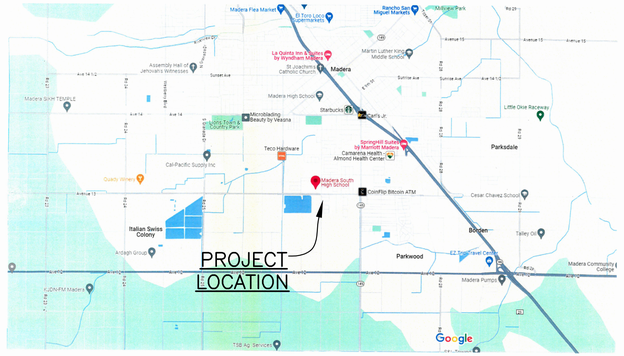
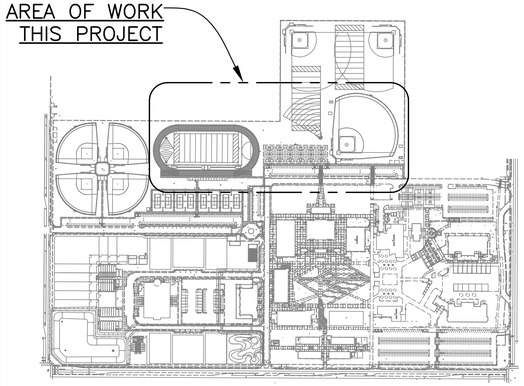
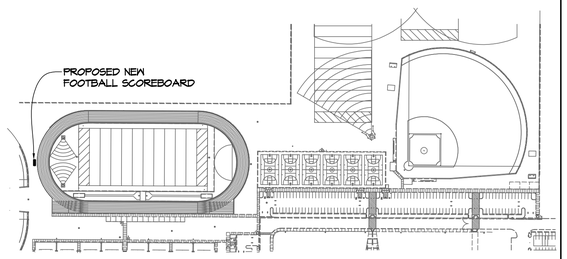


10 VICINITY MAP
- SCALE: N.T.S.



11 SITE PLAN
- SCALE: N.T.S.



12 AREA OF WORK
ITEMS SCALE: N.T.S.

Statement of General Conformance

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

(Application No. 02-122411 **File No.** 20-H3 **)**

☒ The drawings or sheets listed on the cover or index sheet
☐ This drawing, page of specifications/calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for:

1) Design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and
2) Coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344" of Title 24, Part 1. (Title 24, Part 1, Section 4-317 [b])

I find that: ☒ All drawings or sheets listed on the cover or index sheet ☐ This drawing or page	
☐ is/are in general conformance with the project design intent, and ☐ has/have been coordinated with the project plans and specifications.	☒ is/are in general conformance with the project design intent, and ☒ has/have been coordinated with the project plans and specifications.
Signature / Date	Signature 05/15/2024 / Date
Architect or Engineer designated to be in general responsible charge	**Architect or Engineer delegated responsibility for this portion of the work**
Print Name	Print Name: Gaylord R. Ransom
License Number / Expiration Date	License Number: S2386 / Expiration Date: 03/31/26

OWNER:	MADERA UNIFIED SCHOOL DISTRICT 1205 S. MADERA AVE. MADERA, CA 93637 T: (559) 675-4548	
STRUCTURAL:	BROOKS RANSOM ASSOCIATES 7415 N. PALM AVE. STE. 100 FRESNO, CA 93711 T: (559) 449-8444 F: (559) 449-8404 CONTACT: ARTURO LOPEZ	BrooksRansom ASSOCIATES 7415 N. PALM AVE, STE 100	FRESNO, CA 93778 (559) 449-8444 OFFICE	(559) 449-8404 FAX
ELECTRICAL:	HARDIN-DAVIDSON ENGINEERING 356 POLLASKY AVE. STE. 200 CLOVIS, CA 93612 T: (559) 323-4915	

9 CONSULTANTS
- SCALE: N.T.S.

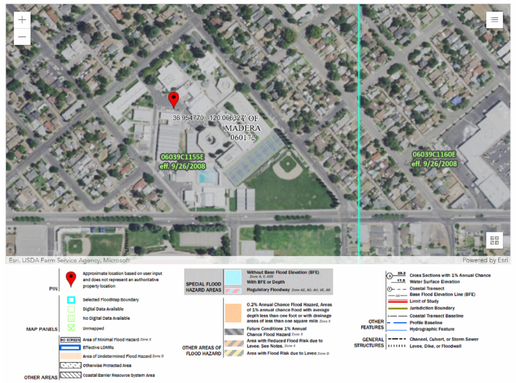
FLOOD HAZARD ZONE INFORMATION:

1.) FLOOD ZONE DESIGNATION: ZONE X - OTHER AREAS OUTSIDE OF THE 0.2% ANNUAL CHANGE FLOODPLAIN

2.) FIRM PANEL DESIGNATION: MAP# 06031C0185G

3.) FIRM EFFECTIVE DATE: JUNE 16, 2009

4.) BASE FLOOD ELEVATION: N/A



10 FLOOD ZONE
- SCALE: N.T.S.

PROJECT INFORMATION:

PROJECT NAME:	MADERA SOUTH HIGH SCHOOL
LOCATION:	705 W. PECAN AVE. MADERA, CALIFORNIA 93637
PROJECT DESCRIPTION:	PROVIDE NEW MODEL 8321 LED OUTDOOR BASEBALL and FOOTBALL SCOREBOARD

SCOPE OF WORK:

1.) CONSTRUCT SCOREBOARDS STRUCTURAL SUPPORTS AND FOOTINGS.

2.) INSTALL OWNER FURNISHED SCOREBOARD.

3.) MAKE ELECTRICAL POWER CONNECTION FROM EXISTING ELECTRICAL PULL BOX, INCLUDING DISCONECT.

3.) PAINT EXPOSED STEEL.

GENERAL NOTES:

1.) ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE CONSTRUCTIONS DRAWINGS, THE CONTRACT SPECIFICATIONS AND, WHERE APPLICABLE, THE CITY OF MADERA AND THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS.

2.) THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE SCHOOL DISTRICT'S USE OF THE FACILITIES AND OTHER CONTRACTORS WHO MAY BE DOING CONSTRUCTION WITHIN THE PROJECT SITE.

3.) THE CONTRACTORS SHALL CONTACT DISTRICT OFFICIALS FOR DETERMINATION OF DEPTH AND LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION IN THE PROJECT SITE.

4.) BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK OF THE CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES IN THE WORK AREA, NOTIFY U.S.A. AT 1(800) 642-2444, TWO (2) DAYS PRIOR TO EXCAVATION.

5.) CONTRACTOR SHALL PROVIDE 6' HIGH TEMPORARY CHAIN LINK FENCE AROUND THE PERIMETER OF THE WORK AREAS EXCEPT WHERE ENCLOSED BY EXISTING FENCING.

6.) ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE (CBC).

7.) CHANGE TO THE APPROVED DRAWINGS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1. TITLE 24. CCR.

8.) A "DSA CERTIFIED" CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

9.) A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

10.) FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF CHAPTER 33 OF THE 2022 CALIFORNIA BUILDING CODE AND THE APPLICABLE PROVISIONS OF CHAPTER 33 OF THE CALIFORNIA FIRE CODE.

11.) THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR)

12.) GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

13.) SUBSTITIONS AFFECTING DSA REGULATED ITEMS SHALL BE CONSIDERED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDUM, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION PER DSA IR A-6 AND SECTION 338(C) PART 1, TITLE 24 CCR.

6 GENERAL DESIGN NOTES
- SCALE: N.T.S.

SHEET INDEX:

SHT. NO.	TITLE
GENERAL	
C-1	COVER SHEET
SP-1	STRUCTURAL PARTIAL SITE PLAN
NEVCO DSA P.C. 04-122317	
SBO.1	COVER SHEET
SBO.2	STRUCTURAL NOTES
~~SBO.3~~	~~EXAMPLE DSA 103 TESTING AND INSPECTIONS~~
SB3.2	THREE COLUMN CAISSON - BOLTED
SB5.1	ATTACHMENT DETAILS
SB5.2	OPTIONAL SCOREBOARD FEATURE ATTACHMENT DETAILS
SB5.3	DECORATIVE ALUMINUM TRUSS ATTACHMENT DETAILS
SB5.4	DECORATIVE ALUMINUM TRUSS ATTACHMENT DETAILS & 10mm VIDEO BOARD
ELECTRICAL	
E1	ELECTRICAL SYMBOLS, NOTES AND DETAILS
E2	ELECTRICAL PARTIAL SITE PLAN

TOTAL SHEET COUNT: 12

3 SHEET INDEX
- SCALE: N.T.S.

NOT APPLICABLE

4 DEFERRED SUBMITTAL
- SCALE: N.T.S.

APPROVALS:
APPLICATION #
02-122411

ENGINEER IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ DATE ☑ ACS ☐
DATE: ~~06/25/2024~~ 06-22-2023
REVISIONS

