RESPONSE COEFFICIENT
V	19.80	19.41	DESIGN BASE SHEAR IN KIPS

SPECIAL INSPECTIONS:

1. IN ADDITION TO THE INSPECTIONS REQUIRED BY THE CBC , THE OWNER OR ENGINEER OF RECORD, ACTING AS THE OWNER'S AGENT, SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS WHO SHALL PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE FOLLOWING TYPES OF WORK:

   A) WELDING: ALL STRUCTURAL WELDING.
   B) CONCRETE: DURING THE TAKING OF TEST SPECIMENS. FOR 3000 PSI CONCRETE BATCHES 50 CUBIC YARDS OR LESS PROVIDE MIX DESIGN AND PAST BREAK HISTORY. FOR 3000 PSI CONCRETE BATCHES LARGER THAN 50 CUBIC YARDS PROVIDE MIX DESIGN, PAST BREAK HISTORY AND A CYLINDER TEST FROM THE ACTUAL JOB PLACEMENT.
   C) BOLTS INSTALLED IN CONCRETE: PRIOR TO AND DURING THE PLACEMENT OF CONCRETE AROUND BOLTS.
   D) OBSERVATION OF SUBGRADE PREPARATION & FOUNDATION CONSTRUCTION OPERATIONS BY THE GEOTECHNICAL ENGINEER. CBC 1705.6
   E) PLACEMENT OF CONCRETE REINFORCING CBC 1705.3
   F) CONCRETE PLACEMENT AND STRENGTH TESTING, INCLUDING NON-SHRINKAGE GROUTING CBC 1705.3
   G) ALL WELDING W/ THE EXCEPTION OF SHOP WELDING DONE IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE W/ CBC 1705.2 & CBC 1705.2.1

   THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL AND THE ENGINEER OF RECORD FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

2. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:

   H) THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
   I) THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OF RECORD, AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE ENGINEER OF RECORD AND TO THE BUILDING OFFICIAL.
   J) THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CBC.

EXCAVATIONS AND FOUNDATIONS:

1. SLOPES FOR PERMANENT FILLS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL. CUT SLOPES FOR PERMANENT EXCAVATIONS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL UNLESS SUBSTANTIATING DATA JUSTIFYING STEEPER CUT SLOPES ARE SUBMITTED.

2. EXISTING FOOTINGS OR FOUNDATIONS WHICH MAY BE AFFECTED BY ANY EXCAVATION SHALL BE UNDERPINNED ADEQUATELY OR OTHERWISE PROTECTED AGAINST SETTLEMENT AND SHALL BE PROTECTED AGAINST LATERAL MOVEMENT.

3. IF EXPANSIVE SOIL EXISTS, THE BUILDING SUBGRADE SHALL BE SCARIFIED AND RECOMPACTED TO A DEPTH OF 6 INCHES BELOW ROUGH GRADE. THE CONTRACTOR SHALL PROVIDE DIKES AND LONG TERM SPRINKLING TO OBTAIN A MOISTURE CONTENT OF 5% PERCENT ABOVE OPTIMUM PRIOR TO PLACING OF CONCRETE. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A MOISTURE TEST BY AN APPROVED TESTING LABORATORY PRIOR TO PLACEMENT OF CONCRETE. ALL SUBGRADE SHALL BE NATIVE OR ENGINEERED FILL.

4. FILLS USED TO SUPPORT THE FOUNDATIONS OF ANY BUILDING OR STRUCTURE SHALL BE PLACED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. A SOIL INVESTIGATION REPORT AND A REPORT OF SATISFACTORY PLACEMENT OF FILL, BOTH ACCEPTABLE TO THE BUILDING OFFICIAL AND THE ENGINEER OF RECORD, SHALL BE SUBMITTED.

5. THE ALLOWABLE FOUNDATION AND LATERAL PRESSURES ARE BASED ON THE VALUES SET FORTH BY CBC TABLE 1806.2

   A) CLASS OF MATERIALS: #5.
   B) ALLOWABLE FOUNDATION PRESSURE:

CONTINUOUS STRIP FOOTING MAXIMUM BEARING PRESSURES		
MINIMUM FOOTING EMBEDMENT DEPTH (INCHES)	MAXIMUM BEARING PRESSURE FOR LIVE + DEAD LOADS (psf)	MAXIMUM BEARING PRESSURE FOR LIVE + DEAD + (WIND OR SEISMIC LOADS) (psf)
12	1,500	1,995

SQUARE AND RECTANGULAR FOOTING MAXIMUM BEARING PRESSURES		
MINIMUM FOOTING EMBEDMENT DEPTH (INCHES)	MAXIMUM BEARING PRESSURE FOR LIVE + DEAD LOADS (psf)	MAXIMUM BEARING PRESSURE FOR LIVE + DEAD + (WIND OR SEISMIC LOADS) (psf)
12	1,500	1,995

EQUIVALENT FLUID PRESSURES FOR RETAINING WALL DESIGN		
LOADING CONDITIONS	WALL WITH A HORIZONTAL BACKFILL SLOPE	WALL WITH A MAXIMUM 2H:1V BACKFILL SLOPE
ACTIVE PRESSURE (psf) (APPLIES TO UNRESTRAINED WALL TOP)	30(H)[1)]	45(H)
PASSIVE PRESSURE (psf) (APPLIES TO WALL BOTTOM)	275(H)	275(H)
AT-REST PRESSURE (psf) (APPLIES TO RESTRAINED WALL TOP)	50(H)	65(H)

NOTE:
1. H = HEIGHT ABOVE BOTTOM OF RETAINING WALL (FEET).
2. IF PASSIVE PRESSURE IS USED, THEN WE RECOMMEND THAT THE TOP 0.5 FEET OF SOIL BE IGNORED.

   C) LATERAL BEARING: 100 LBS/SQ.FT. PER FOOT OF DEPTH.
   D) LATERAL SLIDING RESISTANCE: .25
   E) ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL 12 INCHES BELOW NATURAL OR FINISHED GRADE, WHICHEVER IS LOWER.

6. FOUNDATIONS SUPPORTING WOOD SHALL EXTEND AT LEAST 8 INCHES ABOVE THE ADJACENT FINISH GRADE.

7. FOUNDATIONS FOR ALL BUILDINGS WHERE THE SURFACE OF THE GROUND SLOPES MORE THAN 1 FOOT IN 10 FEET SHALL BE LEVEL OR SHALL BE STEPPED SO THAT BOTH TOP AND BOTTOM OF SUCH FOUNDATIONS ARE LEVEL.

8. FOUNDATION PLATES OR SILLS SHALL BE BOLTED TO THE FOUNDATION OR FOUNDATION WALL WITH NOT LESS THAN 5/8-INCH NOMINAL DIAMETER STEEL BOLTS EMBEDDED AT LEAST 7 INCHES INTO THE CONCRETE OR MASONRY AND SPACED NOT MORE THAN 4 FEET APART. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PIECE WITH ONE BOLT LOCATED WITHIN 12 INCHES OF EACH END OF EACH PIECE. A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE.

