ADD FOUR SHADE STRUCTURES AT LA PALOMA ELEMENTARY SCHOOL

SYMBOLS LEGEND **ABBREVIATIONS** MAXIMUM MAX. NEW OR FINISHED CONTOURS CENTERLINE M.B. MACHINE BOLT EXISTING CONTOURS POUND OR NUMBER MECH. MECHANICAL ANCHOR BOLT MINIMUM SLOPING SURFACE ABV. MINUTE ACOUST. . ACOUSTICAL MISCELLANEOUS ASPHALT CONCRETE MASONRY OPENING -DETAIL NUMBER **ADJUSTABLE** MOISTURE RESISTANT \ A4 /€ ABOVE FINISH FLOOR MTL. METAL ABOVE FINISH GRADE NOT IN CONTRACT - SECTION NUMBER NO. OR# NUMBER ARCHITECTURAL - SHEET SECTION APPEARS ON NOT TO SCALE BD. OVER BLDG BUILDING (26 DOOR NUMBER ON CENTER BLKG. **BLOCKING** OPENING BEAM OPPOSITE WINDOW NUMBER BOTTOM PULL BOX CABINET PERFORATED CATCH BASIN CONCRETE PLATE OR PLASTIC CONTRACTOR FURNISHED PLASTER OWNER INSTALLED PLYWOOD PLYWD. CAST IN PLACE _///_/// PLYWOOD CONTROL JOINT PROJ. PROJECTION CHAIN LINK STEEL PRESSURE TREATED CEILING DOUGLAS FIR WOOD BLOCKING R OR RAD RADIUS CONCRETE MASONRY UNIT ROOF DRAIN CLEAN OUT WOOD CONTINUOUS MEMBER REFRIGERATOR COLUMN REINFORCED OR REINFORCEMENT CONCRETE GYP. BD. REQUIRED CONSTR. CONSTRUCTION RETAIN'G RETAINING WORK POINT, CONNECTION POINT DATUM POINT OR CONTROL POINT CONTINUOUS RETAINING CORR. CORRIDOR ROOF DBL. DF. **DOUBLE** ROOM - INTERIOR ELEVATION DOUGLAS FIR ROOF'G ROOFING DECOMPOSED GRANITE SOLID CORE DIA. DIAMETER SCHEDULE DIAG. DIAGONAL SHEATHING - SHEET ELEVATION APPEARS ON DIMENSION DIM. SHEET DISP. DISPENSER SIMILAR SQUARE 1029 DOOR STANDARD ROOM NUMBER D.S. STL. DOWN SPOUT STEEL DWG DRAWING NEW CONSTRUCTION STOR. STORAGE EXISTING EACH SUSPENDED T&B TOP & BOTTOM EXPANSION JOINT EXISTING TO REMAIN T&B TONGUE & GROOVE ELECTRICAL TEL. TELEPHONE ELEVATION FINISH MATERIAL TO ALIGN TEMPERED ENCLOSURE ENCL. T.O. TOP OF EQUAL TOP OF WALL EQUIPMENT T.W. KEY NOTE TYP TYPICAL EXISTING UNLESS NOTED OTHERWISE U.N.O. EXTERIOR U.O.N. UNLESS OTHERWISE NOTED FIRE BLANKET V.C.T VINYL COMPOSITION TILE FLOOR DRAIN VERT. FOUNDATION VERTICAL FIRE EXTINGUISHER F.E.C. FIRE EXTINGUISHER CABINET W.C. WATERCLOSET F.F. FINISH FLOOR WOOD FIN. FINISH WEAKENED JOINT FLASH'G FLASHING W.P. WATERPROOF FLOOR WATER RESISTANT W.R. F.O.C. FACE OF CONCRETE WEIGHT WT. F.O.F. FACE OF FINISH WELDED WIRE FABRIC W.W.F. F.O.M. FACE OF MASONRY F.O.S. FACE OF STUD FRAM'G FRAMING FIBERGLASS REINFORCED POLYESTER FOOT OR FEET FOOTING F.V. FIELD VERIFY GAUGE GALV. GALVANIZED GALVANIZED IRON GLASS GLU-LAM BEAM GOVN'T GOVERNMENT GYP. BD. GYPSUM BOARD HANDICAPPED HOLD DOWN HDWR. HARDWARE HEADER HANGER HORIZ. HORIZONTAL HOLLOW METAL HR HOUR HT. HEIGHT INSUL. INSULATION INTERIOR INTERNATIONAL SYMBOL ACCESSIBILITY JOINT JST. JOIST

> LAMINATE LAVATORY

LIGHT

MFR. MANUFACTURER

PROJECT TEAM

FALLBROOK UNION SCHOOL DISTRICT 321 N. IOWA STREET

FALLBROOK, CA 92028 (760) 723-7000

ROESLING NAKAMURA TERADA ARCHITECTS, INC. (RNT) 363 FIFTH AVENUE, SUITE 202

SAN DIEGO, CA 92101 (619) 233-1023 FAX: (619) 233-0016

SHADE STRUCTURE MANUFACTURER USASHADE & Fabric Structures 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX 75261 MANTECA, CA 95336 800-966-5005

CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING PARTS OF THE TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS (CCR):

2019 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.

APPLICABLE STANDARDS

2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2019 CALIFORNIA

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4 TITLE 24 C.C.R. (2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2018 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE (CEC) PART 6, TITLE 24 C.C.R.

2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R. (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen), PART 11, TITLE 24

2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.

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

*CALIFORNIA ADMINISTRATIVE CODE, PART 1, CHAPTER 10, ADMINISTRATIVE REGULATIONS FOR THE CALIFORNIA ENERGY COMMISSION (CEC).

NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE 2016 EDITION

UL 464 - AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES 2003 EDITION

UL 521 - STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS

UL 1971 - STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED 2002 EDITION (R2010)

SUMMARY OF WORK SHEET INDEX

1. INSTALL ONE 40'-0" X 30'-0" FOUR-POST FABRIC SHADE STRUCTURE (DSA PC#04-119454).

2. INSTALL ONE 30'-0" X 20'-0" TWO-POST FABRIC SHADE STRUCTURE (DSA PC#04-119455).

DSA REQUIREMENTS

2. CHANGES TO THE APPROVED DRAWINGS AND

AND APPROVED BY THE DIVISION OF THE STATE

CODE OF REGULATIONS (CCR).

CLASS 4 MINIMUM CONSTRUCTION.

TITLE 24, CCR.

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA

SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A

CHANGE ORDER APPROVED BY THE DIVISION OF THE STATE

ARCHITECT, AS REQUIRED BY SECTION 4-338, PART I,

3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT

ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF

INSPECTOR SHALL BE CERTIFIED BY DSA TO INSPECT

THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED

IN SECTION 4-342, PART 1, TITLE 24, CCR. THE PROJECT

3. INSTALL TWO 20'-0" SQUARE SINGLE-POST SHADE STRUCTURES (DSA PC#04-119454).

SHEET TITLE SHT #

AS2.0

T2.0 FIRE ACCESS PLAN AS0.1 DEMOLITION SITE PLANS AS1.0 OVERALL/ACCESS SITE PLAN

P.C. T-1.0 P.C. TITLE SHEET

ENLARGED SITE PLANS

9.1-1000 PRODUCT INFORMATION 9.2-2000 REACTIONS

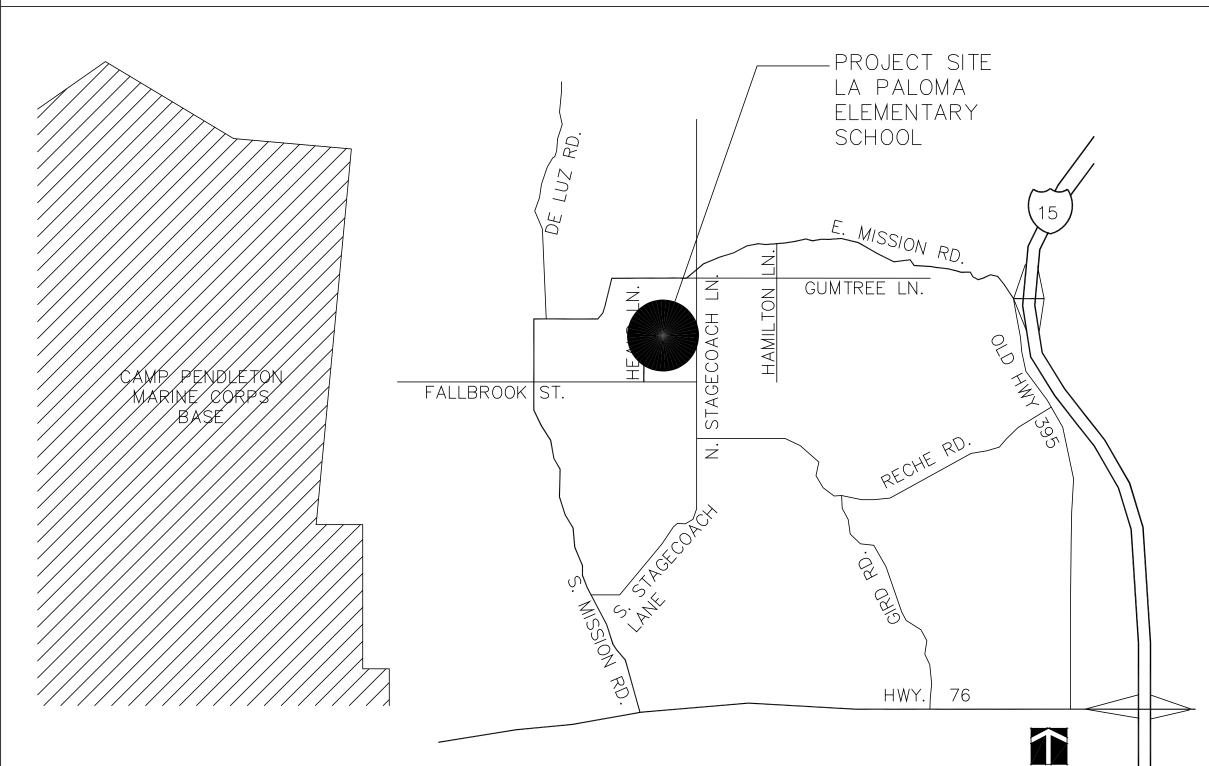
(DSA P.C #04-119454 (40'X30' FOUR-POST) P.C. T-1.0 P.C. TITLE SHEET

22.1-1000 PRODUCT INFORMATION 22.2-2000 REACTIONS 16.1-1000 PRODUCT INFORMATION

16.2-2000 REACTIONS

13 TOTAL SHEETS

VICINITY MAP

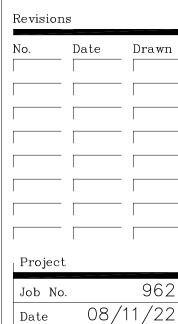


ARCHITECTS INC San Diego California P619 233 1023

JOE MANSFIELD

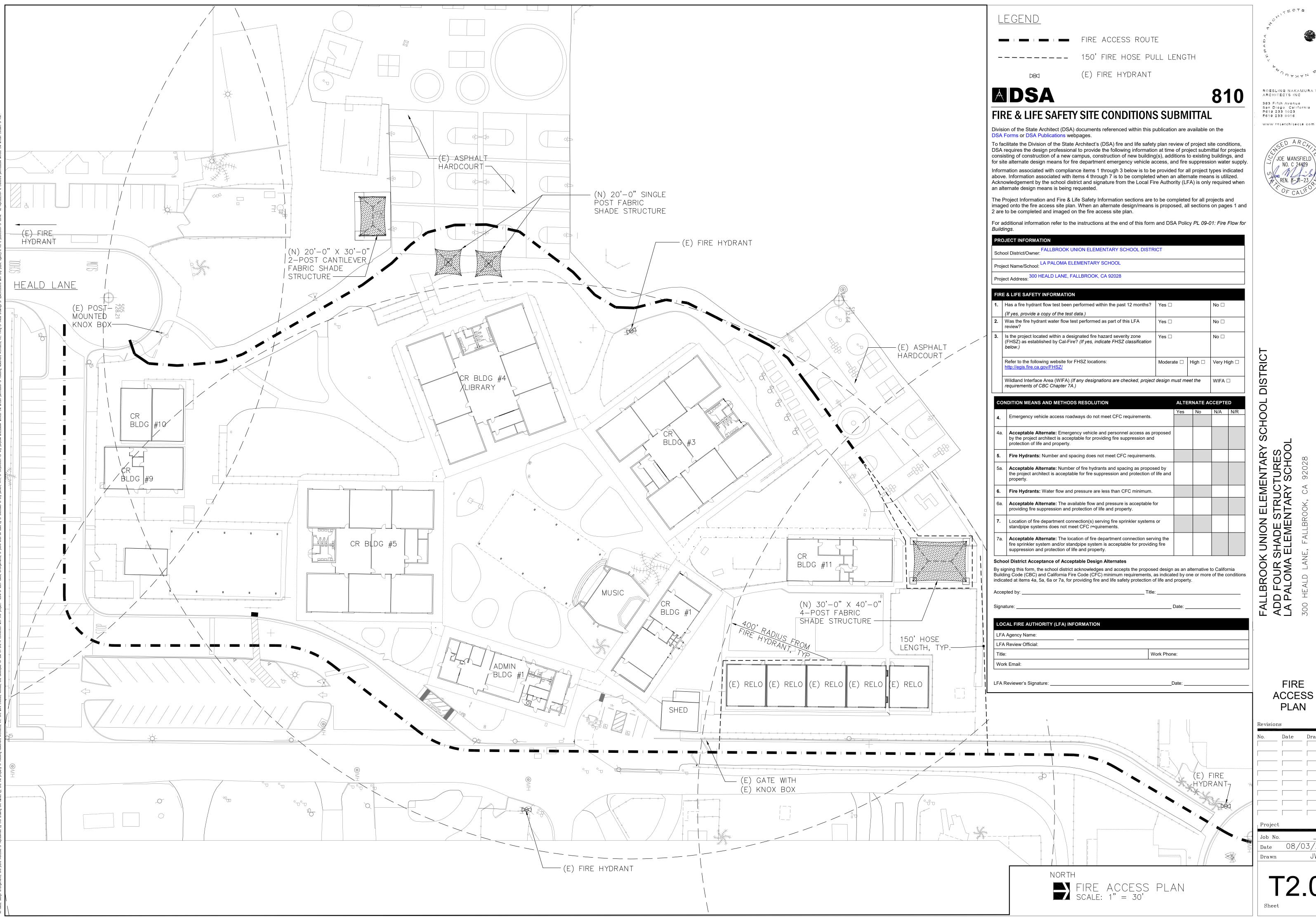
ELEMEI STRUCT VTARY S

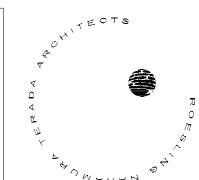
TITLE SHEET



08/11/22 Drawn

NORTH



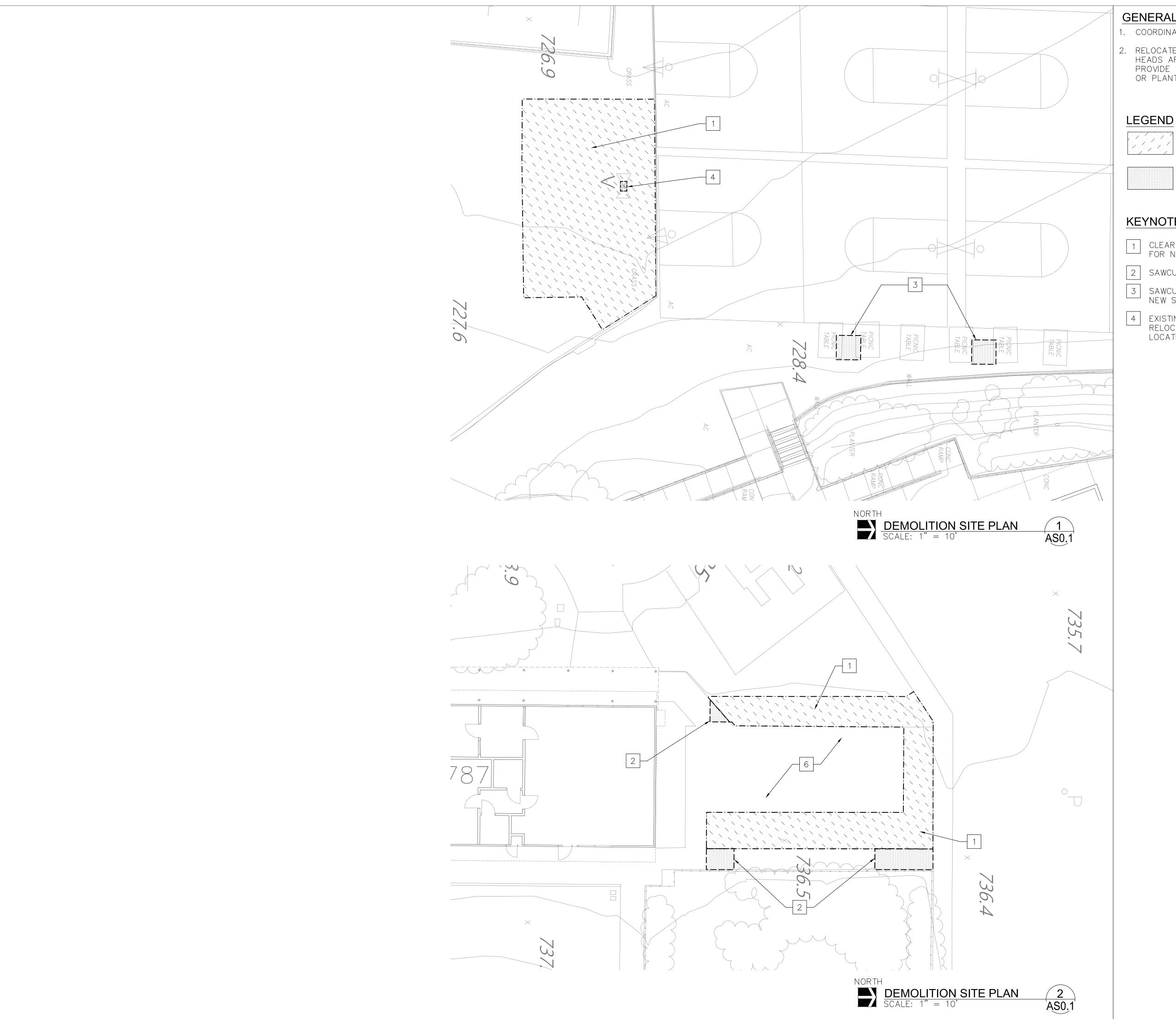


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FIRE ACCESS PLAN

NO.	Date	Drawn
Project		
Job No.		
Date	08/0	3/22 JWM
Drawn		JWM



GENERAL NOTES

- 1. COORDINATE ALL NEW WORK WITH DEMOLITION.
- 2. RELOCATE EXISTING IRRIGATION AND SPRINKLER HEADS AROUND NEWLY PAVED AREAS TO PROVIDE 100% COVERAGE OF REMAINING TURF OR PLANTED AREAS.



