VERDUGO WOODLANDS ELEMENTARY SCHOOL
PLAYGROUND SHADE STRUCTURE

GLENDALE UNIFIED SCHOOL DISTRICT
GLENDALE, CALIFORNIA

ABBREVIATIONS

L	ANGLE
@	AT
℄	CENTERLINE
~	DIAMETER OR ROUND
A.B.	ANCHOR BOLT
A.F.F.	ABOVE FINISH FLOOR
A.G.	ASPHALTIC CONCRETE
ADJ.	ADJACENT
ALUM.	ALUMINUM
APPROX.	APPROXIMATELY
ARCH.	ARCHITECT
BD.	BOARD
BET.	BETWEEN
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
CAB.	CABINET
C.B.	CATCH BASIN
C.F.	CURB FACE
C.J.	CONTROL JOINT
CLG.	CEILING
C.O.	CONCRETE OPENING
COL.	COLUMN
CONC.	CONCRETE
C.M.U.	CONCRETE MASONRY UNITS
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CORR.	CORRIDOR
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
D.G.	DECOMPOSED GRANITE
DIA.	DIAMETER
DIM.	DIMENSION
DIV.	DIVISION
DN	DOWN
DBL.	DOUBLE
D.S.	DOWNSPOUT
DWG	DRAWING
(E)	EXISTING
EA.	EACH
E.J.	EXPANSION JOINT
ELEC	ELECTRIC
ELEV	ELEVATION
ENT.	ENTRANCE
EMER.	EMERGENCY
ENCL.	ENCLOSURE
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.G.	EXISTING GRADE
EXPO.	EXPOSED
EXP.	EXPANSION
EXT.	EXTERIOR
F.D.	FLOOR DRAIN
FE.	FIRE EXTINGUISHER
FEC.	FIRE EXTINGUISHER CABINET
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
F.H.W.S.	FLATHEAD WOOD SCREWS
FIN.	FINISH
F.L.	FLOW LINE
FLASH.	FLASHING
FLUOR.	FLUORESCENT
FAC	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
FOV	FACE OF VENEER
FRA	FIRE RATED ASSEMBLY
FRV	FIBERGLASS REINFORCED PANELS
F.S.	FLOOR SINK
FT.	FOOT OR FEET
FURR	FURRING
GA.	GAUGE
GALV.	GALVANIZED
G.I.	GALVANIZED IRON
GL.	GLASS
GLU LAM.	GLUE LAMINATED
GND.	GROUND
GR.	GRADE
GYP.BD.	GYPSUM BOARD
H.B.	HOSE BIB
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HR.	HOUR
HT.	HEIGHT
HTG.	HEATING
HDWD.	HARDWOOD
I.D.	INSIDE DIAMETER
INSUL.	INSULTAION
INT.	INTERIOR
INV.	INVERT
JAN.	JANITOR
LAB	LABORATORY
PLAM.	LAMINATED PLASTIC
LAV.	LAVATORY
LVR	LOUVER
MAR	MARBLE
MAT'L	MATERIAL
MAX.	MAXIMUM
MC	MEDICINE CABINET
MCB	METAL CORNER BEAD
MECH	MECHANICAL
MTL.	METAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MUL.	MULLION
(N)	NEW
N.	NORTH
NAT.	NATURAL
N.G.	NATURAL GRADE
N.I.C.	NOT IN CONTRACT
NO. / #	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.A.	OVERALL
OBS.	OBSCURE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.H.	OPPOSITE HAND
OPG.	OPENING
OSA	OUTSIDE AIR
PART.	PARTITION
P.C.	PORTLAND CONCRETE
P.H.	PANIC HARDWARE
PL.	PLATE
P.L.	PROPERTY LINE
PLAS.M.	PLASTIC
PLYWD.	PLYWOOD
PR.	PAIR
R.	RISER
RB.	RESILIENT BASE
RAD	RADIUS
RDWD.	REDWOOD
REF.	REFERENCE
RESIL.	RESILIENT
REV.	REVERSE
RM.	ROOM
R.O.	ROUGH OPENING
REFR.	REFRIGERATOR
REG.	REGISTER
REINF.	REINFORCEMENT
REQ'D	REQUIRED
RO	ROUGH
S.	SOUTH
SB.	SPLASH BLOCK
S.D.	STORM DRAIN
S.C.	SAW CUT
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SIM.	SIMILAR
S.J.	SCORE JOINT
SLD'G.	SLIDING
SM. F.	SMOOTH FACE
S.M.S.	SHEET-METAL SCREW
SPEC.	SPECIFICATIONS
SP. F.	SPLIT FACE
SQ.	SQUARE
S.S.	SERVICE SINK
SST.	STAINLESS STEEL
STAT.A.	STATIONARY
STD.	STANDARD
STL.	STEEL
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
T.	TREAD
T.B.	TACKBOARD
T.&B.	TOP AND BOTTOM
T.C.	TOP OF CURB
T.D.	TOWEL DISPENSER
T.G.	TOP OF GRADE
T.O.W.	TOP OF WALL
T.O.R.	TOP OF ROOFING
T.O.S.	TOP OF STEEL
T.P.	TOP OF PARAPET
T.W.	TOP OF WALL
TEL.	TELEPHONE
TEMP.	TEMPERATURE
TR	TRANSOM
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
U.O.F.	UNDERSIDE OF FRAME
UR	URINAL
VAR	VARIES
VCT	VINYL COMPOSITION TILE
VERT.	VERTICAL
VEST.	VESTIBULE
V.I.F.	VERIFY IN FIELD
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD
W.I.	WROUGHT IRON

GENERAL NOTES

1. VERIFY ALL DIMENSIONS, LOCATIONS OF EXISTING UTILITIES, AND CONDITIONS ON JOB SITE PRIOR TO START OF WORK OR PORTIONS OF WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS. EXISTING CONDITIONS ARE INDICATED AS RESULT OF FIELD OBSERVATIONS. INFORMATION SHOWN WAS FROM AVAILABLE DOCUMENTS AND FIELD CONDITIONS AT TIME OF PREPARATION.
2. NOT ALL MECHANICAL, PLUMBING, AND ELECTRICAL ITEMS MAY BE SHOWN ON THE ARCHITECTURAL DRAWINGS
3. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.
4. WHERE ANY CONFLICT OCCURS BETWEEN REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.
5. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE DRAWINGS.
6. DETAILS MARKED WITH 'TYPICAL' SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY NOTED OTHERWISE.
7. ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.
8. CONTRACTOR SHALL COORDINATE BETWEEN THE REQUIREMENTS OF ALL DISCIPLINES HEREIN AND BETWEEN DRAWING AND SPECIFICATION REQUIREMENTS IN ORDER THAT ALL ITEMS RELATE TO ONE ANOTHER. NOTIFY ARCHITECT IMMEDIATELY REGARDING ANY ITEMS NOT COORDINATED.
9. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF CONSTRUCTION, ALTERATION, REHABILITATION OR RECONSTRUCTION SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATION (CCR). SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CCD OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
10. CONTRACTOR SHALL STOP WORK AND NOTIFY ARCHITECT IMMEDIATELY IF ANY ASBESTOS CONTAINING MATERIAL (ACM) OR SUSPECTED ACM IS FOUND DAMAGED OR DISTURBED.
11. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING, CONDUIT, ETC. AND TO PREVENT HAZARD TO PERSONNEL AND/OR TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES. THE DESIGN PROFESSIONALS ARE NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES, WHETHER OR NOT SHOWN ON AND INSTALLED BY THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DISTRICT SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
12. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR A CCD APPROVED BY DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCP.
13. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
14. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES
15. UPDATED SOILS REPORT AVAILABLE BY NINYO & MOORE, DATED DEC. 6, 2018

DSA CLOSE OUT STATUS

BUILDING	DSA NO	CERTIFICATION STATUS	DATE
1000	69989	UNKNOWN	
1000	9924	UNKNOWN	
1000	102811	#1	12/24/2002
1000	107884	#2	11/01/2012
2000	8859	UNKNOWN	
3000	4953	UNKNOWN	
4000	114339	UNDER CONSTRUCTION	
RELOCATABLE	101287	#1	4/6/2001
RELOCATABLE	114669	PENDING	
BRIDGE	119567	DSA REVIEW	11/29/18

NOT IN THIS PROJECT SCOPE OF WORK

APPLICABLE CODES

CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING SECTIONS OF THE CALIFORNIA CODE OF REGULATIONS (CCR).

LIST OF 2016 CALIFORNIA CODE OF REGULATIONS (C.C.R.):

APPLICABLE CODES AS OF JANUARY 1, 2017

PART 1 2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24 C.C.R.

PART 2 2016 CALIFORNIA BUILDING CODE, TITLE 24 C.C.R.

PART 3 2016 CALIFORNIA ELECTRICAL CODE, TITLE 24 C.C.R.

PART 4 2016 CALIFORNIA MECHANICAL CODE, TITLE 24 C.C.R.

PART 5 2016 CALIFORNIA PLUMBING CODE, TITLE 24 C.C.R.

PART 6 2016 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R.

PART 7 NOT USED

PART 8 2016 CALIFORNIA HISTORICAL BUILDING CODE, TITLE 24 C.C.R.

PART 9 2016 CALIFORNIA FIRE CODE, TITLE 24 C.C.R.

PART 10 2016 CALIFORNIA EXISTING BUILDING CODE, TITLE 24 C.C.R.

PART 11 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE), TITLE 24 C.C.R.

PART 12 2016 CALIFORNIA REFERENCED STANDARDS CODE, TITLE 24 C.C.R.

TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

PARTIAL LIST OF APPLICABLE STANDARDS
2016 CALIFORNIA BUILDING CODE (FOR SFM) REFERENCED STANDARDS CHAPTER 35

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CALIFORNIA AMENDED) 2016 EDITION
NFPA 14	STANDPIPE SYSTEMS (CALIFORNIA AMENDED) 2013 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS 2013 EDITION
NFPA 17A	WET CHEMICAL SYSTEMS 2013 EDITION
NFPA 20	STATIONARY PUMPS 2016 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS (CALIFORNIA AMENDED) 2016 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED) 2016 EDITION (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")
NFPA 80	FIRE DOOR AND OTHER OPENING PROTECTIVES 2016 EDITION
NFPA 253	CRITICAL RADIANT FLUX OR FLOOR COVERING SYSTEMS 2016 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS 2015 EDITION

DSA INSPECTOR

A CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTIONS 4-342, PART 1, TITLE 24, CCR.

CODE ANALYSIS

BUILDING GROUP	OCCUPANCY CLASS	NO. OF STORIES	TYPE OF CONSTRUCTION	SPRINKLERED	ALLOWABLE SQ.FT.	ACTUAL SQ.FT.
SHADE STRUCTURE	A-3	1	V-B	NO	9,500	680

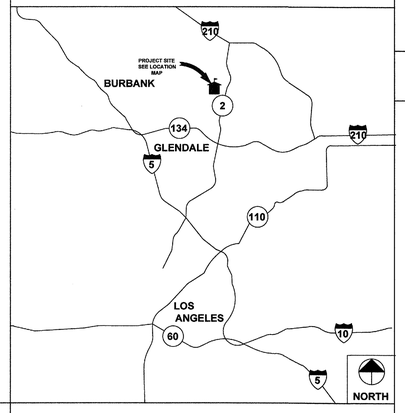
PROJECT DIRECTORY

DISTRICT
GLENDALE UNIFIED SCHOOL DISTRICT
1440 EAST BROADWAY
GLENDALE, CA. 91205

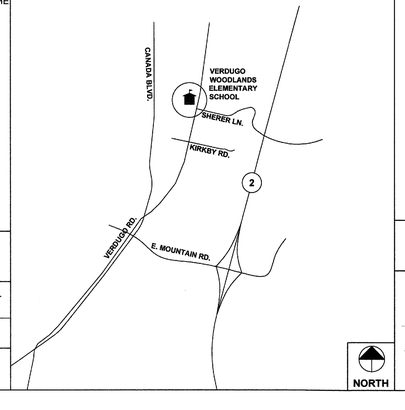
SCHOOL
VERDUGO WOODLANDS ELEMENTARY SCHOOL
1751 NORTH VERDUGO ROAD
GLENDALE, CA. 92108

ARCHITECT
ARCHITECTURE 9, PLLLP
8816 FOOTHILL BOULEVARD, SUITE 103-224
RANCHO CUCAMONGA, CA. 91730
A9CONTACT@ARCHITECTURE9.COM

VICINITY MAP



LOCATION MAP



INDEX OF DRAWINGS

A/E STATEMENT

THESE DRAWINGS AND/OR SPECIFICATIONS AND/OR CALCULATIONS FOR THE ITEMS LISTED BELOW HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. THESE DOCUMENTS HAVE BEEN EXAMINED BY ME FOR DESIGN INTENT AND APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME.

THE ITEMS LISTED BELOW HAVE BEEN COORDINATED WITH MY PLANS AND SPECIFICATIONS AND ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT FOR WHICH I AM THE INDIVIDUAL DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE.

PRE-FABRICATED SHADE STRUCTURE SEE DRAWINGS LISTED ON THIS SHEET.

S. Mark Gelsinger 3-26-19

SIGNATURE: DATE:

STEVEN M. GELSINGER
LICENSE NO.: C28546
EXPIRATION DATE: MAY 31, 2019

PROJECT DESCRIPTION

A. NEW DISTRICT FURNISHED, CONTRACTOR INSTALLED (1) 20'x34'x9' PRE-FABRICATED METAL SHADE STRUCTURE WITH GUTTER AND DOWNSPOUTS RELOCATION FROM A#03-118956. FABRICATED PER PC#03-113591
B. NEW 9' HIGH (2) CMU BALL WALL.
C. THIS PROJECT CANNOT CLOSE UNTIL BOTH 03-116278 AND 03-119567 IS CLOSED WITH CERTIFICATION.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP# 03 118948
AC M FLS K SS CL
DATE MAR 26 2019

Architecture 9 PLLLP
8816 Foothill Boulevard, Suite 103-224
Rancho Cucamonga, CA. 91730
a9contact@architecture9.com

ARCHITECTS STAMP:

LICENSED ARCHITECT
STEVEN M. GELSINGER
C-28546
5-31-19
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANTS STAMP:

SCHOOL DISTRICT:
GLENDALE UNIFIED SCHOOL DISTRICT

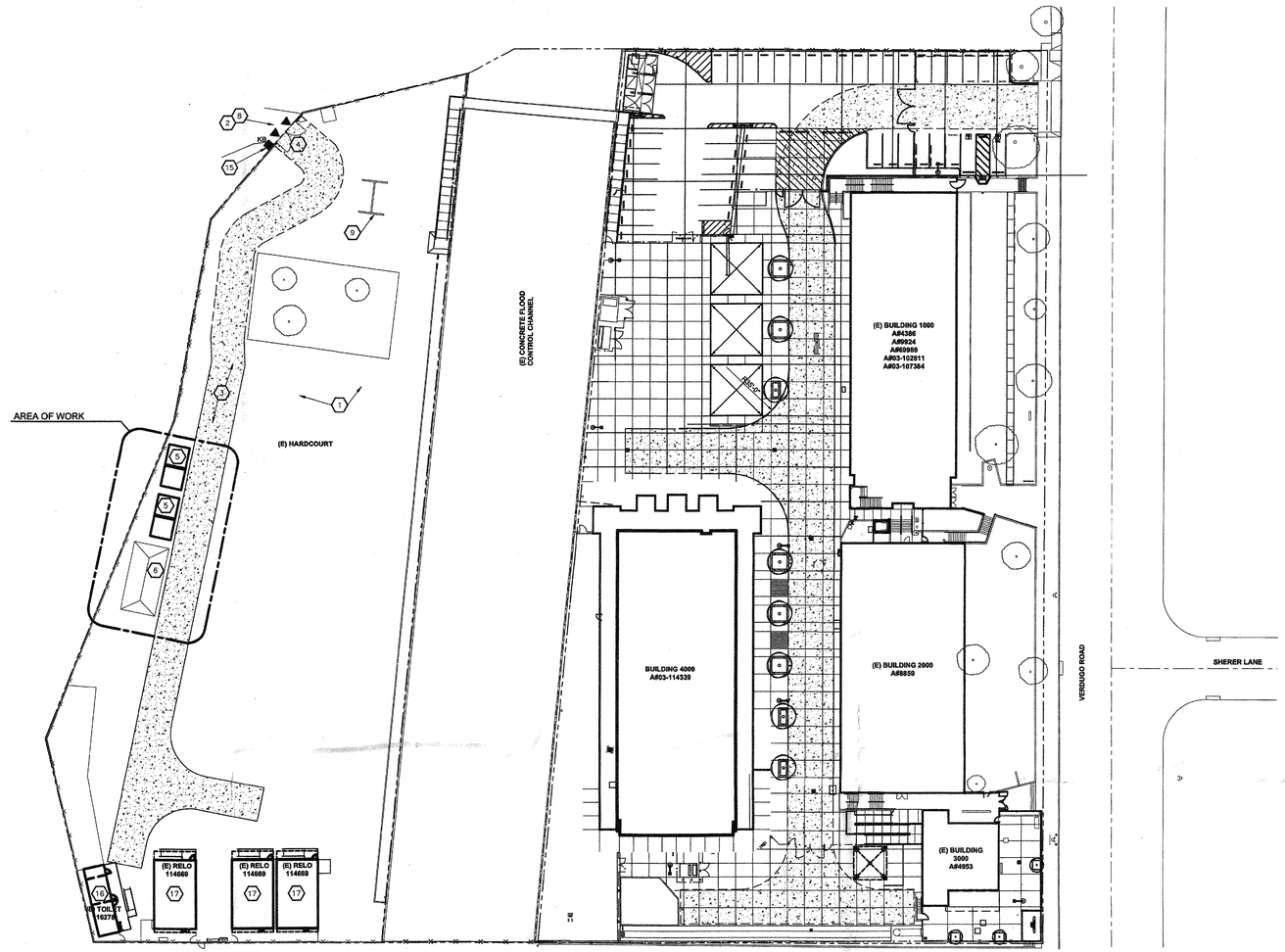
PROJECT:
VERDUGO WOODLANDS PLAYGROUND SHADE STRUCTURE

JOB NUMBER: 10.02.10
DATE: 07.01.18

REVISION: 1 DATE:
REVISION: 2 DATE:

DRAWING TITLE:
TITLE SHEET

DRAWING NO.:
G1.0



1 FIRE AUTHORITY SITE PLAN

SCALE: 1" = 40'-0"

TRUE NORTH

KEYNOTES:

1. EXISTING HARD COURT TO REMAIN
2. EXISTING FIRE LANE ENTRANCE SIGN TO REMAIN (A# 03-114669/A# 03-114339)
3. EXISTING FIRE LANE WITH FIRE LANE DESIGNATION TEXT BOTH SIDES
4. EXISTING PAIR 20' W. GATES.
5. NEW CMU BALL WALL, RE: 2/A1.3
6. NEW 24'x34'x9' METAL SHADE STRUCTURE
7. NOT USED
8. EXISTING FIRE ACCESS MAP TO REMAIN (A# 03-114669/A#03-114339)
9. EXISTING PLAY APPARATUS TO REMAIN
10. NOT USED
11. NOT USED
12. NOT USED
13. NOT USED
14. NOT USED
15. EXISTING KNOX BOX TO REMAIN (A# 03-114669/A# 03-114339)
16. EXISTING ACCESSIBLE BOYS / GIRLS / STAFF TOILET (A# 03-116278)
17. EXISTING MODULAR CLASSROOM BUILDING (A# 03-114669)

CODE ANALYSIS

BUILDING GROUP	OCCUPANCY CLASS	NO. OF STORIES	TYPE OF CONSTRUCTION	SPRINKLERED	ALLOWABLE SQ. FT.	ACTUAL SQ. FT.
METAL SHADE STRUCTURE	A-3	1	V-B	NO	9,500	680

LEGEND:

- EXISTING ONE STORY BUILDING
- NEW SHADE STRUCTURE
- EXISTING FIRE LANE
- PROPERTY LINES
- ASSUMED PROPERTY LINES PER CBC SECTION 503
- EXISTING FIRE DEPARTMENT ACCESS SIGN ON GATE
- KB — EXISTING KNOX BOX LOCATION MOUNT AT +4'-0" AFF
- FACP — EXISTING FACP LOCATION

FIRE DEPARTMENT NOTES:

A. ACCESS DURING CONSTRUCTION: FIRE APPARATUS ACCESS ROADS SHALL INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF CONSTRUCTION EXCEPT WHEN APPROVED ALTERNATIVE METHODS OF PROTECTION ARE PROVIDED (SEE CFC SECTION 501.4)

B. REQUIRED INSPECTIONS:
   1. GLENDALE FIRE PREVENTION FINAL INSPECTION (PRIOR TO OCCUPANCY): TO VERIFY INSTALLATION OF ADEQUATE FIRE DEPARTMENT ACCESS AND SIGNAGE, AS INDICATED ON THIS PLAN, CONTACT THE GLENDALE FIRE DEPARTMENT AT (818) 548-4810 TO SCHEDULE A SITE VISIT AND INSPECTION PRIOR TO OCCUPANCY.
   2. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION INSPECTION: THIS INSPECTION WILL INCLUDE A REVIEW OF THE ACCESS REQUIRED FOR FIRE FIGHTING IN CFC SECTION 1410 AND FIRE DEPARTMENT SIGNAGE (TO FACILITATE ACCESS DURING CONSTRUCTION), AND THE WATER SUPPLY AVAILABLE DURING CONSTRUCTION REQUIRED IN CFC SECTION 1412.

C. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL WORK AND ITEMS SHOWN AND CALLED FOR IN THIS DRAWING

D. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF GLENDALE FIRE DEPARTMENT

SCOPE OF WORK:

20' X 34' METAL SHADE STRUCTURE

THIS PROJECT SHALL COMPLY WITH CBC CHAPTER 7A CONSTRUCTION & CFC CHAPTER 49

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requ the design professional to provide the following information at time of project submittal for projects consisting of construc of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1–3 below is to be provided for all project types indicated above. Informati associated with items 4–7 is to be completed when an alternate means is utilized. Acknowledgement by the school distri and signature from the local fire authority (LFA) is only required when an alternate design means is being requested.

Page 1 of the completed form must be imaged onto the fire access site plan. When an alternate design/means is propos completed pages 1 and 2 are to be imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy 09-01.

PROJECT INFORMATION

School District/Owner:	GLENDALE UNIFIED SCHOOL DISTRICT
Project Name/School:	VERDUGO WOODLANDS ELEMENTARY SCHOOL
Project Address:	1751 NORTH VERDUGO ROAD, GLENDALE, CA. 91208

FIRE & LIFE SAFETY INFORMATION

1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐			No ☐	
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐			No ☐	
3.	Is the project located within a designated fire hazard severity zone as established by Cal-Fire? *(If yes, indicate fire hazard zone classification below)*	Yes ☒			No ☐	
	Refer to the following for fire hazard zone locations: www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps	Moderate ☐	High ☒		Very High ☐	
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*				WIFA ☐	

CONDITION MEANS AND METHODS RESOLUTION

		ALTERNATE ACCEPTED Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.			X	
4a.	**Acceptable Alternate:** Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.	✓			
5.	**Fire Hydrants:** Number and spacing does not meet CFC requirements.			X	
5a.	**Acceptable Alternate:** Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.				
6.	**Fire Hydrants:** Water flow and pressure are less than CFC minimum.			X	
6a.	**Acceptable Alternate**: The available flow and pressure is acceptable for providing fire suppression and protection of life and property.				
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.			✓	X
7a.	**Acceptable Alternate:** The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.			✓	

DSA 810 (rev 10-22-18) DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES — Page 1 of 4 STATE OF CALIFORNIA

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: Raymond McKinley Title: Maint. Proj. Supervisor

Signature: Date: 3/8/19

LOCAL FIRE AUTHORITY (LFA) INFORMATION

LFA Agency Name:	GLENDALE FIRE DEPARTMENT
LFA Review Official:	SIRA DEMIRJIAN
Title:	FESS
Work Phone:	818 937 8105
Work E-mail:	sdemirjian@glendaleca.gov
LFA Reviewer's Signature:	Date: 02/19/19

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP03 119848
AC PV FLS FC SS CL
DATE MAR 26 2019

Architecture 9 PLLP
8816 Foothill Boulevard, Suite 103-224
Rancho Cucamonga, CA. 91730
a9contact@architecture9.com

ARCHITECTS STAMP:

LICENSED ARCHITECT STEVEN M. GELSINGER RENEWAL DATE 5-31-19 STATE OF CALIFORNIA

CONSULTANT:

CONSULTANTS STAMP:

SCHOOL DISTRICT:
GLENDALE UNIFIED SCHOOL DISTRICT

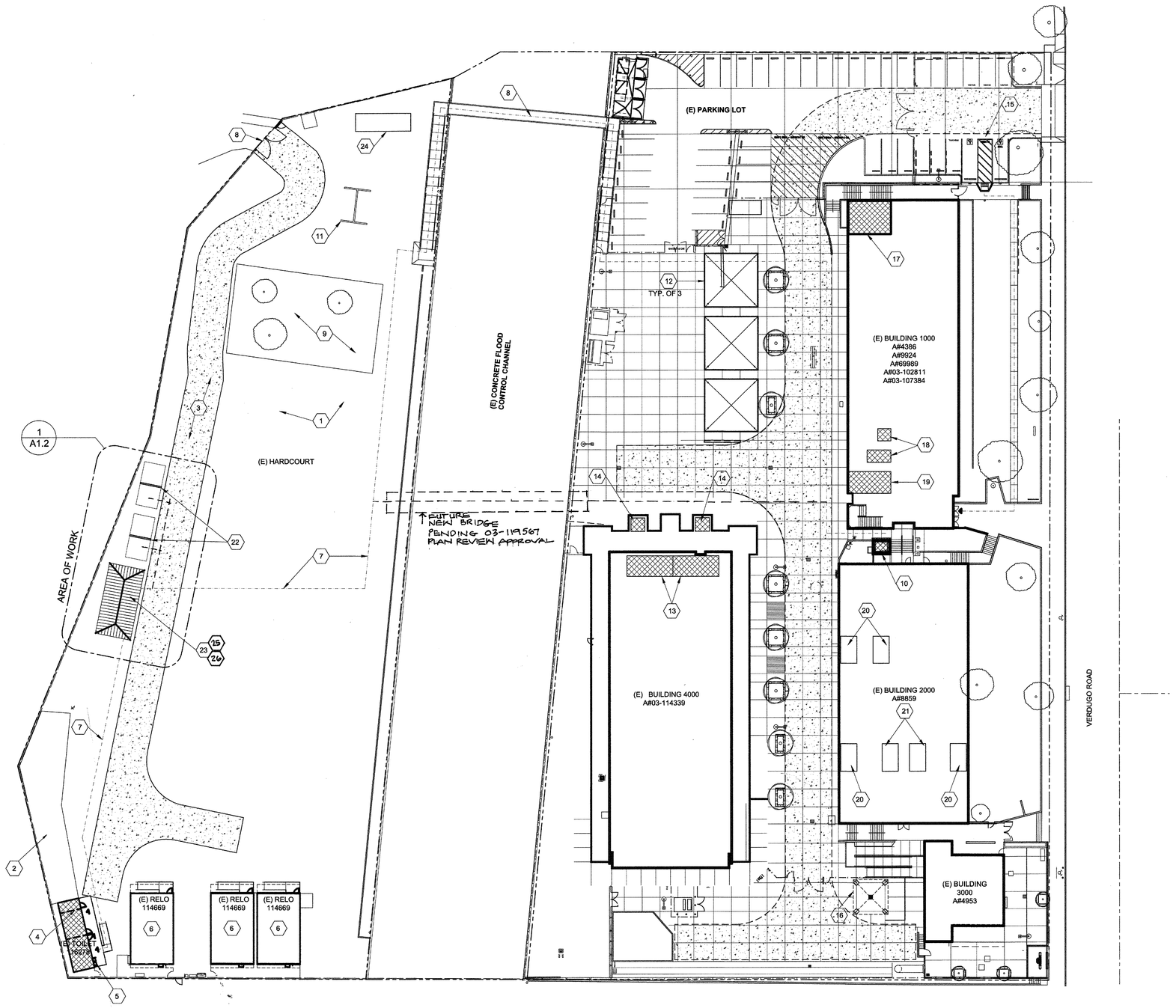
PROJECT:
VERDUGO WOODLANDS PLAYGROUND SHADE STRUCTURE
1751 N. Verdugo Rd, Glendale, CA 91208

JOB NUMBER: 10.02.10
DATE: 07.01.18

REVISION: 1 DATE:
REVISION: 2 DATE:

DRAWING TITLE:
FIRE AUTHORITY SITE PLAN

DRAWING NO.:
G1.1



1 SITE PLAN
SCALE: 1" = 30'-0"

TRUE NORTH

KEYNOTES

1. EXISTING UPPER ELEMENTARY ACCESSIBLE HARDCOURT WITH 2% MAXIMUM SLOPE IN ANY DIRECTION
2. EXISTING ACCESSIBLE PLAY APPARATUS
3. EXISTING FIRE LANE A#03-114669, MODIFY STRIPING PER 1/A1.3
4. EXISTING ACCESSIBLE BOY'S, GIRL'S AND STAFF TOILETS (A# 03-116276)
5. EXISTING ACCESSIBLE HIGH/LOW DRINKING FOUNTAIN (A# 03-116276)
6. EXISTING 24'x40' RELOCATABLE CLASSROOM. USED BY EEELP (NON-DISTRICT ORGANIZATION) (A# 03-114669)
7. ACCESSIBLE PATH OF TRAVEL
8. EXISTING BRIDGE
9. EXISTING TURF AREA
10. EXISTING ACCESSIBLE ELEVATOR
11. EXISTING BALL WALL
12. EXISTING METAL SHADE STRUCTURE (A#03-114339)
13. EXISTING ACCESSIBLE BOY'S AND GIRL'S TOILETS (A# 03-114339)
14. EXISTING ACCESSIBLE STAFF TOILET (A# 03-114339)
15. EXISTING ACCESSIBLE PARKING (A# 03-114339)
16. EXISTING METAL SHADE STRUCTURE (A# 03-118702)
17. EXISTING FIRST FLOOR ACCESSIBLE BOYS TOILET (A# 03-107384)
18. EXISTING SECOND FLOOR ACCESSIBLE UNISEX STAFF TOILETS (A# 03-102811)
19. EXISTING FIRST FLOOR ACCESSIBLE GIRL'S TOILET (A# 03-107384)
20. EXISTING NON-ACCESSIBLE UNISEX STUDENT KINDERGARTEN TOILET
21. EXISTING NON-ACCESSIBLE STUDENT TOILETS
22. NEW CMU BALL WALL AND STRIPING, RE: 3/A1.3
23. NEW 20' X 40' PRE-MANUFACTURED METAL SHADE STRUCTURE WITH GUTTER AND DOWNSPOUTS FURNISHED BY DISTRICT AND INSTALLED BY CONTRACTOR, RE: 1/A1.3
24. EXISTING NON-ACCESSIBLE STUDENT TOILETS TO REMAIN (A# 9924)
25. ADD NEW 22GA GALV. 1/8" MAX, WIRE MESH TO GUTTER TO PREVENT LEAVES AND DEBRIS.
26. NEW (1) 2A10BC FIRE EXTINGUISHER IN LOCKING METAL BOX WITH EMERGENCY GLASS MOUNT 48" AFF.

PARKING TABULATIONS

PARKING LOT	
TOTAL PARKING SPACES	47
ACCESSIBLE SPACES REQUIRED PER TABLE 11B-6	2
REGULAR ACCESSIBLE SPACES PROVIDED	1
VAN ACCESSIBLE SPACES PROVIDED	1
STANDARD SPACES PROVIDED	45

RE: 2016 CBC SECTION 1129B, TABLE 11B-6 FOR REQUIRED NUMBER OF ACCESSIBLE PARKING SPACES

CHARGE STATEMENT

DESIGN PROFESSIONAL IN GENERAL RESPONSIBILITY

"THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALL ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS NONCOMPLIANT ELEMENTS, FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTIONS DOCUMENTS. DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT."

LEGEND

- EXISTING BUILDING
- ACCESSIBLE TOILETS & ELEVATOR
- EXISTING ASPHALT FIRE LANE AND STRIPING
- NEW PRE-MANUFACTURED METAL SHADE STRUCTURE
- PROPERTY LINES
- ACCESSIBLE PATH OF TRAVEL
- ACCESSIBLE ENTRY

PATH OF TRAVEL

"THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS. DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT."

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP03 119848
AC W FLS K SS CL
DATE MAR 26 2019

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ARCHITECTS STAMP:

LICENSED ARCHITECT
STEVEN M. GELSINGER
No. C-28546
5-31-19
RENEWAL DATE
STATE OF CALIFORNIA

CONSULTANT:

CONSULTANTS STAMP:

SCHOOL DISTRICT:
GLENDALE UNIFIED SCHOOL DISTRICT

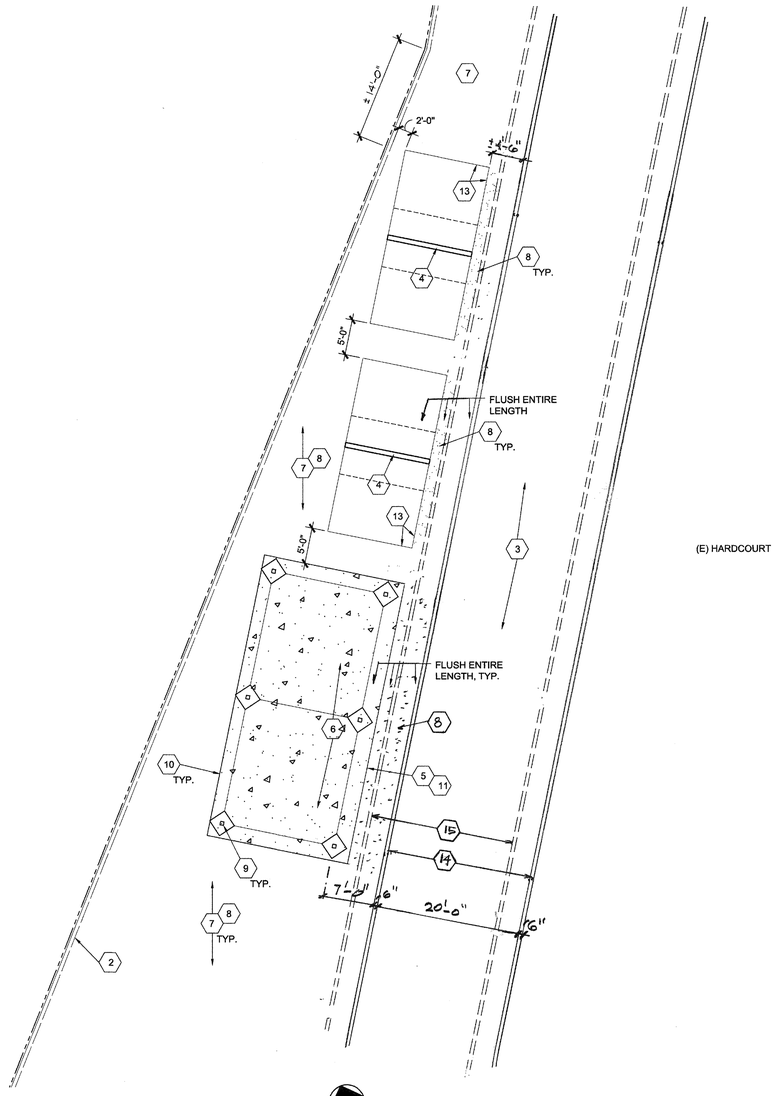
PROJECT:
VERDUGO WOODLANDS PLAYGROUND SHADE STRUCTURE

JOB NUMBER: 10.02.10
DATE: 07.01.18

REVISION: 1 DATE: _____
REVISION: 2 DATE: _____

DRAWING TITLE:
SITE PLAN

DRAWING NO.:
A1.1



1 SITE PLAN
SCALE: 1" = 10'-0"

TRUE NORTH

KEYNOTES

1. EXISTING UPPER ELEMENTARY ACCESSIBLE HARDCOURT WITH 2% MAXIMUM SLOPE IN ANY DIRECTION
2. EXISTING CHAIN LINK FENCE
3. EXISTING FIRE LANE AND STRIPING (A# 03-116278)
4. NEW CMU BALL WALL, RE: 2/A1.3
5. NEW DISTRICT FURNISHED AND CONTRACTOR INSTALLED METAL SHADE STRUCTURE WITH GUTTERING AND DOWNSPOUTS AND 4" CONCRETE PAD BENEATH RE: 1/A1.3
6. SAW CUT AND REMOVE EXISTING ASPHALT PAVING FOR NEW 4" CONCRETE PAVING. PROVIDE A MINIMUM 2" AGGREGATE BASE, RE: 3/A1.3
7. EXISTING AC PAVING TO REMAIN, BLACK-OUT EXISTING PAINTED STRIPING IN FOOTPRINT OF NEW WORK
8. REPAIR EXISTING ASPHALT PAVING DUE TO NEW CONSTRUCTION
9. NEW METAL SHADE STRUCTURE POST WITH CONTINUOUS 1/2" CONTROL JOINT AROUND TRIANGULAR CONCRETE PAVING, RE: 3C/A1.3
10. PROVIDED THICKENED CONCRETE PAVING EDGE, RE: 3B/A1.3
11. NEW CONTRACTOR INSTALLED METAL SHADE STRUCTURE. FRAMING TO BE PRE-ASSEMBLED TO LOCATED POST AND FOOTINGS
12. NEW EXPANSION JOINT, RE: 3C/A1.3
13. NEW 4" PAINTED WHITE STRIPE
14. REPAINT FIRE LANE STRIPING AS REQUIRED DUE TO NEW CONSTRUCTION
15. BLACK OUT EXISTING FIRE LANE STRIPING