MADERA UNIFIED SCHOOL DISTRICT

1205 S. Madera Ave. Madera, California 93637
(559) 675-4548

COVER SHEET
MADERA SOUTH HIGH SCHOOL
FOOTBALL SCOREBOARD
MADERA, CA 93637

REGISTERED PROFESSIONAL ENGINEER
GAYLORD R. RANSOM
NO. S2386
EXPIRES 3-31-26
CIVIL
STATE OF CALIFORNIA

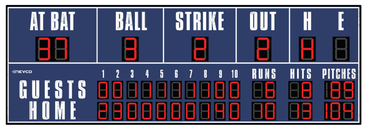
ENGINEERS STAMP

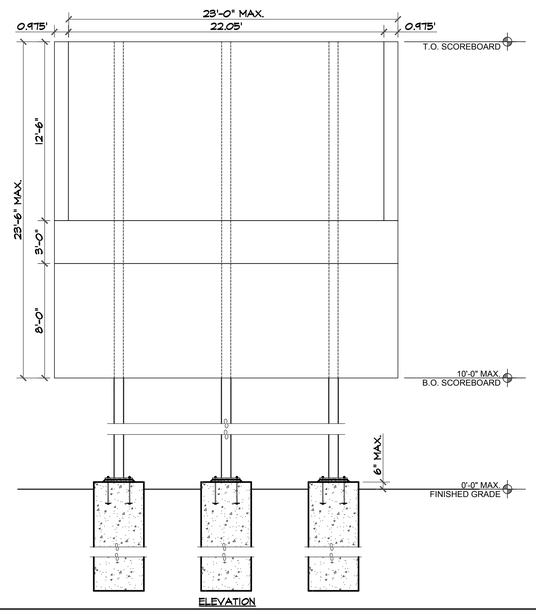
BrooksRansom ASSOCIATES
7415 N. PALM AVE. STE 100 | FRESNO, CA 93711
(559) 449-8444 OFFICE | (559) 449-8404 FAX

PROJECT NUMBER
23313

SHEET NUMBER
C-1

SEE DSA P.C. 04-122317 FOR NEVCO 3685-EC SCOREBOARD

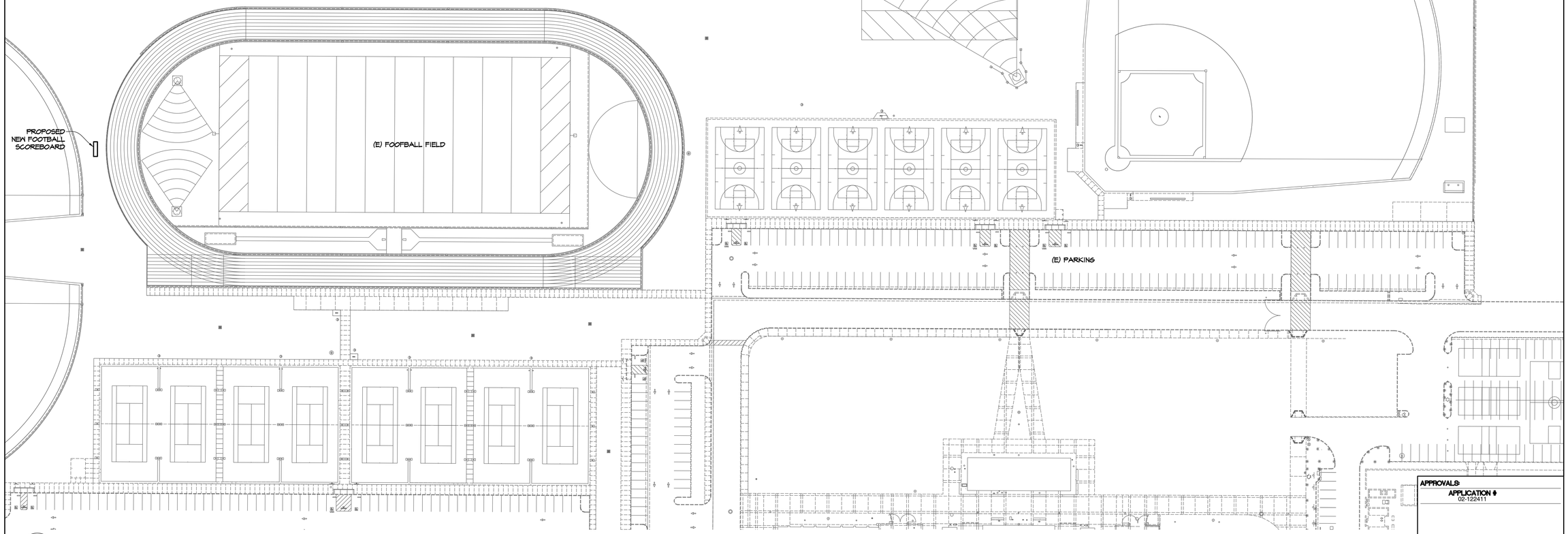




ELEVATION

10 DETAIL

SCALE: N.T.S.



– PARTIAL SITE PLAN

SCALE: 1"= 50'-0"

ENGINEER IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 DRAWN BY: JC
REVIEWED FOR:
SS ☑ DATE: PLS ☑ ACS ☐
DATE: 06/25/2024
REVISIONS
08-22-2023

PARTIAL SITE PLAN
MADERA SOUTH HIGH SCHOOL
FOOTBALL SCOREBOARD
MADERA, CA 93637

REGISTERED PROFESSIONAL ENGINEER
GAYLORD R. RANSOM
NO. S2386
EXPIRES 3-31-26
STATE OF CALIFORNIA
ENGINEERS STAMP

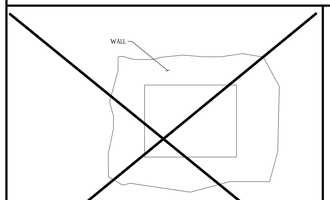
APPROVALS:
APPLICATION #
02-122411

BrooksRansom ASSOCIATES
7415 N. PALM AVE. STE 100 | FRESNO, CA 93711
(559) 449-8444 OFFICE | (559) 449-8404 FAX

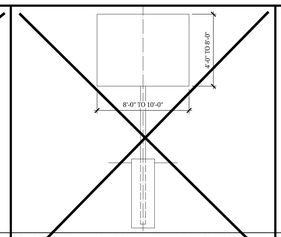
PROJECT NUMBER
23313

SHEET NUMBER
SP-1

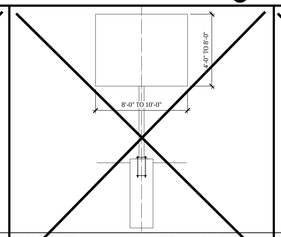
NEVCO DSA P.C. 04-122317



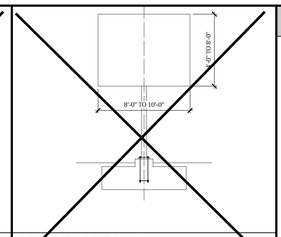
INDOOR WALL MOUNTED ASSEMBLY
SHEETS: SB0.1, SB0.2, SB6.1



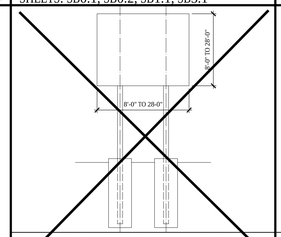
MARQUEE: COLUMN EMBEDDED IN CAISSON
SHEETS: SB0.1, SB0.2, SB1.1, SB5.1



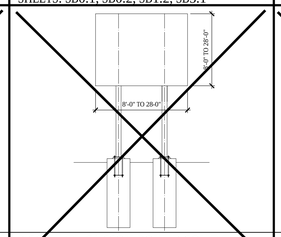
MARQUEE: CAISSON-BOLTED COLUMN
SHEETS: SB0.1, SB0.2, SB1.2, SB5.1



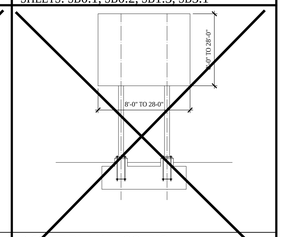
MARQUEE: MAT FOOTING
SHEETS: SB0.1, SB0.2, SB1.3, SB5.1



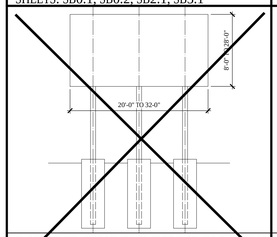
2 COLUMN: COLUMN EMBEDDED IN CAISSON
SHEETS: SB0.1, SB0.2, SB2.1, SB5.1



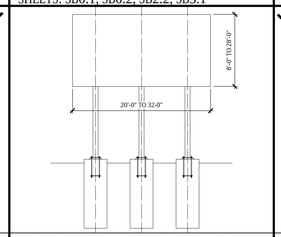
2 COLUMN: CAISSON-BOLTED COLUMN
SHEETS: SB0.1, SB0.2, SB2.2, SB5.1



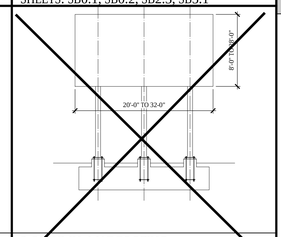
2 COLUMN: MAT FOOTING
SHEETS: SB0.1, SB0.2, SB2.3, SB5.1