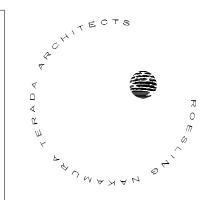
CLEAR & GRUB



PAVEMENT DEMOLITION

KEYNOTES

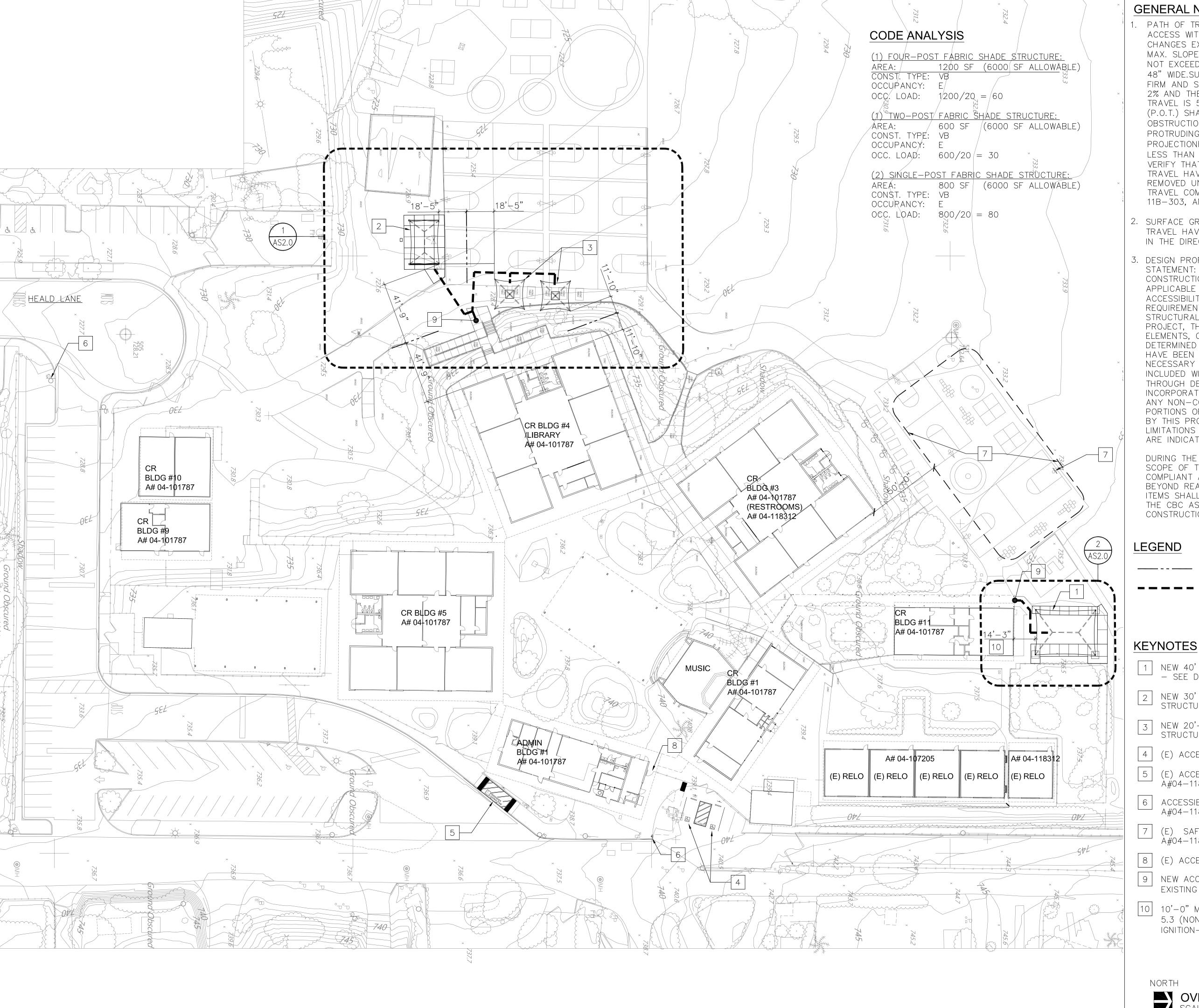
- 1 CLEAR & GRUB EXISTING TURF AT AREA SCHEDULED FOR NEW PAVEMENT. SEE GENERAL NOTE 2.
- 2 SAWCUT, REMOVE & DISPOSE OF CONCRETE PAVING
- 3 SAWCUT, REMOVE & DISPOSE OF ASPHALT PAVING AT NEW SHADE STRUCTURE FOUNDATION
- EXISTING IRRIGATION VALVE AND YARD BOX TO BE RELOCATED. SEE ENLARGED SITE PLAN FOR NEW LOCATED.



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DEMOLITION SITE PLANS



GENERAL NOTES

1. PATH OF TRAVEL (P.O.T.) IS A BARRIER-FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAX. SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL, AND IS AT LEAST 48" WIDE.SURFACE IS SLIP-RESISTANT, STABLE, FIRM AND SMOOTH. MAXIMUM CROSS-SLOPE IS 2% AND THE SLOPE IN THE DIRECTION OF TRAVEL IS 5% UNLESS OTHERWISE INDICATED. (P.O.T.) SHALL REMAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTIONFROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307). ARCHITECT TO VERIFY THAT ALL BARRIEERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT., AND PATH OF TRAVEL COMPLIES WITH CBC 11B-302, 11B-303, AND 11B-403



3. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS, AND STRUCTURALREPAIRS. AS PART OF THE DESIGN FOR THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PRTIONS OF THE P.O.T. DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND 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 NON-COMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OF A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED ON THESE CONSTRUCTION DOCUMENTS.

DURING THE CONSTRUCTION, IF THE P.O.T. WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NON-CONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE THE CBC AS PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

----- IMAGINARY LINE

- - (N) ACCESSIBLE PATH OF TRAVEL

- 1 NEW 40' X 30' FOUR POST FABRIC SHADE STRUCTURE - SEE DSA P.C. 04-119455 DWGS.
- 2 NEW 30' X 20' TWO POINT CANTILEVER FABRIC SHADE STRUCTURE SEE DSA P.C. 04—119455 DWGS.
- 3 NEW 20'-0" SQUARE SINGLE POST FABRIC SHADE STRUCTURE SEE DSA P.C. 04-119454 DWGS.
- 4 (E) ACCESSIBLE PARKING PER A#04-118312
- 5 (E) ACCESSIBLE PASSENGER LOADING ZONE PER À#04-118312
- ACCESSIBLE PARKING TOW AWAY SIGN PER A#04-118312
- 7 (E) SAFE DISPERSAL AREA W/ SIGN ON POST PER A#04-118312
- 8 (E) ACCESSIBLE GATE PER A#04-118312
- 9 NEW ACCESSIBLE PATH OF TRAVEL CONNECTION TO EXISTING CERTIFIED PATH OF TRAVEL (A#04-101787
- 10 10'-0" MIN. CLEAR ALLOWED PER DSA IR31.1, ITEM 5.3 (NON-COMBUSTIBLE FRAME W/ IGNITION-RESISTANT ROOF COVERING)

OVERALL/ACCESS SITE PLAN
SCALE: 1" = 30'



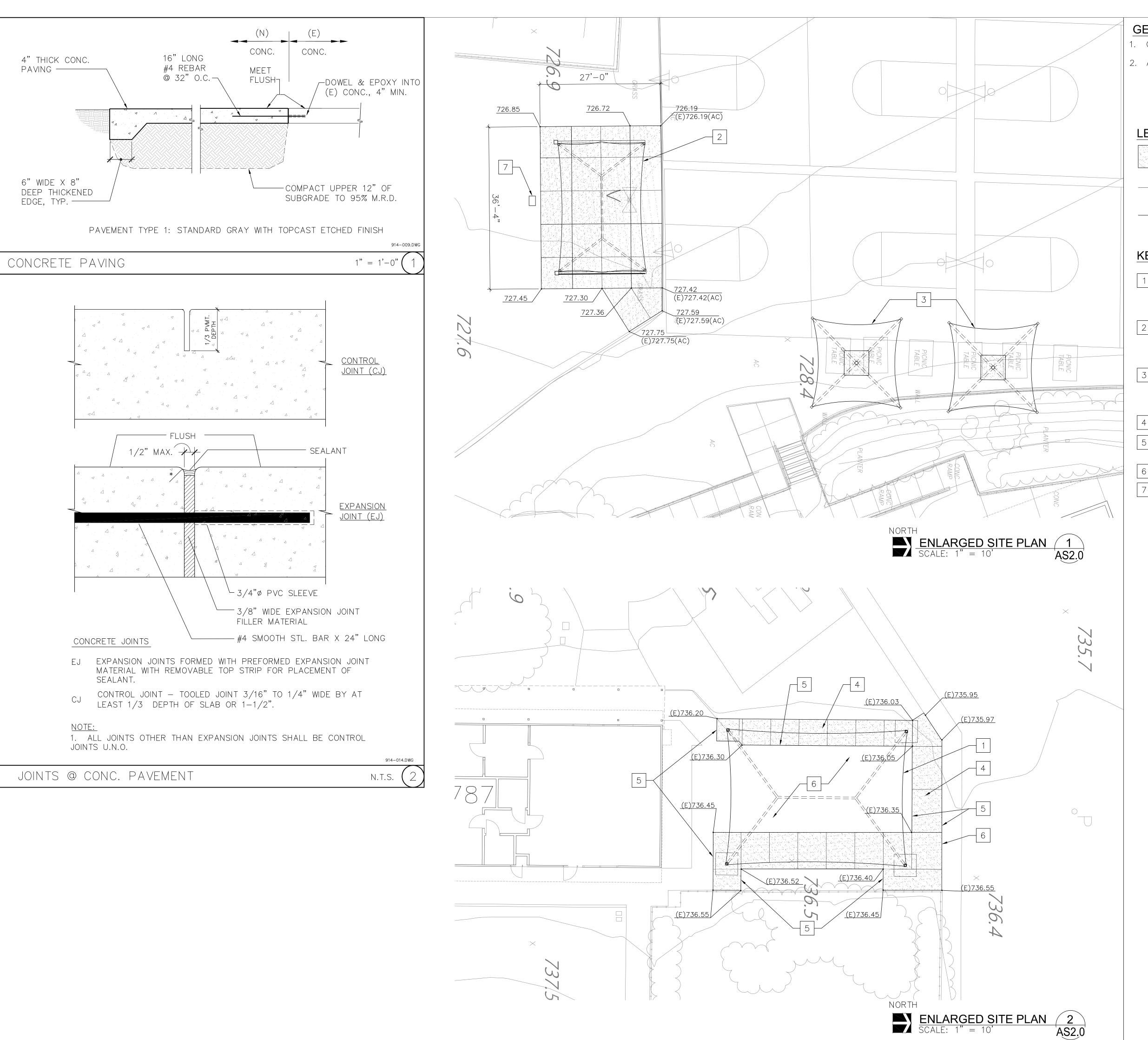
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www.rntarchitects.com



08/11/22

AS1.0



GENERAL NOTES

- 1. COORDINATE ALL NEW WORK WITH DEMOLITION.
- 2. ALL ITEMS ARE NEW UNLESS NOTED OTHERWISE.

LEGEND

CONCRETE PAVING

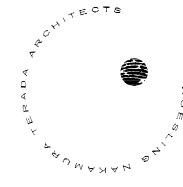
CONCRETE CONTROL JOINT PER DETAIL 2/-

_____FJ

EXPANSION JOINT PER DETAIL 2/-

KEYNOTES

- 1 30'-0" X 40'-0" FOUR-POST FABRIC SHADE STRUCTURE PER DSA P.C. 04-119455 DWGS. - USE ALTERNATE SPREAD FOOTING - RECESSED BASE PLATE OPTION
- 2 20'-0" X 30'-0" TWO-POST FABRIC SHADE STRUCTURE PER DSA P.C. 04-119455 DWGS. - USE ALTERNATE SPREAD FOOTING - RECESSED BASE PLATE OPTION
- 3 20'-0" SQUARE SINGLE POST FABRIC SHADE STRUCTURE PER P.C. 04-119454 DWGS. - USE ALTERNATE SPREAD FOOTING - RECESSED BASE PLATE OPTION
- 4 CONCRETE PAVING PER DETAIL 1/-
- 5 DOWEL CONCRETE PAVING INTO (E) PAVING PER DETAIL 1/-. MEET FLUSH WITH EXISTING
- 6 EXISTING CONCRETE PAVING TO REMAIN
 - RELOCATE IRRIGATION CONTROL VALVE & YARD BOX.
 REROUTE IRRIGATION PIPING AND CONTROL WIRING
 FROM ORIGINAL LOCATION TO NEW POSITION. INSTALL
 NEW VALVE AND IRRIGATION BOX TO MATCH EXISTING
 AT NEW LOCATION



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OL DISTRICT

ADD FOUR SHADE STRUCTURES
LA PALOMA ELEMENTARY SCHO

ENLARGED SITE PLANS

No	Date	Drawn
		-
		-
Project	t	
Job No		962
Date	08/	/11/22 JWM
Drawn		JWM

AS2.0



FABRIC SHADE STRUCTURE DSA P.C. 04-119455

SITE SPECIFIC APPLICATION SITE PLAN SHALL INCLUDE:

- 1. ACTUAL DIMENSIONS OF SHADE STRUCTURES.
- 2. DIMENSIONS FROM ADJACENT STRUCTURES AND PROXIMITY OF ASSUMED OR ACTUAL PROPERTY LINES.
- 3. PROVIDE CODE ANALYSIS INCLUDING ACTUAL SHADE STRUCTURE AREA (SQ. FT.), OCCUPANCY TYPE (A-3), AND TYPE OF CONSTRUCTION (V-B). INDICATE OCCUPANT LOAD FACTOR per 2019 CBC, SECTION 1004.
- 4. INDICATE LOCATIONS OF FIRE EXTINGUISHER WITHIN 75 FEET.
- 5. SHOW LOCATIONS OF AUDIBLE FIRE ALARM
- 6. INDICATE DIMENSIONS FROM THE ROOF TO THE HIGHER STRUCTURE OR TERRAIN FEATURE. MINIMUM DIMENSION OF 20' FOR SNOW LOAD MODEL (ASCE 7-16).
- ACTUAL SITE ELEVATION (FT.) TO DETERMINE SITE OCCURS AT OR BELOW THE UPPER ELEVATION LIMIT FOR THE GROUND SNOW LOAD SHOWN IN ASCE 7-16 (FOR SNOW LOAD MODEL).
- AISC 341-10 SECTION A.3.4b, A4.1 AND A4.2 PER NOTE ON EACH INDIVIDUAL MODEL ENGINEERING DRAWING WHICH RELATES TO DEMAND CRITICAL WELD AND "L.A.S.T." TEMPERATURE (EITHER STRUCTURAL STEEL NOTE #14).
- COMPLETE SCOPE OF WORK INCLUDING THE SHADE STRUCTURE MODEL NUMBER, P.C. NUMBER. AND SPECIFIC SIZE OF SHADE STRUCTURE.
- 10. ALL SADDLES, CLAMPS AND FITTINGS SHALL CONFORM TO THE GUIDELINES AS SPECIFIED IN APPENDICES "A, B & C" RESPECTIVELY IN ASCE 19-16, "STRUCTURAL APPLICATIONS OF STEEL CABLES FOR BUILDINGS."
- 11. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN MAPPED GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.
- 12. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN A MAPPED FIRE HAZARD SEVERITY ZONE OR WILDLAND INTERFACE AREA.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN



CORPORATE HEADQUARTERS 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005

CERTIFICATIONS:

IAS CERTIFICATION No: FA-428 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

Fallbrook Union Elementary School District

PROJECT NAME:

La Paloma Elementary

LOCATION:

300 Heald Lane Fallbrook, CA 92028 **MODEL NUMBER:**



DSA4013030-19

DSA4013030-19

DSA4013040-19

DSA4013040-19

DSA401S2030-19

DSA401S2030-19

DSA1031414-19

DSA1031414-19

DSA4073030-19

DSA407J3060-19

DSA407J3060-19

DSA2022030-19

DSA2022030-19

DSA3022060-19

DSA3022060-19

DSA2062030-19

DSA2062030-19

DSA3052060-19

DSA3052060-19

DSA4182020-19

DSA4182020-19 DSA4183030-19

DSA4183030-19

DSA30730-19

DSA407Q6060-19 DSA407Q6060-19

GENERAL NOTES

OIV. OF THE STATE ARC

STRUCTURE TYPE:

SCALE: VARIES

PRE-CHECK (PC)

A separate project application for construction is required.

Eng. By :	DWH	09/18/2
Design By :	DWH	09/18/2
Approved By :	DWH	09/18/2

DRAWING DESCRIPTION:

P.C. TITLE SHEET

P.C. T-1.0

DWG.

20 X 30

30 X 30

30 X 30

30 X 40

20 X 30

20 X 30

14 X 14

30 X 30

30 X 200

30 X 200

60 X 60

60 X 60

20 X 30

20 X 30

20 X 300

20 X 300

20 X 30

20 X 300

20 X 300

30 X 200

30 X 200

20 X 300

20 X 300

30 X 200

DRAWING DESCRIPTION STRUCTURE TYPE SIZE NUMBER P.C. T-1.0 P.C. TITLE SHEET DSA 103 SAMPLE FORM DSA 103 SAMPLE FORM

HIP (20# SNOW LOAD)

HIP (20# SNOW LOAD)

SINGLE POST PYRAMID

SINGLE POST PYRAMID

JOINED MARINER

JOINED MARINER

QUAD MARINER

QUAD MARINER

FULL CANTILEVER

FULL CANTILEVER

FULL CANTILEVER JOINED

FULL CANTILEVER JOINED

TRI TRUSS CANTILEVER

TRI TRUSS CANTILEVER

THREE POINT SAILS

THREE POINT SAILS

FOUR-POINT SAILS

FOUR-POINT SAILS

FOUR POINT SAILS

FOUR POINT SAILS

TRI TRUSS CANTILEVER JOINED

TRI TRUSS CANTILEVER JOINED

P.C. T-2.0 P.C. T-2.1 P.C. T-3.0 DSA 103 SAMPLE FORM P.C. T-3.1 DSA 103 SAMPLE FORM 1.1-1000 PRODUCT INFORMATION 1.2-2000 REACTIONS DSA 103 - 2 / PC T-2 2.1-1000 PRODUCT INFORMATION **REACTIONS** 2.2-2000

 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2018 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS) • 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R. 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.

(2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R. (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)

(2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)

SITE SPECIFIC APPLICATION TITLE SHEET SHALL INCLUDE:

(2018 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R. • 2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS 2016 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS

(PER 2019 CBC, PART 2, CHAPTER 35) NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES C.C.R. TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

PARTIAL LIST OF APPLICABLE STANDARDS

PARTIAL LIST OF APPLICABLE CODES

2019 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.

2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.

2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.

(2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS

STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS 2016 EDITION 2017 EDITION 2017 EDITION NFPA 17A STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION 2016 EDITION STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION 2013 EDITION STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES 2016 EDITION NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES 2015 EDITION STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, 1999 EDITION STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED 2002 (R2010) SANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

SEE INDIVIDUAL STRUCTURAL DRAWINGS FOR SPECIFIC DESIGN NOTES AND LOADING.

ALL WORK SHALL CONFORM TO 2019 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (C.C.R.).