REINFORCING:

1. REINFORCEMENT SHALL BE DEFORMED REINFORCEMENT, EXCEPT THAT PLAIN REINFORCEMENT MAY BE USED FOR SPIRALS.

2. REINFORCEMENT SHALL CONFORM TO ASTM A 615, REINFORCING BARS FOR CONCRETE.

3. REINFORCING BARS SHALL HAVE THE FOLLOWING SPECIFIED YIELD STRENGTHS:

   A) NO. 4 AND SMALLER - 40,000 PSI (GRADE 40)
   B) NO. 5 AND LARGER - 60,000 PSI (GRADE 60)

4. WELDED SMOOTH WIRE FABRIC FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM 185.

5. ALL WELDED REBAR SHALL BE ASTM A706.

STEEL:

1. STRUCTURAL STEEL SHALL CONFORM TO THE CBC, MATERIAL SPECIFICATIONS FOR STRUCTURAL STEEL AS FOLLOWS:

   A) PLATES AND CHANNELS: ASTM A36, Fy=36 KSI
   B) STRUCTURAL STEEL: ASTM A992 Fy = 50 KSI
   C) STEEL PIPE: ASTM A53, GRADE B, Fy=35 KSI
   D) HIGH STRENGTH BOLTS: ASTM A325 1/2" TO 1" DIAMETER, INCLUSIVE, Fy=92 KSI, 1-1/8" TO 1-1/2" DIAMETER, INCLUSIVE, Fy=81 KSI
   E) STRUCTURAL TUBING: ASTM A500, GRADE B, Fy=46 KSI

2. WELDING SHALL CONFORM TO CBC, STRUCTURAL WELDING. ALL WELDING SHALL BE DONE WITH E70 SERIES ELECTRODES.

3. CONNECTORS SHALL CONFORM TO CBC, HIGH-STRENGTH BOLTS UNLESS OTHERWISE NOTED.

4. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL TEMPORARY SUPPORTS REQUIRED FOR ERECTION. THIS STRUCTURE MAY NOT BE SELF-SUPPORTING AS DEFINED IN THE AISC CODE OF STANDARD PRACTICE; THEREFORE ERECTION BRACING IS REQUIRED AND IS TO BE PREPARED BY A LICENSED CIVIL OR STRUCTURAL ENGINEER. ERECTION PLANS, AND SEQUENCE MEMBER DETAILS TO BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

5. STRUCTURAL AND MISCELLANEOUS SHAPES, PLATES AND BARS SHALL CONFORM WITH ASTM AND SHALL BE FABRICATED IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION.

6. ALL STEEL SHALL BE THOROUGHLY CLEANED, REMOVING ALL LOOSE MILL SCALE, GREASE, DIRT AND FOREIGN MATTER BY SCRAPING OR SANDBLASTING. APPLY ONE COAT OF SHOP PRIME, (2 MIL DFT) "RUST-OLEUM NUMBER 5769 PRIMER", OR APPROVED EQUAL. DO NOT SHOP PAINT MEMBERS OR PORTIONS OF MEMBERS TO BE EMBEDDED IN CONCRETE OR MORTAR, PAINT EMBEDDED STEEL WHICH IS PARTIALLY EXPOSED ON EXPOSED PORTIONS AND INITIAL 2 INCHES OF EMBEDDED PORTIONS ONLY. DO NOT PAINT SURFACES WHICH ARE TO BE WELDED.

7. ALL BOLT HOLES IN STEEL SHALL BE PUNCHED OR DRILLED. NO TORCHING OF HOLES ALLOWED. HOLES SHALL BE 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE BOLT.

8. ALL SHOP WELDING SHALL BE PERFORMED BY A LICENSED FABRICATOR APPROVED BY THE BUILDING OFFICIAL. IN LIEU OF AN APPROVED FABRICATOR, THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO OBSERVE AND APPROVE ALL SHOP WELDING. ALL FIELD WELDING SHALL REQUIRE SPECIAL INSPECTION, UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL.

CONCRETE:

1. MATERIALS:

   A) CEMENT SHALL CONFORM TO THE CBC , PORTLAND CEMENT AND BLENDED HYDRAULIC CEMENTS, TYPE I OR TYPE II.
   B) AGGREGATES SHALL CONFORM TO ASTM C33, CONCRETE AGGREGATES WITH THE FOLLOWING MAXIMUM AGGREGATE SIZES:

      I FOUNDATIONS 1-1/2 INCH
      II SLAB-ON-GRADE 1 INCH

   C) WATER USED IN MIXING CONCRETE SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS OR OTHER SUBSTANCES THAT MAY BE DELETERIOUS TO CONCRETE OR REINFORCEMENT. NONPOTABLE WATER SHALL NOT BE USED IN CONCRETE.
   D) CONCRETE SHALL BE PROPORTIONED TO PROVIDE AN AVERAGE COMPRESSIVE STRENGTH AS FOLLOWS:

      a. FOUNDATIONS: 3000 PSI
      b. SLAB-ON-GRADE: 3000 PSI
      UNLESS OTHERWISE SPECIFIED, F'C SHALL BE BASED ON 28-DAY TESTS.
      MAXIMUM CONCRETE SLUMP = 4".
      WATER TO CONCRETE RATIO = .55 MAXIMUM
      5 SACKS OF CONCRETE MIN.

2. CONCRETE SHALL BE DEPOSITED AS NEARLY AS PRACTICABLE IN ITS FINAL POSITION TO AVOID SEGREGATION DUE TO REHANDLING OR FLOWING. CONCRETING SHALL BE CARRIED ON AT SUCH A RATE THAT CONCRETE IS AT ALL TIMES PLASTIC AND FLOWS READILY INTO SPACES BETWEEN REINFORCEMENT. CONCRETE THAT HAS PARTIALLY HARDENED OR BEEN CONTAMINATED BY FOREIGN MATERIALS SHALL NOT BE DEPOSITED IN THE STRUCTURE.

3. CONCRETE (OTHER THAN HIGH-EARLY-STRENGTH) SHALL BE MAINTAINED ABOVE 50 DEGREES F. AND IN A MOIST CONDITION FOR AT LEAST THE FIRST SEVEN DAYS AFTER PLACEMENT.

4. CONDUITS, PIPES AND SLEEVES OF ANY MATERIAL NOT HARMFUL TO CONCRETE AND WITHIN LIMITATIONS OF CBC SECTION 1906.3 MAY BE EMBEDDED IN CONCRETE WITH APPROVAL OF THE ENGINEER OF RECORD, PROVIDED THEY ARE NOT CONSIDERED TO REPLACE STRUCTURALLY THE DISPLACED CONCRETE. REINFORCEMENTS, ANCHOR BOLTS, PIPE SLEEVES, AND OTHER INSERTS SHALL BE POSITIVELY SECURED IN PLACE PRIOR TO PLACING CONCRETE.

5. PROVIDE CONTROL OR CONSTRUCTION JOINTS AT 10'-0" ON CENTER EACH WAY, UNLESS OTHERWISE NOTED ON THE PLANS. SUBMIT A LAYOUT TO THE ARCHITECT AND ENGINEER FOR REVIEW. SURFACE OF CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND LAITANCE REMOVED. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED. CONSTRUCTION JOINTS SHALL BE SO MADE AND LOCATED AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. PROVISION SHALL BE MADE FOR TRANSFER OF SHEAR AND OTHER FORCES THROUGH CONSTRUCTION JOINTS.

6. ADDITIVES AND ADMIXTURES TO CONCRETE SHALL NOT BE USED UNLESS APPROVED BY THE ENGINEER OF RECORD.

7. CONCRETE CLEARANCES ARE AS FOLLOWS:

LOCATION	CLEAR COVER
CONCRETE PLACED AGAINST EARTH	3 INCHES
FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH EARTH	
#6 BARS AND LARGER	2 INCHES
#5 BARS AND SMALLER	1 1/2 INCHES
SLABS ON GRADE (TOP CLEARANCE)	1 1/2 INCHES
BEAMS, GIRDERS AND COLUMNS NOT EXPOSED TO WEATHER OR EARTH	1 1/2 INCHES
WALL OR SLAB SURFACES NOT EXPOSED TO WEATHER OR EARTH	
#5 BARS AND SMALLER	3/4 INCH
#6 AND #7 BARS	1 INCH
#8, #9, #10AND #11 BARS	1 1/2 INCHES
#14 AND #18 BARS	2 1/2 INCHES

PRE-ENGINEERED, PREFAB. METAL BLDG. SYSTEM:

1. CODES-ALL WORK SHALL CONFORM TO THE CODES AS NOTED ABOVE FOR "STRUCTURAL STEEL AND MISCELLANEOUS IRON" AND IN ADDITION SHALL CONFORM TO ALL SECTIONS OF THE CURRENT EDITION MANUAL OF THE METAL BUILDING MANUFACTURERS ASSOCIATION, "METAL BUILDING SYSTEMS MANUAL".
2. A) LIVE LOAD
   ROOF SHEETING - 20 PSF BASIC
   ROOF PURLINS - 20 PSF BASIC
   RIGID FRAMES - 20 PSF BASIC REDUCED FOR TRIBUTARY AREA AND SLOPE.
   B) WIND LOAD-PER APPLICABLE CODES
   C) DEAD LOAD
   ROOF AND WALL SHEETING - ACTUAL WEIGHT OF MATERIAL.
   ROOF PURLINS - ACTUAL WEIGHT OF THE MEMBERS. MANUFACTURER SHALL BE SUPPLIED THE LOCATION OF THE MAIN WATER SUPPLY LINES FOR THE SPRINKLER SYSTEM (IF APPLICABLE) AND THE MANUFACTURER
   RIGID FRAMES - ACTUAL WEIGHT OF THE FRAME.
   COLLATERAL DEAD LOAD - 2.00 PSF
   THE OWNER SHALL MAKE ALL COLOR SELECTIONS FOR THE ROOF SHEETING.
3. WALL SHEETING, ROOF VENTS AND TRIM FOR THE BUILDING.
4. ALL METAL BUILDING MANUFACTURER CONTRACTORS SHALL AT THE TIME OF SUBMITTING THEIR BID, SUPPLY ENOUGH DATA OF THE BUILDING PROPOSED BY THE CONTRACTOR, SO THAT THE OWNER MAY VERIFY THAT ALL REQUIREMENTS OF HIS NEEDS WILL BE MET BY THE CONTRACTOR'S PROPOSAL.
5. MATERIAL SPECIFICATIONS
   A) USE PRE-FORMED APPROVED NEOPRENE SHEET CLOSURES AT THE FOLLOWING LOCATIONS:
      i. ROOF SHEETS AT THE RIDGE.
      ii. ROOF SHEETS A THE EAVE.
      iii. WALL SHEETS AT THE EAVE.
      vi. WALL SHEETS AT THE TOP OF CMU WALL OR TOP OF FOUNDATION.
6. MASTIC
   A) USE 1/4" THICK x 1" WIDE PRE-FORMED APPROVED MASTIC AT THE FOLLOWING LOCATIONS:
      i. ROOF SHEETS
      ii. SIDE LAPS, INCLUDING SKYLITES
      iii. END LAPS, INCLUDING SKYLITES
      vi. TOP AND BOTTOM OF PRE-FORMED NEOPRENE CLOSURE AT ROOF SHEET EAVE LINE.

GRID REFERENCE
DETAIL NO. / SHEET NO.
DETAIL REFERENCE
DETAIL IN SECTION REFERENCE
FOOTING SCHEDULE ITEM
(LENGTH) SHEAR WALL SCHEDULE ITEM
WALL REINFORCING SCHEDULE ITEM
ELEVATION (SECTIONS & DETAILS)
ELEVATION (PLANS)

PLYWOOD
WOOD CONTINUOUS
WOOD BLOCKING
STEEL
GYPSUM BOARD
GROUT
MASONRY
SAND
GRAVEL
EARTH

1 | S1 | SCALE: NONE

SYMBOLS

@	AT	I.A.	IN ADVANCE
&	AND	I.D.	INSIDE DIAMETER
A.B.	ANCHOR BOLTS	INT.	INTERIOR
ABV.	ABOVE	INTM.	INTERMEDIATE
ACTL.	ACTUAL	JT.	JOINT
ADDL.	ADDITIONAL	LG.	LENGTH
ADJ.	ADJACENT	LONG.	LONGITUDINAL
A.F.F.	ABOVE FINISHED FLOOR	L.L.H.	LONG LEG HORIZONTAL
ALT.	ALTERNATE	L.L.V.	LONG LEG VERTICAL
ARCH.	ARCHITECTURAL	L.S.	LAG SCREW
BD.	BOARD	MFR.	MANUFACTURER
BETW.	BETWEEN	MFG.	MANUFACTURING
BEV.	BEVELED	MAX.	MAXIMUM
BLDG.	BUILDING	M.B.	MACHINE BOLT
BLK(G).	BLOCK(ING)	M.B.M.	METAL BUILDING MFR.
BLW.	BELOW	MECH.	MECHANICAL
BM.	BEAM	MIN.	MINIMUM
B.O.B.	BOTTOM OF BEAM	MISC.	MISCELLANEOUS
B.O.C.	BOTTOM OF CONCRETE	MTL.	METAL
B.O.F.	BOTTOM OF FOOTING	(N)	NEW
BOTT.	BOTTOM	N/A	NOT APPLICABLE
BRG.	BEARING	NO.	NUMBER
B.S.	BOTH SIDES	NOM.	NOMINAL
BYD.	BEYOND	N.S.	NAILING STRIP / NEAR SIDE
CANT.	CANTILEVER	N.T.S.	NOT TO SCALE
C.B.	CARRIAGE BOLT	O/	OVER
C.C.	CENTER TO CENTER	O.C.	ON CENTER
C.J.	CONTROL JOINT (CONSTRUCTION JOINT)	O.D.	OUTSIDE DIAMETER
CL	CENTER LINE	O.H.	OPPOSITE HAND / OVERHANG
CLG.	CEILING	OPNG.	OPENING
CLR.	CLEAR	OPP.	OPPOSITE
CMU	CONCRETE MASONRY UNIT	P.A.F.	POWDER ACTUATED FASTENER
COL.	COLUMN	PC.	PIECE
CONC.	CONCRETE	PARA.	PARALLEL
CONN.	CONNECTION	PERP.	PERPENDICULAR
CONST. JT.	CONSTRUCTION JOINT	PL.	PLATE
CONT.	CONTINUOUS	PLY.	PLYWOOD
CTR(D).	CENTER(ED)	PREFAB.	PREFABRICATED
CTSK.	COUNTERSUNK	P.T.	PRESSURE TREATED
DBL.	DOUBLE	PTDF.	PRESSURE TREATED DOUGLAS FIR
DET.	DETAIL	DIA.	ROUND OR DIAMETER
D.F.	DOUGLAS FIR	RAD.	RADIUS
DIA(M).	DIAMETER	REINF.	REINFORCING
DIAG.	DIAGONAL	REQ.	REQUIRED
DIM.	DIMENSION	RGH.	ROUGH
DN.	DOWN	RHWS	ROUND HEAD WOOD SCREW
DR.	DRAIN	R.O.	ROUGH OPENING
DRWG(S).	DRAWING(S)	RWD.	REDWOOD
(E)	EXISTING	SCHED.	SCHEDULE
EA.	EACH	S.D.S.	SELF DRILLING SCREW
E.F.	EACH FACE	SECT.	SECTION
E.J.	EXPANSION JOINT	SIM.	SIMILAR
EL. (ELEV)	ELEVATION	S.O.G.	SLAB ON GRADE
ELEC.	ELECTRICAL	SPEC.	SPECIFICATIONS
EN	EDGE NAIL - END NAIL	SQ.	SQUARE
EQ.	EQUAL	SST.	STAINLESS STEEL
E.O.S.	EDGE OF SLAB	STAG.	STAGGERED
E.S.	EDGE SCREW	STD.	STANDARD
E.W.	EACH WAY	STIFF.	STIFFENER
E.W. E.F.	EACH WAY, EACH FACE	STL.	STEEL
EXC.	EXCAVATE	STRUCT.	STRUCTURAL
EXT.	EXTERIOR	SYM.	SYMMETRICAL
F.D.	FLOOR DRAIN	T&B	TOP & BOTTOM
F.H.W.S.	FLAT HEAD WOOD SCREW	T.C.	TOP OF CURB
FIN.	FINISH	T&G	TONGUE & GROOVE
FIN. FLR.	FINISHED FLOOR	THRU	THROUGH
FIN. GRD.	FINISHED GRADE	TN	TOE NAIL
FLG.	FLANGE	T.O.B.	TOP OF BEAM
FLR.	FLOOR	T.O.C.	TOP OF CONCRETE
FN	FIELD NAIL - FACE NAIL	T.O.F.	TOP OF FRAMING
FNDN.	FOUNDATION	T.O.M.	TOP OF MASONRY
F.O.B.	FACE OF BEAM	T.O.P.	TOP OF PLYWOOD
F.O.C.	FACE OF CONCRETE	T.O.S.	TOP OF STEEL
F.O.M.	FACE OF MASONRY	T.O.W.	TOP OF WALL
F.O.S.	FACE OF STUD	TRANS.	TRANSVERSE
F.P.	FULL PENETRATION	T.S.	TOP OF SLAB
FRMG.	FRAMING	TYP.	TYPICAL
F.S.	FAR SIDE	U.O.N.	UNLESS OTHERWISE NOTED
FTG.	FOOTING	VERT.	VERTICAL
GA.	GAGE	W/	WITH
GALV.	GALVANIZED	WD.	WIDTH
GLB	GLUE LAMINATED BEAM	W/O	WITHOUT
GYP. BD.	GYPSUM BOARD	W.P.	WORK POINT
HDR.	HEADER	W.W.F.	WIRE WELDED FABRIC
HGR.	HANGER		
HORIZ.	HORIZONTAL		
H.S.B.	HIGH STRENGTH BOLT		
HT.	HEIGHT		
HVAC	HEATING, VENTILATION & AIR CONDITIONING		