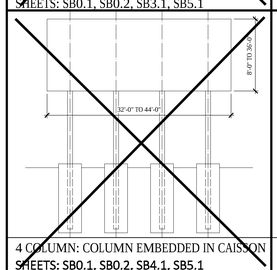
3 COLUMN: COLUMN EMBEDDED IN CAISSON
SHEETS: SB0.1, SB0.2, SB3.1, SB5.1



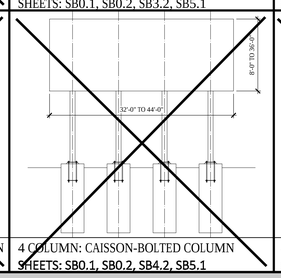
3 COLUMN: CAISSON-BOLTED COLUMN
SHEETS: SB0.1, SB0.2, SB3.2, SB5.1



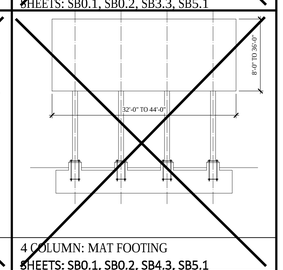
3 COLUMN: MAT FOOTING
SHEETS: SB0.1, SB0.2, SB3.3, SB5.1



4 COLUMN: COLUMN EMBEDDED IN CAISSON
SHEETS: SB0.1, SB0.2, SB4.1, SB5.1



4 COLUMN: CAISSON-BOLTED COLUMN
SHEETS: SB0.1, SB0.2, SB4.2, SB5.1



4 COLUMN: MAT FOOTING
SHEETS: SB0.1, SB0.2, SB4.3, SB5.1

TABLE C - SITE SPECIFIC SEISMIC AND WIND VALUES

EARTHQUAKE DESIGN DATA	MAXIMUM		SITE SPECIFIC
Mapped Spectral Response Accelerations (Maximum)	S_S= 3.73 g S_1= 1.0 g	≥ ≥	S_S= 0.71 g S_1= 0.24 g
Site Class	D		D
Spectral Response Coefficients (Maximum)	S_{MS}= 2.49 g S_{M1}= 1.0 g	≥ ≥	S_{MS}= 0.67 g S_{M1}= 0.42 g
Wind Design Data	**Value**		**Value**
Design Wind Speed (3-sec gust), V_{ULT}	100 mph	≥	94 mph
Exposure Category	C		C

TABLE D - SITE FLOOD ZONE

THIS SECTION NOT REQUIRED IF SITE IS IN FLOOD ZONE X

Geotechnical Engineer:

Letter Dated:

TABLE B - STRUCTURAL DESIGN VALUES

All values reported are unfactored and strength level, unless noted otherwise

Gravity Design Data	Value
Dead Loads:	
Sign Dead Load	PER SCHEDULE
Snow Loads:	
Ground Snow Load, P, (Maximum)	30 psf
Deflection Criteria:	
Sign, Wind Load	H/240

Wind Design Data	Value
Design Wind Speed (3-sec gust), V_{ULT}	100 mph
Design Wind Speed (3-sec gust), V_{ASD}	77 mph
Risk Category	II
Exposure Category	C
Applicable Internal Pressure Coefficient	± 0.18
Design Wind Pressure(s) for Components & Cladding (Not specifically designed by the Registered Design Professional, and to be modified by applicable factors per ASCE 7)	q_h=21.8xK_z psf K_zVARIES

Earthquake Design Data		Value
Risk Category		II
Importance Factor, I_e		1.0
Mapped Spectral Response Accelerations (Maximum)		S_S= 3.73 g S_1= 1.0 g
Site Class		A through E
Spectral Response Coefficients (Maximum)		S_{MS}= 2.49 g S_{M1}= 1.0 g
Seismic Design Category		E
Analysis Procedure Used	Equivalent Lateral Force Procedure (ASCE 7, 12.8)	
Basic Seismic-Force Resisting System	Non-Building Structure, ASCE 7-16 Chapter 15	
Response Modification Factor, Signs and Billboards Table 15.4-2		R= 3.0
Seismic Response Coefficient		C_H= 0.83
Design Base Shear		$V=C_S w_D$

Flood Design
When the scoreboard is located in a flood zone other than Zone X, a letter stamped and signed from a Geotechnical Engineer is needed to validate allowable soil values specified in the PC are still applicable.

Geotechnical Design Data	Value
Geotechnical Design Based on: 2022 California Building Code, Chapter 18A, Table 1806.A.2 (Class 5 Material)	
Allowable Soil Bearing Pressure (DL + LL)	1,500 psf
Design Passive Pressure, P, (Tabular value has been increased per CBC Section 1806A.3.4 for pier design)	100 pcf
Design Skin Friction, f_s	100 psf

SCOREBOARD ASSEMBLY WORKSHEET (TABLE A, C & D) INSTRUCTIONS

STEP 1: DETERMINE DESIRED SCOREBOARD ASSEMBLY. FILL OUT SCOREBOARD ASSEMBLY TABLE (TABLE A BELOW). PROVIDE NEVCO PART NUMBERS, PART HEIGHT, PART WIDTH, AND PART WEIGHTS.

STEP 2: DETERMINE TOTAL ASSEMBLY HEIGHT, WIDTH, AND WEIGHT, TABLE A

STEP 3: BASED ON TOTAL ASSEMBLY WIDTH, DETERMINE THE NUMBER OF REQUIRED COLUMNS.
SEE SHEETS SB1.X FOR 1 COLUMN ASSEMBLY OPTIONS
SB2.X FOR 2 COLUMN ASSEMBLY OPTIONS
SB3.X FOR 3 COLUMN ASSEMBLY OPTIONS
SB4.X FOR 4 COLUMN ASSEMBLY OPTIONS
SB6.1 FOR WALL MOUNTED ASSEMBLY OPTIONS (SKIP STEPS 4, 5, & 7)

STEP 4: PICK FOUNDATION TYPE (CAISSON WITH EMBEDDED COLUMN, CAISSON WITH BOLTED COLUMN, OR MAT FOOTING) . MARK APPLICABLE SHEET ON SHEET INDEX, SB0.1

STEP 5: MARK APPLICABLE CHECK BOX FOR SCOREBAORD SIZE ON DETAIL 'A' OF SELECTED COLUMN/FOUNDATION OPTION (SHEETS SB1.X, SB2.X, SB3.X OR SB4.X)

STEP 6: FILL IN SITE SPECIFIC SEISMIC AND WIND VALUES TABLE C ON SB0.1.

STEP 7: FILL IN SITE SPECIFIC FLOOD ZONE AS REQUIRED, TABLE D ON SB0.1

STEP 8: VERIFY ALL APPLICABLE SHEETS ARE MARKED ON SHEET INDEX, SB0.1. INCLUDE ONLY MARKED SHEETS AS PART OF DSA SUBMITTAL

SITE SPECIFIC SUBMITTAL REQUIREMENTS

SEE DSA POLICY PL 07-02 FOR ADDITIONAL INSTRUCTIONS REGARDING USE AND APPLICATION OF THIS PRE-CHECK DOCUMENT. ALL SITE SPECIFIC SUBMITTALS SHALL INCLUDE:

1. COMPLETED DSA 1 APPLICATION, DSA3, DSA 103, AND FILING FEE AND COPY OF THE PRE-CHECK DOCUMENT WITH APPLICABLE DESIGN OPTION MARKED ON THE MARQUEE, TWO COLUMN, THREE COLUMN, FOUR COLUMN, OR WALL ASSEMBLY SCHEDULES.
2. SITE PLAN OF FACILITY IDENTIFYING ALL STRUCTURES BY DSA APPLICATION NUMBER. LOCATION OF SCOREBOARD SHALL BE IDENTIFIED. ELECTRICAL PANEL SERVING THE SCOREBOARD SHALL BE LOCATED AND IDENTIFIED.
3. WHERE WIRELESS CONTROLLERS ARE NOT SPECIFIED, AN ACCESSIBLE PATH OF TRAVEL AND ACCESSIBLE SEATING FOR THE SCOREBOARD OPERATOR SHALL BE IDENTIFIED AND PROVIDED.
4. PROVIDE AN ELEVATION OF PROPOSED SCOREBOARD IDENTIFYING ALL INSTALLED DISPLAY COMPONENTS, SIGNAGE, TRUSSES, AND ADDITIONAL COMPONENTS IN THE PRE-CHECK DOCUMENT. ALL ELEMENT WEIGHTS SHALL BE SPECIFIED.
5. THE APPLICABLE SHEETS SHALL BE IDENTIFIED BY MARKING APPROPRIATE CHECK BOX ON THIS SHEET.
6. THE APPLICABLE CONFIGURATION SHALL BE IDENTIFIED BY MARKING APPROPRIATE CHECK BOX ON THE 'A' DETAILS ON THE APPLICABLE SHEET.
7. PROVIDE CUT SHEETS OF THE BOARDS, BOXES, AND EQUIPMENT TO BE MOUNTED ON THE STRUCTURE. CUT SHEETS SHALL INCLUDE WEIGHTS AND DIMENSIONS
8. SITE SPECIFIC SEISMIC DESIGN CRITERIA SHALL BE PROVIDED IN THE DRAWINGS.
9. SITE SPECIFIC BASIC DESIGN WINDSPEED AND SITE EXPOSURE SHALL BE PROVIDED ON THE DRAWINGS, SEE TABLE C.
10. STEEL COATING SPECIFICATIONS FOR WEATHER PROTECTION IF DIFFERENT THAN NOTED ON SB0.3
11. A GEOHAZARD REPORT IS NOT REQUIRED PER IR A-4.13. IF A SCOREBOARD IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED BY A GEOTECHNICAL ENGINEER IS REQUIRED VALIDATING THE ALLOWABLE SOIL VALUES, PROVIDE INFORMATION IN TABLE D.
12. PROVIDE A SITE SPECIFIC DESIGN FOR STRUCTURES THAT DO NOT MEET THE MINIMUM SETBACK REQUIREMENTS.
13. PROVIDE A SITE SPECIFIC DESIGN FOR STRUCTURES LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F.
14. FOR WALL MOUNTED ASSEMBLIES (SB6.1), STRUCTURAL ANALYSIS AND JUSTIFICATION THAT THE WALL FRAMING IS CAPABLE OF SUPPORTING THE ASSEMBLY FOR VERTICAL AND LATERAL LOADS.