ALL WORK SHALL BE IN COMPLIANCE WITH CFC CHAPTER 33 -FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

BUILDING CODE DATA

MODEL: DSA4013030-19 : 30'X30'X15'HIP UNIT MODEL: DSA2022030-19
STRUCTURE: 20'X30'X14' FULL CANTI HIP SINGLE
MAX. AREA - 600 SQ. FT.
MAX. OCCUPANCY = 40 DEL: DSA2062030-19 STRUCTURE: 20'X30'X14' TRI TRUSS HIP SINGLE WIDE MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY = 40 STRUCTURE: 14'X14'X12' SINGLE POST PYRAMID I MODEL: DSA4013040-19 TURE: 30'X40'X15' HIP UNIT REA - 1200 SQ. FT. CCUPANCY = 80 MODEL: DSA401S2030-19 STRUCTURE: 20'X30'X12' HIP (20 PSF SNOW LOAD)
MAX. AREA - 600 SQ. FT.
MAX. OCCUPANCY = 40 MODEL: DSA3022060-19 EL: DSA3052060-19 CTURE: 20'X60'X14' T RI TRUSS HIP JOIN L: DSA4182020-19 TURE: 20'X20'X14' TENSION SAILS JOINE TURE: 20'X60'X14' FULL CANTI HIP JOIN ODEL: DSA4073030-19 NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL REA, OCCUPANCY AND SITE CONDITIONS NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL PREA, OCCUPANCY AND SITE CONDITIONS MODEL: DSA407Q6060-19 STRUCTURE: 60'X60'X12' MARINER PEAK QUA MAX. AREA - 3600 SQ. FT. MAX. OCCUPANCY = 120 MODEL: DSA407J3060-19 IODEL: DSA4183030-19 ZRUCTURE: 30"X30"X14" TENSION SAILS JOINEO MAX, AREA/SAIL-900 SQ. FT./SAIL MAX. OCCUPANCY / SAIL = 60 /SAIL STRUCTURE: 20'X60'X12' MARINER PEAK JOINED MAX. AREA - 1800 SQ. FT. MAX. OCCUPANCY = 120 UNIT SELECTION AND DESCRIPTION

3.1-1000 3.2-2000 4.1-1000 4.2-2000 5.1-1000 5.2-2000 6.1-1000 6.2-2000 7.1-1000 7.2-2000 8.1-1000 8.2-2000 9.1-1000 9.2-2000 10.1-1000 10.2-2000 11.2-2000 12.1-1000 12.2-2000 13.1-1000 13.2-2000 14.1-1000 14.2-2000 15.1-1000 15.2-2000 DAVID HIGGINSON, AIA, ARCHITECT 38868 BUTTERFLY DRIVE YUCAIPA, CA 92399 (909) 499-0058 dhigginson.arch@gmail.com

SHEET INDEX - P.C. DRAWINGS

PRODUCT INFORMATION

REACTIONS

REACTIONS

REACTIONS

REACTIONS

REACTIONS

REACTIONS

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REACTIONS

REACTIONS

MARK LOWE, S.E. STRUCTURAL ENGINEER 19471 MISTY RIDGE LANE TRABUCO CANYON, CALIFORNIA 92367 PH. 949-400-1265

malowe@me.com

ARCHITECT OF RECORD **ENGINEER OF RECORD**

DESIGN LOADS BUILDING CODE CBC 2019 (BASED ON IBC 2018) 5 PSF LIVE LOADS 5 PSF SNOW LOAD WIND LOADS 115 MPH (3-Sec. Gust); EXPOSURE C; TOPOGRAPHIC FACTOR, Kzt = 1.0 .- SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION LIST (T & I LIST) APPROVED BY DSA. THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING, UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2019 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION. 2.- STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING. 3.- FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF) 4.- DESIGN PER FOLLOWING CODES: CBC 2019, ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-14, ASCE 55-16 & ASCE 19-16 STRUCTURAL STEE BE CONDUCTED PER CBC 2019 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1. 2.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE SHADE STRUCTURES. 3.- ALL WORK SHALL CONFORM TO CBC 2019 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

.- FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL

4.- ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS

STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16, IN ITS' ENTIRETY. TYPICAL MECHANICAL PROPERTIES ARE:

42,000 PSI YIELD STRESS MINIMUM / 48,000 PSI TENSILE STRESS MINIMUM

5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE B, UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS: SQUARE AND RECTANGULAR 46,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS 42.000 PSI YIELD STRESS / 58.000 PSI TENSILE STRESS ROUND PIPE

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

7.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

8.- ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.

9.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

10.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS (IF REQUIRED). ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.

11.- ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 1, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS.

12.- ALL HIGH STRENGTH BOLTS SHALL COMPLY WITH ASTM F3125 GRADE A325 N (GALVANIZED). ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.

13.- ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER. UNDERCOAT. AND FINISH COAT. OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:

- PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247). - SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS

14.- ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

15.- COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION. ALL EXPOSED STEEL FASTENERS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117, ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

1.- CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2019 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE F'c= 4500 PSI, TYPE V CEMENT, WATER/CEMENT RATIO OF 0.45, PER ACI 318-14 CHAPTER 5. REINFORCING STEEL TO BE Fy= 60000 PSI, MIN. GR. 60

3.- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329). ANCHOR BOLT'S EMBEDMENT NEEDS TO BE AS FOLLOW:

A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)

4.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT

5.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.

1.- FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.

2.- THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.

3.- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT

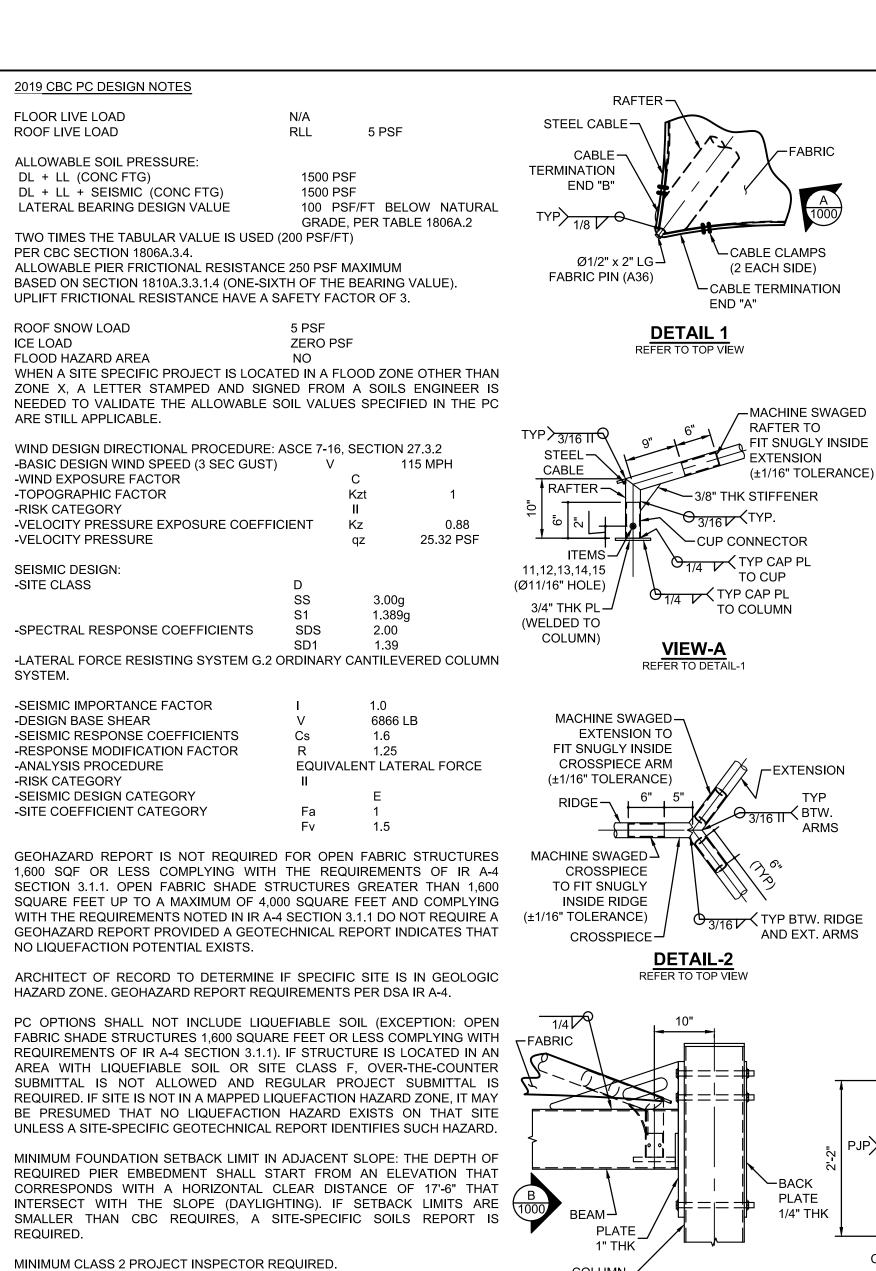
4.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2261. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 1 OF "FABRIC SPECIFICATION" ON THE APPROVED PLANS. THE FABRIC SHALL BE REPLACED WHEN THE TEST RESULTS RETURN LESS THAN 50% OF THE ULTIMATE VALUES IN NOTE 1 OF "FABRIC SPECIFICATION". FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10. SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA.

5.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.

6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

.- FOR FABRIC ATTACHMENT USE 3/8" 7x19 GALV. CABLE PER ASTM A1023A, ASTM 1023M-02, WITH A BREAKING STRENGTH VALUE OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM. THE

MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=4909 LB 2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.



-PL3/8X10SQ

VERTICAL

-FINISHED

SURFACE

-1 1/2 EXTRA

TURNS

TOP AND

BOTTOM

OF SPIRAL

REBAR 18#5

1/2

EIGHT Ø1 1/4" x 36"

HVY. HEX NUTS (3)

FLAT WASHERS (2)

ANCHOR RODS

LOCK WASHER

FINISHED-

SURFACE

1,600 SQF OR LESS COMPLYING WITH THE REQUIREMENTS OF IR A-4 SECTION 3.1.1. OPEN FABRIC SHADE STRUCTURES GREATER THAN 1,600 SQUARE FEET UP TO A MAXIMUM OF 4,000 SQUARE FEET AND COMPLYING GEOHAZARD REPORT PROVIDED A GEOTECHNICAL REPORT INDICATES THAT NO LIQUEFACTION POTENTIAL EXISTS.

ARCHITECT OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

PC OPTIONS SHALL NOT INCLUDE LIQUEFIABLE SOIL (EXCEPTION: OPEN FABRIC SHADE STRUCTURES 1,600 SQUARE FEET OR LESS COMPLYING WITH REQUIREMENTS OF IR A-4 SECTION 3.1.1). IF STRUCTURE IS LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F, OVER-THE-COUNTER SUBMITTAL IS NOT ALLOWED AND REGULAR PROJECT SUBMITTAL IS REQUIRED. IF SITE IS NOT IN A MAPPED LIQUEFACTION HAZARD ZONE, IT MAY BE PRESUMED THAT NO LIQUEFACTION HAZARD EXISTS ON THAT SITE

MINIMUM FOUNDATION SETBACK LIMIT IN ADJACENT SLOPE: THE DEPTH OF REQUIRED PIER EMBEDMENT SHALL START FROM AN ELEVATION THAT CORRESPONDS WITH A HORIZONTAL CLEAR DISTANCE OF 17'-6" THAT INTERSECT WITH THE SLOPE (DAYLIGHTING). IF SETBACK LIMITS ARE

TOP VIEW

▘╒╴═<u>╶</u>╪═╌╇

2'-6"

DRILLED PIER-PIH

(EMBEDDED, PIH) (USE FOR NON-CONSTRAINED CASES)

_COLUMN

(SLRS)

MINIMUM CLASS 2 PROJECT INSPECTOR REQUIRED.

SPIRAL #4

Ø13/16" HOLE -

ALL THREADED

GALVANIZED

ROD ASTM A449

HVY. HEX NUTS (4)

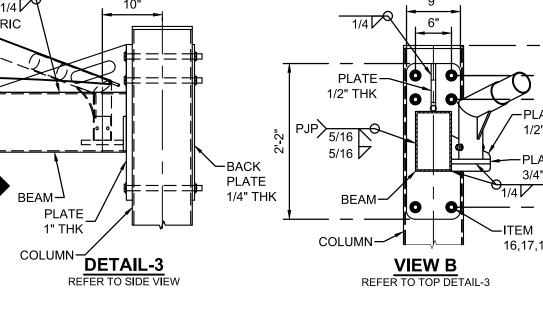
FLAT WASHERS (2)

TROUGH

Ø3/4"X20"

PROVIDE TAPER-

SLOPE 2% MAX.



TOP VIEW

F#!=<u>==#=</u>===#=

2'-6"

DRILLED PIER-RBP

(RECESSED BASE PLATE, RBP)
(USE FOR NON-CONSTRAINED CASES)

(OPTIONAL)

_COLUMN

(SLRS)

VERTICAL

-PL1-1/4X18SQ

-PROVIDE TAPER

SLOPE 2% MAX.

-1 1/2 EXTRA

TURNS

TOP AND

BOTTOM

OF SPIRAL

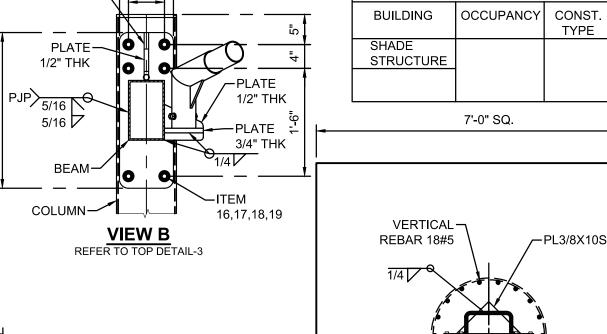
-VERTICAL

3" CLR.

REBAR 18#5

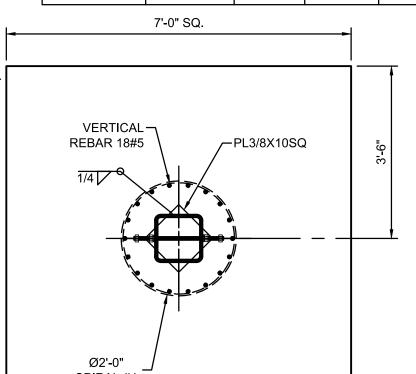
REBAR 18#5

SPIRAL #4



FOR FOOTING AND MOUNTING

INFO SEE DETAILS BELOW



-FINISHED

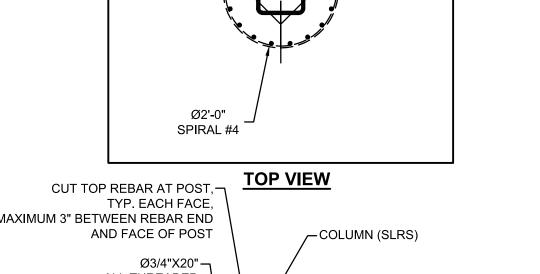
SURFACE

CODE ANALYSIS

TYPE

AREA

(SQ. FT.)



STRUCTURE SHALL BE INSTALLED A MINIMUM OF 20'-0" AWAY FROM ADJACENT

BUILDING, UNLESS OTHERWISE APPROVED BY D.S.A. ON A JOB SPECIFIC BASIS

30'-0" (MAX.)

TOP VIEW

(SCHEMATIC VIEW ONLY)

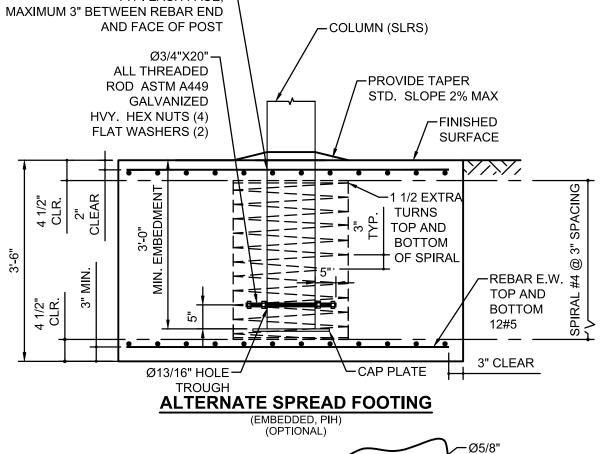
FRONT VIEW

(SCHEMATIC VIEW ONLY

7'-8" (MAX.)

FROM BOTTOM OF BEAM

TO TOP OF RIDGE



DETAIL-4

REFER TO SIDE VIEV

GUSSET PLATE DETAIL

┍⋕⋸⋕⋸⋕⋝ **ドボミボニ#**-TOP AND

(3/8" THK) (TYP. FOR ALL COLUMNS)

(TOP OF RBP COLUMNS)

(TOP & BOT. OF PIH COLUMNS)

EIGHT Ø1 1/4" x 36" →

HVY. HEX NUTS (3)

FLAT WASHERS (2)

LOCK WASHER

ANCHOR RODS

(OPTIONAL)

LIST OF MATERIALS

MATERIAL

HSS 10 x 10 x 0.625

HSS 10 x 6 x 0.375

HSS 10 x 6 x 0.375

HSS 4.0 x 0.25

4.50 GA 7 RD. TUBE (4.5 x 0.188)

FR COLOURSHADE Z25

GALVANIZED STEEL

GALVANIZED STEEL

18-8 SS

18-8 SS

18-8 SS

DELRIN (ACETAL)

ASTM F3125 GRADE A325,

GALVANIZED

ASTM A563 GALVANIZED

ASTM F436 GALVANIZED

ASTM F436 GALVANIZED

/JOE MANSFIFLE

DESCRIPTION

COLUMN

BEAM LEFT

BEAM RIGHT

CUP CONNECTOR (6" LG)

RAFTER (GALVANIZED STEEL TUBE)

EXTENSION (GALVANIZED STEEL TUBE)

CROSSPIECE (GALVANIZED STEEL TUBE)

RIDGE

FABRIC TOP

Ø3/8" CABLE

Ø3/8" CABLE CLAMP

Ø5/8"-11NC x 6" HEX BOLT

Ø5/8"-11NC HEX NUT

Ø5/8" FLAT WASHER

Ø5/8" FLAT WASHER

Ø5/8" SPLIT LOCK WASHER

Ø1"-8NC x 13" HEX BOLT

Ø1"-8NC HEX NUT

Ø1" SPLIT LOCK WASHER

Ø1" FLAT WASHER

-FINISHED

SURFACE

MAXIMUM OCCUPANT LOAD (PER CBC 2019 TABLE 1604A.5)

7'-0" SQ.

TOP VIEW

SECOND POUR

-COLUMN

(SLRS)

-K-12:

-PUBLIC ASSEMBLY

ABOVE 12TH GRADE

-EDUCATIONAL OCCUPANCIES

20'-0" (MAX)

SIDE VIEW

(SCHEMATIC VIEW ONLY)

250 PERSONS

300 PERSONS

500 PERSONS

-VERTICAL

-PL1-1/4X18SQ

Ø2'-0"

SPIRAL #4

REBAR 18#5

-PROVIDE TAPER

STD. SLOPE 2% MAX

FINISHED

─_1 1/2 EXTF

. | TURNS

SURFACE

1/4" GROUT

-REBAR E.W.