REVISIONS	BY
FOR SUBMITTAL 10/2/15	CB

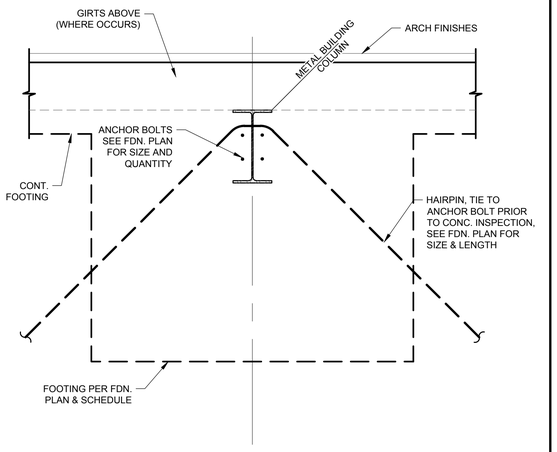
COMMERCIAL ARCHITECTURE INC.
THEODORE J. BRANDVOLD, ARCHITECT
616 14TH STREET, MODESTO, CA 95354
PH (209) 571-8158 FAX (209) 571-8160

CB ENGINEERING INCORPORATED
STRUCTURAL DESIGN AND CIVIL ENGINEERING
1420 Downey Ave., Modesto, CA 95354
Tel: (209) 566-9033 Fax: (209) 622-0967
Email: CBEng@cbengineering.com
JOB # 4136-7-15

REGISTERED PROFESSIONAL ENGINEER
CARL R. BALLANTYNE
No. 057113
CIVIL
STATE OF CALIFORNIA
DATE: 10/2/2015

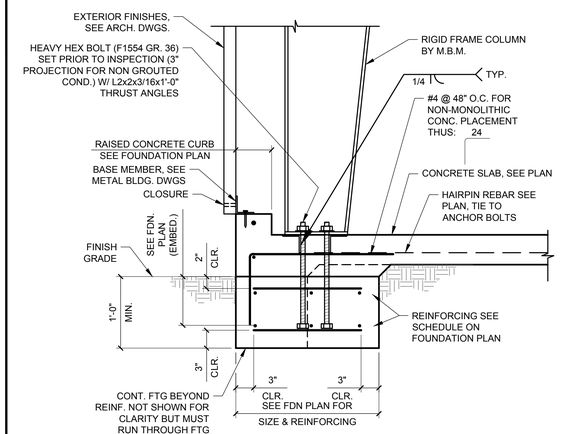
PROJECT: WAREHOUSE & MAINTENANCE / STORAGE BUILDING
CLIENT: KEYSTONE CORPORATION
LOCATION: KEYSTONE PACIFIC PARKWAY, PATTERSON, CA 95363
A.P.N.: 021-085-020

DRAWN DW
CHECKED CB
DATE 9/14/15
SCALE AS SHOWN
JOB NO. 15-101
SHEET S1
OF SHEETS



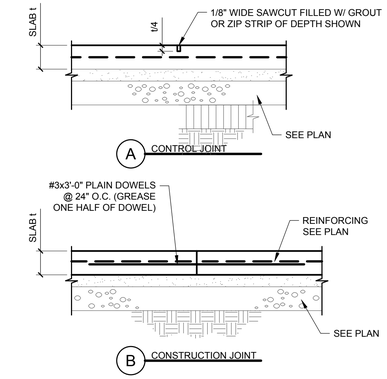
10 / S2 | SCALE: 1" = 1'-0"

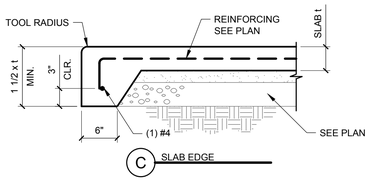
TYPICAL FOOTING PLAN

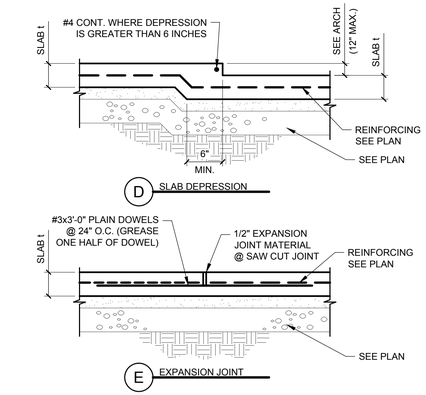


7 / S2 | SCALE: 1" = 1'-0"

RIGID FRAME FOOTING SECTION

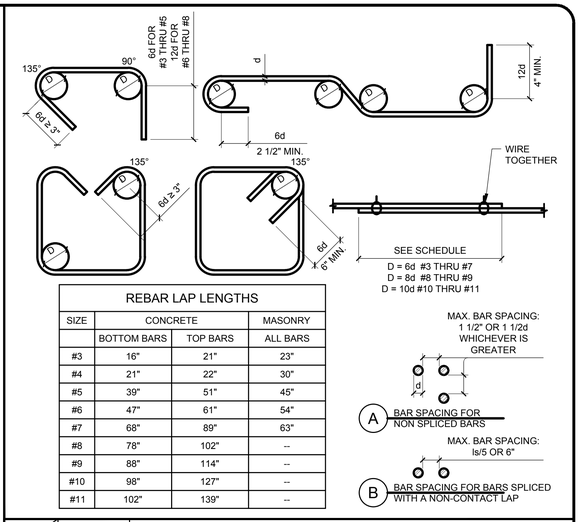






5 / S2 | SCALE: 1" = 1'-0"

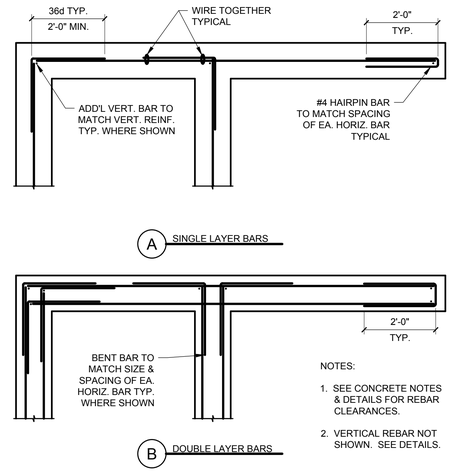
SLAB DETAILS



REBAR LAP LENGTHS			
SIZE	CONCRETE		MASONRY
	BOTTOM BARS	TOP BARS	ALL BARS
#3	16"	21"	23"
#4	21"	22"	30"
#5	39"	51"	45"
#6	47"	61"	54"
#7	68"	89"	63"
#8	78"	102"	--
#9	88"	114"	--
#10	98"	127"	--
#11	102"	139"	--

1 / S2 | SCALE: 1" = 1'-0"