TABLE A - SCOREBOARD ASSEMBLY WORKSHEET (1)

Nevco Part No.or Description	Part Height [ft.]	Part Width [ft]	Part Weight [lb]
3685-EC	8	24	740
ADO-24-3	3	24	2,700
FULL COLOR LED VIDEO	12.5	22.05	2,640
2 CUSTOM FILLER PANELS	12.5	0.975	30 EA., 60 TOTAL
Total			

TOTAL ASSEMBLY DIMENSIONS & WEIGHT (2)

Total Assembly Height =	23 ft. 6 in.		
Total Assembly Width =	24 ft. 0 in.		
Total Assembly Weight =	3,440 lbs.		
Distance from Finish Grade to Bottom of Sign =	10 ft. 0 in.	Total Height = Total Assembly Height + Distance from Finish Grade to Bottom of Sign =	33 ft. 6 in.

SCOREBOARD ASSEMBLY FOOTNOTES

1. Verify part number, dimensions, and weight with Nevco
2. See Step 3 of Scoreboard Assembly Worksheet Instructions

CHECK ALL THAT APPLY — SHEET INDEX

CODE INFORMATION

2022 CALIFORNIA BUILDING STANDARDS CODE (TITLE 24, CCR):

2022 ADMINISTRATIVE CODE, PART 1, TITLE 24 CODE OF REGULATIONS (CCR)
2022 CALIFORNIA BUILDING CODE VOLUMES 1 &2, PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR

REFERENCED CODE SECTIONS FOR APPLICABLE STANDARDS:
2022 CALIFORNIA BUILDING CODE, CHAPTER 35
2022 CALIFORNIA FIRE CODE, CHAPTER 80

GENERAL NOTES AND MATERIAL SPECIFICATIONS

GENERAL REQUIREMENTS

1. THE ARCHITECT OR PROFESSIONAL ENGINEER IN GENERAL RESPONSIBLE CHARGE SHALL SIGN AND SEAL ALL DRAWINGS AND SPECIFICATIONS PER TITLE 24, PART 1, SECTIONS 4-316(E) AND 4-317 (H).
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA, OR CONSTRUCTION CHANGE DOCUMENTS APPROVED BY THE DIVISION OF THE STATE ARCHITECT (DSA), AS REQUIRED BY TITLE 24, PART 1, SECTION 4-338.
3. THE DISTRICT SHALL EMPLOY A CLASS 2 PROJECT INSPECTOR WHEN OVERALL STRUCTURE HEIGHT IS 35 FEET OR GREATER, OTHERWISE A CLASS 3 PROJECT INSPECTOR MAY BE USED. THE PROJECT INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK , AND SHALL SUBMIT VERIFIED REPORTS ON A DSA-6 FORM. THE DUTIES OF THE PROJECT INSPECTION ARE DEFINED IN TITLE 24, PART 1, SECTION 4-342.
4. ALL SCOREBOARD CONTROLS SHALL BE FULLY ACCESSIBLE VIA WIRELESS CONTROL OR COMPLETE DESIGN SHALL BE DEMONSTRATED IN THE SITE-SPECIFIC APPLICATION.
5. ALL ASSEMBLIES SHALL HAVE ELECTRICAL DISCONNECT PER CEC 600.6 AND BE ELECTRICALLY GROUNDED PER CEC 600.7, SEE DETAIL B/SB5.1
6. IN FLOOD ZONES, LOCATION OF ELECTRICAL ELEMENTS SHALL CONFORM TO ASCE 24, SECTION 7.2 PER DSA PR-14-01 SECTION 1.2.1.
7. SEE PAGE, SB0.2, FOR ALL MATERIAL SPECIFICATIONS AND NOTES.
8. PROJECT DESIGN PROFESSIONAL OF RECORD IS RESPONSIBLE FOR PREPARATION OF THE PROJECT SPECIFIC DSA 103 AND IS RESPONSIBLE FOR ALL SHOP DRAWING AND SUBMITTAL REVIEWS. SEE SB0.3 FOR EXAMPLE DSA 103

APPLICATION# 02-12241

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER — MICHAEL E. PORTER — No. 5405 — STRUCTURAL — STATE OF CALIFORNIA
DATE SIGNED: 08.09.2023
PC SEOR SEAL

NEVCO
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
www.nevco.com

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122317 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐ CG ☐
DATE: 09/20/2024

DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER — RANDALL R. RAMEY — NO. 52386 — EXPIRES 3-31-26 — CIVIL — STATE OF CALIFORNIA

COVER SHEET

SHEET INFORMATION

DATE	08.09.2023
DRAWN	JMK
CHECKED	MEP
SSG JOB #	S23109
SHEET	SB0.1

STRUCTURAL NOTES

GENERAL NOTES

1. The following notes, typical details and schedules shall apply to all phases of this project unless otherwise shown or noted.
2. Specific notes and details shall take precedence over general notes and typical details.
3. All materials and workmanship shall conform to the minimum standards of the 2022 edition Title 24 of the California Building Code (CBC) and such other regulating agencies exercising authority over any portion of the work. The contractor shall have a current copy of the CBC on the job site.
4. The "Contract or Construction Documents" shall consist of these notes, details, schedules, plans, and drawings.
5. All specifications, including but not limited to materials and products, shall be those put forth in the "Contract or Construction Documents". No substitutions shall be permitted to be used or assumed to be used in the bidding or construction process without written approval by the Structural Engineer of Record.
6. The contractor shall examine the "Contract or Construction Documents" and shall notify the Architect or Structural Engineer of Record of any discrepancies he may find before proceeding with the work.
7. All information on existing conditions shown on drawings are based on best present knowledge available, but without guarantee of accuracy. The Contractor shall verify and be responsible for all dimensions and conditions at the site and shall notify the Architect or Structural Engineer of Record of any discrepancies between actual site conditions and information shown on or in the "Contract or Construction Documents" before proceeding with work.
8. The Contractor shall immediately notify the Architect or Structural Engineer of Record of any condition which in his opinion might endanger the stability of the structure or cause distress of the structure.
9. All work shall conform to the best practice prevailing in the various trades comprising work. The Contractor shall be responsible for coordinating the work of all trades.
10. These "Contract or Construction Documents" represent the finished structure, and do not indicate the method of construction. The Contractor shall supervise and direct the work and shall be solely responsible for construction means, methods, techniques, sequences and procedures.
11. Inspection and approval for fabricator's shops used for fabrication of structural load bearing members, components, materials or assemblies shall conform to CBC Section 1704A.2.5.
    A. Labeling (as required or specified) shall be provided in accordance with CBC Section 1703A.5.
    B. Evaluation and follow-up inspection services (as required or specified), shall conform to CBC Section 1703A.6.
12. The Contractor shall provide temporary bracing and shoring for all structural members as required for structural stability of the structure during all phases of construction.
13. The Contractor shall take all steps necessary to ensure proper alignment of the structure after the installation of all structural and finish materials. This shall include any necessary preloading of the structure to determine final position of the completed work.
14. Observation visits to the project site by field representatives of Architect and/or Structural Engineer of Record (support services) shall not include inspections of safety or protective measures, nor construction procedures, techniques or methods. Any support services performed by Architect or Structural Engineer of Record during any phase of construction, shall be distinguished from continuous and detailed inspection services (as required by any regulating governmental agency, e.g. the Authority Having Jurisdiction) provided by others, these support services, whether of material or work, are performed solely for the purpose of assisting in quality control and in achieving conformance with contract documents, but do not guarantee Contractor's performance and shall not be construed as supervision of construction.
15. These notes, details, drawings and specifications (Contract or Construction Documents) do not carry necessary provisions for construction safety. These documents and all phases of construction hereby contemplated are to be governed, at all times, by applicable provisions of the current California Occupational Safety and Health Act.
16. Where any conflict occurs between the requirements of federal, state and local laws, codes, ordinances, rules and regulations, the most stringent shall govern.
17. Written dimensions shall have precedence over scaled dimensions.
18. Drawings (notes, schedules, details and plans) shall have precedence over Structural Calculations.
19. In the event that certain features of the construction are not fully shown on the drawings or called for in the General Notes or Specifications, then their construction shall be of the same character as for similar conditions that are shown or called for.
20. ASTM designation and all standards refer to the latest amendments.
21. These structural "Contract or Construction Documents" shall not be modified without prior written approval of the Structural Engineer of Record.
22. Only structural working drawings approved by the Division of the State Architecture permitted to be used for construction on this project. All other drawings or documents are obsolete and are not permitted on the job site, nor shall they be used for any construction purposes. Contractors using unapproved drawings or documents are solely responsible for all work not performed in accordance with the "approved" drawings.
23. A Division of the State Architect certified project inspector employed by the District (Owner) and approved by the Division of the State Architect shall provide continuous inspection of the work. The duties of the inspector are defined in Section 4-342, Part 1, Title 24 California Code of Regulations.