TOP AND

BOTTOM

3" CLEAR

12#5

ITEM QTY

2A | 1

2B | 1

8 | 1

10 4

11 | 4

13 | 8

12

12

12

14

16

17

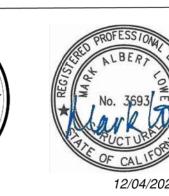
18

OCCUPANT OCCUPANT

LOAD

LOAD FACTOR

19 | 24



THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.



CORPORATE HEADQUARTERS 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005

CERTIFICATIONS: IAS CERTIFICATION No: FA-428 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

Fallbrook Union Elementary **School District**

La Paloma Elementary

300 Heald Lane Fallbrook, CA 92028 **MODEL NUMBER:**

DSA2022030-19

OV. OF THE STATE ARC APP: 04-119455 P

STRUCTURE TYPE: **FULL CANTILEVER HIP** SINGLE - DSA MAXIMUM

20' x 30' x 15'e MAX. **SCALE: NONE**

DRAWING SIZE:

PRE-CHECK (PC) DOCUMENT Code : 2019 CBC A separate project application for construction is required.

Eng. By :	JO	06/26/20
Design By :	JO	06/26/20
Approved By :	JO	06/26/20
DRAWING DESC	CRIPTION:	

PRODUCT INFORMATION

DSA2022030-19

9.1-1000

SHEET

⊢| BOTTOM = # - → + OF SPIRAL **ALTERNATE SPREAD FOOTING** (RECESSED BASE PLATE, RBP) EYE NUT 1'-8 7/8" **CAP PLATE**

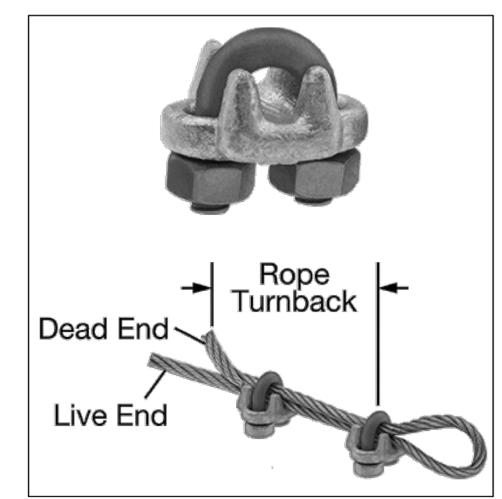
							ASD REACTION	ONS				
Node	° -	-	Support Forces [kip)	Suj	pport Moments [ki	pft]		Support Forces [kip]	Support Moments [kipft]	Support Forces [kip]	Support Forces [ki
No.	4	P _x .	P _v	P _x	M _e	M _r	Mz		SHEAR RESULTANT	MOMENT RESULTANT	UPLIFT	AXIAL
						MAXI	MUM REAC	TIONS	3.466	52.323	0.094	-4.346
Node				1			-61					
Node No.		P _x	Support Forces [kip	P _y	M _x	pport Moments [ki M _v	M ₂					
86	Max	3.440	P _v 3.168	0.094	9.171	41.120	4,771					
00	Min	-0.395	-1.100	-4.346	-52.186	-6.576	-13.318		 			
	Max P _r	3.440	0.426	-0.604	-11.243	41.120	-10.632	CO 24	3.466	42.629		-0.604
	Min P _{x*}	-0.395	-0.729	-4.293	-25.418	-5.914	-5.740	CO 16	0.829	26,097		-4.293
	Max P _r	0.354	3.168	-0.696	-41.894	5.385	-0.637	CO 25	3.188	42.239		-0.696
J.	Min P _{v*}	-0.365	-1.100	-2.784	-9.662	-6.576	-9.088	CO 39	1.159	11.688		-2.784
Ų.	Max P _z	1.674	-0.414	0.094	8.606	24.449	-4.281	CO 42	1.724	25.919	0.094	
- å	Min P ₂	0.683	0.666	-4.346	-40.129	13.029	4.291	CO 15	0.954	42.191		-4.346
10	Max M _{x'}	0.838	0.299	0.060	9.171	9.810	-11.916	CO 41	0.890	13.429	0.060	
î	Min M _{x'}	0.227	3.168	-2.785	-52.186	3.779	0.083	CO 23	3.176	52.323		-2.785
T Y	Max M _r	3.440	0.426	-0.604	-11.243	41.120	-10.632	CO 24	3.466	42.629		-0.604
	Min M _r	-0.365	-1.100	-2.784	-9.662	-6.576	-9.088	CO 39	1.159	11.688		-2.784
i i	Max M _Z	1.140	0.903	-3.766	-36.139	19.882	4.771	CO 9	1.454	41.247		-3.766
T i	Min M ₂	0.956	0.351	0.027	7.584	11.360	-13.318	CO 6	1.018	13.659	0.027	
88	Max	3.024	3.168	0.094	9.171	34.971	13.318					
	Min	-1.841	-1.100	-4.346	-52.186	-26.944	-8.431					
	Max P _{x*}	3.024	-0.427	-2.875	-5.862	34.971	-8.431	CO 22	3.054	35.459		-2.875
	Min P _{X*}	-1.841	-0.430	0.056	8.884	-26.944	4.808	CO 7	1.891	28.371	0.056	
U	Max P _r	-0.354	3.168	-0.696	-41.894	-5.385	0.637	CO 25	3.188	42.239		-0.696
	Min P _Y	0.365	-1.100	-2.784	-9.662	6.576	9.088	CO 39	1.159	11.688		-2.784
	Max P _Z	-1.674	-0.414	0.094	8.606	-24.449	4.281	CO 42	1.724	25.919	0.094	
	Min P ₂	-0.683	0.666	-4.346	-40.129	-13.029	-4.291	CO 15	0.954	42.191		-4.346
	Max M _{x'}	-0.838	0.299	0.060	9.171	-9.810	11.916	CO 41	0.890	13.429	0.060	
	Min M _{x'}	-0.227	3.168	-2.785	-52.186	-3.779	-0.083	CO 23	3.176	52.323		-2.785
	Max M _Y	3.024	-0.427	-2.875	-5.862	34.971	-8.431	CO 22	3.054	35.459		-2.875
	Min M _r	-1.841	-0.430	0.056	8.884	-26.944	4.808	CO 7	1.891	28.371	0.056	
- 97	Max M ₂ Min M ₂	-0.956 3.024	0.351 -0.427	0.027 -2.875	7.584 -5.862	-11.360 34.971	13.318 -8.431	CO 6	1.018 3.054	13.659 35.459	0.027	-2.875

BASIC LOAD CASES

DEAD LOAD 0.0378 PSF (FABRIC) FLOOR LIVE LOAD 5 PSF **ROOF LIVE LOAD** 5 PSF **ROOF SNOW LOAD** SUPERIMPOSED LOADS N/A WIND LOAD

ULTIMATE DESIGN WIND SPEED (3 SEC GUST) 115 MPH VELOCITY PRESSURE qz 25.32 PSF COMPONENT AND CLADDING qz (CABLE AND CABLE HARDWARE ONLY) 25.32 PSF

SEISMIC RESPONSE COEFFICIENTS Cs 1.6 DESIGN BASE SHEAR 6866 LB



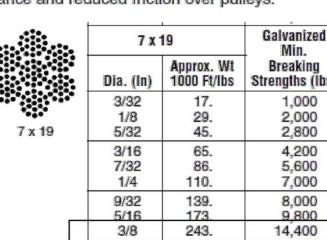
FORGED WIRE ROPE CLAMP

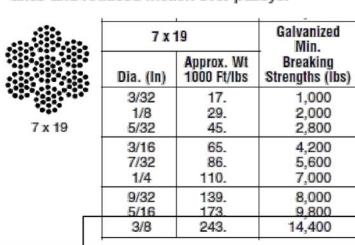
FITTING TYPE ROPE CLAMP FABRICATION: FORGED MATERIAL: GALVANIZED STEEL FOR WIRE ROPE DIAMETER 3/8" NUMBER OF CLAMPS REQUIRED: 2 ROPE TURNBACK: 6 1/2" FOR WIRE ROPE CONSTRUCTION 7 × 19 ATTACHMENT TYPE: LOOP CLAMP:WIDTH 2", HEIGHT 1 15/16", THICKNESS 1 11/16" REQUIRED INSTALLATION TOOL TORQUE WRENCH REQUIRED TORQUE 45 FT.-LBS. CAPACITY 80% OF THE ROPE'S CAPACITY SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

Aircraft Cable

Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.





DIV. OF THE STATE ARCH

THESE PLANS AND SPECIFICATIONS ARE THE

PROPERTY OF USA SHADE AND FABRIC

STRUCTURES AND SHALL NOT BE

REPRODUCED WITHOUT THEIR WRITTEN

PERMISSION.

CORPORATE HEADQUARTERS

2580 ESTERS BLVD. SUITE 100

DFW AIRPORT, TX, 75261

CERTIFICATIONS:

CUSTOMER:

PROJECT NAME:

MODEL NUMBER:

800-966-5005

IAS CERTIFICATION No: FA-428

CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

Fallbrook Union Elementary

School District

La Paloma Elementary

Fallbrook, CA 92028

DSA2022030-19

LOCATION: 300 Heald Lane

USASHADE

& Fabric Structures®

STRUCTURE TYPE: FULL CANTILEVER HIP SINGLE - DSA

MAXIMUM 20' x 30' x 15'e MAX.

SCALE: NONE DRAWING SIZE:

PRE-CHECK (PC) DOCUMENT Code: 2019 CBC A separate project application for construction is required.

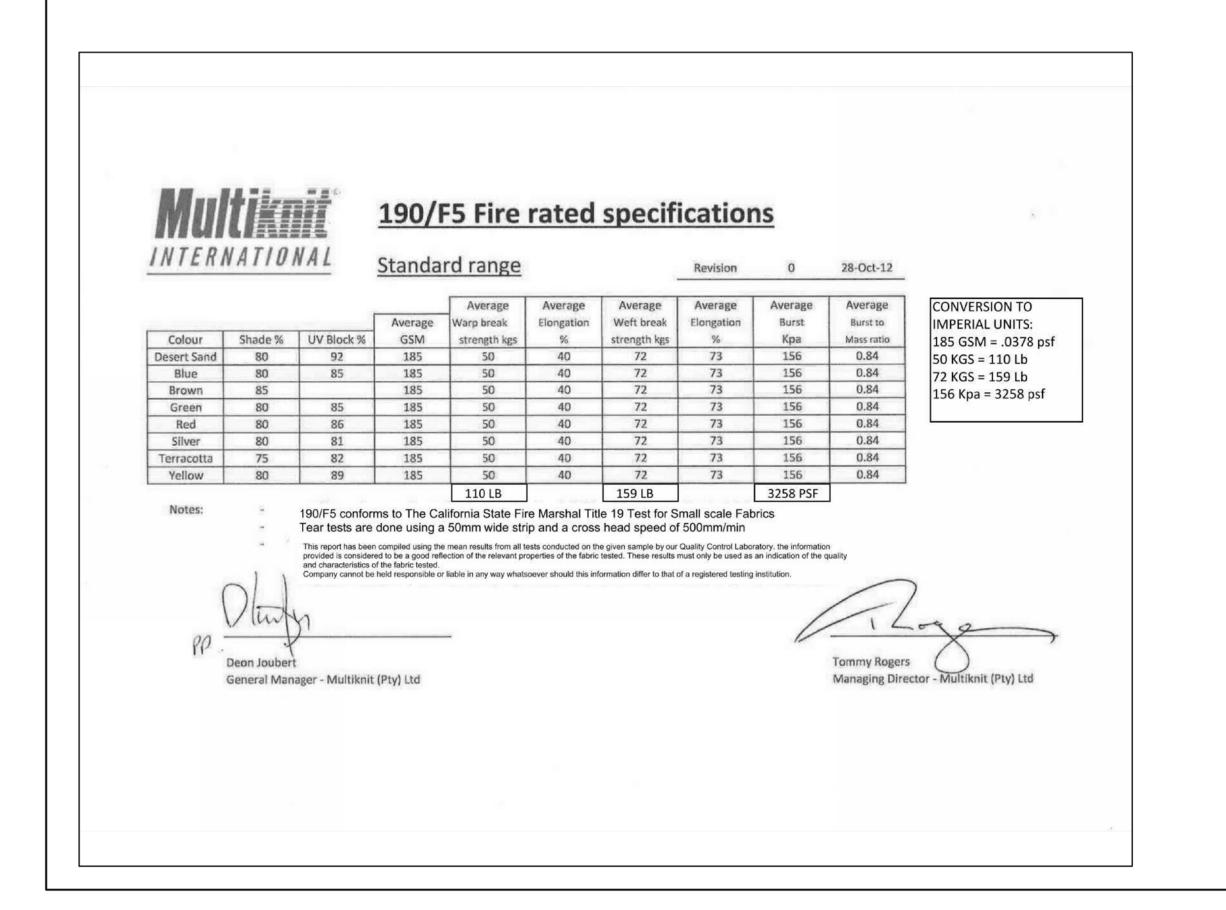
Eng. By: JO 06/26/20 06/26/20 Design By : Approved By: JO

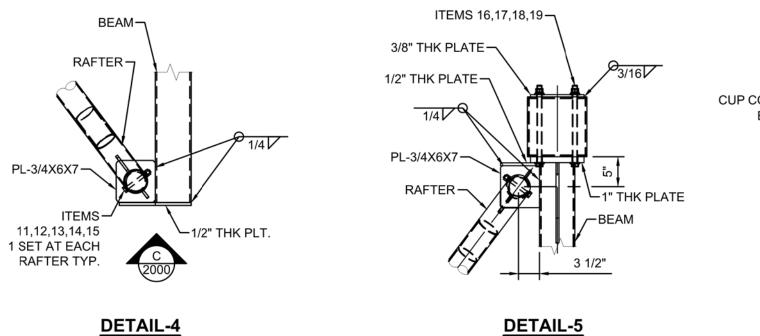
DRAWING DESCRIPTION:

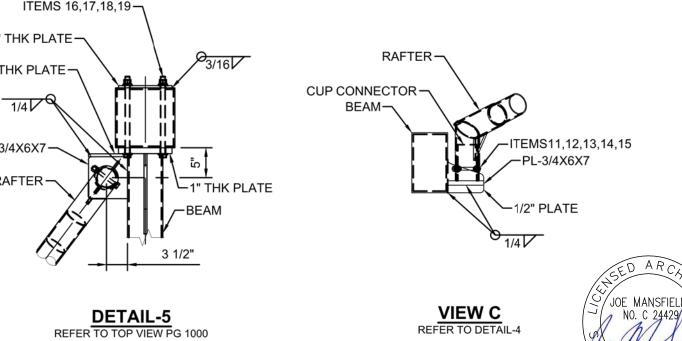
REACTIONS

DSA2022030-19

SHEET 9.2-2000













FABRIC SHADE STRUCTURE DSA P.C. 04-119454



MODEL

SIZE

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN



CORPORATE HEADQUARTERS 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005

CERTIFICATIONS: IAS CERTIFICATION No: FA-428

Fallbrook Union Elementary **School District**

CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

PROJECT NAME:

La Paloma Elementary

300 Heald Lane Fallbrook, CA 92028 **MODEL NUMBER:**

NUMBER

SITE SPECIFIC APPLICATION TITLE SHEET SHALL INCLUDE:

PARTIAL LIST OF APPLICABLE CODES

2019 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.

- (2018 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2019 CALIFORNIA AMENDMENTS)
- (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
- (2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
- (2018 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R. 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R.
- (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
- 2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
- 2016 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS
- (PER 2019 CBC, PART 2, CHAPTER 35)

NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES C.C.R. TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS	2016 EDITION
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 20	STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 22	STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND	
	THEIR APPURTENANCES	2016 EDITION
NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE (CA AMENDED)	2016 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION	
	OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS,	
	INCLUDING ACCESSORIES	2003 EDITION
UL521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 (R2010)
ICC 300	SANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING	
	AND GRANDSTANDS	2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

SEE INDIVIDUAL STRUCTURAL DRAWINGS FOR SPECIFIC DESIGN NOTES AND LOADING.

ALL WORK SHALL CONFORM TO 2019 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (C.C.R.).

ALL WORK SHALL BE IN COMPLIANCE WITH CFC CHAPTER 33 -FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

BUILDING CODE DATA

SITE SPECIFIC APPLICATION SITE PLAN SHALL INCLUDE:

- ACTUAL DIMENSIONS OF SHADE STRUCTURES.
- 2. DIMENSIONS FROM ADJACENT STRUCTURES AND PROXIMITY OF ASSUMED OR ACTUAL PROPERTY LINES.
- PROVIDE CODE ANALYSIS INCLUDING ACTUAL SHADE STRUCTURE AREA (SQ. FT.), OCCUPANCY TYPE (A-3), AND TYPE OF CONSTRUCTION (V-B). INDICATE OCCUPANT LOAD FACTOR per 2019 CBC, SECTION 1004.
- 4. INDICATE LOCATIONS OF FIRE EXTINGUISHER WITHIN 75 FEET.
- 5. SHOW LOCATIONS OF AUDIBLE FIRE ALARM.
- INDICATE DIMENSIONS FROM THE ROOF TO THE HIGHER STRUCTURE OR TERRAIN FEATURE. MINIMUM DIMENSION OF 20' FOR SNOW LOAD MODEL (ASCE 7-16).
- ACTUAL SITE ELEVATION (FT.) TO DETERMINE SITE OCCURS AT OR BELOW THE UPPER ELEVATION LIMIT FOR THE GROUND SNOW LOAD SHOWN IN ASCE 7-16 (FOR
- 8. FOR RECESSED BASE PLATE (RBP) OPTION: ARCHITECT/ENGINEER OF RECORD TO SPECIFY THE LOWEST ANTICIPATED SERVICE TEMPERATURE (LAST). AS DEFINED IN AISC 341-10 SECTION A.3.4b, A4.1 AND A4.2 PER NOTE ON EACH INDIVIDUAL MODEL

ENGINEERING DRAWING WHICH RELATES TO DEMAND CRITICAL WELD AND

9. COMPLETE SCOPE OF WORK INCLUDING THE SHADE STRUCTURE MODEL NUMBER, P.C. NUMBER. AND SPECIFIC SIZE OF SHADE STRUCTURE.

"L.A.S.T." TEMPERATURE (EITHER STRUCTURAL STEEL NOTE #14).

- 10. ALL SADDLES, CLAMPS AND FITTINGS SHALL CONFORM TO THE GUIDELINES AS SPECIFIED IN APPENDICES "A, B & C" RESPECTIVELY IN ASCE 19-16, "STRUCTURAL APPLICATIONS OF STEEL CABLES FOR BUILDINGS."
- . ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN MAPPED GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.
- 12. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN A MAPPED FIRE HAZARD SEVERITY ZONE OR WILDLAND INTERFACE AREA.