BAR BEND / LAP DETAIL

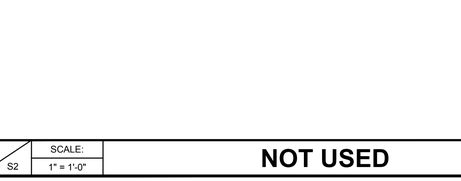


NOTES:

1. SEE CONCRETE NOTES & DETAILS FOR REBAR CLEARANCES.
2. VERTICAL REBAR NOT SHOWN. SEE DETAILS.

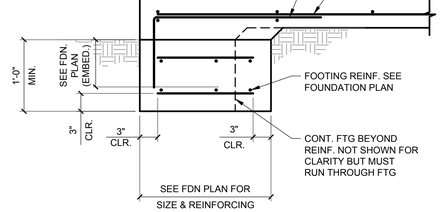
2 / S2 | SCALE: 1/2" = 1'-0"

REBAR INTERSECTION



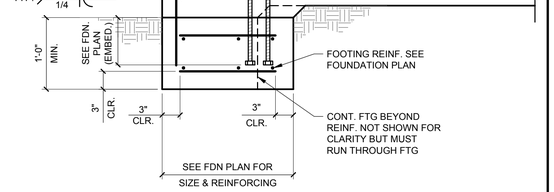
12 / S2 | SCALE: 1" = 1'-0"

NOT USED



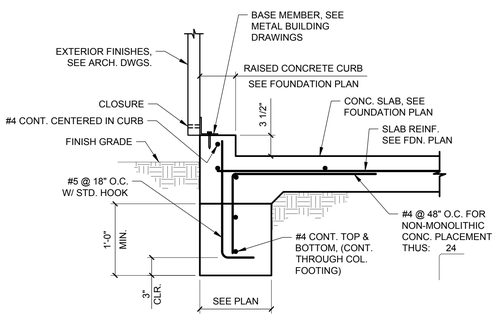
11 / S2 | SCALE: 1" = 1'-0"

PERIMETER FTG. @ STOREFRONT



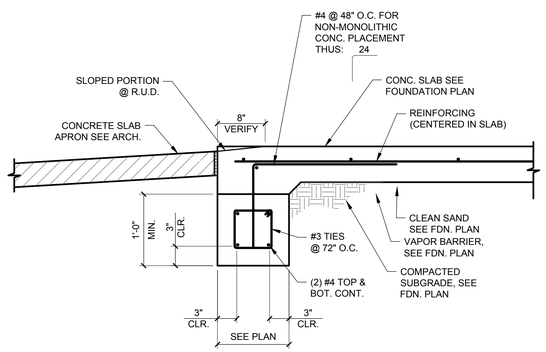
8 / S2 | SCALE: 1" = 1'-0"

POST & BEAM FOOTING SECTION



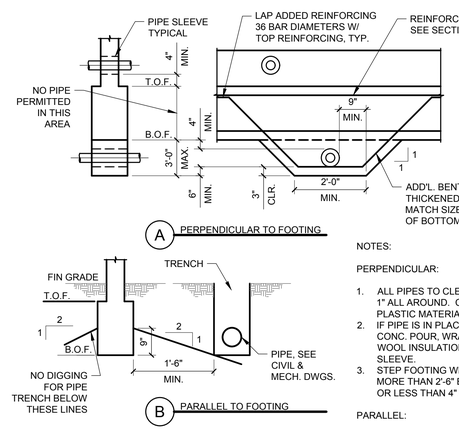
9 / S2 | SCALE: 1" = 1'-0"

PERIMETER FOOTING SECTION



6 / S2 | SCALE: 1" = 1'-0"

FTG. SECT. @ ROLL UP DOOR



NOTES:

PERPENDICULAR:

1. ALL PIPES TO CLEAR SLEEVE BY 1" ALL AROUND. CAULK W/ PLASTIC MATERIAL.
2. IF PIPE IS IN PLACE PRIOR TO CONC. POUR, WRAP W/ 1" GLASS WOOL INSULATION IN LIEU OF SLEEVE.
3. STEP FOOTING WHERE PIPE IS MORE THAN 2'-6" BELOW B.O.F. OR LESS THAN 4" ABOVE T.O.F.

PARALLEL:

1. STEP FOOTING WHERE REQUIRED SO THAT LIMITS SHOWN ARE NOT EXCEEDED.

3 / S2 | SCALE: 1/2" = 1'-0"

PIPE THROUGH FTG. DETAIL

REVISIONS	BY
FOR SUBMITTAL 10/2/15	CB

COMMERCIAL ARCHITECTURE INC.
THEODORE J. BRANDVOLD, ARCHITECT
616 14TH STREET, MODESTO, CA 95354
PH (209) 571-8158 FAX (209) 571-8160

CB ENGINEERING INCORPORATED
STRUCTURAL DESIGN AND CIVIL ENGINEERING
420 Downey Ave. Modesto, CA 95354
Tel: (209) 566-9033 Fax: (209) 622-0967
Email: CBEng@CBEngineering.com
JOB # 4136-7-15

REGISTERED PROFESSIONAL ENGINEER
CARL R. BALLANTYNE
No. 057113
CIVIL
STATE OF CALIFORNIA
DATE: 10/2/2015

PROJECT : WAREHOUSE & MAINTENANCE STORAGE BUILDING
CLIENT : KEYSTONE CORPORATION
LOCATION : KEYSTONE PACIFIC PARKWAY PATTERSON, CA 95363
A.P.N.: 021-085-020

DRAWN	DW
CHECKED	CB
DATE	9/14/15
SCALE	AS SHOWN
JOB NO.	15-101
SHEET	S2
OF	SHEETS

INTERIOR CEILING JOIST SCHEDULE

	MEMBER SIZE	GAUGE	MAXIMUM SPAN [1, 2, 3]	
			SUPPORTING DRYWALL CEILING [4] (FT)	SUPPORTING PLASTER CEILING [5] (FT)
12" O.C.	3 5/8"	16	13	12
	3 5/8"	18	12	11
	3 5/8"	20	11	10
	4"	16	14	13
	4"	18	13	12
	4"	20	12	11
	6"	16	20	18
	6"	18	18	17
	6"	20	17	16
	8"	16	25	23
	8"	18	23	22
	8"	20	20	18
16" O.C.	3 5/8"	16	12	11
	3 5/8"	18	11	10
	3 5/8"	20	10	9
	4"	16	13	12
	4"	18	12	11
	4"	20	11	10
	6"	16	18	16
	6"	18	17	15
	6"	20	15	14
	8"	16	23	21
	8"	18	21	19
	8"	20	18	16
24" O.C.	3 5/8"	16	10	9
	3 5/8"	18	9	9
	3 5/8"	20	9	8
	4"	16	11	10
	4"	18	10	10
	4"	20	9	8
	6"	16	15	14
	6"	18	14	13
	6"	20	13	11
	8"	16	20	18
	8"	18	18	17
	8"	20	14	13

1. MAX. SPANS BASED UPON MEMBER MOMENT CAPACITY, AND DEFLECTION CRITERIA AS FOLLOWS:
   DL+LL L/240
   LL L/360
2. TOP OF CEILING JOISTS SHALL BE BRACED AT 4'-0" O.C. MAX. BY STRONG BACK W/ (2) #8 TEK SCREWS TO EACH JOIST.
3. MAXIMUM SPANS BASED ON THE PROPERTIES OF DETRICH C STUDS (CWN, 33 KSI).
4. MAXIMUM SPANS BASED ON SINGLE LAYER OF GYP. BOARD (TOTAL CEILING LOAD 10 PSF DL + 10 PSF LL)
5. MAXIMUM SPANS BASED ON DOUBLE LATER OF GYP. BOARD OF 1 LAYER OF PLASTER (TOTAL CEILING LOAD 15 PSF DL + 10 PSF LL)