FOUNDATION NOTES

1. Basis: See Structural Design Values Chart, Sheet SB0.1 Table B
2. Unexpected soil conditions: Allowable values and foundation design are based upon the minimum values provided in Table 1806A.2 of the 2022 California Building Code. See SB0.1 for values
3. Excavate to required depths and dimensions (as indicated in drawings), cut square and smooth with firm level bottoms. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbing of soils around higher elevation.
4. Footings shall be poured in neat excavations, without side forms whenever possible.
5. Carry all foundations to required depths into compacted fill or natural soil (as per Structural Plans and Details).
6. All foundation excavations shall be inspected and approved by the Inspector of Record or Geotechnical Engineer prior to forming and placement of reinforcing or concrete.
7. Foundations shall not be poured until all required reinforcing steel, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the Authority having Jurisdiction.
8. The sides and bottoms of excavations which are to have concrete contact must be moistened several times just prior to pouring upon them.
9. De-water footings, as required, to maintain dry working conditions.

REINFORCING STEEL

1. All reinforcing steel shall be deformed intermediate grade bars conforming to ASTM A615, Grade 60 (f_y = 60 ksi) unless noted otherwise.
2. Reinforcing steel shall not be welded, unless specifically noted otherwise.
3. To hold reinforcing bars in their true position and prevent displacement, standard tie and anchorage devices must be provided. Placing of reinforcement shall conform to ACI 318-19 Section 26.6.2.
4. Shop drawings for fabrication of any reinforcing steel shall be approved by Contractor and submitted to Project Specific Architect or Project Specific Structural Engineer of Record, for their review, prior to fabrication.
5. Refer to typical details for minimum splice length and minimum radius of bend of reinforcing steel.
6. All reinforcing steel splices shall be staggered 24", unless specifically noted or detailed otherwise.
7. All reinforcing bar bends shall be made cold.
8. Fabrication, erection and placement of reinforcing steel shall conform to Concrete Reinforcing Steel Institute of Standard Practice.
9. Reinforcing steel shall be clean of rust, grease or other material likely to impair bond.

CONCRETE

1. All concrete shall have a minimum ultimate compressive strength (f'_c) as outlined below at 28 days. All concrete shall be regular weight (unless specifically noted otherwise).
    A. Concrete for footings: 4,500 psi w/c = 0.45 max.
2. Maximum Fly Ash content shall be 15%, by weight, of total cementitious materials and shall conform to ASTM C618.
3. All concrete work shall comply with CBC Chapter 19A and ACI 318-19 and latest edition of ACI Manual of Concrete Practice.
4. Special Inspection (as required or specified) shall conform to CBC Chapter 17A.
5. Cement shall be portland cement Type V and shall conform to ASTM C150.
6. Aggregates shall conform to ASTM C33, provide aggregates from a single source.
7. Water shall conform to ASTM C94 and be potable.
8. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
    A. Concrete cast against and permanently exposed to earth or weather: 3"
10. All reinforcing steel, anchor bolts, dowels, inserts and any other hardware to be set in concrete shall be well secured in position prior to pouring of concrete.
11. Vibrate all concrete as it is placed, with a mechanical vibrator operated by experienced personnel. The vibrator shall be used to consolidate the concrete, not transport it. Reinforcing and forms shall not be vibrated.
12. Formwork design and removal shall conform to ACI 318-19 Section 26.11. Remove forms in accordance with the following minimum schedule:
    A. Side forms of footings: Minimum 48 hours
    B. Column and pier forms: 72 hours & 70% of design strength
15. Concrete shall not free fall more than six feet. Use tremie, pump or other approved methods.
16. Concrete shall be maintained in a moist condition for a minimum of 5 days after placement.
17. The Contractor may use concrete admixtures as a construction means and methods to execute "Contract or Construction Documents". Use of admixture is solely the responsibility of the Contractor.
18. Mix designs shall be prepared by an approved testing laboratory, signed by a licensed engineer and shall be submitted to the Project Specific Design Professional of Record for approval. SSG is not responsible for review or approval of site specific concrete mix design.
19. Only one grade of concrete shall be allowed on project site at any one time
20. Concrete strength shall be verified by standard cylinder tests (in accordance with CBC Section 1905A.1.16) made by an approved testing laboratory.
21. Concrete placed when the air temperature has fallen to, or is expected to fall below 40° shall conform to ACI 318-19 Section 26.5.4, and ACI 306R-16.
22. Concrete placed during hot weather shall conform to ACI 318-19 Section 26.5.5, and ACI 305R-14.
23. Conduits and sleeves placed within structural concrete shall not be tied directly to structural reinforcement.
    A. 1" concrete cover shall be maintained around all reinforcement.
24. No stakes shall be permitted within the footing section.
25. Concrete shall reach minimum 75% design strength or cure for 3 days minimum prior to installation of steel columns and scoreboard components.

DRILLED CAISSON/PIER AND GRADE BEAM NOTES

1. Excavations for drilled caissons/pier shall be performed in compliance with local grading codes and ordinances as well as CBC Chapters 18A and 33A.
2. Provide Special Inspection in accordance with CBC Section 1705A.8 and Table 1705A.8.
3. Excavations for all drilled caissons/piers shall be approved by the Project Geotechnical Engineer or Project Special Inspector prior to placing of concrete.
4. Reinforcement for drilled caissons/pier shall be approved by the Structural Engineer of Record prior to placing in caisson/pier excavation.
5. De-water caisson/pier footings and building excavation as required to maintain dry working conditions.
6. Caisson/piers are to be poured within 24 hours after completion of drilling operation. Shoring requirements shall be determined by contractor. Contractor shall be provide fall protection and safety barriers at and near the drilled hole as required by OSHA and the Authority Having Jurisdiction.
7. The Contractor shall be responsible for all shoring, bracing, etc. necessary to support cut and/or fill banks, and existing structures during excavation, and the forming and placement of concrete.
8. Bottom of caissons/piers shall be thoroughly cleaned prior to placement of concrete.

STRUCTURAL STEEL AND WELDING

1. All structural steel construction shall conform to AISC 360-16 and AISC 341-16.
    A. Fabrication of all structural steel shall be done in the shop of an approved fabricator. Inspection and approval for fabricator's shops used for fabrication of structural load bearing members, components, materials or assemblies shall conform to CBC Section 1704A.2.5.
2. All structural steel shall conform to the following specifications:
    A. Angles, channels, plates, bars, rounds, and other miscellaneous shapes: Shall conform to ASTM A36 and shall have a minimum yield stress (F_y) of 36 ksi.
    B. Wide-flange shapes: Shall conform to ASTM A992 and shall have a minimum yield stress (F_y) of 50 ksi.
    C. Structural tubes: Shall be ASTM A500, Grade C, and shall have a min. yield stress (F_y) of 50ksi.
3. All structural steel fasteners shall conform to the following specifications:
    A. Bolts shall conform to ASTM A307
    B. Anchor Bolts shall conform to ASTM F1554, Grade as noted in drawings
    C. Carbon steel nuts shall conform to ASTM A563
    D. Stainless steel nuts shall conform to ASTM F594
    E. Washers shall conform to ASTM F436
4. Special Inspection shall be provided for all structural steel and welding, in accordance with CBC Chapter 17A.
5. All structural steel shall be fabricated, erected and welded in accordance with AISC Specifications for Structural Steel Buildings (AISC 360-16) and Code of Standard Practice for Steel Buildings and Bridges (AISC 303-16).
6. All welding shall be done by qualified and certified welders.
7. Shop drawings for the fabrication of any structural steel shall be approved by the Contractor and submitted to Project Specific Architect or Project Specific Structural Engineer of Record for their review, prior to fabrication.
8. No holes other than those specifically detailed shall be allowed through structural steel members. Burning of holes is not permitted.
9. All welding shall conform to 'AWS D1.1' specifications for welding. (E-70XX Electrodes).
10. Where fillet weld size is not indicated, use 'AWS' minimum size based on the thickness of the thinner part being welded, as specified in AISC Specifications for Structural Steel Buildings (AISC 360-10), Section J2.2.
11. All butt welds to be complete joint penetration, unless specifically noted otherwise.
12. Welder qualification requirements, welding procedure and welding electrodes for all structural steel (except structural sheet steel, see steel decking) shall conform to CBC Sections 1705A.2.1 and 2204A.1.
13. Provide 3" minimum concrete cover around all structural steel below grade.
14. Structural steel embedded into concrete shall be uncoated.
15. Structural steel shall be hot-dip galvanized (minimum ASTM A123 or A153 Class D) or painted with zinc-rich primer, undercoat, and finish coat; or equivalent paint system.
16. All exposed steel fasteners, including cast-in-place anchor bolts/rods, 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.