GENERAL NOTES

		P.C. I-1.0	P.C. TITLE SHEET					_		
		P.C. T-2.0	DSA 103 SAMPLE FORM							
		P.C. T-2.1	DSA 103 SAMPLE FORM					_		
		P.C. T-3.0	DSA 103 SAMPLE FORM					_	APPRO	OVED
		P.C. T-3.1	DSA 103 SAMPLE FORM					_ D'	IV. OF THE STA	
		16.1-1000	PRODUCT INFORMATION	SINGLE POST P		20 X 20	DSA1032020-19	- AI	PP: 04-1194	54 PC
'		16.2-2000	REACTIONS	SINGLE POST P		20 X 20	DSA1032020-19		REVJEWE	
DSA 103 - 1 / PC T-2.0	DSA 103 1 / PC T-2.0	17.1-1000	PRODUCT INFORMATION		YRAMID CANTILEVER	14 X 14	DSA1241414-19		S PLS	
MODEL: DSA1032020-19	MODEL: DSA1241414-19	17.2-2000	REACTIONS		YRAMID CANTILEVER	14 X 14	DSA1241414-19		ATE:03/	/26/2021
STRUCTURE: 20' x 20' x 12' SINGLE POST PYRAMID UNIT MAX. AREA - 400 SQ. FT. MAX. OCCUPANCY = 26	STRUCTURE: 14' x 14' x 12' SINGLE POST PYRAMID CANTILEVER MAX. AREA - 196 SQ. FT. MAX. OCCUPANCY = 13	18.1-1000	PRODUCT INFORMATION	TRIANGLE		25 X 25	DSA30125-19	_		
MAX. OCCUPANCY = 26	MAX. OCCUPANCY = 13	18.2-2000	REACTIONS	TRIANGLE		25 X 25	DSA30125-19	_		
		19.1-1000	PRODUCT INFORMATION	TRIANGLE		40 X 40	DSA30140-19	_		
		19.2-2000	REACTIONS	TRIANGLE		40 X 40	DSA30140-19	_		
		20.1-1000	PRODUCT INFORMATION	HIP		20 X 30	DSA401203012-19	STRUCTURE TYP	Æ:	
		20.2-2000	REACTIONS	HIP		20 X 30	DSA401203012-19	_		
		21.1-1000	PRODUCT INFORMATION	HIP		30 X 30	DSA401303012-19	_		
		21.2-2000	REACTIONS	HIP		30 X 30	DSA401303012-19	_		
	DSA 103 - PC T-2.0	22.1-1000	PRODUCT INFORMATION	HIP		30 X 40	DSA401304012-19	_		
' X	MODEL: D8A4073040-19 STRUCTURE: 30' x 40' x 14' MARINER PEAK	22.2-2000	REACTIONS	HIP		30 X 40	DSA401304012-19	_		
/ \	STRUCTURE: 30' x 40' x 14' MARINER PEAK MAX. ABEA - 1200 SQ. FT. MAX. OCCUPANCY = 80	23.1-1000	PRODUCT INFORMATION	HIP		40 X 40	DSA4014040-19	_		
	MODEL: DSA4073040-19 STRUCTURE: 30' x 40' x 18' MARINER PEAK	23.2-2000	REACTIONS	HIP		40 X 40	DSA4014040-19	SCALE	: VARIES	
DSA 103 - PC T-2.0	MAX. AREA - 1200 SQ. FT. MAX. OCCUPANCY = 80	24.1-1000	PRODUCT INFORMATION	JOINED HIPS		VARIES	DSA401J-19	DRAWING SIZE		
MODEZ: DSA30125-19 STRUCTURE: TRIANGLE		24.2-1001	DETAILS	JOINED HIPS		VARIES	DSA401J-19	DRAWING SIZE:	D	
MAX AREA - 271 SQ. FT. MAX. OCCUPANCY = 18		24.3-2000	REACTIONS	JOINED HIPS		VARIES	DSA401J-19	_		
MODEL: DSA30140-19 STRUCTURE: TRIANGLE		25.1-1000	PRODUCT INFORMATION	QUAD JOINED H		VARIES	DSA401Q-19			
MAX. AREA - 692 SQ. FT. MAX. OCCUPANCY = 46		25.2-1001	DETAILS	QUAD JOINED H		VARIES	DSA401Q-19	_		
		25.3-2000	REACTIONS	QUAD JOINED H	IIPS	VARIES	DSA401Q-19			
		26.1-1000	PRODUCT INFORMATION	HEXAGON		40 Ø	DSA60340-19	_		
		26.2-2000	REACTIONS	HEXAGON		40 Ø	DSA60340-19			
		27.1-1000	PRODUCT INFORMATION	HEXAGON		60 Ø	DSA60360-19	_		
	I	27.2-2000	REACTIONS	HEXAGON		60 Ø	DSA60360-19			
	DSA 103 - PC T-2.0	28.1-1000	PRODUCT INFORMATION			30 X 40	DSA4073040-19	_		
	MODEL: DSA401203012-19 STRUCTURE: 20' x 30' x 12' HIP UNIT	28.2-2000	REACTIONS	MARINER PEAK		30 X 40	DSA4073040-19	_		
	MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY = 40									
	MODEL: DSA401303012-19							DDEC		'DC\
DSA 103 - PC T-2.0	STRUCTURE: 30' x 30' x 12' HIP UNIT MAX. AREA - 900 SQ. FT. MAX. OCCUPANCY = 60	TOTAL SHEET	COUNT: 33 SHEETS						HECK (
MODEL: DSA401J-19			• • • • • • • • • • • • • • • • • • • •						CUMEN.	
MODEL: DSA401J-19 STRUCTURE: JOINED HIP MAX: AREA - VARIES MAX: OCCUPANCY = VARIES	MODEL: DSA401304012-19 STRUCTURE: 30' x 40' x12' HIP UNIT MAX. AREA - 1200 SQ. FT. MAX. OCCUPANCY = 80			ARCH	ITECT				: 2019 CBC oroject applicati	ion
SEE SHEET 24.1-1000 FOR SELECTION OPTIONS	MODEL: DSA4014040-19			AROH					action is require	
NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA.	STRUCTURE: 40' x 40' x 15' HIP UNIT MAX. AREA - 1600 SQ. FT. MAX. OCCUPANCY = 106		NI AIA ADOLUTEOT		MADIZIONE STOLL	CTUDAL ENGINEED				1,,,,,,,
	100000000000000000000000000000000000000	38868 BUTTERFL	N, AIA, ARCHITECT	SED ARCHIA	MARK LOWE, STRU 19471 MISTY RIDGE			Eng. By :	DWH	10/16/2
		YUCAIPA, CA 923		SE MIGGING TO	TRABUCO CANYON		PROFESS I ONA	Design By :	DWH	10/16/2
		(909) 499-0058	99	* Day+ light	PH. 949-400-1265	, OA 32301	ALBERT	Deolgh By .		10,10,2
		dhigginson.arch@g	amail com	O NO.C19168 REN. 10-31-21	malowe@me.com		19 18 Var le Time	Approved By :	DWH	10/16/2
			griam.oom	THOS CALLS	1114101101991110100111		No. 3693 m	DRAWING DESCI	RIPTION:	ļ
				CAL			T. CARLETON ST.	BITAWING BEGGI	tii Hoiti.	
							OF CALLED	P.C. TIT	CI E SHI	FFT
	l XY						CAL	1.0.111	LL OIII	
	/ \							DWG.		
DSA 103 - PC T-2.0	DSA 103 - PC T-2.0									
	MODEL : DSA60340-19	1								
MODEL DSA401Q-19 STRUCTURE: QUAD JOINED HIP MAX AREA - VARIES MAX OCCUPANCY = VARIES	STRUCTURE: 40' Ø HEXAGON MAX. AREA - 1,040 SQ. FT. MAX. OCCUPANCY = 69							SHEET		
SEE SHEET 25.1-1000 FOR SELECTION OPTIONS	MODEL: DSA60360-19	1						P.(C. T-1.0	
NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA	STRUCTURE: 60' Ø HEXAGON MAX. AREA - 2,338 SQ. FT.							REV.		
OCCUPANCY AND SITE CONDITIONS.	MAX. OCCUPANCY = 156							- NEV.		
UNIT SELECTION A	ND DESCRIPTION		ARCHITEC	CT		ENGINE	=R			
			,							

STRUCTURE TYPE

DRAWING DESCRIPTION

NUMBER

LIVE LOADS **SNOW LOAD**

WIND LOADS 115 MPH (3-Sec. Gust); EXPOSURE C; TOPOGRAPHIC FACTOR, Kzt = 1.0

1.- SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION LIST (T & I LIST) APPROVED BY DSA. THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2019 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.

2.- STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING.

3.- FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)

4.- DESIGN PER FOLLOWING CODES: CBC 2019, ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-14, ASCE 55-16 & ASCE 19-16

STRUCTURAL STEEL

1.- FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2019 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1

2.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.

3.- ALL WORK SHALL CONFORM TO CBC 2019 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

4.- ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16, IN ITS' ENTIRETY.

TYPICAL MECHANICAL PROPERTIES ARE: 42,000 PSI YIELD STRESS MINIMUM / 48,000 PSI TENSILE STRESS MINIMUM

5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE B, UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS: SQUARE AND RECTANGULAR 46,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS ROUND PIPE 42,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

7.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

8.- ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.

9.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

10.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS (IF REQUIRED). ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.

11.- ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 1, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS.

12.- ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:

- PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247). - SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS.

13.- ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC REQUIRED PIER EMBEDMENT SHALL START FROM AN ELEVATION THAT AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

14.- COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION. ALL REQUIRED. EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

CONCRETE SPECIFICATION

1.- CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2019 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE F'C= 4500 PSI, TYPE V CEMENT, WATER/CEMENT RATIO OF 0.45, PER ACI 318-14 CHAPTER 5. REINFORCING STEEL TO BE Fy= 60000 PSI , MIN. GR. 60

3.- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329). ANCHOR BOLT'S EMBEDMENT NEEDS TO BE AS FOLLOW A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)

4.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

5.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.

FABRIC SPECIFICATION

1.- FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.

2.- THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.

3.- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT TO DSA.

4.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2261. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 1 OF "FABRIC SPECIFICATION" ON THE APPROVED PLANS. THE FABRIC SHALL BE REPLACED WHEN THE TEST RESULTS RETURN LESS THAN 50% OF THE ULTIMATE VALUES IN NOTE 1 OF "FABRIC SPECIFICATION". FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10. SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA.

5.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.

6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

AIRCRAFT CABLE

1.- FOR FABRIC ATTACHMENT USE 3/8" 7x19 GALV. CABLE PER ASTM A1023A, ASTM 1023M-02, WITH A BREAKING STRENGTH VALUE OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=4909 LB.

2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.

2019 CBC PC DESIGN NOTES

FLOOR LIVE LOAD ROOF LIVE LOAD 5 PSF

ALLOWABLE SOIL PRESSURE: DL + LL (CONC FTG)

DL + LL + SEISMIC (CONC FTG) 1500 PSF LATERAL BEARING DESIGN VALUE 100 PSF/FT BELOW NATURAL GRADE, PER TABLE 1806A.2 TWO TIMES THE TABULAR VALUE IS USED (200 PSF/FT)

PER CBC SECTION 1806A.3.4. ALLOWABLE PIER FRICTIONAL RESISTANCE 250 PSF MAXIMUM BASED ON SECTION 1810A.3.3.1.4 (ONE-SIXTH OF THE BEARING VALUE). UPLIFT FRICTIONAL RESISTANCE HAVE A SAFETY FACTOR OF 3.

ROOF SNOW LOAD ICE LOAD ZERO PSF

FLOOD HAZARD AREA WHEN A SITE SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED FROM A SOILS ENGINEER IS NEEDED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED IN THE PC ARE STILL APPLICABLE.

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2

-BASIC DESIGN WIND SPEED (3 SEC GUST)	V	115 MPH
-WIND EXPOSURE FACTOR	С	
-TOPOGRAPHIC FACTOR	Kzt	1
-RISK CATEGORY	II	
-VELOCITY PRESSURE EXPOSURE COEFFICIENT	Kz	0.85
-VELOCITY PRESSURE	qz	24.46 PSF
SEISMIC DESIGN:		
CITE CLASS		

-SITE CLASS 1.389g -SPECTRAL RESPONSE COEFFICIENTS SDS 2.00 1.39

-LATERAL FORCE RESISTING SYSTEM G.2 ORDINARY CANTILEVERED COLUMN SYSTEM.

-SEISMIC IMPORTANCE FACTOR	1	1.0	
-DESIGN BASE SHEAR	V	3072 LB	
-SEISMIC RESPONSE COEFFICIENTS	Cs	1.6	
-RESPONSE MODIFICATION FACTOR	R	1.25	
-ANALYSIS PROCEDURE	EQUIVA	LENT LATERAL	FORCE
-RISK CATEGORY	II		
-SEISMIC DESIGN CATEGORY		Е	
-SITE COEFFICIENT CATEGORY	Fa	1	
	Ev	15	

GEOHAZARD REPORT IS NOT REQUIRED FOR OPEN FABRIC STRUCTURES 1,600 SQF OR LESS COMPLYING WITH THE REQUIREMENTS OF IR A-4 SECTION 3.1.1. OPEN FABRIC SHADE STRUCTURES GREATER THAN 1,600 SQUARE FEET UP TO A MAXIMUM OF 4,000 SQUARE FEET AND COMPLYING WITH THE REQUIREMENTS NOTED IN IR A-4 SECTION 3.1.1 DO NOT REQUIRE A GEOHAZARD REPORT PROVIDED A GEOTECHNICAL REPORT INDICATES THAT NO LIQUEFACTION POTENTIAL EXISTS.

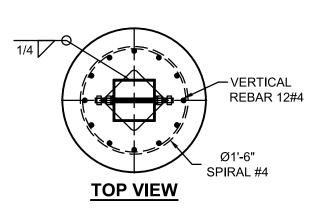
ARCHITECT OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

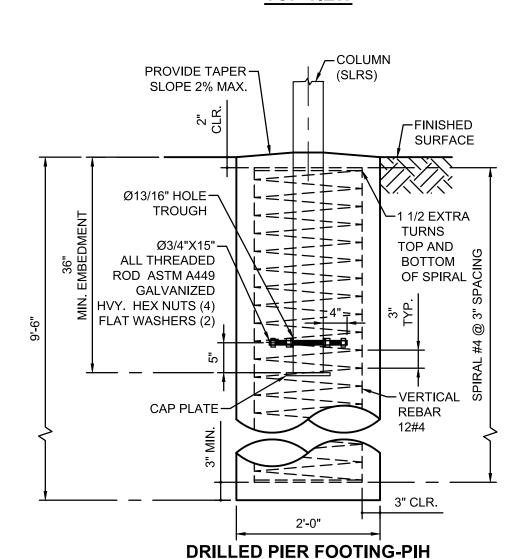
PC OPTIONS SHALL NOT INCLUDE LIQUEFIABLE SOIL (EXCEPTION: OPEN FABRIC SHADE STRUCTURES 1,600 SQUARE FEET OR LESS COMPLYING WITH REQUIREMENTS OF IR A-4 SECTION 3.1.1). IF STRUCTURE IS LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F, OVER-THE-COUNTER SUBMITTAL IS NOT ALLOWED AND REGULAR PROJECT SUBMITTAL IS REQUIRED. IF SITE IS NOT IN A MAPPED LIQUEFACTION HAZARD ZONE, IT MAY BE PRESUMED THAT NO LIQUEFACTION HAZARD EXISTS ON THAT SITE UNLESS A SITE-SPECIFIC GEOTECHNICAL REPORT IDENTIFIES SUCH HAZARD.

MINIMUM FOUNDATION SETBACK LIMIT IN ADJACENT SLOPE: THE DEPTH OF CORRESPONDS WITH A HORIZONTAL CLEAR DISTANCE OF 14 FEET THAT INTERSECT WITH THE SLOPE (DAYLIGHTING). IF SETBACK LIMITS ARE SMALLER THAN CBC REQUIRES, A SITE-SPECIFIC SOILS REPORT IS

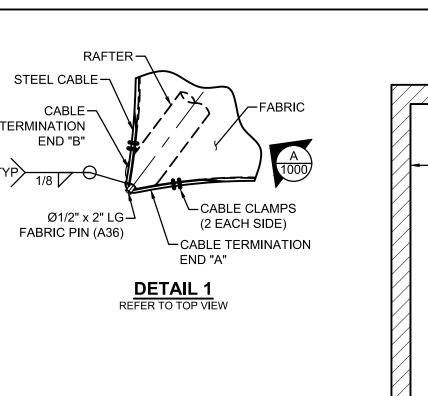
MINIMUM CLASS 2 PROJECT INSPECTOR REQUIRED

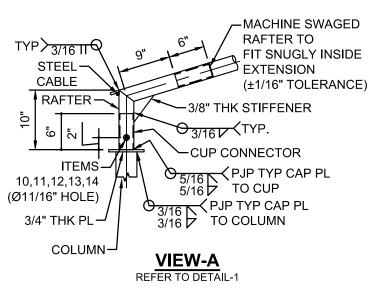
CODE ANALYSIS									
BUILDING	OCCUPANCY	CONST. TYPE	AREA (SQ. FT.)	OCCUPANT LOAD FACTOR	OCCUPANT LOAD				
SHADE STRUCTURE									





(USE FOR NON-CONSTRAINED CASES)





MACHINE SWAGED-

FIT SNUGLY INSIDE CROSSPIECE ARM

(±1/16" TOLERANCE)

RIDGE -

MACHINE SWAGED -

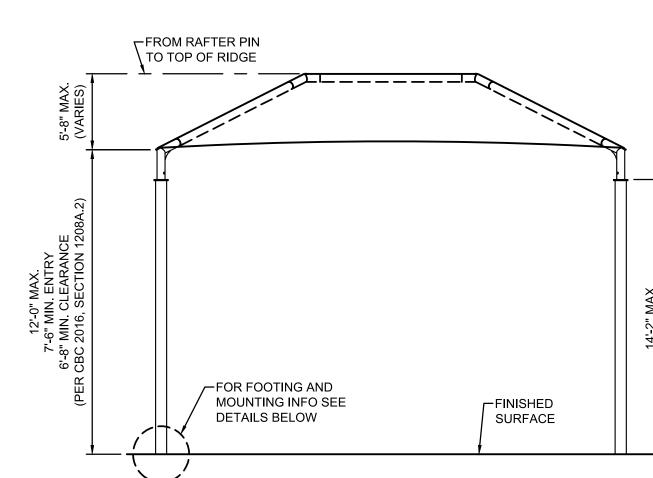
(±1/16" TOLERANCE)

CROSSPIECE TO FIT SNUGLY

INSIDE RIDGE

CROSSPIECE-

EXTENSION TO



— ADJACENT BUILDING

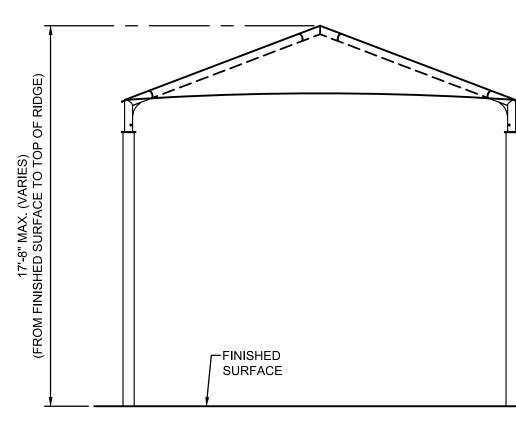
11'-3" MAX. VARIES

-STRUCTURE SHALL BE INSTALLED A MIN. OF 20'-0" AWAY FROM ADJACENT BUILDING,

(L=40'-0" MAX. (CENTER TO CENTER OF COLUMNS)

TOP VIEW

UNLESS OTHERWISE APPROVED BY D.S.A. ON A JOB SPECIFIC BASIS.