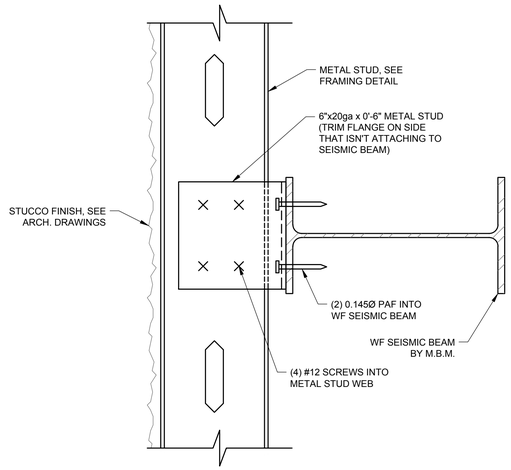
11 / S3 — SCALE: 1" = 1'-0"

INT. CEILING JOIST SCHEDULE

NOT USED

12 / S3 — SCALE: 1" = 1'-0"

NOT USED

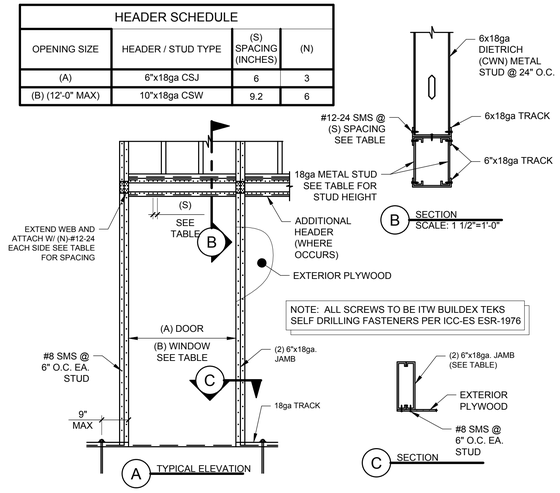


7 / S3 — SCALE: 1:4_XREF

WALL CONN. @ SEISMIC BEAM

HEADER SCHEDULE

OPENING SIZE	HEADER / STUD TYPE	(S) SPACING (INCHES)	(N)
(A)	6"x18ga CSJ	6	3
(B) (12'-0" MAX)	10"x18ga CSW	9.2	6



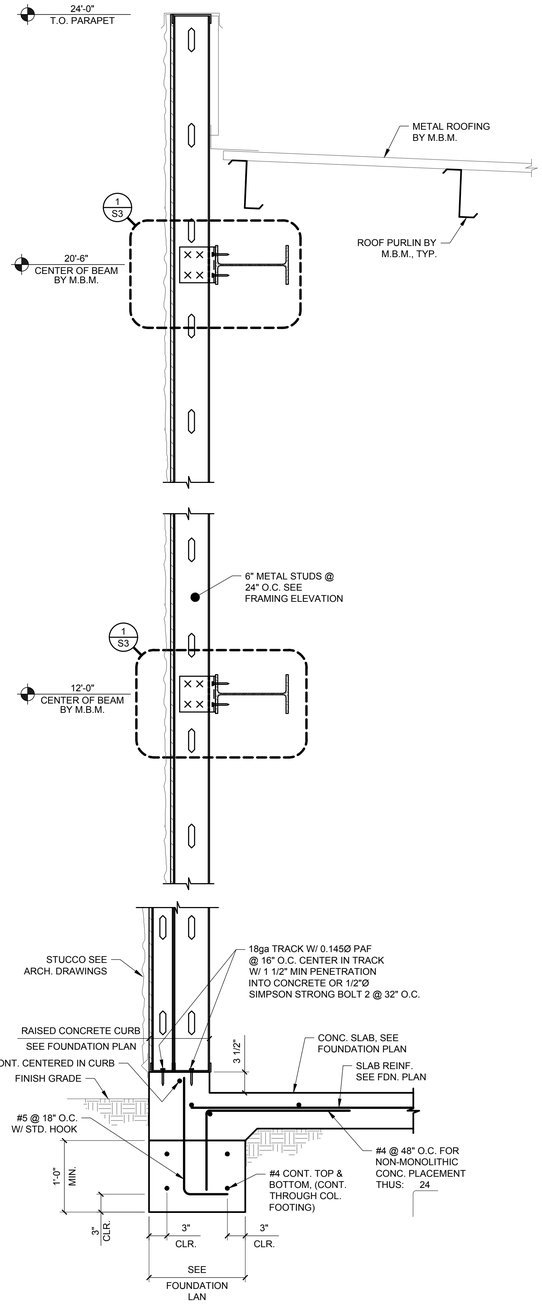
8 / S3 — SCALE: 1/2" = 1'-0"

HEADER SECTION

NOT USED

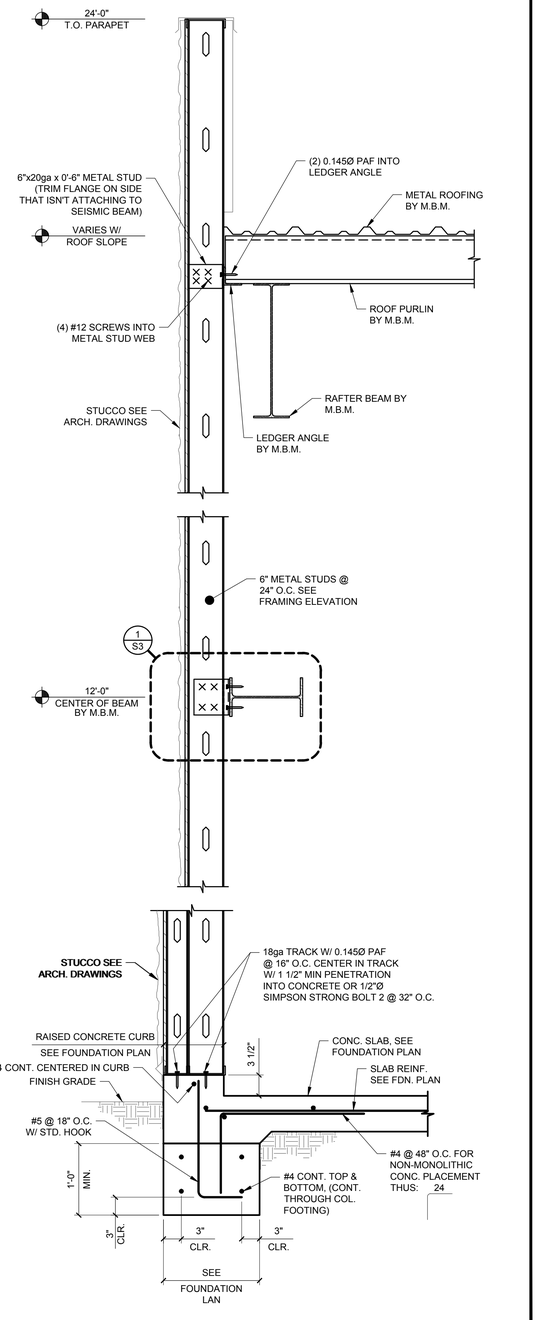
9 / S3 — SCALE: 1" = 1'-0"

NOT USED



6 / S3 — SCALE: 1" = 1'-0"

WALL SECTION @ HIGH SIDE EAVE



3 / S3 — SCALE: 1" = 1'-0"

END WALL SECTION

REVISIONS	BY
FOR SUBMITTAL 10/2/15	CB

COMMERCIAL ARCHITECTURE INC.
THEODORE J. BRANDVOLD, ARCHITECT
616 14TH STREET, MODESTO, CA 95354
PH (209) 571-8158 FAX (209) 571-8160

CB ENGINEERING INCORPORATED
STRUCTURAL DESIGN AND CIVIL ENGINEERING
420 Downey Ave. Modesto, CA 95354
Tel: (209) 986-9033 Fax: (209) 622-0967
Email: CBEngr@cbengineeringinc.com
JOB #: 4136-7-15