ABBREVIATIONS

A.B.	Anchor Bolt		
ABV.	Above		
ACI	American Concrete Institute	HORIZ.	Horizontal
ADJ.	Adjacent	HSS	Hollow Steel Section
AHJ	Division of the State Architect	HT.	Height
AISC	American Institute of Steel Construction	ICC	International Building Code
AOR	Architect of Record	ICC	International Code Council
APPROX.	Approximate(ly)	ID	Inside Diameter
ASCE	American Society of Civil Engineers	IN.	Inch, Inches
ARCH.	Architect, Architecture	INT.	Interior
ASTM	American Society of Testing and Materials	ksi	Kips per Square Inch
ATR	All Thread Rod	LL	Live Load
AWS	American Welding Society	MAX.	Maximum
		MB	Machine Bolt
B.O.	Bottom of _____	MFR.	Manufactured, Manufacturer
BOT.	Bottom	MIN.	Minimum
b/t	Between	MPH	Miles per Hour
CAC	California Administrative Code	N/R	Not Required
CBC	California Building Code	N.T.S.	Not to Scale
CIP	Cast-in-place		
CJP	Complete Joint Penetration	o.c.	On Center
℄	Centerline	o/	Over
CLR.	Clear	OD	Outside Diameter
COL.	Column		
CONC.	Concrete	PEN.	Penetration
CONN.	Connection	PL.	Plate
CONST.	Construction	PJP	Partial Joint Penetration
CONT.	Continue, Continuous	psi	Pounds per Square Inch
		PSF	Pounds per Square Foot
Ø	Diameter		
DBL.	Double	REBAR	Reinforcing Bar
DET.	Detail	REINF.	Reinforcement
DL	Dead Load	REQ'D	Required
DSA	Division of State Architect		
DWGS.	Drawings	S.F.	Square Feet
		SHT.	Sheet
EA.	Each	SIM.	Similar
E.F.	Each Face	SMS	Sheet Metal Screw
ELEC.	Electric, Electrical	SQ.	Square
ELEV.	Elevation	STAGG'D	Staggered
EMBED.	Embedded, Embedment	STD.	Standard
EOR	Engineer of Record	STL.	Steel
EQ.	Equal	SEOR	Structural Engineer of Record
EQUIP.	Equipment		
E.S.	Each Side	T&B	Top and bottom
E.W.	Each Way	THR'D	Threaded
EXT.	Exterior	T.O.	Top of _____
		TYP.	Typical
FAB.	Fabricated		
FDN.	Foundation	U.N.O.	Unless Noted Otherwise
F.G.	Finish Grade		
F.O.	Face of _____	VERT.	Vertical
FRMG.	Framing	VIF	Verify in Field
FT.	Foot,Feet		
FTG.	Footing	w/	With
		w/c	Water/Cement Ratio
GA.	Gauge	WSS	Welded Steel Stud
GALV.	Galvanized	WT.	Weight
GEOR	Geotechnical Engineer of Record		

POST INSTALLED ANCHOR & TESTING

1. All post-installed anchors are to be tension tested with the exception that torque testing is allowed if the anchors are specifically designed as torque controlled
2. Test quantity of post-installed anchors as noted below:

Application	Quantity
Non-structural (Equipment Anchorage, etc.)	50%
Structural	100%

3. Apply proof test loads to anchors without removing the nut if possible. if not, remove nut and install a threaded coupler to the same tightness of the original nut using a torque wrench and apply load.
4. All tests shall be performed in the presence of the inspector.
5. Reaction loads from test fixtures may be applied close to the anchor being tested, provided the anchor is not restrained from withdrawing or restricted from a concrete shear cone type failure mechanism.
6. Test equipment is to be calibrated by an approved testing laboratory in accordance with standard recognized procedures.
7. The following criteria apply for the acceptance of installed anchors:
    A. Hydraulic ram method: anchors tested with a hydraulic jack or spring loaded devices shall maintain the test load for a minimum of 15 seconds and shall exhibit no discernable movement during the tension test, e.g. as evidenced by loosening of the washer under the nut.
    B. Torque wrench method: anchors tested with a calibrated torque wrench must attain the manufacturer recommended torque within ½ turn of the nut.
    Exceptions:
    - Wedge or sleeve type: one-quarter turn of the nut from 3/8" sleeve anchor only.
    - Threaded type: one-quarter turn of the screw after initial seating of the screw head.
8. If any anchor fails testing, test all anchors of the same type not previously tested until twenty consecutive anchors pass, then resume the initial test frequency. if the anchors are used for the support and bracing of non-structural components (pipe, duct or conduit), the twenty shall be only those anchors installed by the same trade.
9. Test loads per ICC ESR, IAPMO, OR UES report
10. When installing drilled-in anchors and/or powder driven pins in existing non-prestressed reinforced concrete, use care and caution to avoid cutting or damaging the existing reinforcing bars. When installing them into existing prestressed concrete (pre- or post-tensioned) locate the prestressed tendons by using a non-destructive method prior to installation. Exercise extreme care and caution to avoid cutting or damaging the tendons during installation. Maintain a minimum clearance of one inch between the reinforcement and the drilled-in anchor and/or pin.

ANCHOR TORQUE TEST VALUES				
Anchor Diameter	CONCRETE		MASONRY	
	HILTI KB TZ 2	SIMPSON STRONG BOLT 2	HILTI KB TZ 2	SIMPSON STRONG BOLT 2
	ESR-4266	ESR-3037	ESR-4561	ER-240
⅜"	30 ft-lb	30 ft-lb	15 ft-lb	20 ft-lb
½"	50 ft-lb	60 ft-lb	25 ft-lb	35 ft-lb
⅝"	40 ft-lb	90 ft-lb	30 ft-lb	55 ft-lb
¾"	110 ft-lb	150 ft-lb	50 ft-lb	100 ft-lb

If the manufacturer's recommended installation torque is less than the test torque noted in the table, the manufacturer's recommended installation torque should be used in lieu of the tabulated values.

See manufacturer's ESR report for Maximum Impact Wrench Torque Rating.

APPLICATION# 02-12241

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER — GAILLORD R. RAMSEY — No. 5405 — STRUCTURAL — STATE OF CALIFORNIA
DATE SIGNED: 08.09.2023

PC SEOR SEAL

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Phone: (618) 664-0360
www.nevco.com

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123317 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2023

DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER — GAILLORD R. RAMSEY — NO.S2386 — EXPIRES 3-31-25 — STRUCTURAL — STATE OF CALIFORNIA

STRUCTURAL NOTES & SPECIAL INSPECTIONS

SHEET INFORMATION

DATE 08.09.2023
DRAWN JMK
CHECKED MEP
SSG JOB # S23109
SHEET SB0.2

EXAMPLE DSA 103 - TESTING AND INSPECTIONS

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number: 04-122317
DSA File Number:
School Name: Nevco Scoreboards PC
Increment Number:
School District: Nevco Scoreboards PC
Date Created: 2023-05-23 08:35:36

2022 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The Special Inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load racking diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

**NOTE: Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE

Continuous – Indicates that a continuous special inspection is required

Periodic – Indicates that a periodic special inspection is required

Test – Indicates that a test is required

2. PERFORMED BY

GE (Geotechnical Engineer) – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.

LOR (Laboratory of Record) – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.

PI (Project Inspector) – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.

SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3, ACI 318-19 Sections 26.12 & 26.13

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (MASONRY), 2022 CBC

Table 1705A.3, ACI 530/ASCE 5/TMS 402-16, Tables 3 and 4,

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

Table 1705A.2.1, Table 1705A.2.3, AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16, AISI S100-20/ RCSC 2014, AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2022 CBC

Name of Architect or Engineer, general responsible charge:

Name of Structural Engineer (When structural observation has been delegated):

Signature of Architect or Structural Engineer:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3, ACI 318-19 Sections 26.12 & 26.13

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

Table 1705A.2.1, Table 1705A.2.3, AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16, AISI S100-20/ RCSC 2014, AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

Table 1705A.2.1, Table 1705A.2.3, AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16, AISI S100-20/ RCSC 2014, AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

Application Number: 04-122317
DSA File Number:
School Name: Nevco Scoreboards PC
Increment Number:
School District: Nevco Scoreboards PC
Date Created: 2023-05-23 08:35:36

1. Structural Tests and Inspections: Laboratory Verified Report Form DSA 291
2. Post-installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
3. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
4. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (MASONRY), 2022 CBC

Table 1705A.3, TMS 602-16, Tables 3 and 4

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark in the design professional of record's set subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3, ACI 318-19 Sections 26.12 & 26.13

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (MASONRY), 2022 CBC

Table 1705A.3, TMS 602-16, Tables 3 and 4

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

Table 1705A.2.1, Table 1705A.2.3, AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16, AISI S100-20/ RCSC 2014, AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (OTHER), 2022 CBC

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

NOTE: THE DSA 103 SHOWN INCLUDES MINIMUM SPECIAL INSPECTION REQUIREMENTS AND IS PROVIDED AS EXAMPLE. ADDITIONAL TESTING AND INSPECTIONS MAY BE REQUIRED BEYOND THE SCOPE OF THE SCOREBOARD. A FINAL DSA 103 FORM SHALL BE SUBMITTED BY THE DESIGN PROFESSIONAL OF RECORD AS PART OF THE SITE SPECIFIC SUBMITTAL REQUIREMENTS. THE DESIGN PROFESSIONAL OF RECORD IS RESPONSIBLE FOR REVIEWING PROJECT SPECIFIC SPECIAL INSPECTION REPORTS. SSG STRUCTURAL ENGINEERS OR NEVCO ARE NOT RESPONSIBLE FOR PROVIDING THE PROJECT DSA 103 OR REVIEWING SPECIAL INSPECTION REPORTS.
DSA 103 CAN BE FOUND AT:https://forms.dgs.ca.gov/content/forms/af/dgs/dsa/form-103/public/dsa-form-103-22.html

APPLICATION# 02-122417

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER — DANIEL R. PARKIN — No. 5405 — STATE OF CALIFORNIA — DATE SIGNED: 08.09.2023

PC SEOR SEAL

nevco
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
www.nevco.com

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DIV. OF THE STATE ARCHITECT
APP: 04-122317 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2024

DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER — GAILLORD R. RAMOS — NO.S2386 — EXPIRES 3-31-25 — CIVIL — STATE OF CALIFORNIA

SHEET INFORMATION

DATE	08.09.2023
DRAWN	JMK
CHECKED	MEP
SSG JOB #	S23109
SHEET	SB0.3

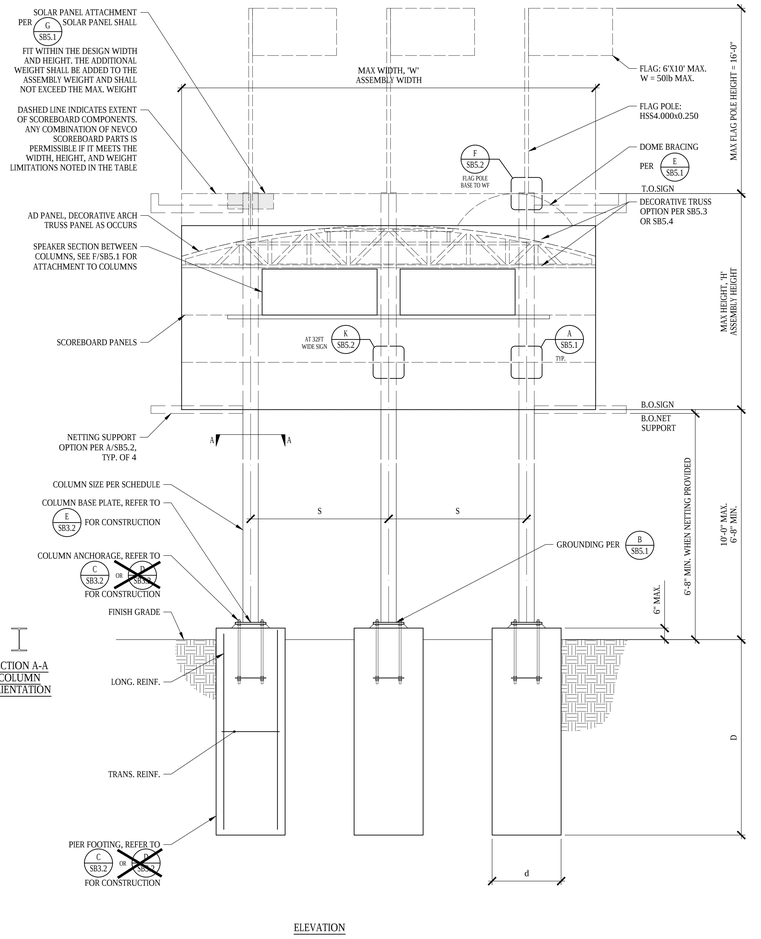
THREE COLUMN ASSEMBLY

ASSEMBLY CRITERIA							PIER FOOTING CRITERIA (2)				BASE PLATE				ANCHOR RODS				
ASSEMBLY WIDTH, W	CHECK OPTION THIS APPLICATION	MAX. WEIGHT	ASSEMBLY HEIGHT, H	COLUMN SPACING, S	COLUMN SIZE	COLUMN SIZE, W/O FLAG	PIER DIAMETER, d	DEPTH, D	LONG. REINF.	TRANS. REINF.(1)	THICKNESS, t	WIDTH, B	LENGTH, L	WELD	QUANTITY & DIAMETER	GRADE	EDGE DISTANCE, X	GROUT HEIGHT	EMBED
20'-0"		1,920 lbs.	≤ 8'-0"	8'-0"	W10x33	W10x30	36"Ø	8'-6"	8 - #6	#4 @ 4½" o.c.	1⅛"	20"	20"	5/16	(4) - 1⅛"Ø	F1554 - GR.36	2½"	2"	48"
		2,880 lbs.	≤ 12'-0"	8'-0"	W12x40	W12x40	36"Ø	10'-0"	8 - #6	#4 @ 4½" o.c.	1⅛"	20"	20"	7/8	(6) - 1⅛"Ø	F1554 - GR.55	2½"	2"	48"
		3,840 lbs.	≤ 16'-0"	8'-0"	W14x61	W14x53	42"Ø	11'-0"	8 - #8	#4 @ 6" o.c.	1⅜"	24"	24"	3/8	(6) - 1¼"Ø	F1554 - GR.55	2½"	2"	64"
		4,800 lbs.	≤ 20'-0"	8'-0"	W16x67	W16x67	48"Ø	11'-0"	14 - #8	#4 @ 6" o.c.	1½"	24"	30"	½	(4) - 1½"Ø	F1554 - GR.55	3"	2"	64"
		5,760 lbs.	≤ 24'-0"	8'-0"	W18x86	W18x76	48"Ø	12'-0"	14 - #8	#4 @ 6" o.c.	1¾"	24"	30"	CJP	(6) - 1½"Ø	F1554 - GR.55	3"	2"	64"
24'-0"		3,216 lbs.	≤ 8'-0"	8'-0"	W10x33	W10x33	36"Ø	9'-6"	8 - #6	#4 @ 4½" o.c.	1¼"	20"	20"	5/16	(4) - 1⅛"Ø	F1554 - GR.55	2½"	2"	48"
		3,468 lbs.	≤ 12'-0"	8'-0"	W14x48	W14x48	36"Ø	10'-6"	8 - #8	#4 @ 6" o.c.	1¼"	20"	28"	7/16	(6) - 1⅛"Ø	F1554 - GR.55	2½"	2"	64"
		4,618 lbs.	≤ 16'-0"	8'-0"	W14x61	W14x61	48"Ø	10'-9"	12 - #8	#4 @ 6" o.c.	1½"	24"	24"	7/16	(6) - 1¼"Ø	F1554 - GR.55	2½"	2"	64"
		5,760 lbs.	≤ 20'-0"	8'-0"	W16x77	W16x67	48"Ø	12'-0"	14 - #8	#4 @ 6" o.c.	1½"	24"	30"	7/16	(6) - 1¼"Ø	F1554 - GR.105	2½"	2"	64"
	X	6,920 lbs.	≤ 24'-0"	8'-0"	W18x97	W18x86	48"Ø	13'-3"	14 - #8	#4 @ 6" o.c.	1¾"	24"	30"	CJP	(6) - 1½"Ø	F1554 - GR.55	3"	2"	64"
		8,060 lbs.	≤ 28'-0"	8'-0"	W18x119	W18x106	48"Ø	14'-3"	14 - #8	#4 @ 6" o.c.	2"	24"	30"	CJP	(6) - 1½"Ø	F1554 - GR.105	3"	2"	64"
28'-0"		2,690 lbs.	≤ 8'-0"	10'-0"	W10x33	W10x33	36"Ø	9'-6"	8 - #6	#4 @ 4½" o.c.	1¼"	20"	20"	5/16	(4) - 1⅛"Ø	F1554 - GR.55	2½"	2"	48"
		4,040 lbs.	≤ 12'-0"	10'-0"	W14x48	W14x43	48"Ø	9'-9"	8 - #8	#4 @ 6" o.c.	1¼"	24"	24"	7/16	(6) - 1¼"Ø	F1554 - GR.55	2½"	2"	64"
		5,380 lbs.	≤ 16'-0"	10'-0"	W16x67	W16x67	48"Ø	11'-6"	14 - #8	#4 @ 6" o.c.	1⅝"	24"	30"	½	(4) - 1½"Ø	F1554 - GR.55	3"	2"	64"
		6,720 lbs.	≤ 20'-0"	10'-0"	W16x89	W16x77	48"Ø	12'-0"	14 - #8	#4 @ 6" o.c.	2"	24"	30"	CJP	(6) - 1½"Ø	F1554 - GR.55	3"	2"	64"
		8,070 lbs.	≤ 24'-0"	10'-0"	W18x106	W18x97	48"Ø	13'-9"	14 - #9	#4 @ 6" o.c.	2"	24"	30"	CJP	(6) - 1¼"Ø	F1554 - GR.55	3"	2"	64"
		9,400 lbs.	≤ 28'-0"	10'-0"	W18x130	W18x119	48"Ø	15'-0"	14 - #9	#4 @ 6" o.c.	2"	24"	30"	CJP	(6) - 1½"Ø	F1554 - GR.105	3"	2"	64"
32'-0"		3,080 lbs.	≤ 8'-0"	12'-0"	W10x33	W10x33	36"Ø	10'-0"	8 - #6	#4 @ 4½" o.c.	1¼"	20"	20"	3/8	(6) - 1⅛"Ø	F1554 - GR.55	2½"	2"	48"
		4,610 lbs.	≤ 12'-0"	12'-0"	W14x61	W14x48	48"Ø	10'-3"	8 - #8	#4 @ 6" o.c.	1½"	24"	24"	¾	(6) - 1¼"Ø	F1554 - GR.55	2½"	2"	64"
		6,150 lbs.	≤ 16'-0"	12'-0"	W16x67	W16x67	48"Ø	11'-0"	14 - #8	#4 @ 6" o.c.	1⅝"	24"	30"	½	(4) - 1½"Ø	F1554 - GR.55	3"	2"	64"
		7,680 lbs.	≤ 20'-0"	12'-0"	W18x86	W18x76	48"Ø	12'-0"	14 - #8	#4 @ 6" o.c.	1¾"	24"	30"	CJP	(6) - 1½"Ø	F1554 - GR.55	3"	2"	64"
		9,220 lbs.	≤ 24'-0"	12'-0"	W18x119	W18x106	48"Ø	14'-6"	14 - #9	#4 @ 6" o.c.	2"	24"	30"	CJP	(6) - 1¼"Ø	F1554 - GR.55	3"	2"	64"
		10,750 lbs.	≤ 28'-0"	12'-0"	W18x143	W18x130	54"Ø	15'-6"	14 - #9	#4 @ 6" o.c.	2¼"	30"	36"	CJP	(6) - 2"Ø	F1554 - GR.55	4"	2½"	64"