LEGEND

- NEW PRE-MANUFACTURED MEDAL SHADE STRUCTURE
- NEW 4" CONCRETE PAVING
- PROPERTY LINES
- EXISTING CHAIN LINK FENCE

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GLENDALE UNIFIED SCHOOL DISTRICT

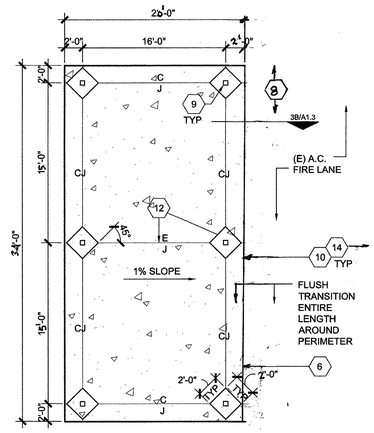
PROJECT:
VERDUGO WOODLANDS PLAYGROUND SHADE STRUCTURE

JOB NUMBER: 10.02.10
DATE: 07.01.18

REVISION: 1 DATE: _____
REVISION: 2 DATE: _____

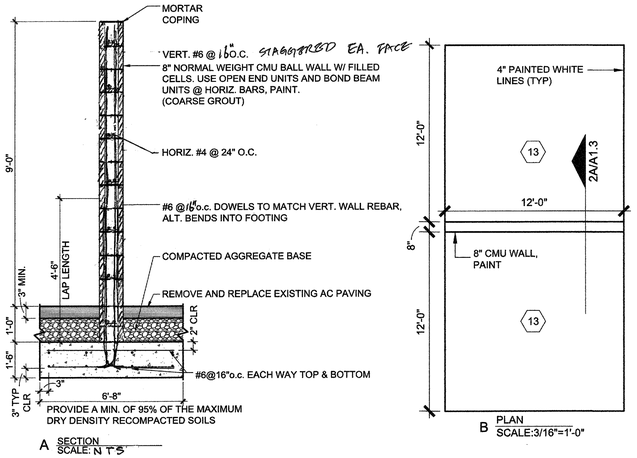
DRAWING TITLE:
ENLARGED SITE PLAN

DRAWING NO.:
A1.2



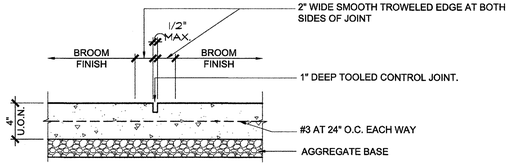
1 CONCRETE PAD DETAIL @ NEW SHADE STRUCTURE

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



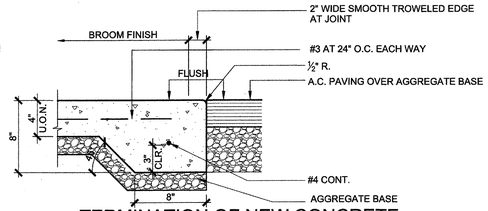
2 CMU WALL BALL

SCALE: AS NOTED

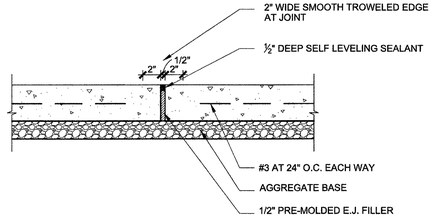


A. CONTROL JOINT (C.J.)

PROVIDE C.J. SPACING EQUAL TO SIDEWALK WIDTH OR 10'-0" MAXIMUM O.C. EACH WAY RE: SITE PLAN DRAWINGS FOR ADDITIONAL REQUIREMENTS.



B. TERMINATION OF NEW CONCRETE AT NEW A.C. PAVING



C. EXPANSION JOINT (E.J.)

3 CONCRETE PAVING DETAILS

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

MASONRY

1. F'm, SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT (CMU) SHALL BE AS FOLLOWS.

   F'm = 2000 PSI U.N.O.

2. CONCRETE BLOCK SHALL BE MEDIUM WEIGHT COMPLYING ASTM C90, GRADE N-1 AND ARTICLE 2.3 OF TMS 602/ACI 503.1 / ASCE 6.
3. GROUT SHALL COMPLY WITH ASTM C476 AND ARTICLE 2.2 OF TMS 602/ACI 503.1 / ASCE 6.. COMPRESSIVE STRENGTH SHALL NOT BE LESS THAN 2000 PSI AT 28 DAYS.
4. MORTAR SHALL COMPLY WITH ASTM C270, TYPE. S AND ARTICLE 2.1 AND 2.6A OF TMS 602/ACI 503.1 / ASCE 6. MINIMUM STRENGTH AT 28 DAYS OF 2000 PSI.
5. CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II. USE OF MASONRY CEMENT OR PLASTIC CEMENT IS NOT PERMITTED.
6. SPECIAL INSPECTION IS REQUIRED FOR ALL STRUCTURAL MASONRY UNITS PER CBC SECTION 1705A.4.
7. AGGREGATES FOR MORTAR AND GROUT SHALL BE NATURAL SAND AND ROCK COMPLYING WITH ASTM C144 AND C404.
8. SEE REINFORCING STEEL NOTES FOR REINFORCING STEEL, U.N.O.
9. REINFORCING STEEL SPLICES (U.N.O.):
   - 72 DIAMETERS @ LAP SPLICES IN WALL
   - 72 DIAMETERS @ FOOTING DOWELS
   - WHEN MINIMUM CLEAR DISTANCE BETWEEN BARS @ ADJACENT SPLICE IS 3 INCHES OR LESS, INCREASE SPLICE LENGTH 30 PERCENT UNLESS SPLICES ARE STAGGERED AT LEAST 24 BAR DIAMETERS.
10. GROUT SOLID ALL CELLS UNLESS NOTED OTHERWISE MECHANICALLY VIBRATE GROUT IN CELLS.
11. USE LOW LIFT GROUTING METHOD PER CBC SECTION 2104A.1.3.1.2.2 UNLESS NOTED OTHERWISE. FOR HIGH LIFT GROUTING METHOD, SEE IR 21-2 AND CBC SECTION 2104A.1.3.1.2.3.
12. SET COURSES IN RUNNING BOND U.N.O. SET CELLS IN VERTICAL ALIGNMENT.
13. WHEN WORK IS STOPPED ONE HOUR OR LONGER, PROVIDE HORIZONTAL CONSTRUCTION JOINT BY STOPPING GROUT 1-1/2" BELOW TOP OF MASONRY UNIT

REINFORCING STEEL

1. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 40 FOR#3 AND SMALL AND GRADE 60 FOR #4 AND LARGER. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60.
2. WELDED WIRE FABRIC (WWF) SHALL COMPLY WITH ASTM 185 (Fy=60 KSI), AND SHALL BE LAPPED 1-1/2 SPACES (12"MM).
3. ALL REINFORCING STEEL, DOWELS, ANCHOR BOLTS, ETC. SHALL BE WELL SECURED IN PLACE PRIOR TO PLACING CONCRETE.
4. ALL REINFORCING STEEL SHALL BE LAPPED AS SPECIFIED ON THE DETAIL. WHERE NOT SPECIFICALLY INDICATED ON THE DRAWING, ALL REINFORCING STEEL SHALL BE LAPPED USING THE TENSION SPLICE LENGTHS IN THE SCHEDULE ON DRAWING UNLESS NOTED OTHERWISE, TERMINATED CONTINUOUS BARS AT DISCONTINUOUS ENDS WITH STANDARD HOOKS.
5. DOWELS SHALL BE PROVIDED AT POUR AND CONSTRUCTION JOINTS AND SHALL BE THE SAME SIZE AND SPACING AS THE REINFORCING SHOWN FOR THE SUBSEQUENT CONSTRUCTION.
6. REINFORCING STEEL SHALL HAVE THE FOLLOWING MINIMUM COVERS, U.N.O.

   CONCRETE AGAINST EARTH (NOT FORMED) ——— 3"
   CONCRETE AGAINST EARTH (FORMED AND TROWELED) ——— 2"
   WALL AND CURB ——— 1-1/2"
   SLAB ON GRADE ——— CENTER
7. WELDING OR REINFORCING STEEL SHALL COMPLY WITH AWS D1.4. ALL BARS TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60.
8. SUBMIT REINFORCING STEEL SHOP DRAWING TO ARCHITECT FOR APPROVAL.

DESIGN LOADS

1. WIND DESIGN LOADS
   - BASIC WIND SPEED..... 110 MPH
   - EXPOSURE..... C
   - WIND LOADING ..... 30 PSF (LRFD)

   S_s = 2.943 Fa=1.00
   S_1 = 0.912 Fv=1.50
   S_{DS} = 1.899
   S_{D1} = 0.912 LATITUDE = 34.2049861; LONGITUDE = -118.225243
2. SEISMIC DESIGN LOADS
   - OCCUPANCY CATEGORY..... II
   - SITE CLASS..... D
   - SEISMIC DESIGN CATEGORY..... E
   - IMPORTANCE FACTOR..... 1.00

FOUNDATION

1. FOUNDATION DESIGN IS BASED ON GEOTECHNICAL REPORT PREPARED BY: NINYO & MOORE PROJECT NUMBER 20846500 , DATED DEC. 6 , 2018
2. ALLOWABLE DESIGN VALUE (SILTY SANDS AND CLAYEY SAND SOIL TYPES):
   BEARING PRESSURE: 2000 PSF
   PASSIVE PRESSURE: 300 PSF PER FOOT OF EMBEDMENT
   FRICTION: 0.35
3. FOOTING SHALL REST ON COMPACTED SOIL.
4. NO BACKFILL SHALL BE DONE AGAINST FOUNDATION AND RETAINING WALL UNTIL CONCRETE HAS ATTAINED AT LEAST 75% OF ITS DESIGN STRENGTH. ADEQUATELY SHORE RETAINING WALLS DURING BACKFILL.
5. CONTRACTOR SHALL BE RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION SLOPES. WHERE NECESSARY, SHEETING AND SHORING OF EXCAVATION SHALL BE PROVIDED WITH ALL REQUIRED TIE BACKS AND BRACING.
6. METHOD EMPLOYED IN ALL SHEETING AND SHORING SHALL BE DESIGNED BY A LICENSED PROFESSIONAL CIVIL ENGINEER.

GENERAL

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE 2016 CALIFORNIA BUILDING CODE AND ALL LOCAL CODES.
2. STRUCTURAL DRAWINGS ARE PARTS OF CONTRACT DOCUMENTS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AND COORDINATE WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER CONSULTANTS, PROJECT SHOP DRAWINGS AND FIELD CONDITIONS, AND SHALL NOTIFY THE ARCHITECT AND ENGINEERS OF ANY DISCREPANCIES.
3. STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. CONTRACTOR SHALL PROVIDE MEANS AND METHODS AS REQUIRED. PROVIDE ADEQUATE BRACING, SHORING, TEMPORARY STRUCTURES AND PARTIALLY COMPLETED PORTIONS OF WORKS COMPLYING WITH NATIONAL, STATE AND ALL LOCAL SAFETY ORDINANCES.
4. TYPICAL DETAILS AND SCHEDULES MAY NOT BE REFERENCED ON DRAWINGS. CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH ALL TYPICAL DETAILS AND SCHEDULES PRIOR TO PROCEED WITH WORK.
5. CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITY LINES FROM ALL DAMAGE.
6. THE CONTRACTOR SHALL NOT DEVIATE FROM THE TENDERED DOCUMENTS WITHOUT WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEERS.
7. JOB SAFETY AND CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

KEYNOTES ⬡

1. EXISTING UPPER ELEMENTARY ACCESSIBLE HARDCOURT WITH 2% MAXIMUM SLOPE IN ANY DIRECTION
2. EXISTING CHAIN LINK FENCE
3. EXISTING FIRE LANE AND STRIPING (A# 03-116278)
4. NEW CMU BALL WALL, RE: 2/A1.3
5. NEW DISTRICT FURNISHED AND CONTRACTOR INSTALLED METAL SHADE STRUCTURE WITH GUTTERING AND DOWNSPOUTS AND 4" CONCRETE PAD BENEATH RE: 1/A1.3
6. SAW CUT AND REMOVE EXISTING ASPHALT PAVING FOR NEW 4" CONCRETE PAVING. PROVIDE A MINIMUM 2" AGGREGATE BASE, RE: 3/A1.3
7. EXISTING AC PAVING TO REMAIN, BLACK-OUT EXISTING PAINTED STRIPING IN FOOTPRINT OF NEW WORK
8. REPAIR EXISTING ASPHALT PAVING DUE TO NEW CONSTRUCTION
9. NEW METAL SHADE STRUCTURE POST WITH CONTINUOUS 1/2" CONTROL JOINT AROUND TRIANGULAR CONCRETE PAVING, RE: 3C/A1.3
10. PROVIDED THICKENED CONCRETE PAVING EDGE, RE: 3B/A1.3
11. NEW CONTRACTOR INSTALLED METAL SHADE STRUCTURE. FRAMING TO BE PRE-ASSEMBLED TO LOCATED POST AND FOOTINGS
12. NEW EXPANSION JOINT, RE: 3C/A1.3
13. NEW 4" PAINTED WHITE STRIPE
14. REPAINT FIRE LANE STRIPING AS REQUIRED DUE TO NEW CONSTRUCTION

IDENTIFICATION STAMP
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APP03 119848
AC ✓ FLS ✓ SS CL
DATE MAY 26 2019

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ARCHITECTS STAMP:

CONSULTANT:

CONSULTANTS STAMP:

REGISTERED PROFESSIONAL ENGINEER
No. 2998
Exp. 6-30-20
STRUCTURAL
STATE OF CALIFORNIA

SCHOOL DISTRICT:
GLENDALE UNIFIED SCHOOL DISTRICT

PROJECT:
VERDUGO WOODLANDS PLAYGROUND SHADE STRUCTURE

JOB NUMBER: 10.02.10
DATE: 07.01.18

REVISION: 1 DATE: _____
REVISION: 2 DATE: _____

DRAWING TITLE:
DETAILS

DRAWING NO.:
A1.3

2014A

DESIGN VALUES:

DESCRIPTION	DESIGN VALUES
DEAD AND LIVE LOADS	
ROOF LIVE LOAD	20 PSF
ROOF DEAD LOAD (SUPERIMPOSED ON FRAME)	VARIES
ALLOWABLE SOIL PRESSURE	
DL+LL (CONCRETE FOOTING)	2000 PSF
DL+LL+SEISMIC (CONCRETE FOOTING)	2000 PSF
ROOF SNOW LOAD	
GROUND SNOW LOAD, Pg, FROM COUNTY	10 PSF
RISK CATEGORY	[X] II [ ] III
ROOF SNOW LOAD: [ ] FLAT, Pf OR [ ] LOW-SLOPE, Pm OR [X] SLOPED, Ps	10 PSF
SNOW ROOF SLOPE FACTOR, Cs	1.0
SNOW EXPOSURE FACTOR, Ce	1.2
SNOW LOAD IMPORTANCE FACTOR, Is	[X] 1.0 [ ] 1.1
THERMAL FACTOR, Ct	[ ] 1.0 [X] 1.2
FLOOD DESIGN	
FLOOD HAZARD AREA: [ ] YES [X] NO	
WIND DESIGN	
BASIC WIND SPEED (3 SECOND GUST), Vult	110 MPH
RISK CATEGORY	[X] II [ ] III
EXPOSURE CATEGORY	[X] C [ ] D
TOPOGRAPHIC FACTOR, Kzt (1 MINIMUM)	1.0
INTERNAL PRESSURE COEFFICIENT, GCpi (IF APPLICABLE)	0.0
SEISMIC DESIGN	
LATERAL FORCE-RESISTING SYSTEM	STEEL ORDINARY CANTILEVER COLUMN SYSTEMS
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE
SEISMIC DESIGN CATEGORY (SDC)	E
SEISMIC IMPORTANCE FACTOR, Ie	[X] 1.0 [ ] 1.25
DESIGN BASE SHEAR, V	Cs x W
SEISMIC RESPONSE COEFFICIENT, Cs	LOAD SCENARIO = { 1, 2, 3, 4 } Cs = { 0.80, 0.80, 1.07, 1.28 }
RESPONSE MODIFICATION FACTOR, R	1.25
SITE CLASS	[X] D [ ] E
REDUNDANCY FACTOR, p	1.3
MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, Ss - USED TO DETERMINE Cs (WITH CAP PER CBC 1616A.1.12)	LOAD SCENARIO = { 1, 2, 3, 4 } Ss (MAX) = { 1.875, 1.875, 2.500, 3.000 }
MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, Ss - USED TO DETERMINE OTHER PARAMETERS AND NON-STRUCTURAL COMPONENT ANHORAGE (NO CAP)	3.00
SHORT-PERIOD SITE COEFFICIENT, Fa	1.0
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, Sds - USED TO DETERMINE Cs (WITH CAP PER CBC 1616.1.12)	LOAD SCENARIO = { 1, 2, 3, 4} Sds (MAX) = { 1.00, 1.00, 1.33, 1.60 }
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, Sds - USED TO DETERMINE OTHER PARAMETERS AND NON-STRUCTURAL COMPONENTS ANCHORAGE (NO CAP)	2.00
MAPPED SPECTRAL RESPONSE ACCELERATION AT 1 SECOND PERIOD, S1	1.07
LONG-PERIOD SITE COEFFICIENT, Fv	1.5
DESIGN SPECTRAL RESPONSE ACCELERATION AT 1 SECOND PERIOD, Sd1	1.07
HORIZONTAL OR VERTICAL IRREGULARITIES TYPE(S)	NONE

ARCHITECTURAL REQUIREMENTS:

DESCRIPTION	DESIGN VALUES
TYPE OF CONSTRUCTION	VB
OCCUPANCY CLASSIFICATION	A3
NUMBER OF STORIES	1
FIRE HAZARD SEVERITY ZONE	VERY HIGH
FIRE SPRINKLER SYSTEM	NOT BY POLIGON

POLIGON ASSUMES ANY OCCUPANT LOAD CALCULATIONS ARE BASED ON 15 SQ FT/ PERSON. PROJECT ARCHITECT MAY ADJUST OCCUPANT LOAD AS PERMITTLED BY THE BUILDING CDE.