LIST OF MATERIALS

MATERIAL

HSS 7.0 x 7.0 x 0.250

HSS 4.5 x 0.375

5.00 GA 7 RD. TUBE (5.0 x 0.188)

FR COLOURSHADE Z25

GALVANIZED STEEL

GALVANIZED STEEL

18-8 SS

18-8 SS

18-8 SS

DELRIN (ACETAL)

18-8 SS

DESCRIPTION

COLUMN

CUP CONNECTOR (6" LG)

RAFTER (GALVANIZED STEEL TUBE)

EXTENSION (GALVANIZED STEEL TUBE)

CROSSPIECE (GALVANIZED STEEL TUBE)

RIDGE (GALVANIZED STEEL TUBE)

FABRIC TOP

Ø3/8" CABLE

Ø3/8" CABLE CLAMP

Ø5/8"-11NC x 6 1/2" HEX BOLT

Ø5/8"-11NC HEX NUT

Ø5/8" FLAT WASHER

Ø5/8" FLAT WASHER

Ø5/8" SPLIT LOCK WASHER

ITEM QTY

10

11

12

13

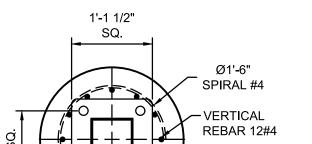
14

8

(SCHEMATIC VIEW ONLY

MAXIMUM OCCUPANT LOAD (PER CBC 2019 TABLE 1604A.5) 250 PERSONS

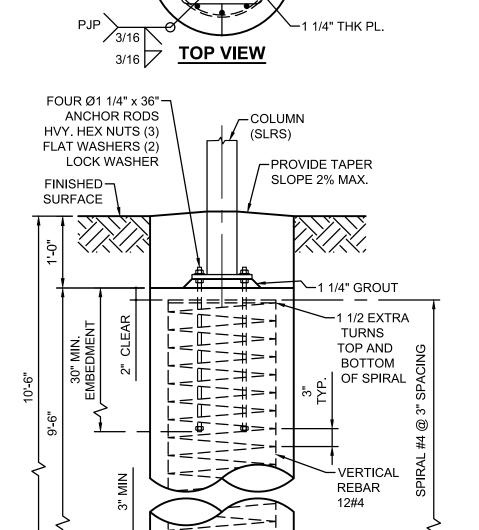
PUBLIC ASSEMBLY: EDUCATIONAL OCCUPANCIES ABOVE 12TH GRADE: 500 PERSONS



-EXTENSION

AND EXT. ARMS

♦ 3/16 V < TYP BTW. RIDGE

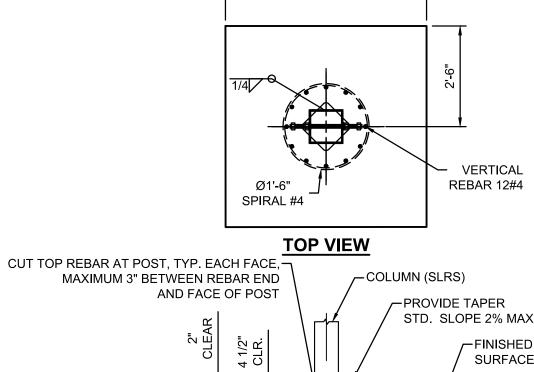


2'-0"

DRILLED PIER FOOTING-RBP

RECESSED BASE PLATE. RBP

(USÈ FOR NON-CONSTRAINED CASES)

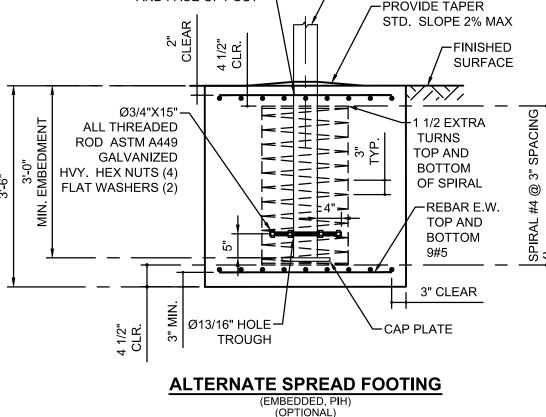


5'-0"

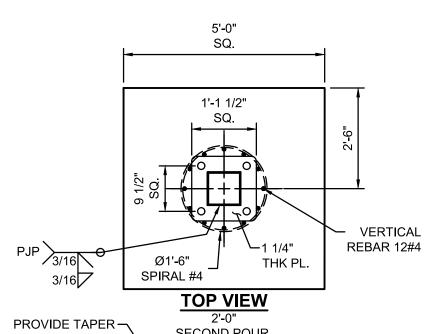
SQ.

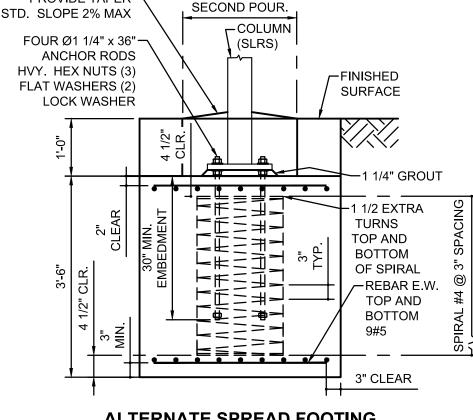
FRONT VIEW

(SCHEMATIC VIEW ONLY)



/JOE MANSFIELD **CAP PLATE** (3/4" THK) (TYP. FOR ALL COLUMNS) (TOP OF RBP COLUMNS) (TOP & BOT. OF PIH COLUMNS





ALTERNATE SPREAD FOOTING (RECESSED BASE PLATE, RBP (OPTIONAL)





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CORPORATE HEADQUARTERS

2580 ESTERS BLVD. SUITE 100

DFW AIRPORT, TX, 75261 800-966-5005 CERTIFICATIONS:

IAS CERTIFICATION No: FA-428

CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

Fallbrook Union Elementary School District

La Paloma Elementary

LOCATION: 300 Heald Lane Fallbrook, CA 92028 MODEL NUMBER:

DSA401304012-19

IV. OF THE STATE AR

STRUCTURE TYPE: HIP**MAXIMUM** 30' x 40' x 12'e MAX. SCALE: NONE

DRAWING SIZE:

PRE-CHECK (PC) DOCUMENT Code : 2019 CBC A separate project application

for construction is required.

Eng. By :	JO	08/15/20
Design By :	MP	08/15/20
Approved By :	JO	08/15/20
DRAWING DESC	RIPTION	-

DRAWING DESCRIPTION: PRODUCT INFORMATION

22.1-1000

DSA401304012-19 SHEET

REV.

ENVELOPE JOINT REACTIONS Moment resultant = $\sqrt{Mx^2 + My^2 + Mz^2}$ Shear resultant = $\sqrt{Px^2 + Py^2 + Pz^2}$

	1						ASD REACTION	1		6		
Node		10.00	Support Forces [kip	7/		ments [kipft]			Support Forces [kip]	Support Moments [kipft]	Support Forces [kip]	Support Forces [kip
No.		P _{X'}	P _{Y'}	P _{Z'}	M _{X'}	M _Y	M _Z ,		SHEAR RESULTANT	MOMENT RESULTANT	UPLIFT	AXIAL
						MAXI	MUM REAC	TIONS	2.205	22.740	1.518	-2.728
						IVIAAI	IVIOIVI KEAC	110143	2.203	22.740	1.518	-2.728
Node			Support Forces [kip	1	Su	pport Moments [ki	pftl					
No.		P _X	P _Y	P _z	M _x	My	M _z					
84	Max	2.102	1.661	1.518	5.337	22.232	1.319					
	Min	-0.985	-0.666	-2.414	-16.755	-11.068	-0.831					
	Max P _x	2.102	-0.666	1.395	4.782	22.232	-0.695	CO 5	2.205	22.740	1.395	
	Min P _X	-0.985	1.661	-2.257	-16.755	-9.581	-0.001	CO 11	1.931	19.301		-2.257
	Max P _Y	-0.985	1.661	-2.257	-16.755	-9.581	-0.001	CO 11	1.931	19.301		-2.257
	Min P _Y	2.102	-0.666	1.395	4.782	22.232	-0.695	CO 5	2.205	22.740	1.395	
	Max P _z	1.987	-0.607	1.518	4.209	20.837	-0.831	CO 34	2.078	21.258	1.518	
	Min P _z	0.056	0.431	-2.414	-1.820	3.333	0.673	CO 10	0.435	3.798		-2.414
	Max M _x	0.542	-0.288	-1.601	5.337	7.651	1.254	CO 2	0.614	9.329		-1.601
	Min M _X	-0.985	1.661	-2.257	-16.755	-9.581	-0.001	CO 11	1.931	19.301	1 205	-2.257
	Max M _Y	-0.977	-0.666 1.467	1.395 -1.402	4.782 -15.854	22.232 -11.068	-0.695 0.502	CO 5	2.205	22.740	1.395	-1.402
	Min M _Y Max M _Z	0.497	-0.223	-1.402 -1.607	-15.854 4.641	7.284	1.319	CO 32	1.763 0.545	19.335 8.637		-1.402
1	Min M ₂	1.987	-0.223	1.518	4.641	20.837	-0.831	CO 31	2.078	21.258	1.518	-1.007
86	Max	1.517	1.125	0.601	6.957	20.252	2.275	60 34	2.070	21.230	1.510	
	Min	-0.320	-0.773	-2.727	-10.349	-1.828	-1.322					
	Max P _x	1.517	0.367	-2.140	-5.245	20.252	2.275	CO 32	1.561	20.920		-2.140
	Min P _x	-0.320	-0.735	-1.474	6.658	-1.828	0.366	CO 30	0.802	6.904		-1.474
	Max P _Y	0.862	1.125	0.588	-10.349	7.621	-0.292	CO 5	1.417	12.852	0.588	
	Min P _Y	-0.281	-0.773	-1.718	6.957	-1.231	0.403	CO 1	0.822	7.065		-1.718
	Max P _Z	0.795	1.053	0.601	-9.614	7.001	-0.277	CO 34	1.319	11.893	0.601	
,	Min P _Z	0.726	-0.482	-2.727	3.202	12.067	1.774	CO 11	0.871	12.485		-2.727
	Max M _x	-0.281	-0.773	-1.718	6.957	-1.231	0.403	CO 1	0.822	7.065		-1.718
	Min M _x	0.862	1.125	0.588	-10.349	7.621	-0.292	CO 5	1.417	12.852	0.588	
	Max M _Y	1.517	0.367	-2.140	-5.245	20.252	2.275	CO 32	1.561	20.920		-2.140
	Min M _Y	-0.320	-0.735	-1.474	6.658	-1.828	0.366	CO 30	0.802	6.904		-1.474
	Max M _Z	1.517	0.367	-2.140	-5.245	20.252	2.275	CO 32	1.561	20.920		-2.140
	Min M _Z	0.495	0.223	-1.607	-4.640	7.254	-1.322	CO 31	0.543	8.611		-1.607
88	Max	0.737	1.233	1.053	10.995	5.818	0.294					
	Min Max P _x	-1.518 0.737	-1.075 -0.728	-2.728 -1.555	-11.441 6.953	-20.264 5.730	-2.270 -0.749	CO 14	1.036	9.010		-1.555
	Min P _X	-1.518	0.369	-2.140	-5.271	-20.264	-2.270	CO 14	1.562	20.938		-2.140
	Max P _v	-0.902	1.233	1.006	-11.441	-8.306	0.167	CO 4	1.528	14.138	1.006	-2.140
	Min P _Y	0.525	-1.075	-1.988	10.995	4.352	-1.317	CO 10	1.196	11.825	1.000	-1.988
	Max P _z	-0.802	1.142	1.053	-10.471	-7.257	0.159	CO 33	1.395	12.740	1.053	2,000
	Min P _z	-0.727	-0.481	-2.728	3.184	-12.083	-1.770	CO 11	0.872	12.495		-2.728
	Max M _x	0.525	-1.075	-1.988	10.995	4.352	-1.317	CO 10	1.196	11.825		-1.988
	Min M _X	-0.902	1.233	1.006	-11.441	-8.306	0.167	CO 4	1.528	14.138	1.006	
	Max M _Y	0.663	-0.189	-0.681	2.050	5.818	-0.585	CO 16	0.689	6.169		-0.681
	Min M _Y	-1.518	0.369	-2.140	-5.271	-20.264	-2.270	CO 32	1.562	20.938		-2.140
	Max M _z	-0.863	1.127	0.589	-10.370	-7.634	0.294	CO 5	1.419	12.877	0.589	
	Min M _Z	-1.518	0.369	-2.140	-5.271	-20.264	-2.270	CO 32	1.562	20.938		-2.140
90	Max	0.984	1.661	1.516	11.435	11.053	1.356					
	Min	-2.100	-1.232	-2.256	-16.762	-22.223	-0.500	***	4.000	44		
	Max P _X	0.984	1.661	-2.256	-16.762	9.574	0.001	CO 11	1.931	19.304	4.204	-2.256
	Min P _X	-2.100	-0.664	1.394	4.771	-22.223	0.694	CO 5	2.202	22.729	1.394	2.250
	Max P _Y	0.984	1.661	-2.256 1.005	-16.762	9.574	0.001	CO 11	1.931	19.304	1.005	-2.256
	Min P _Y	-0.902 -1.985	-1.232	1.005 1.516	11.435 4.193	-8.303 -20.825	-0.169 0.829	CO 4 CO 34	1.527	14.131	1.005	
	Max P _z Min P _z	-1.985 0.984	-0.604 1.661	-2.256	-16.762	9.574	0.829	CO 11	2.075 1.931	21.243 19.304	1.510	-2.256
	Max M _x	-0.902	-1.232	1.005	11.435	-8.303	-0.169	CO 11	1.527	14.131	1.005	-2.230
	Min M _X	0.984	1.661	-2.256	-16.762	9.574	0.001	CO 11	1.931	19.304	1.005	-2.256
	Max M _y	0.975	1.467	-1.400	-15.860	11.053	-0.500	CO 32	1.761	19.332		-1.400
	Min M _Y	-2.100	-0.664	1.394	4.771	-22.223	0.694	CO 5	2.202	22.729	1.394	

BASIC LOAD CASES

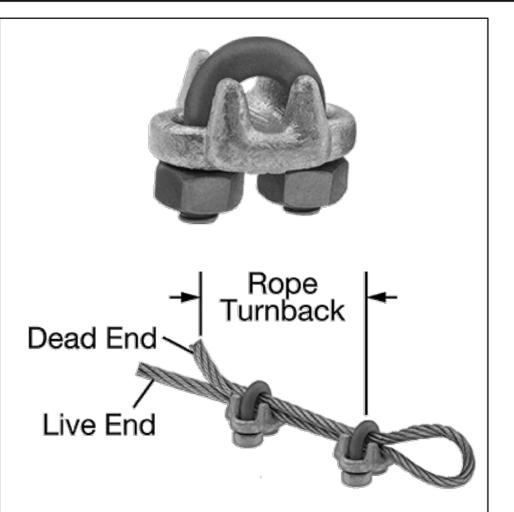
DEAD LOAD 0.0378 PSF (FABRIC) FLOOR LIVE LOAD **ROOF LIVE LOAD** 5 PSF **ROOF SNOW LOAD** 5 PSF SUPERIMPOSED LOADS

WIND LOAD BASIC DESIGN WIND SPEED (3 SEC GUST) 115 MPH VELOCITY PRESSURE qz 24.46 PSF

COMPONENT AND CLADDING qz (CABLE AND CABLE HARDWARE ONLY) 24.46 PSF

SEISMIC LOAD

SEISMIC RESPONSE COEFFICIENTS Cs DESIGN BASE SHEAR 3072 LB



INTERNATIONAL

Deon Joubert

General Manager - Multiknit (Pty) Ltd

Silver

Colour Shade % UV Block % GSM

FORGED WIRE ROPE CLAMP

FITTING TYPE ROPE CLAMP FABRICATION: FORGED MATERIAL: GALVANIZED STEEL FOR WIRE ROPE DIAMETER 3/8" NUMBER OF CLAMPS REQUIRED: 2 ROPE TURNBACK: 6 1/2" FOR WIRE ROPE CONSTRUCTION 7 × 19 ATTACHMENT TYPE: LOOP

190/F5 Fire rated specifications

40

40

This report has been compiled using the mean results from all tests conducted on the given sample by our Quality Control Laboratory, the information provided is considered to be a good reflection of the relevant properties of the fabric tested. These results must only be used as an indication of the quality and characteristics of the fabric tested.

Company cannot be held responsible or liable in any way whatsoever should this information differ to that of a registered testing institution.

Average Average

Elongation Weft break

159 LB

Average

Elongation

Standard range

Average Warp break

110 LB

190/F5 conforms to The California State Fire Marshal Title 19 Test for Small scale Fabrics Tear tests are done using a 50mm wide strip and a cross head speed of 500mm/min

185

CLAMP:WIDTH 2", HEIGHT 1 15/16", THICKNESS 1 11/16" REQUIRED INSTALLATION TOOL TORQUE WRENCH REQUIRED TORQUE 45 FT.-LBS. CAPACITY 80% OF THE ROPE'S CAPACITY SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

0 28-Oct-12

Burst to

0.84

Tommy Rogers

Managing Director - Multiknit (Pty) Ltd

CONVERSION TO

IMPERIAL UNITS:

50 KGS = 110 Lb

72 KGS = 159 Lb

156 Kpa = 3258 psf

185 GSM = .0378 psf

Average

Burst

3258 PSF

Aircraft Cable

Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.

	7 x	19	Galvanized Min.
	Dia. (In)	Approx. Wt 1000 Ft/lbs	Breaking Strengths (lbs)
7 x 19	3/32	17.	1,000
	1/8	29.	2,000
	5/32	45.	2,800
	3/16	65.	4,200
	7/32	86.	5,600
	1/4	110.	7,000
	9/32	139.	8,000
	5/1.6	173.	9,800
	3/8	243.	14,400

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.



2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005

CORPORATE HEADQUARTERS

CERTIFICATIONS:

IAS CERTIFICATION No: FA-428 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

Fallbrook Union Elementary **School District**

PROJECT NAME:

La Paloma Elementary

LOCATION: 300 Heald Lane Fallbrook, CA 92028

MODEL NUMBER:

DSA401304012-19



STRUCTURE TYPE: HIP

MAXIMUM 30' x 40' x 12'e MAX.

SCALE: NONE

DRAWING SIZE:

PRE-CHECK (PC) DOCUMENT Code : 2019 CBC

A separate project application for construction is required.

Eng. By :	JO	08/15/20
Design By :	MP	08/15/20
Approved By :	JO	08/15/20

DRAWING DESCRIPTION:

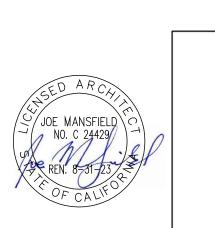
REACTIONS

DSA401304012-19

22.2-2000

REV.