REGISTERED PROFESSIONAL ENGINEER
CARL R. BALLANTYNE
No. 057113
CIVIL
STATE OF CALIFORNIA

DATE: 10/2/2015

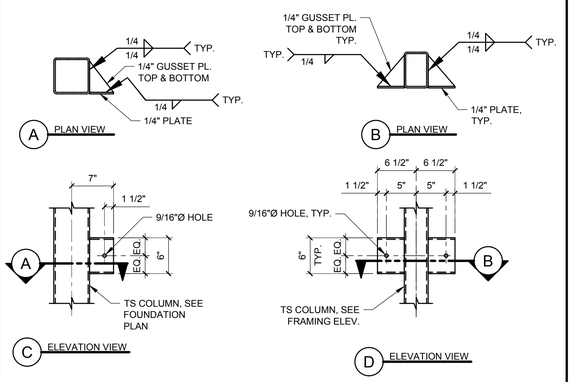
PROJECT : WAREHOUSE & MAINTENANCE
STORAGE BUILDING
CLIENT : KEYSTONE CORPORATION
LOCATION : KEYSTONE PACIFIC PARKWAY
PATTERSON, CA 95363
A.P.N.: 021-085-020

DRAWN	DW
CHECKED	CB
DATE	9/14/15
SCALE	AS SHOWN
JOB NO.	15-101
SHEET	S3
OF	SHEETS

NOT USED

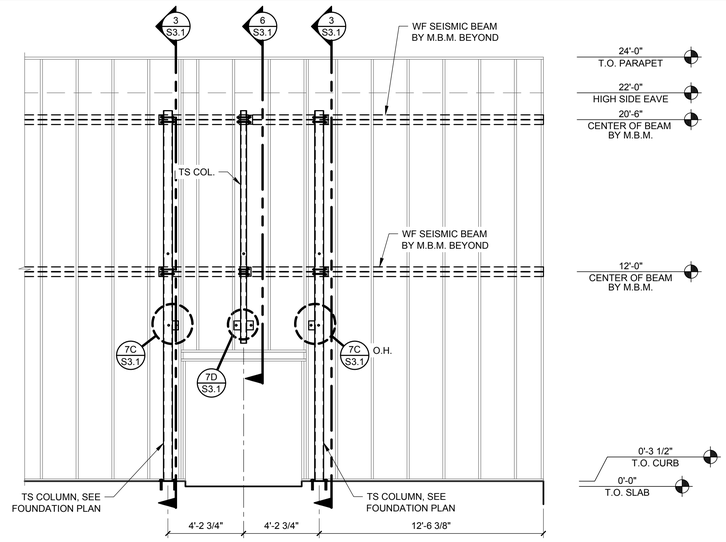
10 / S3.1 | SCALE: 1" = 1'-0"

NOT USED



7 / S3.1 | SCALE: 1" = 1'-0"

AWNING CONN. BRACKET



4 / S3.1 | SCALE: 1/4" = 1'-0"

FRAMING ELEVATION @ ENTRNACE CANOPY

NOT USED

11 / S3.1 | SCALE: 1" = 1'-0"

NOT USED

NOT USED

8 / S3.1 | SCALE: 1" = 1'-0"

NOT USED

NOT USED

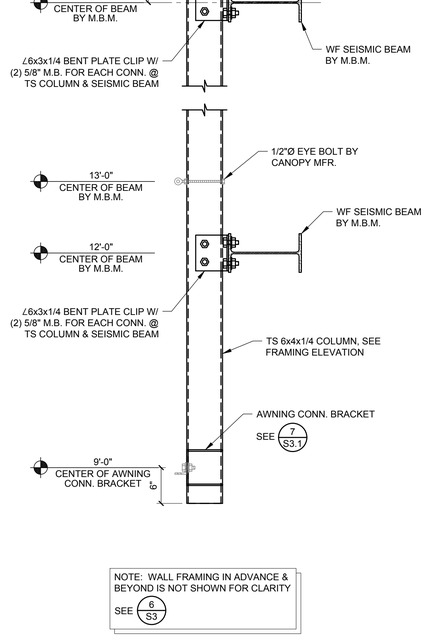
12 / S3.1 | SCALE: 1" = 1'-0"

NOT USED

NOT USED

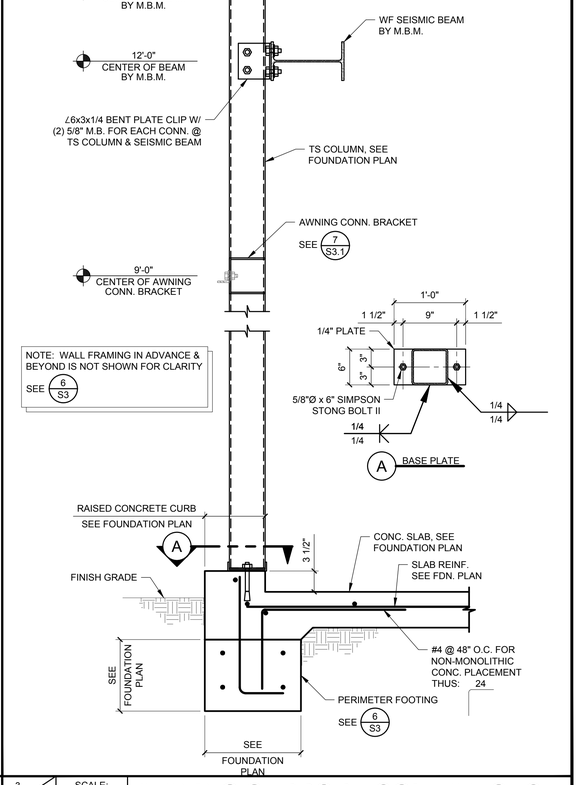
9 / S3.1 | SCALE: 1" = 1'-0"

NOT USED



6 / S3.1 | SCALE: 1" = 1'-0"

AWNING SUPPORT COLUMN SECT.



3 / S3.1 | SCALE: 1" = 1'-0"

AWNING SUPPORT COLUMN SECT.

REVISIONS	BY
FOR SUBMITTAL 10/2/15	CB

COMMERCIAL ARCHITECTURE INC.
THEODORE J. BRANDVOLD, ARCHITECT
616 14TH STREET, MODESTO, CA 95354
PH (209) 571-8158 FAX (209) 571-8160

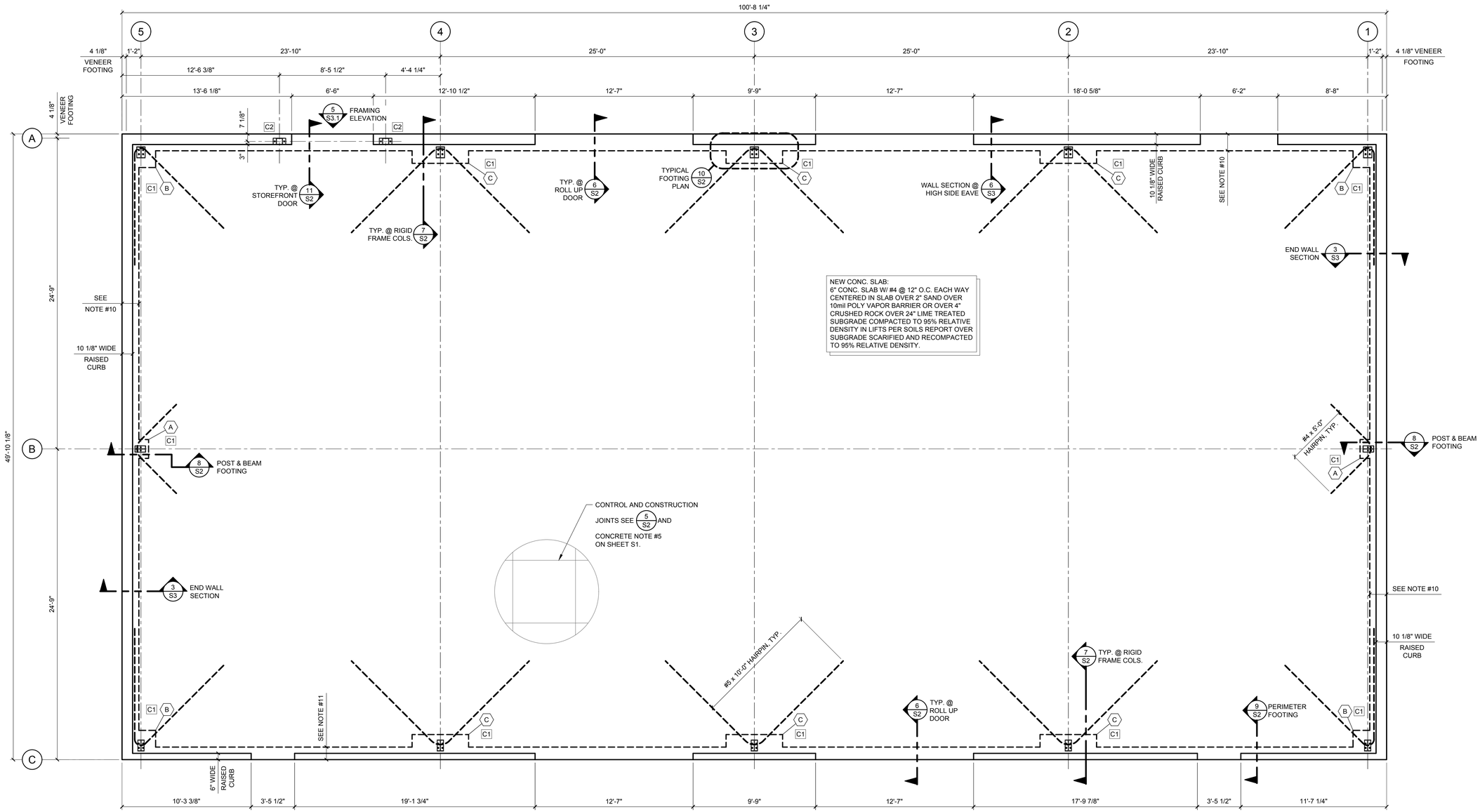
CB ENGINEERING INCORPORATED
STRUCTURAL DESIGN AND CIVIL ENGINEERING
420 Downey Ave. Modesto, CA 95354
Tel: (209) 966-9033 Fax: (209) 622-0967
Email: CBEng@cbengineeringinc.com
JOB # 4136-7-15