RELATED BUILDING CODES AND STANDARDS:

TITLE 24 CODES:

2013 California Administrative Code (CAC)..........................(Part 1, Title 24, CCR)
2013 California Building Code (CBC), Volumes 1, and 2 (Part 2, Title 24, CCR)
(2012 International Building Code with 2013 California amendments)
2013 California Electrical Code ....(Part 3, Title 24, CCR)
(2011 National Electrical Code with 2013 California amendments)
2013 California Mechanical Code (CMC) ....(Part 4, Title 24, CCR)
(2012 Uniform Mechanical Code with 2013 California amendments)
2013 California Plumbing Code (CPC) ....(Part 5, Title 24, CCR)
(2012 Uniform Plumbing Code with 2013 California amendments)
2013 California Energy Code ....(Part 6, Title 24, CCR)
(Effective July 1, 2014)
2013 California Fire Code (CFC) ....(Part 9, Title 24, CCR)
(2012 International Fire Code with 2010 California Amendments)
2013 California Green Building Standards Code...................(Part 11, Title 24, CCR)
(Effective January 1, 2014)
2013 California Referenced Standards Code .... (Part 12, Title 24, CCR)

NFPA 13 - 2013
NFPA 72 - 2013

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:

2013 CBC, CHAPTER **35**
2013 CFC, CHAPTER **45**

SCOPE OF WORK NARRATIVE:

THESE DRAWINGS ILLUSTRATE THE FABRICATION AND INSTALLATION REQUIREMENTS FOR A FREE-STANDING PREFABRICATED STEEL SHADE STRUCTURE. THE ENTIRE STRUCTURAL SYSTEM IS COMPRISED OF TUBULAR STEEL MEMBERS SUPPORTED ON CONCRETE FOUNDATIONS. THE FLEXIBILITY INCLUDED HEREIN ALLOWS THIS STRUCTURE TO COMPLY WITH A WIDE VARIETY OF PROJECT SITES AND LOADING REQUIREMENTS.

GENERAL:

1. GENERAL NOTES AND TYPICAL DETAILS SHALL APPLY TO ALL PARTS OF THE JOB EXCEPT WHERE THEY MAY CONFLICT WITH DETAILS AND NOTES ON OTHER SHEETS. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER FOR THIS PROJECT.
2. WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED TO DATE, OF THE LATEST ADOPTED EDITION OF THE CBC, C.A.C. TITLE 24, AND ALL OTHER LOCAL, STATE AND FEDERAL REGULATIONS.
3. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
5. THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING, BUT NOT LIMITED TO, BRACING, TEMPORARY SUPPORTS, AND SHORING. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT/ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER DURING THE CONSTRUCTION SHALL BE DISTINGUISHED FROM CONSTRUCTION AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER, WHETHER OF MATERIAL OR WORK, ARE FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONSTRUCTION.
6. ASTM DESIGNATIONS AND ALL STANDARDS REFER TO THE LATEST AMENDMENTS.
7. CONFORM TO APPLICABLE CAL/OSHA CONSTRUCTION SAFETY REGULATIONS FOR ALL WORK PERFORMED DURING CONSTRUCTION. JOB SITE SAFETY IS STRICTLY THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THE ARCHITECT/ENGINEER OR OWNER.
8. THE ENGINEER AND THEIR CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, HANDLING, REMOVAL OR DISPOSAL OF HAZARDOUS MATERIALS AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED, TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.
9. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, OR IF A CHANGE IN THE SCOPE OF WORK IS PROPOSED, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED CHANGE(S) SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
10. THE SCHOOL DISTRICT'S INSPECTOR OF RECORD SHALL INSPECT AND APPROVE THE ERECTED FRAME PRIOR TO ROOF INSTALLATION.
11. SEE REQUIREMENTS FOR LOCATION IN ANY FIRE HAZARD SEVERITY ZONE FOR WILDLAND URBAN INTERFACE AREAS (WUI) AS SPECIFIED IN THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE. PROVIDE PROTECTION AND DETAILS OF ALL AREAS COMPLYING WITH THE WUI REQUIRMENTS.
12. LOCATING THIS STRUCTURE CLOSER THAN 20 FEET TO OTHER STRUCTURES MAY AFFECT THE ALLOWABLE AREA FOR THE EXISTING CONSTRUCTION PER THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE.
13. VIEWS AND DETAILS ARE NOT DRAWN TO SCALE (UNLESS NOTED OTHERWISE). DO NOT SCALE THESE DRAWINGS.
14. OTHER SITE SPECIFIC ITEMS MAY BE REQUIRED.

STRUCTURAL AND MISCELLANEOUS STEEL:

1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFIATION MANUAL REFERENCED BY THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.
2. PIPE SECTIONS SHALL CONFORM TO ASTM A53, Fy = 35 ksi, GRADE B OR A501 UNLESS NOTED OTHERWISE.
3. STRUCTURAL TUBING (HSS SHAPES) SHALL CONFORM TO ASTM A500, GRADE B (OR HIGHER), Fy = 46 KSI.
4. IF MATERIAL AVAILABILITY IS LIMITED, MEMBER THICKNESSES CAN BE INCREASED BEYOND WHAT IS SHOWN IN THESE DRAWINGS (MAXIMUM INCREASE OF 1/8").
5. ALL CHANNELS, ANGLES, AND MISC. STEEL SHALL CONFORM TO ASTM A36, Fy = 36 KSI.
6. ALL COLD FORM STEEL SHALL CONFORM TO ASTM A653, CS = TYPE B, Fy = 50 KSI.
7. STRUCTURAL STEEL AND DECK SHALL BE IDENTIFIED FOR CONFORMITY PER CBC 2203A.1.
8. ROOF DECK SHALL HAVE KYNAR 5000 METAL COATING.
9. ROOF DECK SHALL CONFORM TO ATSM A792, Fy = 50 KSI.
10. MR ROOF SCREWS MEET ASTM A510 WITH A HEAD DIMENSION OF 0.31" (FLAT-TO-FLAT) AND INTEGRAL WASHER DIMENSION OF 0.58" (OUTSIDE DIAMETER).
11. SS ROOF SCREWS MEET ASTM A510 WITH A HEAD DIMENSION OF 0.437" (OUTSIDE DIAMETER).

WELDING:

1. ALL WELDING SHALL COMPLY WITH AWS D1.1 SPECIFICATIONS AND SHALL BE DONE BY AWS QUALIFIED WELDERS CERTIFIED FOR THE TYPE OF WELDING TO BE PERFORMED AS REQUIRED BY DSA.
2. ALL WELDING SHALL BE DONE BY GAS METAL ARC PROCESS WITH E70XX ELECTRODES. FLUX CORE ARC WELD SHALL CONFORM TO CHARPY NOTCH TOUGHNESS RATING OF 20 ft-lb @ (O° F).
3. ALL WELDING SHALL BE DONE IN THE SHOP WITH REQUIRED INSPECTION, PRE-APPROVED BY DSA, TO INSURE PROPER MATERIAL ID AND WELDING.
4. WELD FILLER METAL MANUFACTURER SHALL PROVIDE WRITTEN CERTIFICATION OF COMPLIANCE WITH CODE AND SPECIFICATIONS.

BOLTING:

1. ALL BOLTS SHOWN ON THESE DRAWINGS ARE ASTM A325 HIGH STRENGTH BOLTS (UNO), TYPE 3.
2. HIGH STRENGTH BOLTS SHALL BE SAMPLED AND TESTED IN COMPLANCE WITH CBC 2213A.1.
3. BEFORE ERECTING THE FRAME, VERIFY ALL BOLTS AND NUTS ARE CLEAN OF DEBRIS AND BURRS - INCLUDING THE HARDWARE ALREADY FASTENED INSIDE THE MEMBERS. CHASING SOME OF THE BOLTS AND NUTS MAY BE REQUIRED.
4. ANCHOR BOLTS (HEAVY HEX HEAD, ASTM F1554, GRADE 55) SHALL BE HOT DIPPED GALVANIZED PER ASTM F2329. ANCHOR BOLTS MAY BE HEADED OR THREADED WITH A NUT THAT IS PREVENTED FROM ROTATING.
5. HIGH STRENGTH NUTS SHALL CONFORM TO ASTM A563.
6. HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436.
7. THE BOLTING INSTALLATION REQUIREMENTS OUTLINED BELOW ARE CRITICAL TO THE STRUCTURE'S DESIGN AND PERFORMANCE. **THE INSTALLER IS REQUIRED TO COORDINATE THIS PHASE OF CONSTRUCTION WITH THE SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD PRIOR TO THE ERECTION OF THE FRAME.** ALL BOLTS SHALL BE INSTALLED AND INSPECTED PER THE APPLICABLE VERSION OF AISC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", CBC 1705A.2.1; AISC 341-10 J7; AISC 360-10 N5.6.
   - A. PRETENSIONED JOINTS (IDENTIFIED ON THE FRAME CONNECTION DETAILS WITH A "PJ REQUIRED") MUST BE INSTALLED AND INSPECTED TO MEET ONE OF FOLLOWING REQUIREMENTS:
     1. TURN-OF-NUT PRETENSIONING
     2. CALIBRATED WRENCH PRENTENSIONING
     3. DIRECT-TENSION-INDICATOR PRETENSIONING (CONTRACTOR RESPONSIBLE FOR PURCHASE OF REQUIRED WASHERS)
   - B. ALL OTHER JOINTS MUST BE INSTALLED AND INSPECTED TO MEET THE REQUIREMENTS OF SNUG-TIGHTENED JOINTS. **NOTE TO INSTALLER AND INSPECTOR(S): THE SNUG-TIGHT CONDITION EXISTS, IN PART, WHEN ALL THE BOLTS IN THE JOINT HAVE BEEN TIGHTENED SUFFICIENTLY TO PREVENT THE REMOVAL OF THE NUTS WITHOUT THE USE OF A WRENCH.**

THE CONTRACTOR, SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD MUST ALL AGREE ON WHICH APPROACH WILL BE USED TO PRETENSION THE BOLTS. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THE APPROACH AGREED TO BY ALL PARTIES LISTED ABOVE.

FOUNDATIONS:

3. ALLOWABLE SOIL PRESSURES ASSUME CLASS 4 SOIL CLASSIFICATION PER CBC TABLE 1806A.
2. **A GEOTECHNICAL REPORT / LETTER IS REQUIRED AT THE OVER-THE-COUNTER APPOINTMENT FOR EACH PROJECT.**
3. FILL AND BACKFILL SHALL BE COMPACTED TO 95% OF MAX. DENSITY IN ACCORDANCE WITH ASTM TEST METHOD D1557-70. FLOODING NOT PERMITTED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING, ETC. NECCESSARY TO SUPPORT CUT AND/OR FILL BANKS DURING EXCAVATION, AND FORMING AND PLACEMENT OF CONCRETE.

CONCRETE:

1. MIX DESIGN REQUIREMENTS: (NORMAL WEIGHT CONCRETE)

STRENGTH f'c (28 DAYS)	W/C RATIO (NONAIR ENTRAINED)	W/C RATIO (AIR ENTRAINED)	SLUMP (± 1")	UNIT WEIGHT (NORMAL WEIGHT)
5000 PSI	0.63	0.55	3"	150 PCF

2. CHANGES TO THE MIX DESIGN MUST BE APPROVED BY THE ENGINEER OR ARCHITECT OF RECORD AND DSA
3. AGGREGATES SHALL CONFORM TO ASTM C33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN .005. MAX AGGREGATE SIZE = 1".
4. CEMENT SHALL CONFORM TO ASTM C150 (TYPE V) UNLESS NOTED OTHERWISE ON THE DRAWINGS.
5. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER PLACEMENT. ALTERNATE METHODS WILL BE APPROVED IF SATISFACTORY PERFORMANCE CAN BE ASSURED.
6. CONCRETE SHALL NOT FREE FALL MORE THAN FIVE FEET.
7. CONCRETE SHALL BE PROPORTIONED PER ACI 318-11 5.2.
8. CONCRETE SHALL BE TESTED PER CBC 1905A.1.2, 1913A.1, 1705A.3, AND ACI 318-11 5.6.

REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A615. (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A305) AS FOLLOWS:
   GR 60: (#4 BARS AND LARGER)
   GR 40: (#3 BARS)
2. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS SHALL CONFORM THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES."
3. MIN. COVER FOR CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:
   - A. CAST AGAINST EARTH.. 3"
   - B. CAST AGAINST FORM BELOW GRADE...................... 2"
   - C. FORMED SLABS (#11 BAR & SMALLER)..................... 3/4"
   - D. SLABS ON GRADE (FROM TOP OF SLAB).................. 1"
   - E. COLUMNS AND BEAMS (MAIN BARS)...................... 2"
   - F. WALLS EXPOSED TO WEATHER (#6-#18 BARS)......... 2"
     (#5 & SMALLER)......... 11/2"
   - G. NOT EXPOSED TO WEATHER (#11 & SMALLER)........ 3/4"
4. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BENDS SHALL BE MADE COLD.
5. REINFORCING SHALL BE LAP SPLICED 45 BAR DIA. MINIMUM IN CONCRETE AND MUST COMPLY WITH ACI 318-11.
6. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
7. WELDING OF REINFORCING IS NOT ALLOWED
8. REINFORCING STEEL SHALL BE SAMPLED AND TESTED PER CBC 1913A.2.

POWDER COATED AND EPOXY PRIMED FINISH:

1. ENTIRE POWDER COATING PROCESS COMPLETED IN SAME FACILITY AS STEEL FABRICATION.
2. ALL CARBON STEEL MEMBERS (COLUMNS, BEAMS, PLATES, ETC.) PAINTED WITH PRIME COAT PER THE "AISC CODE OF STANDARD PRACTICE" AND THE "AISC SPECIFICATION SECTION M3" (UNLESS NOTED OTHERWISE).
3. PARTS PRETREATED IN A 3 STAGE IRON PHOSPHATE WASHER (OR EQUAL).
4. EPOXY PRIMER POWDER COAT APPLIED TO PARTS FOR SUPERIOR CORROSION PROTECTION.
5. TOP POWDER COAT OF SUPER DURABLE TGIC (COLOR SELECTED FROM MANUFACTURER'S STANDARD OPTIONS OR CUSTOM COLOR).
6. SAMPLE PRODUCTION PARTS TESTED TO MEET THE FOLLOWING CRITERIA:
   - A. SALT SPRAY RESISTANCE PER ASTM B 117/ ASTM D 1654
     1. 10000 HOURS WITH NO CREEP FROM SCRIBE LINE AND RATING OF 10
   - B. HUMIDITY RESISTANCE PER ASTM D2247-02
     1. 5000 HOURS WITH NO LOSS OF ADHESION OR BLISTERING
   - C. COLOR/UV RESISTANCE PER ASTM G154-04
     1. 2000 HOURS EXPOSURE ALTERNATE CYCLES WITH NO CHALKING, 75% COLOR RETENTION, AND COLOR VARIATION MAXIMUM 3.0 E VARIATION CIE FORMULA (BEFORE AND AFTER 2000 HOURS EXPOSURE

ABBREVIATIONS:

ACI	AMERICAN CONCRETE INSTITUTE	MR	MULTI-RIB ROOF PANEL (MCELROY)
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	NTS	NOT TO SCALE
ASM	ASSEMBLY (INTERNAL REFERENCE)	NO	NUMBER
ASTM	AMERICAN SOCIETY FOR TESTING AND MAT'LS	OC	ON CENTER
AWS	AMERICAN WELDING SOCIETY	OSHA	OCCUPATIONAL HEALTH AND SAFETY ADM.
CBC	CALIFORNIA BUILDING CODE	PCF	POUNDS PER CUBIC FOOT
CJP	COMPLETE JOINT PENETRATION	PD	POLIGON DRAWING
CLR	CLEAR	PJ	PRETENSIONED JOINT
DEG	DEGREE	PLCS	PLACES
DIA	DIAMETER	PLT	PLATE
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DSA	DIVISION OF THE STATE ARCHITECT	PSI	POUNDS PER SQUARE INCH
EQ	EQUAL	QTY	QUANTITY
FT	FEET	REF	REFERENCE
GA	GAGE	RH	RIGHT HAND
IN	INCHES	SQ	SQUARE
KSI	KIPS PER SQUARE INCH	SS	STANDING SEAM ROOF PANEL (MCELROY)
LH	LEFT HAND	TYP	TYPICAL
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
MIN	MINIMUM	USGS	U.S. GEOLOGICAL SURVEY
MISC	MISCELLANEOUS	W/	WITH
MPH	MILES PER HOUR		

INSTRUCTIONS FOR ARCHITECTS SUBMITTING THESE PRE-CHECKED DRAWINGS TO DSA:

BEFORE SUBMITTING THESE PRE-CHECKED DRAWINGS FOR YOUR PROJECT, FOLLOW THE STEPS BELOW TO PROPERLY DEFINE THE APPROVED OPTIONS:
THE POLIGON ENGINEERING DEPARTMENT IS AVAILABLE TO HELP YOU COMPLETE THESE STEPS (616-399-1963).