NC







LIVE LOADS

SNOW LOAD 5 PSF 115 MPH (3-Sec. Gust); EXPOSURE C; TOPOGRAPHIC FACTOR, Kzt = 1.0 WIND LOADS

1.- SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION LIST (T & I LIST) APPROVED BY DSA. THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL

2.- STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING.

STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING,

UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2019 CHAPTER 17A. THE FIELD

SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.

3.- FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)

4.- DESIGN PER FOLLOWING CODES: CBC 2019, ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-14, ASCE 55-16 & ASCE 19-16

STRUCTURAL STEEL

ROUND PIPE

1.- FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2019 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.

2.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.

3.- ALL WORK SHALL CONFORM TO CBC 2019 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

4.- ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16, IN ITS' ENTIRETY.

TYPICAL MECHANICAL PROPERTIES ARE 42,000 PSI YIELD STRESS MINIMUM / 48,000 PSI TENSILE STRESS MINIMUM ROUND TUBE

5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE B. UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS: SQUARE AND RECTANGULAR 46,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS

42,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

7.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

8.- ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.

9.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

10.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS (IF REQUIRED). ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.

11.- ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 1, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS.

12.- ALL HIGH STRENGTH BOLTS SHALL COMPLY WITH ASTM F3125 GRADE A325 N (GALVANIZED). ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436.

13.- HIGH STRENGTH BOLTS ITEM 11 SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.

14.- HIGH STRENGTH BOLTS ITEM 7 SHALL BE TIGHTENED TO A PRE-TENSIONED (PT) CONDITION. PER TABLE 4.1 OF SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS (RCSC 2016 ITEM 7 SHALL BE INSTALLED PER SECTION 8.2 AND INSPECTED PER SECTION 9.2. FAYING SURFACE CLASS A OR B IS NOT REQUIRED. SPECIFIED MINIMUM PRE-TENSION IS 51 KIPS. TESTING AND INSPECTION IS REQUIRED PER DSA-103 18D PT-FULLY PRE-TENSIONED CONNECTIONS. NUT TESTING SHALL FOLLOW ONE OF THESE METHODS: TURN OF THE NUT (1/4 OR 1/2 TURN), DYE WASHER OR TORQUE WRENCH. THE INSPECTOR AND GC TO DETERMINE WHAT METHOD TO USE PRIOR TO START THE BOLTING.

15.- ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:

- PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247). - SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS.

16.- ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

17.- COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION. ALL EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

CONCRETE SPECIFICATION

1.- CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2019 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE F'c= 4500 PSI, TYPE V CEMENT, WATER/CEMENT RATIO OF 0.45, PER ACI 318-14 CHAPTER 5. REINFORCING STEEL TO BE Fy= 60000 PSI, MIN. GR. 60

3.- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329). ANCHOR BOLT'S EMBEDMENT NEEDS TO BE AS FOLLOW:

A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)

4.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

5.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.

FABRIC SPECIFICATION

1.- FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.

2.- THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.

3.- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT TO DSA.

4.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2261. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 1 OF "FABRIC SPECIFICATION" ON THE APPROVED PLANS. THE FABRIC SHALL BE REPLACED WHEN THE TEST RESULTS RETURN LESS THAN 50% OF THE ULTIMATE VALUES IN NOTE 1 OF "FABRIC SPECIFICATION". FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10. SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA. 5.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS

TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED. 6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

AIRCRAFT CABLE

1.- FOR FABRIC ATTACHMENT USE 1/4" 7x19 GALV. CABLE PER ASTM A1023A, ASTM 1023M-02, WITH A BREAKING STRENGTH VALUE OF 7000 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=2386 LB.

2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.

2019 CBC PC DESIGN NOTES

FLOOR LIVE LOAD ROOF LIVE LOAD 5 PSF

ALLOWABLE SOIL PRESSURE:

DL + LL (CONC FTG) 1500 PSF DL + LL + SEISMIC (CONC FTG) LATERAL BEARING DESIGN VALUE 100 PSF/FT BELOW NATURAL GRADE, PER TABLE 1806A.2

TWO TIMES THE TABULAR VALUE IS USED (200 PSF/FT) PER CBC SECTION 1806A.3.4.

ALLOWABLE PIER FRICTIONAL RESISTANCE 250 PSF MAXIMUM BASED ON SECTION 1810A.3.3.1.4 (ONE-SIXTH OF THE BEARING VALUE). UPLIFT FRICTIONAL RESISTANCE HAVE A SAFETY FACTOR OF 3.

ROOF SNOW LOAD ICE LOAD ZERO PSF FLOOD HAZARD AREA

WHEN A SITE SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED FROM A SOILS ENGINEER IS NEEDED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED IN THE PC ARE STILL APPLICABLE.

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2 -BASIC DESIGN WIND SPEED (3 SEC GUST) 115 MPH -WIND EXPOSURE FACTOR -TOPOGRAPHIC FACTOR -RISK CATEGORY -VELOCITY PRESSURE EXPOSURE COEFFICIENT 0.85 -VELOCITY PRESSURE 24.46 PSF

SEISMIC DESIGN: -SITE CLASS

1.389a -SPECTRAL RESPONSE COEFFICIENTS SDS 2.00 -LATERAL FORCE RESISTING SYSTEM G.2 ORDINARY CANTILEVERED COLUMN

SYSTEM. -SEISMIC IMPORTANCE FACTOR -DESIGN BASE SHEAR 2030 LB -SEISMIC RESPONSE COEFFICIENTS Cs 1.6 -RESPONSE MODIFICATION FACTOR 1.25 -ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE -RISK CATEGORY

SEISMIC DESIGN CATEGORY -SITE COEFFICIENT CATEGORY Fa:1 Fv:1.5

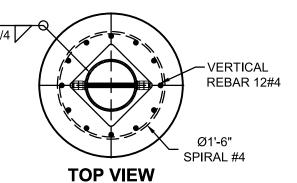
GEOHAZARD REPORT IS NOT REQUIRED FOR OPEN FABRIC STRUCTURES 1,600 SQF OR LESS COMPLYING WITH THE REQUIREMENTS OF IR A-4 SECTION 3.1.1. OPEN FABRIC SHADE STRUCTURES GREATER THAN 1,600 SQUARE FEET UP TO A MAXIMUM OF 4,000 SQUARE FEET AND COMPLYING WITH THE REQUIREMENTS NOTED IN IR A-4 SECTION 3.1.1 DO NOT REQUIRE A GEOHAZARD REPORT PROVIDED A GEOTECHNICAL REPORT INDICATES THAT NO LIQUEFACTION POTENTIAL EXISTS.

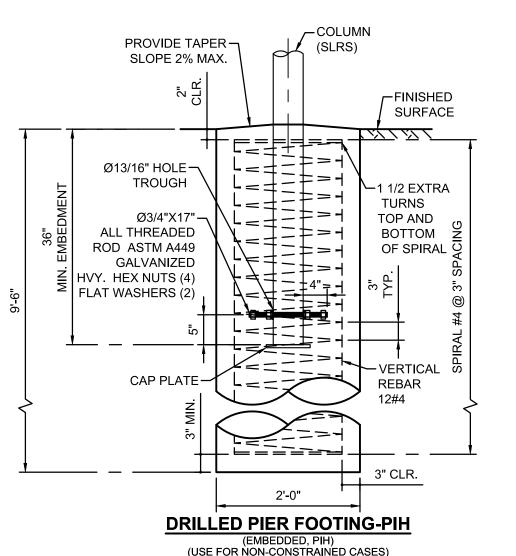
ARCHITECT OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN GEOLOGIC HAZARD ZONE, GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

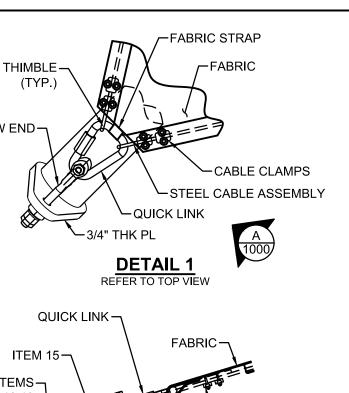
PC OPTIONS SHALL NOT INCLUDE LIQUEFIABLE SOIL (EXCEPTION: OPEN FABRIC SHADE STRUCTURES 1,600 SQUARE FEET OR LESS COMPLYING WITH REQUIREMENTS OF IR A-4 SECTION 3.1.1). IF STRUCTURE IS LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F, OVER-THE-COUNTER SUBMITTAL IS NOT ALLOWED AND REGULAR PROJECT SUBMITTAL IS REQUIRED. IF SITE IS NOT IN A MAPPED LIQUEFACTION HAZARD ZONE, IT MAY BE PRESUMED THAT NO LIQUEFACTION HAZARD EXISTS ON THAT SITE UNLESS A SITE-SPECIFIC GEOTECHNICAL REPORT IDENTIFIES SUCH HAZARD.

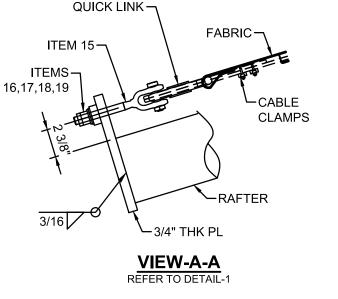
MINIMUM FOUNDATION SETBACK LIMIT IN ADJACENT SLOPE: THE DEPTH OF REQUIRED PIER EMBEDMENT SHALL START FROM AN ELEVATION THAT CORRESPONDS WITH A HORIZONTAL CLEAR DISTANCE OF 14 FEET THAT INTERSECT WITH THE SLOPE (DAYLIGHTING). IF SETBACK LIMITS ARE SMALLER THAN CBC REQUIRES, A SITE-SPECIFIC SOILS REPORT IS REQUIRED.

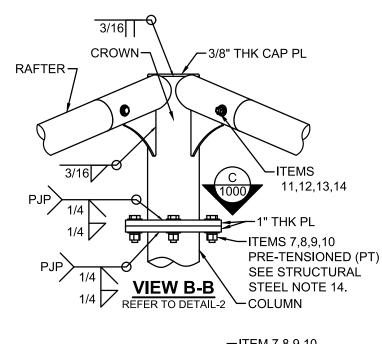
MINIMUM CLASS 2 PROJECT INSPECTOR REQUIRED.

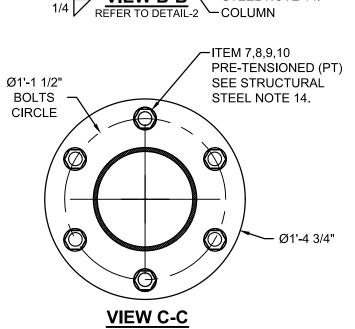












1'-1 1/2"

TOP VIEW

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2'-0"

DRILLED PIER FOOTING-RBP

(RECESSED BASE PLATE, RBP

(USÈ FOR NON-CONSTRAINED CASES)

(OPTIONAL)

_COLUMN

-PROVIDE TAPER

SLOPE 2% MAX.

└─1 1/4" GROUT

-1 1/2 EXTRA

TURNS

TOP AND

BOTTOM

· OF SPIRAL

REBAR

12#4

(SLRS)

FOUR Ø1 1/4" x 36"-

HVY. HEX NUTS (3)

FLAT WASHERS (2)

FINISHED-

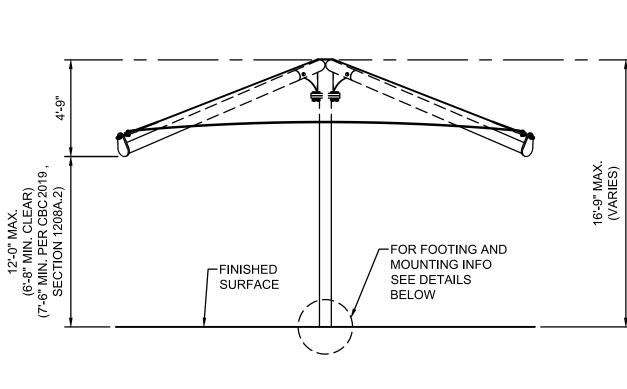
SURFACE

ANCHOR RODS

LOCK WASHER

SPIRAL #4

REBAR 12#4



-STRUCTURE SHALL BE INSTALLED A MIN. OF 20'-0" AWAY FROM ADJACENT BUILDING

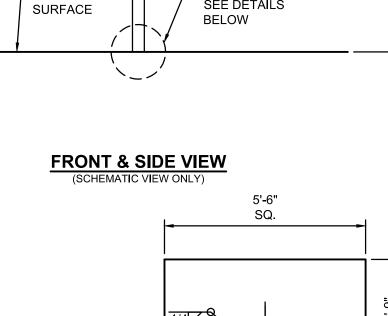
UNLESS OTHERWISE APPROVED BY D.S.A. ON A JOB SPECIFIC BASIS.

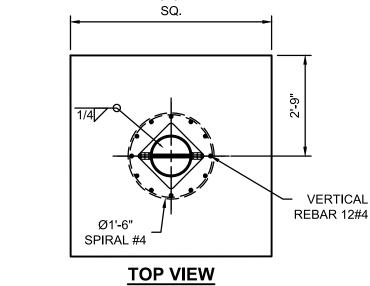
20'-0" (MAX. CEN. TO CEN. RAFTER)

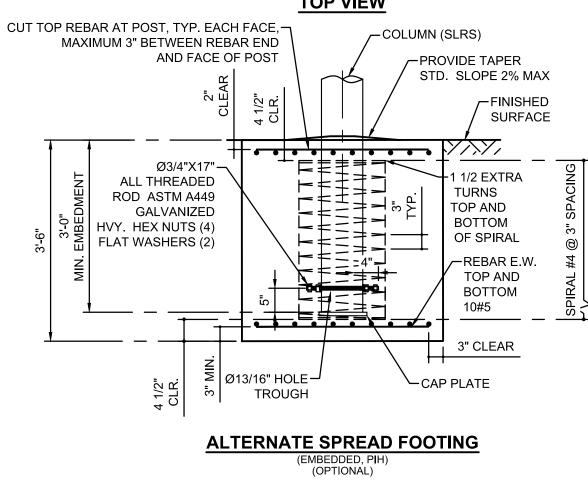
1 FILL

TOP VIEW

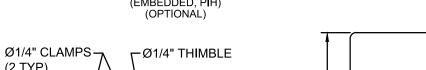
ADJACENT BUILDING







(2 TYP)





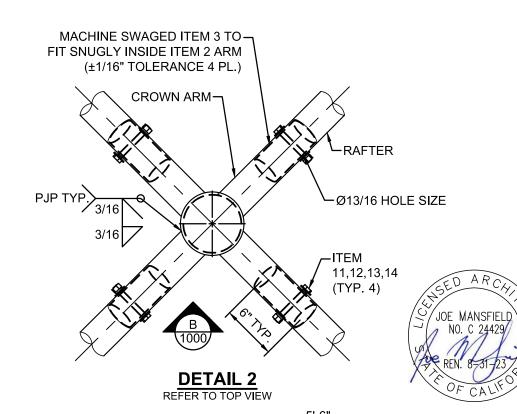
(BOTTOM OF PIH COLUMNS)

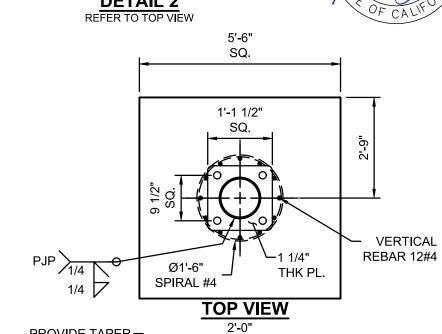


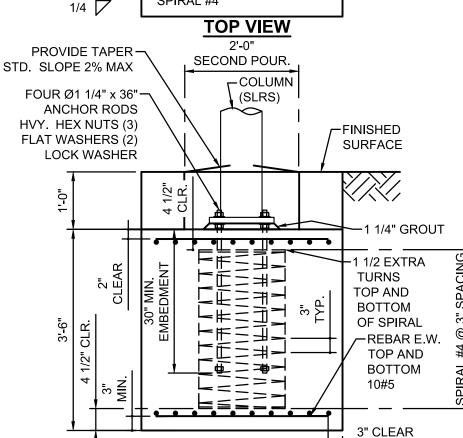
LIST OF MATERIALS

CODE ANALYSIS													
BUILDING	OCCUPANCY	CONST. TYPE	AREA (SQ. FT.)	OCCUPANT LOAD FACTOR	OCCUPANT LOAD								
SHADE STRUCTURE													
MAXIMUM OCCUPANT LOAD (PER CBC 2019 TABLE 1604A.5)													

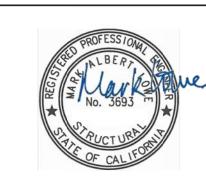
250 PERSONS -PUBLIC ASSEMBLY: 300 PERSONS -EDUCATIONAL OCCUPANCIES 500 PERSONS ABOVE 12TH GRADE:







ALTERNATE SPREAD FOOTING (RECESSED BASE PLATE, RBP) (OPTIONAL)



PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

THESE PLANS AND SPECIFICATIONS ARE THE



CORPORATE HEADQUARTERS 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005 **CERTIFICATIONS:**

IAS CERTIFICATION No: FA-428 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

Fallbrook Union Elementary **School District**

PROJECT NAME:

MODEL NUMBER:

La Paloma Elementary

300 Heald Lane Fallbrook, CA 92028

DSA1032020-19

IV. OF THE STATE ARC APP: 04-119454 P

STRUCTURE TYPE: SINGLE POST PYRAMID

MAXIMUM 20' x 20 x 12'e MAX.

SCALE: NONE

DRAWING SIZE:

PRE-CHECK (PC) DOCUMENT Code : 2019 CBC

A separate project application for construction is required. Eng. By:

08/15/20 08/15/20 Design By: Approved By: JO 08/15/20 **DRAWING DESCRIPTION:**

PRODUCT INFORMATION

16.1-1000

DSA1032020-19

REV.