REGISTERED PROFESSIONAL ENGINEER
CARL R. BALLANTYNE
No. 057113
CIVIL
STATE OF CALIFORNIA

DATE: 10/2/2015

PROJECT : WAREHOUSE & MAINTENANCE STORAGE BUILDING
CLIENT : KEYSTONE CORPORATION
LOCATION : KEYSTONE PACIFIC PARKWAY PATTERSON, CA 95363
A.P.N.: 021-085-020

DRAWN	DW
CHECKED	CB
DATE	9/14/15
SCALE	AS SHOWN
JOB NO.	15-101
SHEET	S3.1
OF	SHEETS



FOOTING SCHEDULE					
MARK	FOOTING SIZE	REINFORCING	ANCHORING *	MIN. EMBED IN FTG. **	COMMENTS
A	1'-6" x 1'-6" x 12" DEEP INTO NATIVE SOIL	#4 @ 12" O.C. EA. WAY TOP & BOTTOM	5/8"Ø F1554 GR. 36 HEAVY HEX BOLTS	8"	SEE METAL BUILDING PLANS FOR BOLT LOCATIONS
B	2'-4" x 2'-4" x 12" DEEP INTO NATIVE SOIL	#4 @ 11" O.C. EA. WAY TOP & BOTTOM	3/4"Ø F1554 GR. 36 HEAVY HEX BOLTS	8"	SEE METAL BUILDING PLANS FOR BOLT LOCATIONS
C	2'-0" x 4'-6" x 12" DEEP INTO NATIVE SOIL	#5 TRANSVERSE @ 12" O.C. & #5 LONGITUDINAL @ 9" O.C. TOP & BOTTOM	3/4"Ø F1554 GR. 36 HEAVY HEX BOLTS	8"	SEE METAL BUILDING PLANS FOR BOLT LOCATIONS

* VERIFY ANCHOR BOLTS W/ METAL BUILDING DRAWINGS (ANCHOR BOLT PLAN)

** PROVIDE 2x2x3/16 x 1'-0" THRUST ANGLES AT ALL RIGID FRAMES
LENGTH OF BOLT = 3" (PROJECTION) + SLAB THICKNESS + THICKENED AREA (SAND) + MIN. EMBEDMENT

COLUMN SCHEDULE		
MARK	COLUMN SIZE	COMMENTS
C1	METAL BUILDING COLUMN	SEE METAL BUILDING PLANS
C2	TS 6x6x1/4	SEE SHEET S1 STEEL

FOUNDATION NOTES:

1. VERIFY ALL DIMENSIONS WITH METAL BUILDING MANUFACTURER DRAWINGS PRIOR TO START OF CONSTRUCTION.
2. SEE SHEET S1 FOR STRUCTURAL NOTES, ABBREVIATIONS, AND SYMBOLS.
3. SEE SHEET S2 FOR CONCRETE DETAILS NOT SPECIFICALLY REFERENCED ON THIS PLAN.
4. SEE DETAIL 1 S2 FOR REBAR BENDS AND LAPS.
5. SEE DETAIL 2 S2 FOR REINFORCING AT CORNERS.
6. SEE DETAIL 3 S2 FOR PIPE THROUGH FOOTING CONDITION.
7. SEE DETAIL 5 S2 FOR TYPICAL SLAB DETAILS.
8. SEE ANCHOR BOLT PLAN BY M.B.M. FOR SIZE AND EXACT LOCATION OF ALL ANCHOR BOLTS.
9. SEE ARCHITECTURAL AND METAL BUILDING DRAWINGS FOR EXACT LOCATION OF ALL WINDOWS, WALLS, DOORS & ETC.
10. ALL PERIMETER FOOTINGS ARE TO BE 1'-4" WIDE x 12" DEEP W/ (2) #4 TOP & BOTTOM, UNLESS OTHERWISE NOTED.
11. PERIMETER FOOTING AT LINE C IS TO BE 1'-0" WIDE x 12" DEEP W/ #4 TOP & BOTTOM, UNLESS OTHERWISE NOTED.
12. PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, THE CONTRACTOR'S TESTING ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:
    A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
    B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACK-FILLED AND COMPACTED.
    C. THE FOUNDATION EXCAVATIONS AND FORMS COMPLY WITH THE APPROVED PLANS.
13. THE FOOTING, HAIRPINS AND ANCHOR BOLTS ARE SUBJECT TO CHANGE AFTER JOB IS AWARDED.
14. THESE DRAWINGS ARE SUBJECT TO CHANGE PER ANY ITEMS THAT MAY OCCUR DURING THE PLAN CHECK PROCESS. REFINE BIDS AT SUCH TIME WITH THE OWNER FOR CHANGES THAT WILL BE SHOWN AS CLOUDED.

FOUNDATION PLAN

12 / S4 | SCALE: 1/4" = 1'-0"

REVISIONS	BY
FOR SUBMITTAL 10/2/15	CB

COMMERCIAL ARCHITECTURE INC.
THEODORE J. BRANDVOLD, ARCHITECT
616 14TH STREET, MODESTO, CA 95354
PH (209) 571-8158 FAX (209) 571-8160

CB ENGINEERING INCORPORATED
STRUCTURAL DESIGN AND CIVIL ENGINEERING
420 Downey Ave. Modesto, CA 95354
Tel: (209) 986-9033 Fax: (209) 622-0967
Email: CBEng@cbengineeringinc.com
JOB # 4136-7-15

REGISTERED PROFESSIONAL ENGINEER
CARL R. BALLANTYNE
No. 057113
CIVIL
STATE OF CALIFORNIA
DATE: 10/2/2015

PROJECT : WAREHOUSE & MAINTENANCE
STORAGE BUILDING
CLIENT : KEYSTONE CORPORATION
LOCATION : KEYSTONE PACIFIC PARKWAY
PATTERSON, CA 95363
A.P.N.: 021-085-020

DRAWN	DW
CHECKED	CB
DATE	9/14/15
SCALE	AS SHOWN
JOB NO.	15-101
SHEET	S4
OF	SHEETS