STEP 1: SELECT FRAME DIMENSIONS FOR YOUR PROJECT
- STRUCTURES UP TO 20' WIDE USE THE "RAM 20" BASE FRAME
- STRUCTURES UP TO 30' WIDE USE THE "RAM 30" BASE FRAME
- THE 20' AND 30' WIDTHS ARE SUGGESTED BECAUSE THEY ARE THE MOST ECONOMICAL
- MAXIMUM WIDTH IS 30'; (SEE 'ARCHITECTURAL VIEWS' SHEET FOR REFERENCE)
- THE 44', 64', AND 84' LENGTHS ARE SUGGESTED BECAUSE THEY ARE THE MOST COMMON (20' BAYS ARE MOST ECONOMICAL)
- FRAME WIDTHS AND LENGTHS ASSUME 2' OVERHANGS (UNO BY ARCHITECT - 2' MAX DIMENSION)

STEP 2: SELECT ROOF DECK FOR YOUR PROJECT
- "MR" REPRESENTS MCELROY METAL "MULTI-RIB" ROOF DECK
- "SS" REPRESENTS MCELROY METAL "MEDALLION-LOK" 16" STANDING SEAM ROOF DECK

STEP 3: IDENTIFY THE Ss ACCELERATION (g) FOR YOUR PROJECT
- Ss VALUE DETERMINES THE REQUIRED SEISMIC DESIGN FORCES
- Ss VALUE DEPENDS ON THE PROJECTS GEOGRAPHICAL LOCATION (VALUES RANGE FROM 0.00 TO 3.73)
  - FIND Ss VALUES FOR YOUR PROJECT ON THE USGS WEBSITE (SEARCH INTERNET FOR "USGS SEISMIC DESIGN MAPS")
- THIS PC IS NOT APPROVED FOR Ss VALUES GREATER THAN 3.00 (CONTACT POLIGON FOR ADDITIONAL OPTIONS)

STEP 4: IDENTIFY THE Ss REGION FOR YOUR PROJECT
- THE REGIONS ARE DEPENDANT ON THE Ss VALUE DETERMINED IN STEP 3
- REFERENCE DSA BU 14-01 FOR A MAP OF VARIOUS Ss REGIONS
- THE Ss REGION DICTATES THE MAXIMUM DEAD LOAD PERMITTED ON THE FRAME (SEE TABLE TO THE RIGHT)

STEP 5: IDENTIFY THE ROOF DEAD LOAD FOR YOUR PROJECT
- THE ROOF DECK DEAD LOAD WILL ALWAYS BE INCLUDED
- THE COLLATERAL LOAD REPRESENTS ADDITIONAL LOAD THAT CAN BE SUPPORTED BY THE FRAME
- BE SURE THE TOTAL ROOF DEAD LOAD FOR YOUR PROJECT IS LESS THAN OR EQUAL TO THE MAX DEAD LOAD SHOWN IN STEP 4

STEP 6: IDENTIFY THE FOUNDATION REQUIREMENTS FOR YOUR PROJECT
- REFERENCE THE Ss REGION (STEP 4) AND THE TOTAL ROOF DEAD (STEP 5)
- IDENTIFY **A SINGLE** LOAD SCENARIO
  - E.G. A PROJECT IN THE WHITE Ss REGION WITH A 4 PSF ROOF DEAD LOAD IS LOAD SCENARIO 2
  - LOAD SCENARIOS HAVE NO IMPACT ON FRAME DESIGN OR COST (BUT DO AFFECT FOUNDATION SIZE)
- SELECT **EITHER** SPREAD PAD OR DRILLED PIER FOUNDATION
  - FOUNDATION TYPE IMPACTS STEEL FABRICATION (COLUMN LENGTH) AND CONSTRUCTION (TIMING, SEQUENCE, COST, ETC.)
  - POLIGON CAN REVIEW THE SITE-SPECIFIC SOILS REPORT TO EVALUATE THE POSSIBILITY OF SMALLER FOUNDATIONS

STEP 1 – FRAME DIMENSIONS

	SUGGESTED (☒ 16')			OTHER	
FRAME WIDTH	☐ 20'	☐ 30'		☐	(30' MAX)
FRAME LENGTH	☐ 44'	☐ 64'	☐ 84'	☐	(NO MAX)

☒ 30'

STEP 2 – ROOF DECK

ROOF DECK TYPE	☒ MR	☐ SS

STEP 3 – Ss ACCELERATION (g)

2.848

STEP 4 – Ss REGIONS[1]

		Ss REGIONS	MAX DEAD LOAD
DESCRIPTION	☐ WHITE	$0.000 < S_s \le 1.875$	5 PSF
	☐ BLUE	$1.875 < S_s \le 2.500$	3.5 PSF
	☐ GREEN	$2.500 < S_s \le 2.750$	2 PSF
	☒ YELLOW	$2.750 < S_s \le 3.000$	2 PSF

[1] REFERENCE DSA BU 14-01 FOR A MAP OF VARIOUS Ss REGIONS

STEP 5 – TOTAL ROOF DEAD LOAD

	DEAD LOAD	EXAMPLES
ROOF DECK	1.2 PSF	MR = 1.2 PSF ; SS = 1.8 PSF (SEE STEP 2)
COLLATERAL[1]	0. PSF	LIGHTING, FIRE SUPPRESSION, PV PANELS, ETC.
TOTAL[2]	1.2 PSF	ADD ROOF DECK AND COLLATERAL LOADS

[1] PROVIDE DSA WITH EVIDENCE THAT THE COLLATERAL LOAD FOR YOUR PROJECT MEETS THESE REQUIREMENTS
[2] MAY NOT EXCEED REQUIREMENTS LISTED IN STEP 6 BELOW

STEP 6 – FOUNDATION REQUIREMENTS

Ss REGION	DEAD LOAD (DL)	LOAD SCENARIO	SPREAD PAD	DRILLED PIER
WHITE	DL <= 2 PSF	☐ LOAD SCENARIO 1	☒	☐
WHITE	2 PSF < DL <= 5 PSF	☐ LOAD SCENARIO 2		
BLUE	DL <= 3.5 PSF	☐ LOAD SCENARIO 3		
GREEN	DL <= 2 PSF	☐ LOAD SCENARIO 4		
YELLOW	DL <= 2 PSF	☒ LOAD SCENARIO 4		

STEP 7: SELECT MISCELLANEOUS OPTIONS FOR YOUR PROJECT
- MAXIMUM CLEAR HEIGHT IS 10'-0"; (SEE 'ARCHITECTURAL VIEWS' SHEET FOR REFERENCE)
- MARK UP PC DRAWINGS WITH SIZE AND LOCATION OF CUTOUTS BEFORE SUBMITTING TO DSA

STEP 8: SELECT APPLICABLE SHEET INDEX FOR YOUR PROJECT
- REFERENCE THE BASE FRAME (STEP 1) AND THE ROOF DECK TYPE (STEP 2)
- IDENTIFY THE APPLICABLE SHEET INDEX

STEP 9: INCLUDE APPLICABLE SHEETS WITH YOUR DSA SUBMITTAL
- EXCLUDE 'MISC DESIGN OPTIONS' SHEET FOR PROJECTS WITHOUT ELECTRICAL CUTOUTS OR GUTTERS

STEP 10: IDENTIFY PROJECT NAME AND SCHOOL DISTRICT

PROJECT NAME:
Verdugo Woodlands Elem. Playfield Shade Structure

SCHOOL DISTRICT:
Glendale Unified School District

STEP 7 – MISCELLANEOUS

	DESIGN OPTIONS	
CLEAR HEIGHT	☒ 9'-0" ☐ 10'-0"	☐ (10' MAX)
ELECTRICAL CUTOUTS	☐ YES	☒ NO
GUTTERS	☒ YES	☐ NO

STEP 8 – SHEET INDEX

BASE FRAME	RAM 20		RAM 30	
ROOF DECK	MR	SS	MR	SS
SELECT ONE	☒	☐	☐	☐
GENERAL NOTES	PD1.0	PD1.0	PD1.0	PD1.0
SPECIAL INSPECTIONS	PD1.1	PD1.1	PD1.1	PD1.1
FOUNDATION PLAN	PD2.0	PD2.0	PD2.1	PD2.1
FRAMING PLAN	PD3.0	PD3.0	PD3.1	PD3.1
FRAME CONNECTION DETAILS	PD4.0	PD4.0	PD4.1	PD4.1
SECTION DETAILS	PD5.0	PD5.0	PD5.1	PD5.1
PLATE DETAILS	PD6.0 - PD6.1		PD6.2 - PD6.3	
ARCHITECTURAL VIEWS	PD7.0	PD7.0	PD7.1	PD7.1
ROOF CONNECTION DETAILS	PD8.0	PD8.1	PD8.0	PD8.1
MISC DESIGN OPTIONS	PD9.0	PD9.0	PD9.0	PD9.0

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP03 119848
AC __ FLS __ SS __
DATE MAR 2 6 2019

REGISTERED PROFESSIONAL ENGINEER
THOMAS A. BURGGRAF
No. S4378
Exp. 3/31/16
STRUCTURAL
STATE OF CALIFORNIA

CARLTON Engineering Inc.

poligon

STATE APPROVALS

PRE-CHECK (PC) DOCUMENT
CODE: 2013 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

GENERAL NOTES
HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

PD1.0

2014A

SPECIAL INSPECTION NOTES:

1. THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD.
2. COSTS OF THE PROJECT INSPECTOR AND THE TESTING AGENCY SHALL BE BORN BY THE SCHOOL DISTRICT.
3. THE PROJECT INSPECTOR, AND ENTIRE CONSTRUCTION OVERSIGHT PROCESS, SHALL COMPLY WITH DSA PR 13-01.
4. ON APPROVED PC DRAWINGS, THE STATEMENT OF STRUCTURAL TESTS AND SPECIAL INSPECTIONS (FORM DSA-103) BELOW IS ONLY AN EXAMPLE. ON APPROVED PC DRAWINGS, THE EXAMPLE FORM DSA-103 MUST BE CROSSED OUT BEFORE THE PC DRAWINGS CAN BE APPROVED AS PART OF A SITE-SPECIFIC (OR STOCKPILE) PROJECT SO THEY WILL NOT CONFLICT WITH THE OFFICIAL FORM DSA-103 FOR THE PROJECT.

DSA DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES

DSA-103 rev 12/20/13

Statement of Structural Tests & Special Inspections - 2013 CBC

INCREMENT #

DSA File No.: PC-1

Application No.: 02-113591

Date Submitted:

Revised:

Revised:

School Name	EXAMPLE - REMOVE ON SITE-SPECIFIC PROJECTS	District	EXAMPLE - REMOVE ON SITE-SPECIFIC PROJECTS

IMPORTANT: This form is only a summary list of structural tests and special inspections required for the project. The actual tests and inspections must be performed as detailed on the DSA approved documents. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of nonstructural components, etc., per Title 24, Part 2, Chapter 17A.

NOTE: This form is also available for projects submitted for review under the 2007 and 2010 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. An "X" before a listed test or inspection indicates it is a mandatory requirement. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests finally selected. **For more information on use of this form, see DSA-103.INSTR.**

Note: References are to the 2013 edition of the California Building Code (CBC) unless otherwise noted.

REQUIRED	TEST OR SPECIAL INSPECTION	TYPE[1]	PERFORMED BY[2]	CODE REFERENCE AND NOTES
-	**SOILS**			
	1. GENERAL:	Table 1705A.6		
X	a. Verify that: • site has been prepared properly prior to placement of controlled fill and/or excavations for foundations, • foundation excavations are extended to proper depth and have reached proper material, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative.
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**	Table 1705A.7		
X	a. Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
X	b. Verify locations of piers.	Continuous	PI	
X	c. Confirm pier diameters, plumbness, bell diameters (if applicable), lengths, and embedment into bedrock (if applicable). Record concrete or grout volumes.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
X	e. Concrete piers.	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**	Table 1705A.3		
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI & PI*	* To be performed by batchplant special inspector and project inspector.
X	b. Test reinforcing steel.	Test	Lab	1913A.2 (1913.2.6*). ASTM A370. DSA IR 17-10
X	c. Perform slump, temperature, and (where required) air content tests.	Test	Lab	ASTM C172, ASTM C31.
X	d. Test concrete (compression).	Test	Lab	ACI 318 Section 5.6 and 1905A.1.2 (1913.3.1*). ASTM C39.
X	g. Inspect placement of formwork, reinforcing steel, embedded items and concrete. Inspect curing and form removal.	Continuous	PI*	* May be performed by a special inspector when specifically approved by DSA.
+	**MASONRY**	TMS 402-11/ACI 530-11/ASCE 5-11 Table 1.19.3		
-	**STEEL**	Table 1705A.2.1		
-	**17. STRUCTURAL STEEL AND COLD-FORMED STEEL USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify that all materials are appropriately marked and that: • Mill certificates indicate material properties that comply with requirements, • Material sizes, types and grades comply with requirements.	Periodic	*	* By special inspector when performed off-site; by project inspector for steel shipped directly to project site without welding or fabrication.
X	b. Test unidentified materials	Test	Lab	2203A.1 (2203.1*). ASTM A370.
X	c. Examine seam welds of structural tubes and pipes	Periodic	SI*	* DSA IR 17-3.
	Inspection:			
X	d. Verify member locations, bracing and all details constructed in the field.	Continuous	PI	
X	e. Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	Periodic	SI	
-	**18. HIGH STRENGTH BOLTS:**			
	Material Verification of High-Strength Bolts, Nuts and Washers:			
X	a. Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA approved documents.	Periodic	SI	DSA IR 17-9
X	b. Test high-strength bolts, nuts and washers.	Test	Lab	2213A.1 (2212.6.1*). ASTM F606, A370. DSA IR 17-8
	Inspection of High-Strength Bolt Installation:			
X	d. Slip-critical connections.	*	SI	* "Continuous" or "Periodic" depends on the tightening method used, DSA IR 17-9 and 1705A.2.1.
-	**19. WELDING:**			DSA IR 17-3, AWS D1.1 and AWS D1.8 (AWS D1.3 for cold formed steel).
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove, multi-pass, and fillet welds > 5/16"	Continuous	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	Per AISC 360 (and AISC 341 as applicable). DSA IR 17-3.
+	**WOOD**			
+	**OTHER**			

1 Soils testing and Inspection: Geotechnical Verified Report - Form DSA-293
2 All Structural Testing: Laboratory Verified Report - Form DSA-291
3 Concrete Batch Plant Inspection: Special Inspection Verified Report - Form DSA-292
4 Shop Welding Inspection: Special Inspection Verified Report - Form DSA-292
5 HS Bolt Installation Inspection: Special Inspection Verified Report - Form DSA-292

KEY to Columns	
1 Type -	2 Performed By -
Continuous – Indicates that a continuous special inspection is required	GE – Indicates that the special inspection is to be performed by a registered geotechnical engineer or his or her authorized representative
Periodic – Indicates that a periodic special inspection is required	Lab – Indicates that the test or inspection is to be performed by a testing laboratory accepted in the DSA laboratory Evaluation and Acceptance (LEA) Program. See section 4-335, 2013 CCR Title 24, Part 1.
Test – Indicates that a test is required	PI – Indicates that the special inspection is to be performed by the project inspector
	SI – Indicates that the special inspection is to be performed by a special inspector

Name of Architect or Engineer in general responsible charge

THOMAS A. BURKHART

Name of Structural Engineer (When structural design has been delegated)

T.A. Burkhart 2/28/14

Signature of Architect or Structural Engineer — date

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PRE-CHECK (PC) DOCUMENT

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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

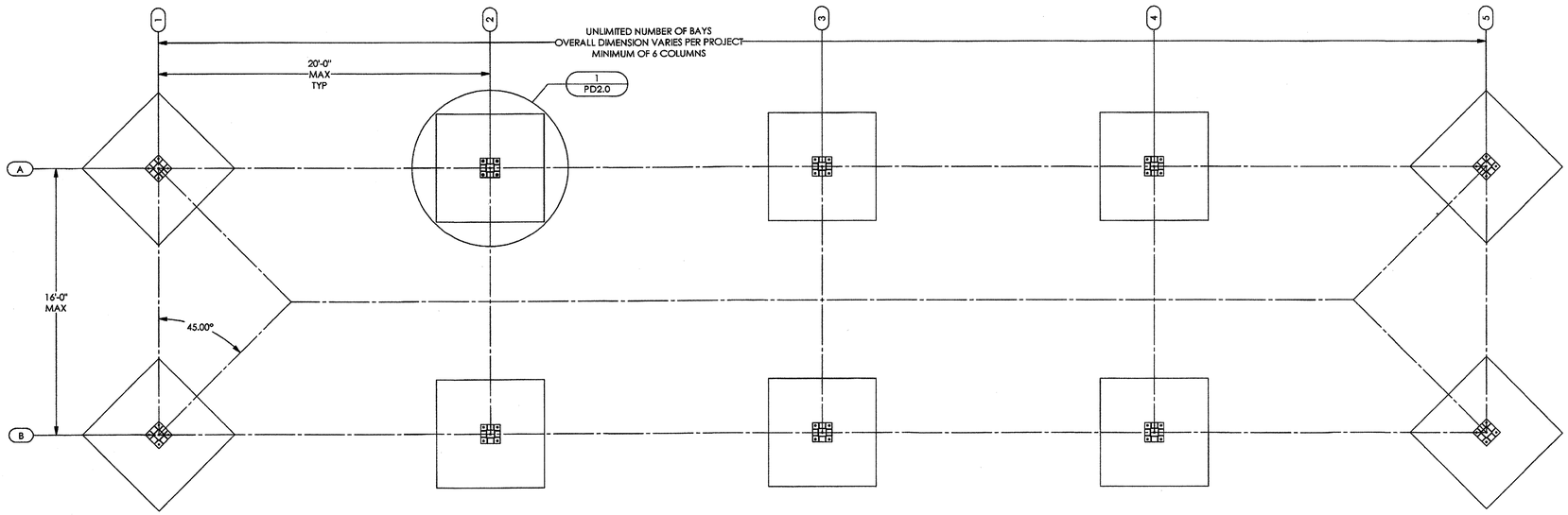
SPECIAL INSPECTIONS

HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

PD1.1

2014A



FOUNDATION PLAN (SPREAD PAD)

SCALE: 1/4" = 1'-0"

FOUNDATION PLAN NOTES:

1. TOP OF ALL FOUNDATIONS MUST BE CONSTRUCTED AT ONE COMMON ELEVATION (COORDINATE WITH SITE PLANS - NOT BY POLIGON)
2. ALL FOUNDATIONS MUST BE CENTERED UNDER COLUMNS (UNO).
3. SEE SHEET PD1.0 FOR CONCRETE REQUIREMENTS.
4. PRIOR TO FORMING AND CASTING FOUNDATIONS, REVIEW FOUNDATION PLAN FOR REQUIRED ORIENTATION.
5. FOUNDATION MATERIAL AND INSTALLATION NOT BY POLIGON.
6. VIBRATE CONCRETE FULL DEPTH OF FOUNDATION.
7. FOR DRILLED PIER FOUNDATIONS, PREVENT SOIL FROM ENTERING EXCAVATED HOLE (FORM, ETC).