SHEET



ENVELOPE JOINT REACTIONS

INTERNATIONAL

Shade % UV Block %

Moment resultant = $\sqrt{Mx^2 + My^2 + Mz^2}$ Shear resultant = $\sqrt{Px^2 + Py^2 + Pz^2}$

ASD REACTIONS Support Moments [kipft] Support Moments [kipft] | Support Forces [kip] | Support Forces [kip] Support Forces [kip] SHEAR RESULTANT MOMENT RESULTANT UPLIFT AXIAL **MAXIMUM REACTIONS** 1.861 23.949 0.887 -3.790 Node Support Forces [kip Support Moments [kipft M_Y P_v 1.861 0.887 0.365 0.002 Max 1.861 23.949 Min 0.000 0.000 -3.790 -23.949 -0.365 -0.002 Max P_x 1.861 0.000 -0.409 0.000 23.831 0.000 CO 18 1.861 23.831 -0.409 Min P_x 0.000 -2.835 0.000 0.000 -2.835 1.391 -17.976 CO 15 1.391 17.976 Max P_v 1.861 -0.409 -23.831 0.000 0.000 CO 19 1.861 23.831 -0.409 0.000 Min P_v 0.000 -2.835 0.000 17.976 0.000 CO 14 1.391 17.976 -2.835 1.391 0.000 0.887 0.450 0.887 Max P_z 0.419 -0.001 0.450 0.001 CO 33 0.419 Min P₇ 0.611 0.000 -3.790 0.000 4.358 -0.001 CO 10 0.611 4.358 -3.790 0.354 0.826 0.365 0.001 -0.001 CO 5 0.354 0.365 0.826 Max M_x 0.000 -1.636 Min M_x 1.861 -23.949 0.000 CO 17 1.861 23.949 0.000 0.000 -1.636 Max M_Y 0.000 -1.636 0.000 23.949 0.000 CO 16 1.861 23.949 1.861 -1.636 Min M_Y 0.354 0.000 0.826 -0.001 -0.365 0.001 CO 4 0.354 0.365 0.826 Max M₂ 0.000 0.892 -2.364 -6.869 0.000 0.002 CO 32 0.892 6.869 -2.364 Min M₇ 0.000 -2.364 0.000 6.869 -0.002 CO 31 0.892 6.869 -2.364 0.892

28-Oct-12

Burst to

0.84

Managing Director - Multiknit (Pty) Ltd

Rockwell C48

Rockwell C48

CONVERSION TO

IMPERIAL UNITS:

50 KGS = 110 Lb 72 KGS = 159 Lb 156 Kpa = 3258 psf

185 GSM = .0378 psf

Average

Elongation

Average

Burst

156

156

3258 PSF

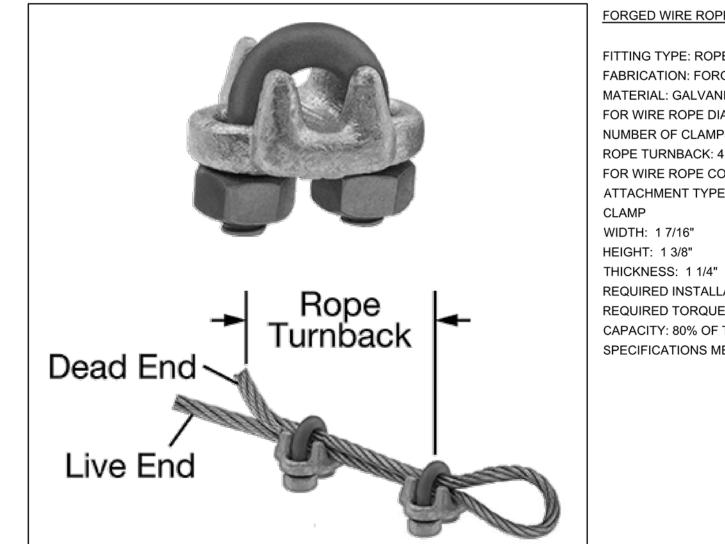
Average

Weft break

159 LB

Also known as spherical washers, these consist of a male and female washer that, when nested, swivel slightly to compensate for

- Washers -



FORGED WIRE ROPE CLAMP

FITTING TYPE: ROPE CLAMP FABRICATION: FORGED MATERIAL: GALVANIZED STEEL FOR WIRE ROPE DIAMETER: 1/4"

NUMBER OF CLAMPS REQUIRED: 2 ROPE TURNBACK: 4 3/4" FOR WIRE ROPE CONSTRUCTION: 7 × 19

ATTACHMENT TYPE: LOOP CLAMP WIDTH: 1 7/16" HEIGHT: 1 3/8"

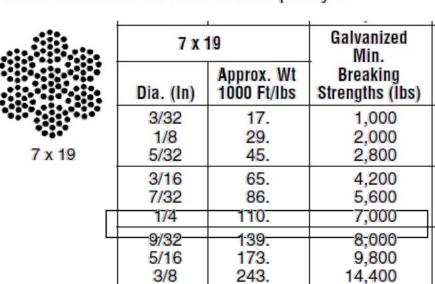
REQUIRED INSTALLATION TOOL: TORQUE WRENCH REQUIRED TORQUE: 15 FT.-LBS. CAPACITY: 80% OF THE ROPE'S CAPACITY

SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

Aircraft Cable

Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.



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CORPORATE HEADQUARTERS 2580 ESTERS BLVD. SUITE 100 DFW AIRPORT, TX, 75261 800-966-5005 **CERTIFICATIONS:**

IAS CERTIFICATION No: FA-428 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

Fallbrook Union Elementary **School District**

PROJECT NAME:

La Paloma Elementary

LOCATION: 300 Heald Lane Fallbrook, CA 92028

MODEL NUMBER: DSA1032020-19

> DIV. OF THE STATE ARCHI APP: 04-119454 PC SS PLS ACS CG C

STRUCTURE TYPE: SINGLE POST PYRAMID

MAXIMUM

20' x 20 x 12'e MAX. SCALE: NONE

DRAWING SIZE:

PRE-CHECK (PC) DOCUMENT Code : 2019 CBC

A separate project application

for construction is required.

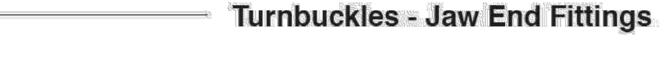
Eng. By :	JO	08/15/20
Design By :	MP	08/15/20
Approved By :	JO	08/15/20

DRAWING DESCRIPTION:

REACTIONS

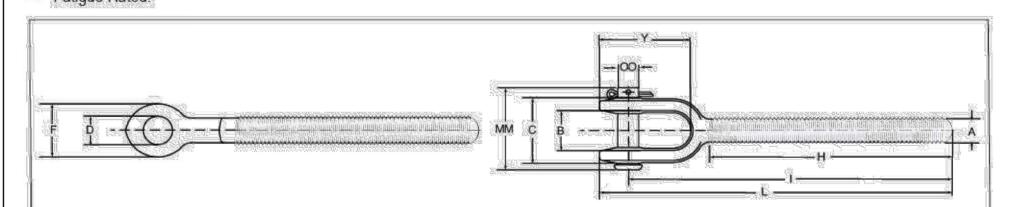
DSA1032020-19

16.2-2000



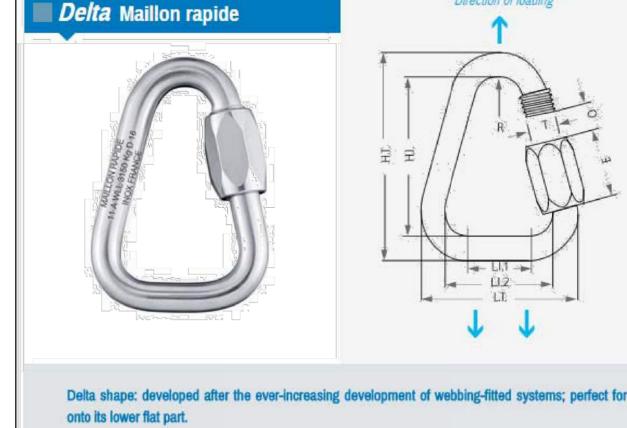
- · Quenched and Tempered or Normalized.
- Hot dip galvanized steel.
- Forged jaw ends are fitted with bolts and nuts on sizes 1/4" through 5/8", and pins and cotters on sizes 3/4" through 2-3/4".
- Modified UNJ thread for improved fatigue properties
- Fatigue Rated.

Jaw End Fittings



Jaw End Fittings

Shank			Working		Dimensions (in.)												
Dia. & Take Up (in.)	RH Jaw Stock No.	LH Jaw Stock No.	Load Limit (lbs.)	Weight Each (lbs.)	А	В	С	D	F	н	Nom. Min.	L Nom. Min.	Y	мм	00 Bolt Pin		
* 1/4 x 4	1072298	1072911	500	31	.25	.45	.91	.30	.63	2.59	3.72	4.09	1.13	1.41	.25		
5/16 x 4 1/2	1072314	1072939	800	.17	.31	.50	1.02	.30	.69	3.00	4.41	4.81	1.39	1.41	.25		
* 3/8 x 6	1072332	1072957	1200	.28	.38	.53	1.15	.36	.81	3.88	5.28	5.75	1.47	1,58	.31		
1/2 x 6	1072350	1072975	2200	.56	.50	.64	1.36	.42	1.00	4.19	6.51	7.07	1.81	1.87	.37		
1/2 x 9	1072378	1072993	2200	.63	.50	.64	1.36	.42	1.00	5.69	8.01	8.57	1.81	1.87	37		
1/2 x 12	1072396	1073019	2200	.72	.50	.64	1.36	.42	1.00	7.19	9.51	10.07	1.81	1.87	.37		
5/8 x 6	1072412	1073037	3500	1.05	.63	.79	1.75	.55	1.31	4.31	7.12	7.91	2.36	2.44	.50		
5/8 x 9	1072430	1073055	3500	1.18	.63	.79	1.75	.55	1.31	5.81	8.62	9.41	2.36	2.44	.50		
5/8 x 12	1072458	1073073	3500	1.31	.63	.79	1.75	.55	1.31	7.31	10.12	10.91	2.36	2.44	.50		
3/4 x 6	1072476	1073091	5200	1.65	.75	.97	2.09	.69	1.63	4.56	7.86	8.84	2.81	2.56	.63		
3/4 x 9	10/2494	1073117	5200	1.84	./5	.97	2.09	.69	1.63	6.06	9.36	10.34	2.81	2.56	.63		
3/4 x 12	1072519	1073135	5200	2.03	.75	.97	2.09	.69	1.63	7.56	10.86	11.84	2.81	2.56	.63		
3/4 x 18	1072537	1073153	5200	2.41	.75	.97	2.09	.69	1.63	10.56	13.86	14.84	2.81	2.56	.63		
7/8 x 12	1072555	1073171	7200	2.88	.88	1.16	2.56	.81	1.88	7.81	11.70	12.81	3.25	3.09	.75		
7/8 x 18	1072573	1073199	7200	3.25	.88	1,16	2.56	.81	1.88	10,81	14.70	15.81	3.25	3.09	.75		
1 x 6	1072591	1073215	10000	3.56	1.00	1.34	2.76	.94	2.12	5.06	9.35	10.59	3.73	3.44	.88		
1 x 12	1072617	1073233	10000	4.22	1.00	1.34	2.76	.94	2.12	8.06	12.35	13.59	3.73	3.44	.88		
1 x 18	1072635	1073251	10000	4.89	1.00	1.34	2.76	.94	2.12	11.06	15.35	16.59	3.73	3.44	.88		
1 x 24	1072653	1073279	10000	5.56	1.00	1.34	2.76	.94	2.12	14.06	18.35	19.59	3.73	3.44	.88		
1-1/4 x 12	1072671	1073297	15200	8.10	1.25	1.84	3.72	1.19	2.63	8.38	14.25	15.79	4.92	4.53	1.13		
1-1/4 x 18	1072699	1073313	15200	9.14	1.25	1.84	3.72	1.19	2.63	11.38	17.25	18.79	4.92	4.53	1.13		
1-1/4 x 24	1072715	1073331	15200	10.2	1.25	1.84	3.72	1.19	2.63	14.38	20.25	21.79	4.92	4.53	1.13		
1-1/2 x 12	1072733	1073359	21400	12.3	1.50	2.06	4.16	1.47	3.12	8.75	15.07	16.84	5.27	5.13	1.38		
1-1/2 x 18	1072751	1073377	21400	13.8	1.50	2.06	4.16	1.47	3.12	11.75	18.07	19.84	5.27	5.13	1.38		
1-1/2 x 24	1072779	1073395	21400	15.3	1.50	2.06	4.16	1.47	3.12	14.75	21.07	22.84	5.27	5.13	1.38		
1-3/4 x 18	1072813	1073439	28000	18.9	1.75	2.60	4.66	1.72	3.50	12.16	18.49	20.58	6.25	6.00	1.63		
1-3/4 x 24	1072831	1073457	28000	21.0	1.75	2.60	4.66	1.72	3.50	15.16	21.49	23.58	6.25	6.00	1.63		
2 x 24	1072859	1073475	37000	35.3	2.00	2.62	5.61	2.09	4.19	15,59	23.82	26.36	7.28	6.88	2.00		
2-1/2 x 24	1072877	1073493	60000	55.8	2.50	3.06	5.84	2.38	5.62	17.20	25.61	29.09	9.04	7.50	2.25		
2-3/4 x 24	1072895	1073518	75000	72.4	2.75	3.69	6.57	2.88	6.12	17.35	26.75	30.75	9.56	8.38	2.75		



Delta shape: developed after the ever-increasing development of webbing-fitted systems; perfect for webbing uphold

Direction of loading

D	Dian	neter				Dime	nsions -	mm				Weight	WLL	BL	Quote
Reference	mm	inches	L.T.	L.I.1	L.I.2	H.T.	H.I.	0	E	R	Т	g	kg	kg	Qty
MRDZ02.5	2,5	3/32"	22	10	17	27	22	3,5	8	3,5	3,5	3	25	125	> 100
MRDZ03.0	3	7/64"	27	12,5	21	30	24	4	9	4,25	4	6	40	200) iii
MRDZ03.5	3,5	1/8"	31	14	24	36	29	5	11	5	5	9	70	350) (i)
MRDZ04.0	4	5/32"	35,5	16	27,5	40	32	5,5	12,5	5,75	6	14	100	500) iii
MRDZ05.0	5	3/16"	40	17	30	48	38	6,5	16	6,5	7	23	150	750) III
MRDZ06.0	6	1/4"	47	20,5	35	56	44	7,5	19	7,25	9	39	250	1250) III
MRDZ07.0	7	9/32"	51	21	37	63	49	8,5	21,5	8	10	58	400	2000	100
MRDZ08.0	8	5/16"	56	22,5	40	73	57	10	24	8,85	11	88	550	2750	1
MRDZ09.0	9	3/8"	60	23	42	78	60	11	26	9,5	12	115	700	3500) (i)
MRDZ10.0	10	7/16"	66	25,5	46	87	67	12	29	10,25	13	153	900	4500	P 100
MRDZ12.0	12	1/2"	75	27,5	51	104	80	15	33	11,75	15	256	1100	5500) (i)
MRDZ14.0	14	9/16"	85	30,5	57	123	95	17	38,5	13,25	17	404	1800	9000	1
MRDZ16.0	16	5/8"	93	31,5	61	138	106	19	45	14,75	19	612	2200	11000	100
MRDZ18.0	18	11/16"	102	32,5	66	155	119	23	52	16,25	22	845	2600	13000) (ij)
MRDZ20.0	20	25/32"	112	31,5	72	176	136	24	60	17,75	24	1185	3000	15000) (i)

8" QUICK LINK UNITS CONVERSION

o Quit	QUICK LINK UNITS CONVERSION														
										WORKING	BREAKIN				
LT	LI1	LI2	HT	HI	0	Е	R	Т	WEIGHT	LOAD	G LOAD				
[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[lb]	[lb]	[lb]				
3.661	1.240	2.402	5.433	4.173	0.748	1.772	0.581	0.748	1.35	4850	24250				

BASIC LOAD CASES

For Screw Max. Angle ID (A) OD (B) Radius ID (C) OD (D) Radius Thick. (E) of Correction Hardness Black-Oxide Steel No. 4 0.116" 0.281" 0.031" 0.156" 0.375" __ 0.144" 0.281" 0.031" 0.172" 0.375"

tolerance variations and uneven surfaces. They're good for die and fixturing applications.

Black-oxide steel washers are mildly corrosion resistant in dry environments.

For technical drawings and 3-D models, click on a part number.

NO. 6	0.144	0.281"	0.031^{-}	0.172	0.375	1,000	0.188"-0.218"	3	Rockwell C48
No. 8	0.169"	0.312"	0.031"	0.188"	0.375"		0.188"-0.218"	3°	Rockwell C48
No. 10	0.196"	0.375"	0.078"	0.219"	0.438"		0.219"-0.249"	3°	Rockwell C48
1/4"	0.257"	0.438"	0.109"	0.281"	0.500"		0.251"-0.281"	3°	Rockwell C48
1/4"	0.281"	0.625"	0.750"	0.281"	0.625"	0.750"	0.173"-0.203"	5°	Rockwell C48
5/16"	0.323"	0.500"	0.063"	0.344"	0.562"		0.312"-0.344"	3°	Rockwell C48
3/8"	0.386"	0.625"	0.094"	0.406"	0.688"		0.407"-0.438"	3°	Rockwell C48
3/8"	0.406"	0.875"	1.250"	0.406"	0.875"	1.250"	0.235"-0.265"	3°	Rockwell C48
1/2"	0.531"	1.125"	1.500"	0.531"	1.125"	1.500"	0.298"-0.328"	2°	Rockwell C48
5/8"	0.656"	1.375"	1.750°	0.656"	1.375"	1.750"	0.298"-0.328"	2°	Rockwell C48
3/4"	0.781"	1.625"	2.250"	0.781"	1.625"	2.250"	0.360"-0.390"	3°	Rockwell C48
7/8"	0.938"	1.750"	2.500"	0.969"	1.750"	2.500"	0.360"-0.390"	3°	Rockwell C48
1"	1.062"	2.000"	2.750"	1.094"	2.000"	2.750"	0.485"-0.515"	3°	Rockwell C48
1 1/8"	1.188"	2.250"	3.000"	1.250"	2.250"	3.000"	0.485"-0.515"	3°	Rockwell C48
1 1/4"	1.312"	2.500"	3.000"	1.375"	2.500"	3.000"	0.485"-0.515"	3°	Rockwell C48
1 1/2"	1.562"	2.875"	3.000"	1.625"	2.875"	3.000"	0.485"-0.515"	3°	Rockwell C48
1 5/8"	1.688"	3.250"	3.500"	1.750"	3.250"	3.500"	0.673"-0.703"	3°	Rockwell C48
1 3/4"	1.812"	3.250"	3.500"	1.875"	3.250"	3.500"	0.673"-0.703"	3°	Rockwell C48
-C-11	O DOON	O OTEN	O COOK	O COER	O OTEN	O FOOT	O TOPH O TOPH	0.0	D - 1 - 11 O 10

2.062" 3.875" 3.500" 2.125" 3.875" 3.500" 0.735"-0.765" 3°

190/F5 Fire rated specifications

Elongation

Standard range

110 LB

190/F5 conforms to The California State Fire Marshal Title 19 Test for Small scale Fabrics

Company cannot be held responsible or liable in any way whatsoever should this information differ to that of a registered testing institution.

provided is considered to be a good reflection of the relevant properties of the fabric tested. These results must only be used as an indication of the quality

Tear tests are done using a 50mm wide strip and a cross head speed of 500mm/min

GSM

185

and characteristics of the fabric tested.

General Manager - Multiknit (Pty) Ltd

Leveling Washers

Two Piece (Male and

Female)

| Radius

0.0378 PSF (FABRIC) DEAD LOAD FLOOR LIVE LOAD 5 PSF ROOF LIVE LOAD ROOF SNOW LOAD 5 PSF SUPERIMPOSED LOADS N/A WIND LOAD

BASIC DESIGN WIND SPEED (3 SEC GUST) VELOCITY PRESSURE qz 24.46 PSF COMPONENT AND CLADDING qz (CABLE AND CABLE HARDWARE ONLY) 24.46 PSF

SEISMIC LOAD SEISMIC RESPONSE COEFFICIENTS Cs DESIGN BASE SHEAR 2030 LB