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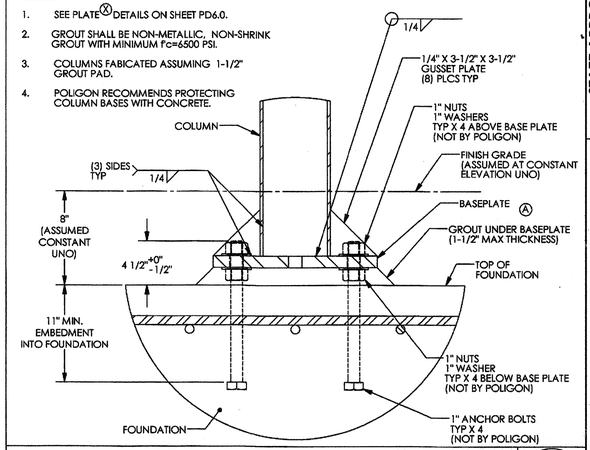
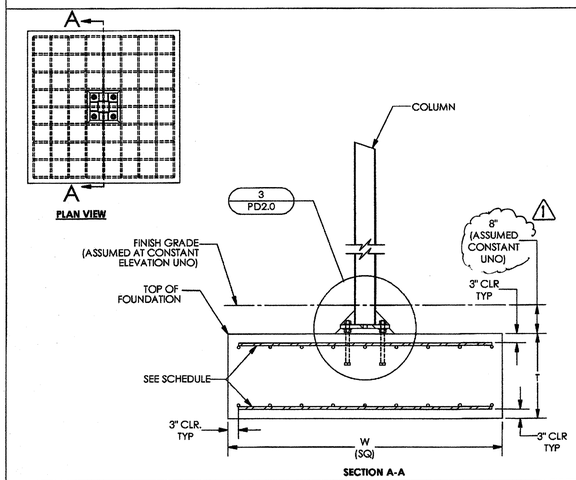
NOTES:

1. SEE PLATE Ⓧ DETAILS ON SHEET PD6.0.
2. GROUT SHALL BE NON-METALLIC, NON-SHRINK GROUT WITH MINIMUM f'c=6500 PSI.
3. COLUMNS FABICATED ASSUMING 1-1/2" GROUT PAD.
4. POLIGON RECOMMENDS PROTECTING COLUMN BASES WITH CONCRETE.



COLUMN BASE PLATE AND ANCHOR BOLTS

3



FOUNDATION REQUIREMENTS VARY PER PROJECT
SEE SHEET PD1.0 FOR REQUIRED LOAD SCENARIO AND FOUNDATION TYPE (STEP 6 OF 'INSTRUCTIONS')
ONLY REFERENCE COPY OF PC DRAWINGS SUBMITTED FOR THIS PROJECT

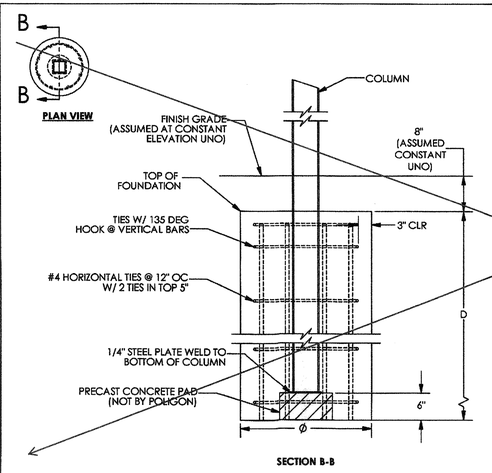
SPREAD PAD
SIZE AND REINFORCING REQUIREMENTS

LOAD SCENARIO	WIDTH (W)	THICKNESS (T)	HORIZONTAL REINFORCING[1]	
			QTY	SIZE
~~1~~	~~6'-0"~~	~~1'-6"~~	~~6~~	~~#6~~
~~2~~	~~6'-0"~~	~~2'-0"~~	~~8~~	~~#6~~
~~3~~	~~7'-0"~~	~~2'-0"~~	~~9~~	~~#6~~
4	7'-6"	2'-0"	9	#6

[1] EQUALLY SPACED EACH WAY, TOP AND BOTTOM

SPREAD PAD FOUNDATION

1



FOUNDATION REQUIREMENTS VARY PER PROJECT
SEE SHEET PD1.0 FOR REQUIRED LOAD SCENARIO AND FOUNDATION TYPE (STEP 6 OF 'INSTRUCTIONS')
ONLY REFERENCE COPY OF PC DRAWINGS SUBMITTED FOR THIS PROJECT

DRILLED PIER
SIZE AND REINFORCING REQUIREMENTS

LOAD SCENARIO	DIAMETER (Ø)	DEPTH (D)	VERTICAL REINFORCING[1]	
			QTY	SIZE
1	2'-6"	8'-0"	6	#6
2	2'-6"	9'-6"	8	#6
3	2'-6"	10'-0"	8	#6
4	2'-6"	10'-0"	8	#6

[1] EQUALLY SPACED AROUND DRILLED PIER

PRIOR TO CONCRETE PLACEMENT, POLIGON STRONGLY RECOMMENDS ERECTING ENOUGH OF THE FRAME (E.G. BEAMS AND PURLINS) TO ENSURE ACCURATE COLUMN SPACING, ROTATION, AND VERTICALITY.

DRILLED PIER FOUNDATION (BURIED COLUMN)

2

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THOMAS A. BURGHART
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Exp. 3/31/16
STRUCTURAL
STATE OF CALIFORNIA

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Rev.1

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CODE: 2013 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

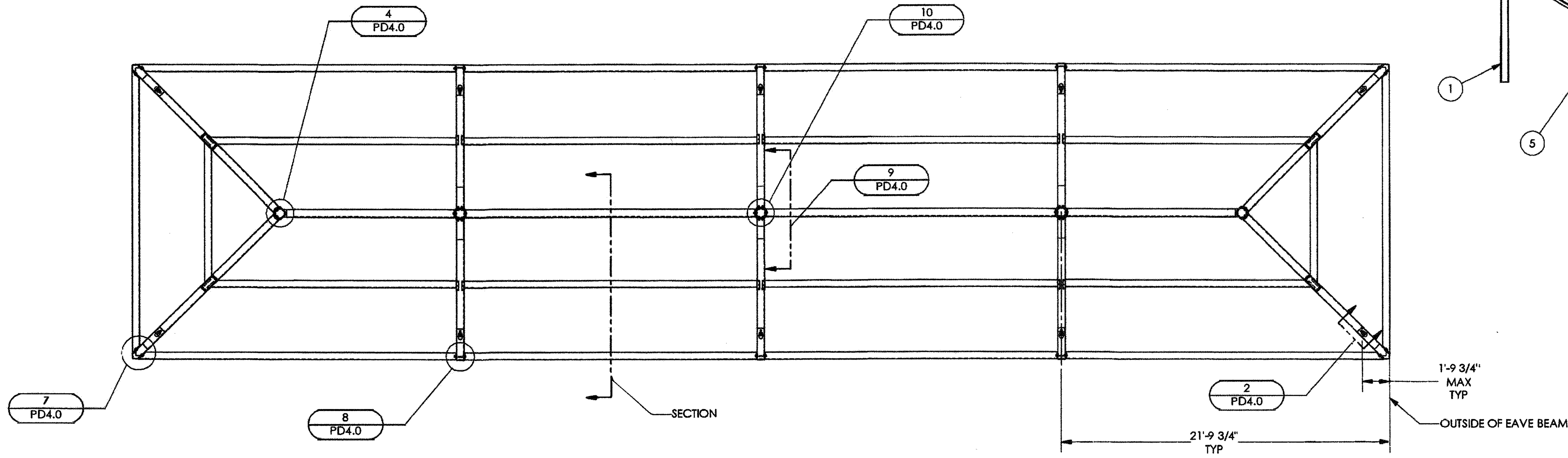
FOUNDATION PLAN
RAM 20

HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

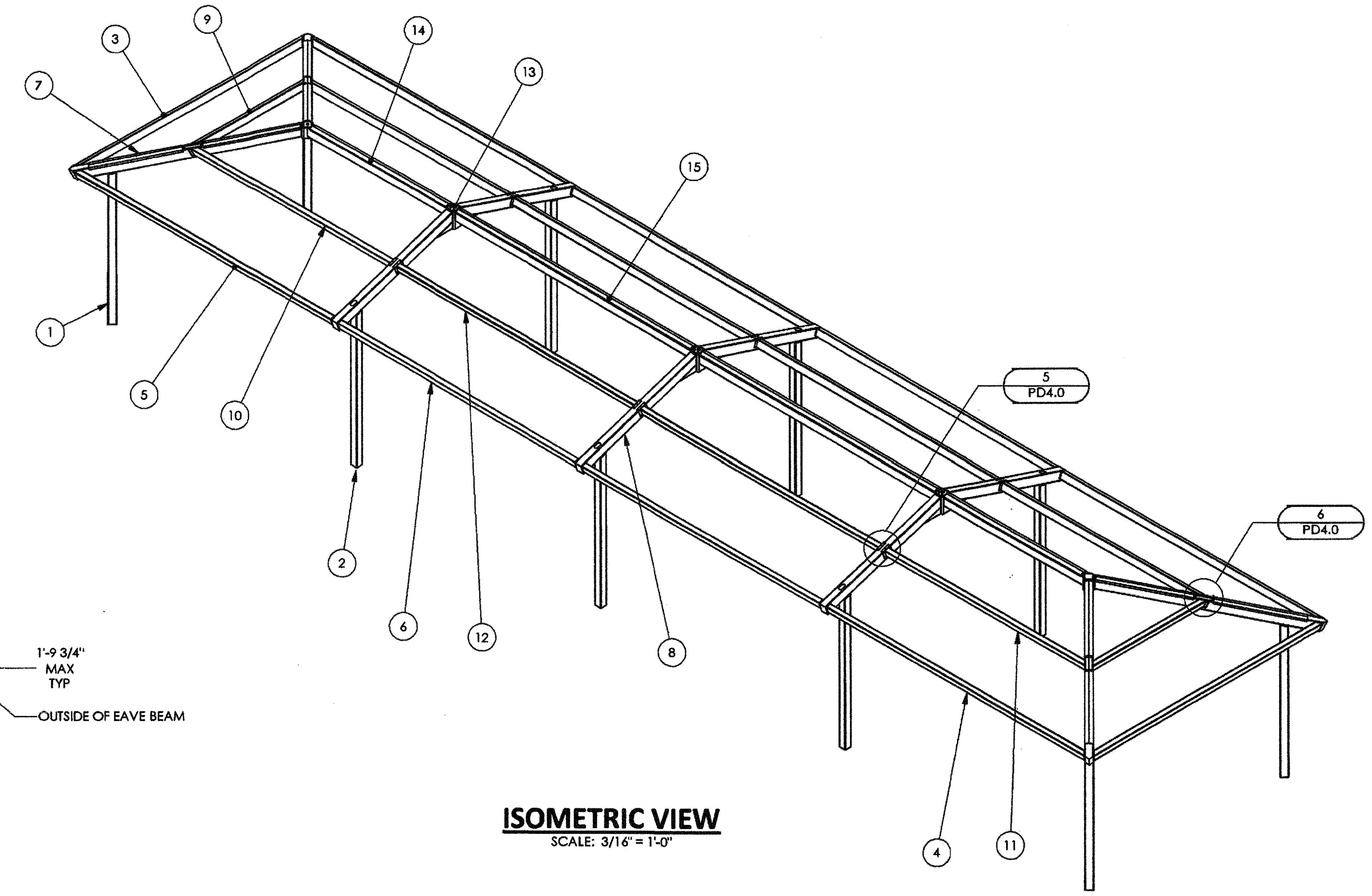
PD2.0

2014A



PLAN VIEW

SCALE: 3/16" = 1'-0"



ISOMETRIC VIEW

SCALE: 3/16" = 1'-0"

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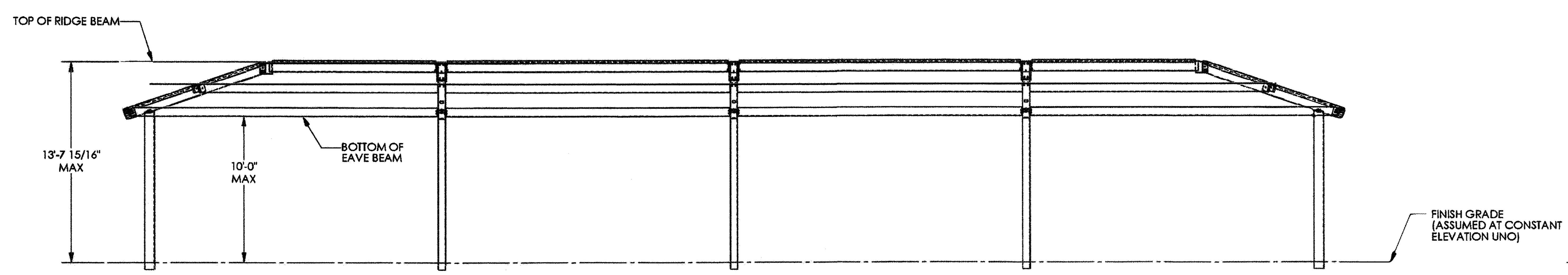
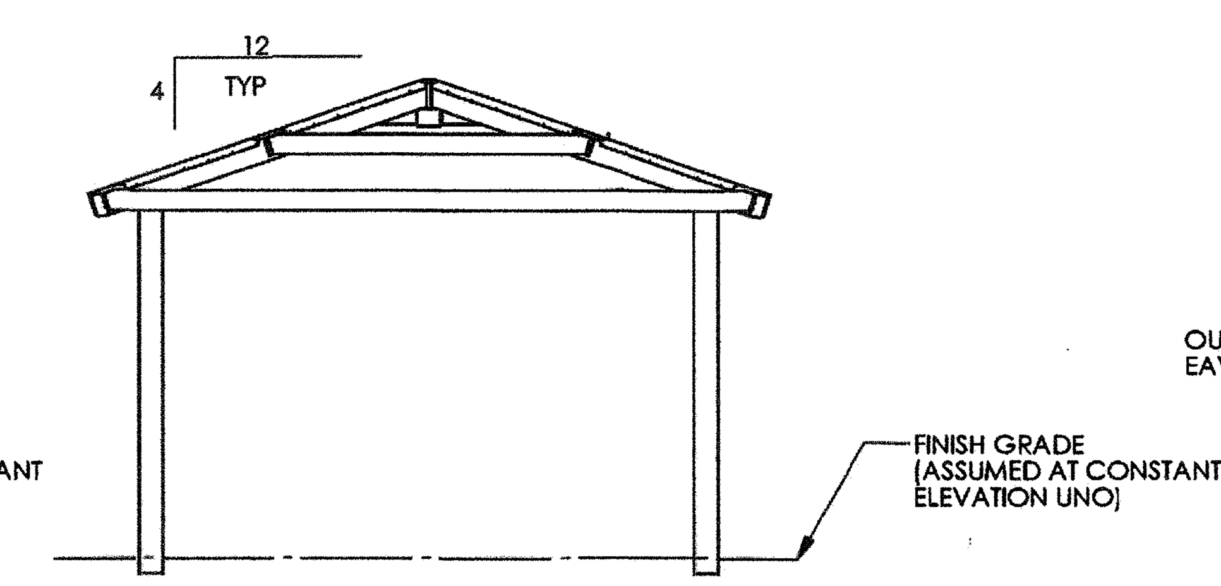


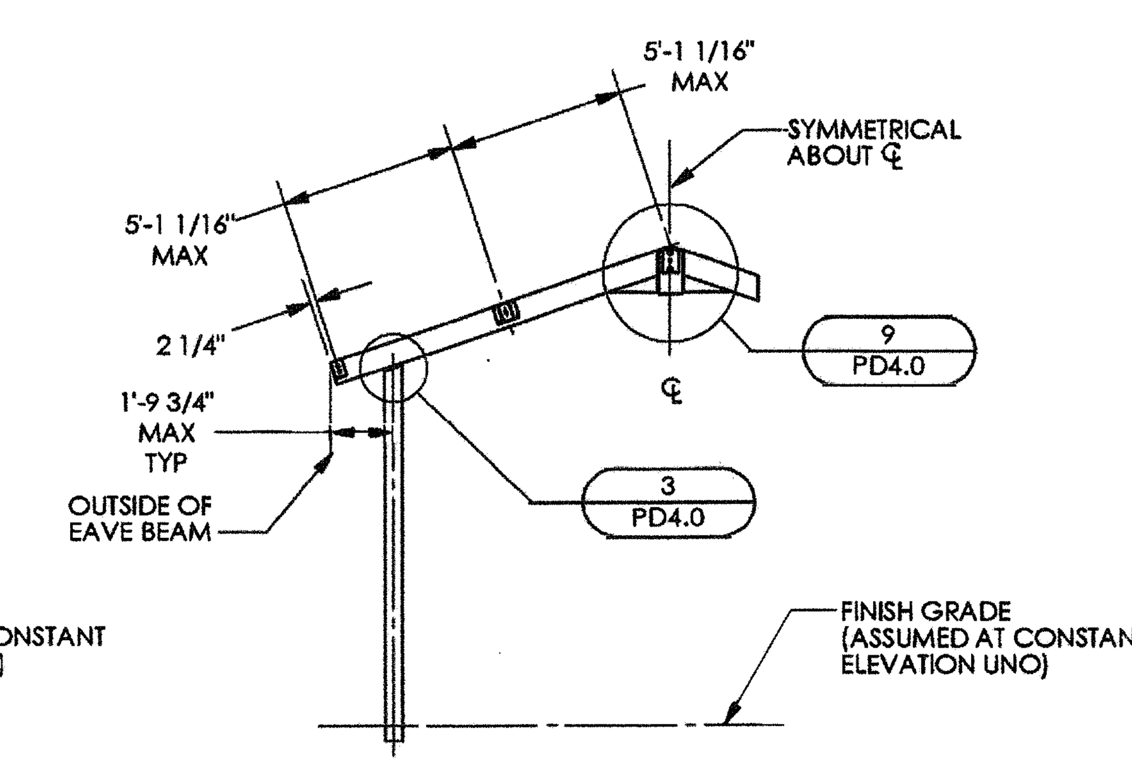
FRONT ELEVATION

SCALE: 3/16" = 1'-0"



SIDE EVEVATION

SCALE: 3/16" = 1'-0"



SECTION

SCALE: 3/16" = 1'-0"

ITEM	FRAME /QTY.	PART NO.	DESCRIPTION	MATERIAL
15	2	-	RIDGE BEAM ASM, MID	HSS8X6X3/16
14	2	-	RIDGE BEAM ASM, END	HSS8X6X3/16
13	3	-	COMPRESSION TUBE ASM	HSS8X8X5/8
12	4	-	PURLIN ASM, SIDE	HSS6X4X3/16
11	2	-	PURLIN ASM, RH	HSS6X4X3/16
10	2	-	PURLIN ASM, LH	HSS6X4X3/16
9	2	-	PURLIN ASM, END	HSS6X4X3/16
8	6	-	GABLE BEAM ASM	HSS8X6X3/16
7	4	-	HIP BEAM ASM	HSS8X6X3/16
6	4	-	EAVE BEAM ASM, SIDE	HSS6X4X1/8
5	2	-	EAVE BEAM ASM, RH	HSS6X4X1/8
4	2	-	EAVE BEAM ASM, LH	HSS6X4X1/8
3	2	-	EAVE BEAM ASM, END	HSS6X4X1/8
2	6	-	COLUMN ASM, SIDE	HSS6X6X1/4
1	4	-	COLUMN ASM, CORNER	HSS6X6X1/4

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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

FRAMING PLAN

RAM 20

HIP ROOF (RAM)

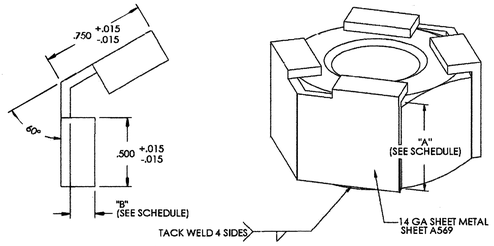
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

PD3.0

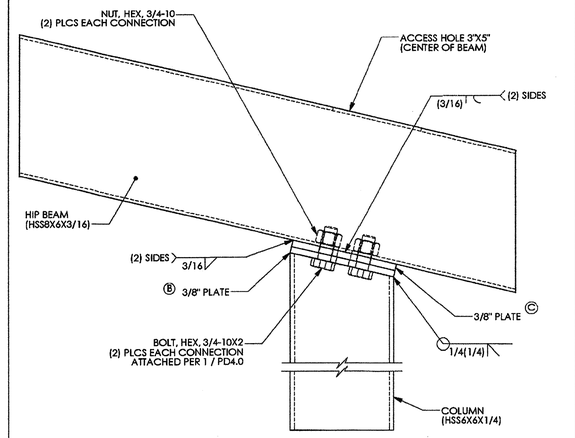
2014A

ALL HIDDEN NUTS AND BOLTS (INSTALLED IN SHOP DURING FABRICATION) ARE SECURED WITH THIS NUT AND BOLT RESTRAINING SYSTEM.

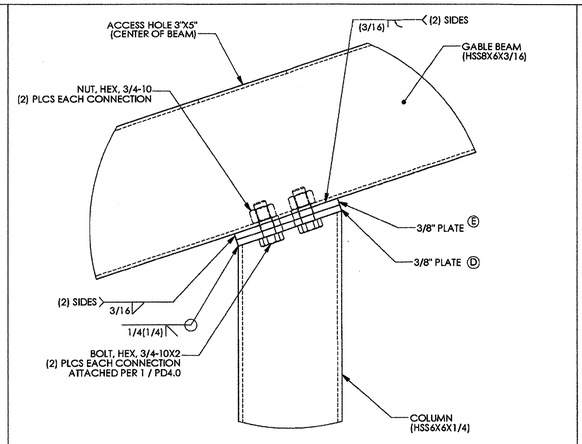


DIMENSION SCHEDULE				
FASTENER	DIM A		DIM B	
5/8" NUT	.631	+.000 -.015	.180	+.015 -.015
5/8" BOLT	.403	+.000 -.015	.250	+.015 -.015
3/4" NUT	.758	+.000 -.015	.180	+.015 -.015
3/4" BOLT	.483	+.000 -.015	.375	+.015 -.015
1" NUT	1.012	+.000 -.015	.180	+.015 -.015
1" BOLT	.643	+.000 -.015	.375	+.015 -.015

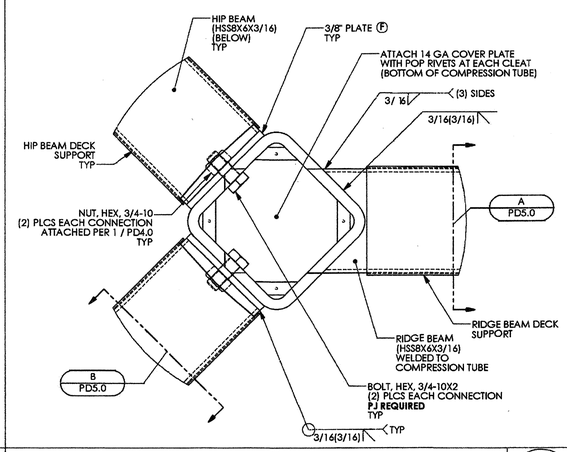
NUT & BOLT RESTRAINING SYSTEM — 1



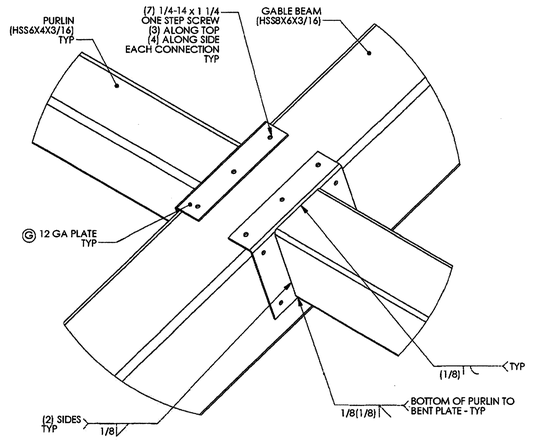
HIP BEAM CONNECTION @ COLUMN — 2



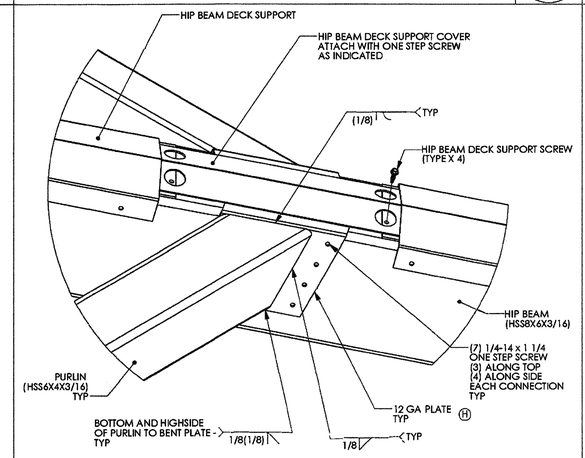
GABLE BEAM CONNECTION @ COLUMN — 3



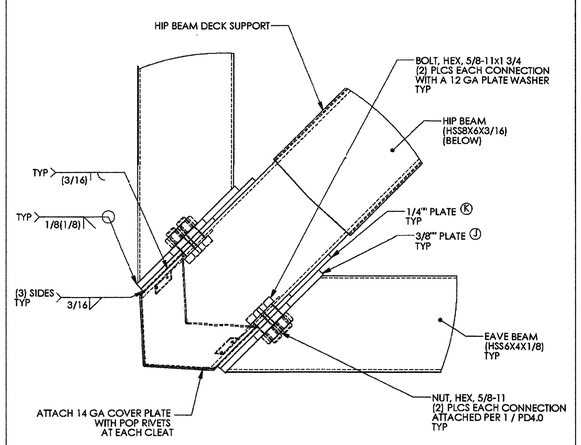
HIP BEAM CONNECTION @ COMPRESSION TUBE — 4



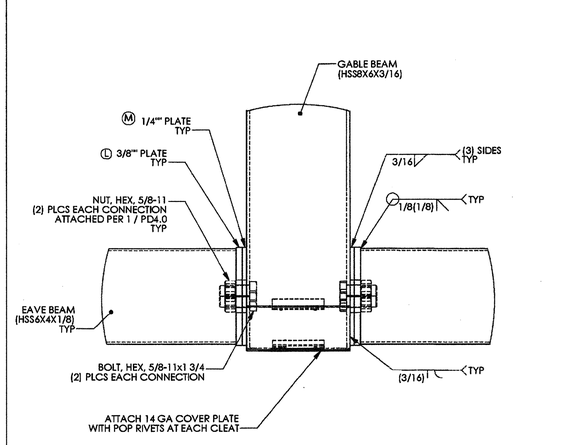
PURLIN CONNECION @ GABLE BEAM — 5



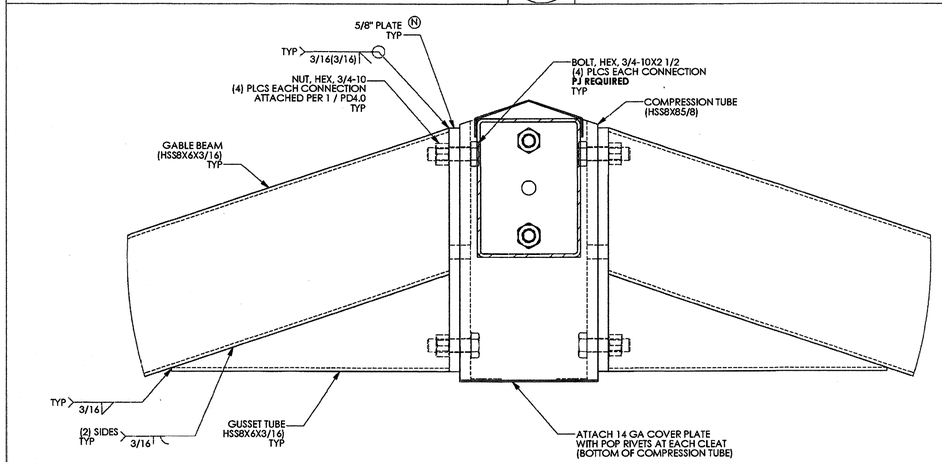
PURLIN CONNECTON @ HIP BEAM — 6



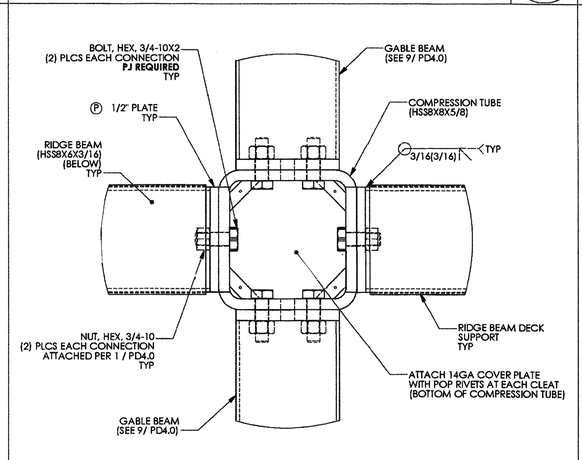
EAVE BEAM CONNECTION @ HIP BEAM — 7



EAVE BEAM CONNECTION @ GABLE BEAM — 8



GABLE BEAM CONNECTION @ COMPRESSION TUBE — 9



RIDGE BEAM CONNECTION @ COMPRESSION TUBE — 10

FRAME CONNECTION DETAIL NOTES:

1. SEE SECTIONS ON SHEET PD5.0.
2. SEE PLATE Ⓧ DETAILS ON SHEET PD6.0 AND PD6.1
3. COVER ACCESS HOLES WITH GRACE ICE AND WATER SHIELD BEFORE ATTACHING ROOF DECK.

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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

FRAME CONNECTION DETAILS

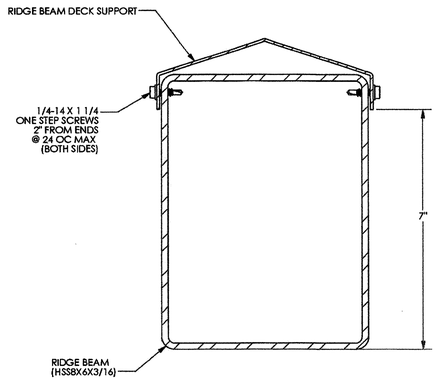
RAM 20

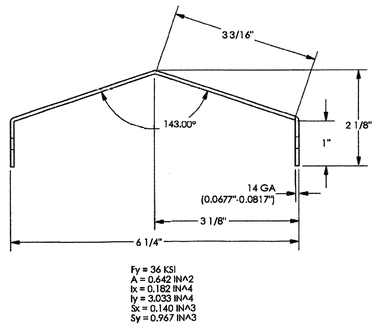
HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

PD4.0

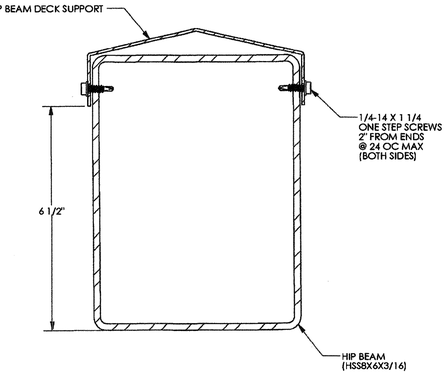
2014A

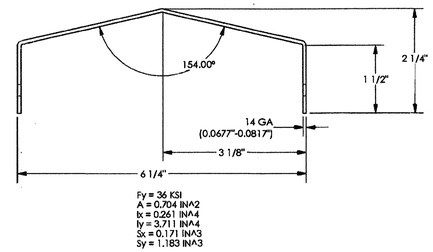




RIDGE BEAM DECK SUPPORT

A





HIP BEAM DECK SUPPORT

B

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Exp. 3/31/16
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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

SECTION DETAILS
RAM 20

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

HIP ROOF (RAM)
PC DRAWINGS

PD5.0

2014A

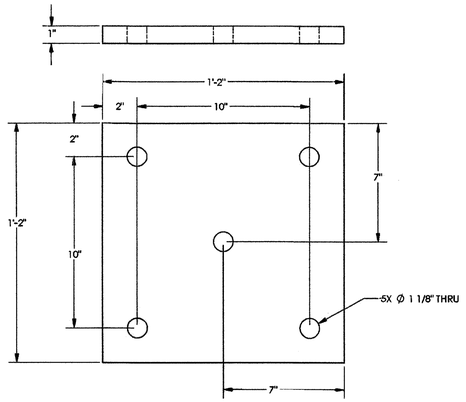


PLATE A

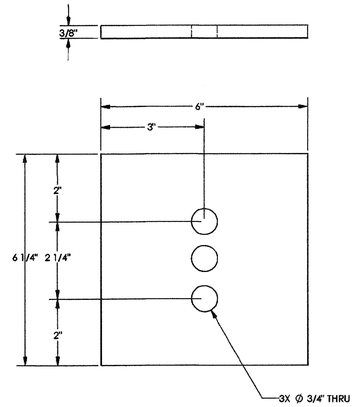


PLATE B

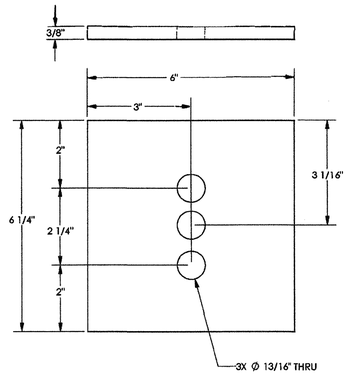


PLATE C

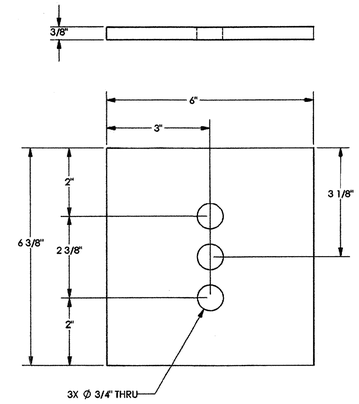


PLATE D

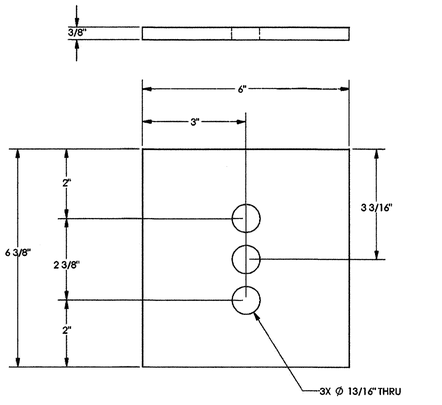


PLATE E

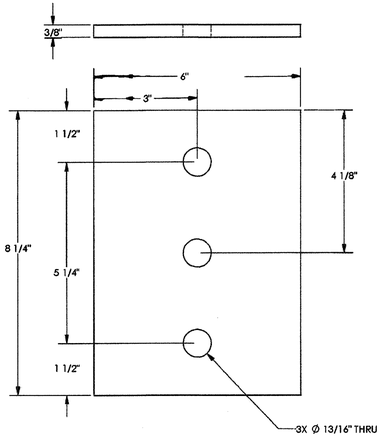


PLATE F

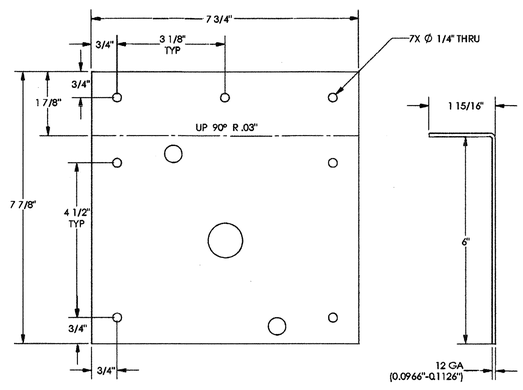


PLATE G

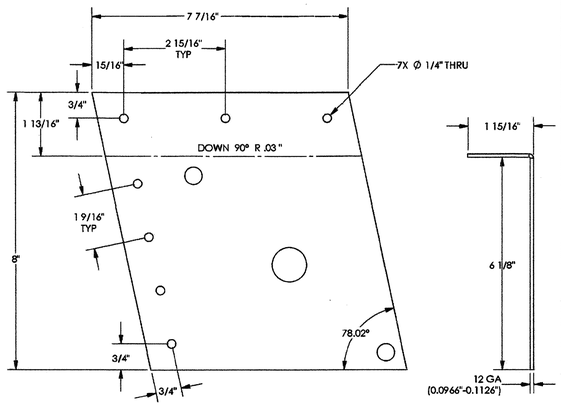
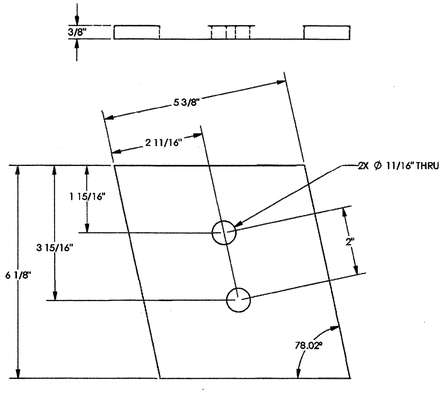


PLATE H



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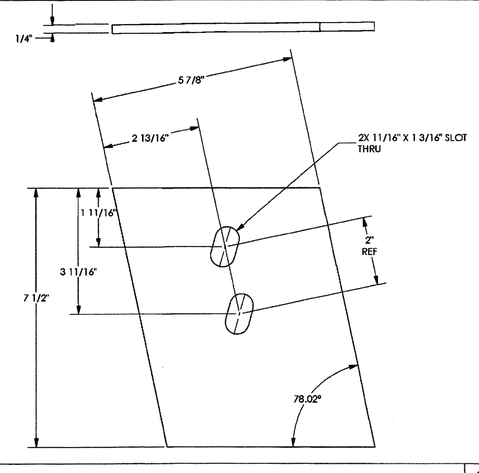

PLATE K

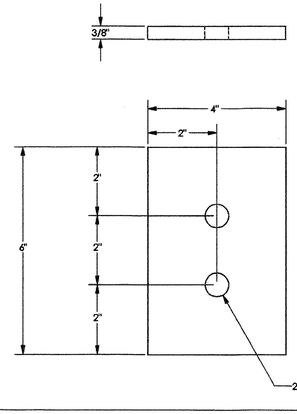

PLATE L

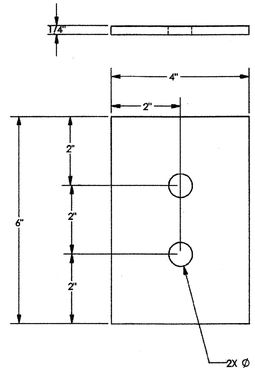

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PLATE M

REGISTERED PROFESSIONAL ENGINEER
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Exp. 3/31/16
STRUCTURAL
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CODE: 2013 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

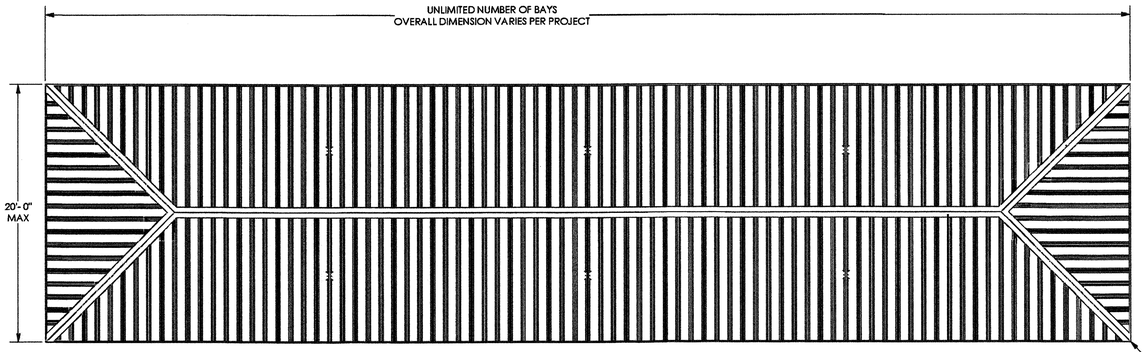
PLATE DETAILS
RAM 20

HIP ROOF (RAM)
PC DRAWINGS

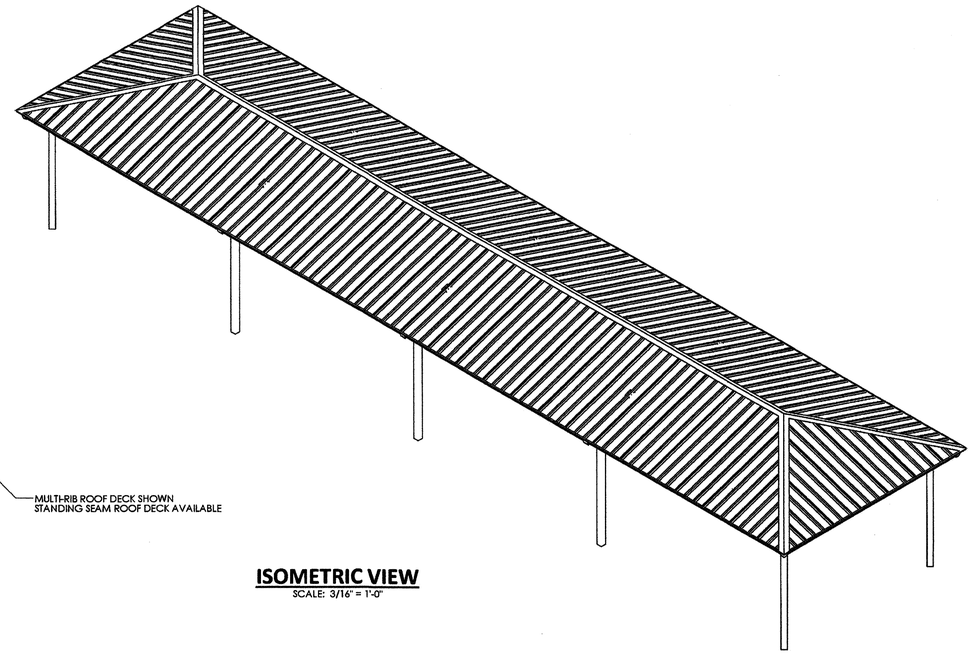
DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

PD6.0

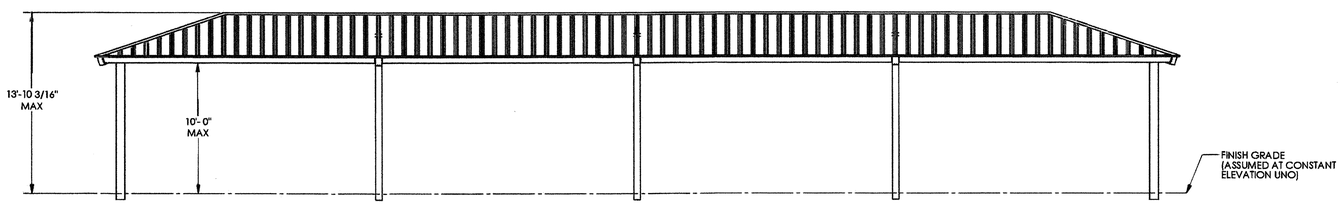
2014A



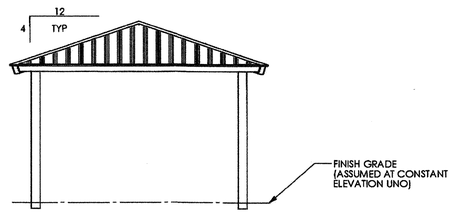
PLAN VIEW
SCALE: 3/16" = 1'-0"



ISOMETRIC VIEW
SCALE: 3/16" = 1'-0"



FRONT ELEVATION
SCALE: 3/16" = 1'-0"



SIDE EVEVATION
SCALE: 3/16" = 1'-0"

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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

ARCHITECTURAL VIEWS
RAM 20

HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

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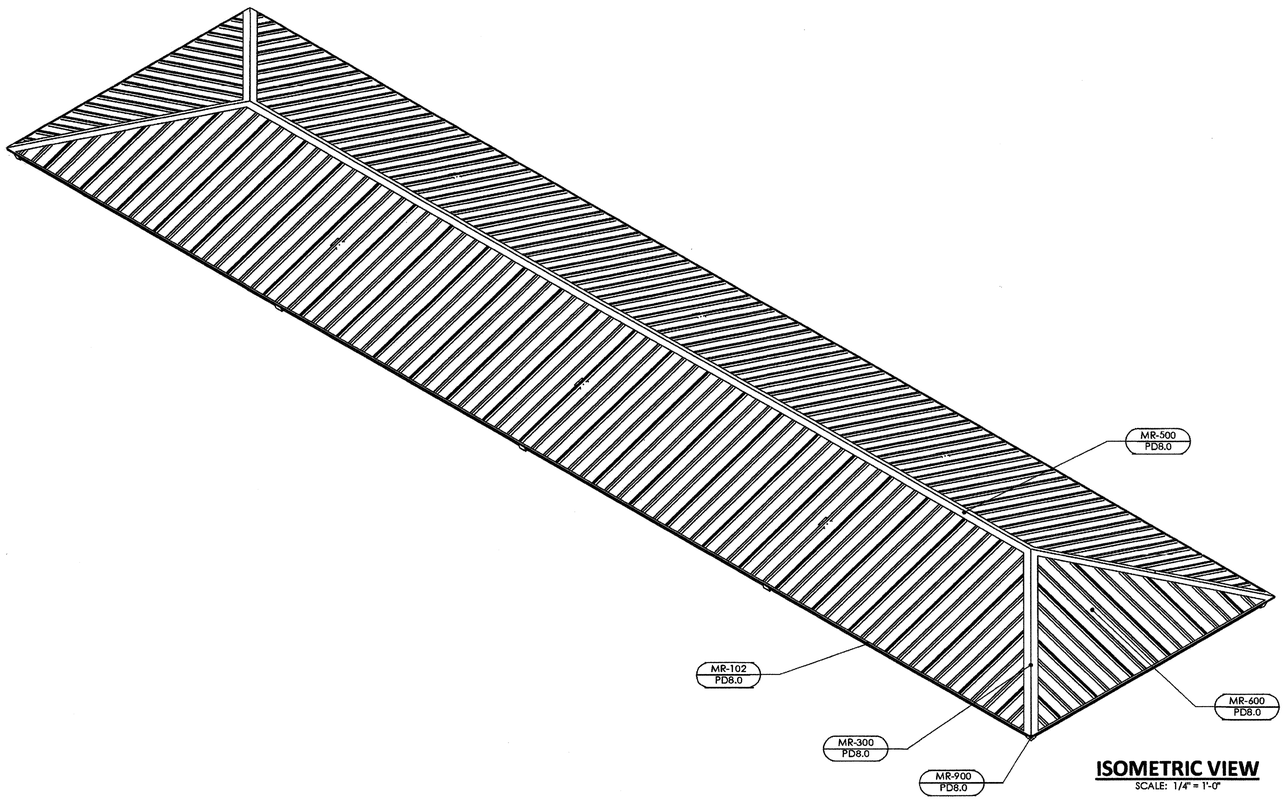
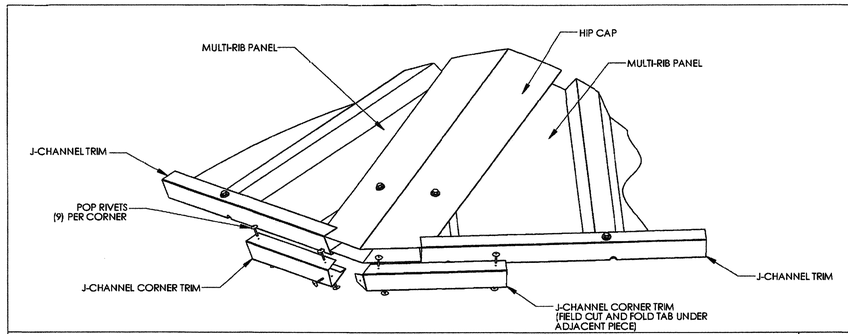


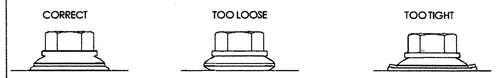
ISOMETRIC VIEW
SCALE: 1/4" = 1'-0"

ROOF LAYOUT NOTES (MR):

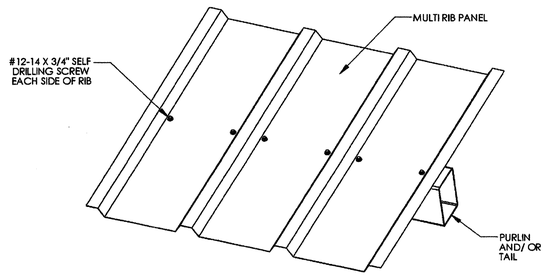
1. IT SHALL BE THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THAT THE DETAILS MEET THE BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.
2. THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.
3. FLASHING AND TRIM SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ANY EXPOSED FASTENERS EQUALLY SPACED FOR THE BEST APPEARANCE.
4. SEALANT SHALL BE FIELD APPLIED ON DRY, CLEAN SURFACES. SOME FIELD CUTTING AND FITTING OF PANELS AND FLASHING IS TO BE EXPECTED BY THE ERECTOR AND MINOR FIELD CORRECTIONS ARE A PART OF NORMAL ERECTION WORK.
5. WORKMANSHIP SHALL BE OF THE BEST INDUSTRY STANDARDS AND INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN.
6. METAL SHAVINGS FROM DRILLING OR INSTALLATION OF ROOF FASTENERS MUST BE CAREFULLY REMOVED FROM THE ROOF BY BRUSHING OR SWEEPING AT THE END OF EACH DAY DURING INSTALLATION. SHAVINGS LEFT ON THE ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH.



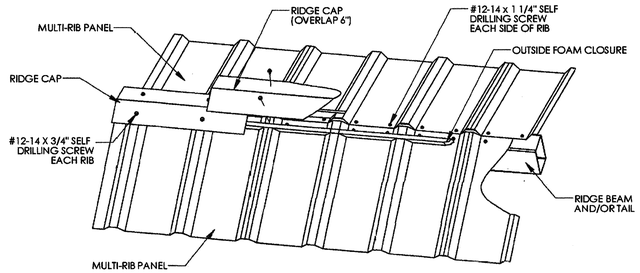
CORNER DETAIL — MR-900



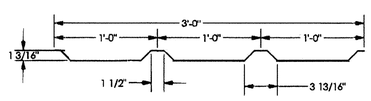
ROOF FASTENER TIGHTENING — MR-950



PURLIN DETAIL — MR-600



RIDGE DETAIL — MR-500

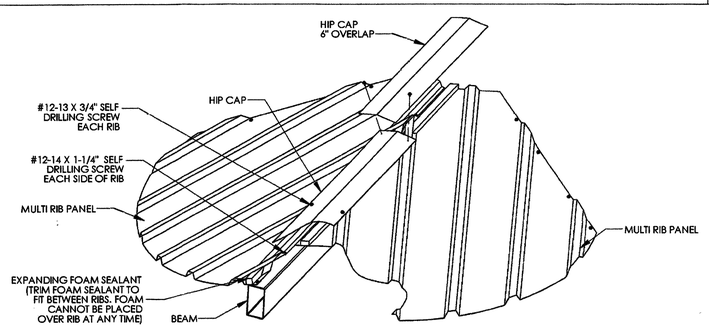


GENERAL:
GAGE = 24
Fy = 50 KSI

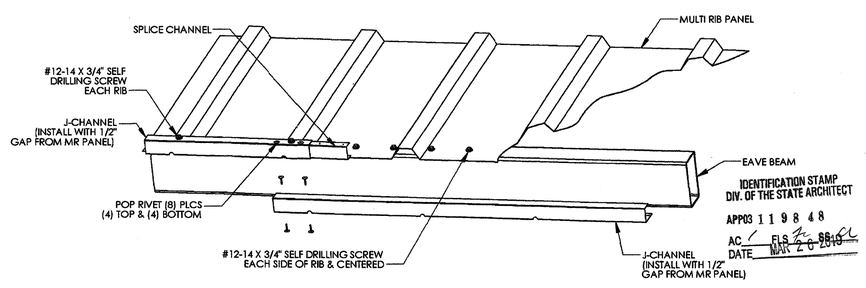
TOP IN COMPRESSION:
Ix=0.0482 IN^4
Se=0.0499 IN^3
Ma=1.494 IN-KIPS

BOTTOM IN COMPRESSION:
Ix=0.0282 IN^4
Se=0.0462 IN^3
Ma=1.382 IN-KIPS

MR ROOF DECK SECTION PROPERTIES — MR-951



BEAM DETAIL — MR-300



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EAVE DETAIL — MR-102

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A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

ROOF CONNECTION DETAILS
MR ROOF DECK

HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

PD8.0

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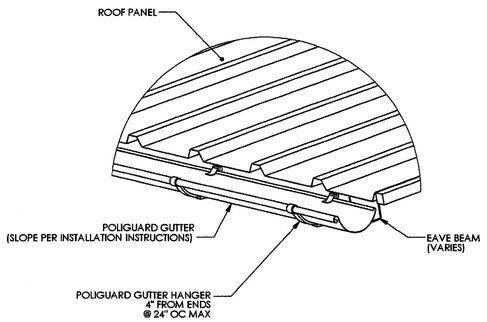
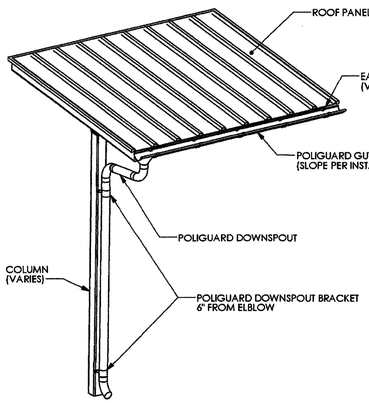


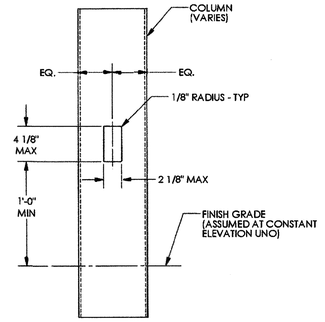
GUTTER DETAIL — GS-100



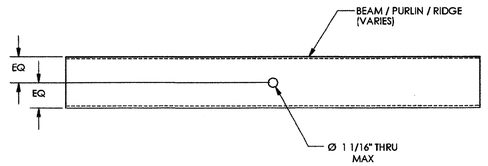
DOWNSPOUT DETAIL — GS-200

POLIGUARD GUTTER SYSTEM NOTES:

1. PREFABRICATED GUTTER SYSTEM IS ATTACHED TO THE STRUCTURE AFTER ROOF IS INSTALLED.
2. DETAILED INSTALLATION INSTRUCTIONS ARE SHIPPED WITH THE STRUCTURE.
3. DOWNSPOUTS REQUIRED AT EACH COLUMN.



ELECTRICAL CUTOUT IN COLUMNS — EC-100



ELECTRICAL CUTOUT IN BEAMS / PURLINS / RIDGES — EC-200

ELECTRICAL CUTOUT NOTES:

1. MAXIMUM ONE CUTOUT PERMITTED IN EACH MEMBER.
2. CUTOUTS CAN BE PLACED ON ANY SIDE OF A MEMBER.
3. CUTOUTS CAN BE PLACED ALONG MEMBERS AS INDICATED IN THE DETAILS.
4. ARCHITECTS REQUESTING CUTOUTS MUST MARKUP APPROVED PC DRAWINGS TO LOCATE CUTOUTS FOR APPROVAL AND FABRICATION.

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MISC DESIGN OPTIONS

HIP ROOF (RAM)
PC DRAWINGS

DRAWN BY: JMD
CHECKED BY: CE
POLIGON #: 51458

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