NOTES:
1. CONTRACTOR OPTION TO PROVIDE TIES OR SPIRAL REINFORCING. SEE C/SB3.2 FOR TIE OPTION, SEE D/SB3.2 FOR SPIRAL OPTION.
2. CONTRACTOR IS RESPONSIBLE FOR CASING PIERS AND DRILLING SEQUENCING TO PROTECT PIER EXCAVATION

THREE COLUMN SCOREBOARD INSTALLATION

N.T.S.

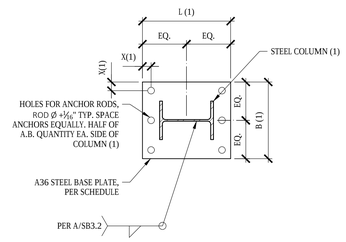


SECTION A-A
COLUMN ORIENTATION

ELEVATION

THREE COLUMN SCOREBOARD INSTALLATION

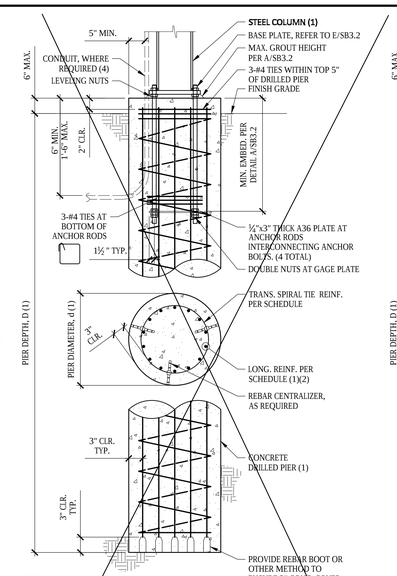
N.T.S. — A



NOTES: (#)
1. SEE SCOREBOARD ELEVATION, A/SB3.2

BASE PLATE

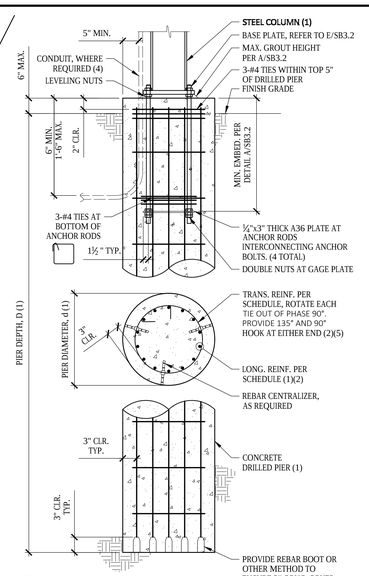
N.T.S. — E



NOTES: (#)
1. SEE ELECTRONIC SIGN ELEVATION, A/SB3.2
2. SEE DETAILS B/SB3.2 FOR REINFORCEMENT TIE REQUIREMENTS
3. DO NOT SPLICE REINFORCEMENT.
4. LOCATION OF CONDUIT APPROACH SHOWN GRAPHICALLY ONLY FOR REFERENCE. VERIFY ACTUAL CONDITIONS IN FIELD. (2)-2" NOMINAL CONDUIT MAX. SPACE CONDUIT 6"o.c. MIN.
5. TIE SHALL OVERLAP ITSELF A MINIMUM OF 6" AND HOOK AT VERTICAL BARS. MAXIMUM OF THREE VERTICAL BAR SPACINGS BETWEEN HOOKS

CONCRETE DRILLED PIER

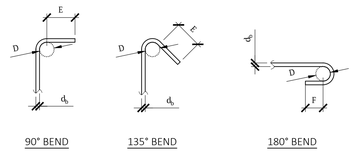
N.T.S. — D



NOTES: (#)
1. SEE ELECTRONIC SIGN ELEVATION, A/SB3.2
2. SEE DETAILS B/SB3.2 FOR REINFORCEMENT TIE REQUIREMENTS
3. DO NOT SPLICE REINFORCEMENT.
4. LOCATION OF CONDUIT APPROACH SHOWN GRAPHICALLY ONLY FOR REFERENCE, VERIFY ACTUAL CONDITIONS IN FIELD. (2)-2" NOMINAL CONDUIT MAX. SPACE CONDUIT 6"o.c. MIN.
5. TIE SHALL OVERLAP ITSELF A MINIMUM OF 6" AND HOOK AT VERTICAL BARS. MAXIMUM OF THREE VERTICAL BAR SPACINGS BETWEEN HOOKS

CONCRETE DRILLED PIER

N.T.S. — C



Bar Size	Dimension of Standard Bends		
	D	E	F (6d_b) [3" min.]
#4	2"Ø	3"	3"

TIE AND STIRRUP BENDS

N.T.S. — B

APPLICATION# 02-122411

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

STRUCTURAL ENGINEERS ASSOCIATION OF CENTRAL CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
GALLORD R. RAMOM
No. 5405
STRUCTURAL
STATE OF CALIFORNIA
DATE SIGNED: 08.09.2023
PC SEOR SEAL

nevco
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
www.nevco.com

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DIV. OF THE STATE ARCHITECT
APP: 04-122411 PC
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SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2024
DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

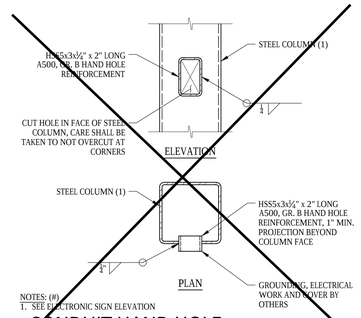
A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER
GALLORD R. RAMOM
NO.S23864
EXPIRES
3-31-26
STRUCTURAL
STATE OF CALIFORNIA

THREE COLUMN CAISSON - BOLTED

SHEET INFORMATION

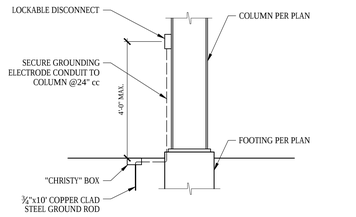
DATE	08.09.2023
DRAWN	JMK
CHECKED	MEP
SSG JOB #	S23109
SHEET	SB3.2



CONDUIT HAND HOLE

N.T.S.

H



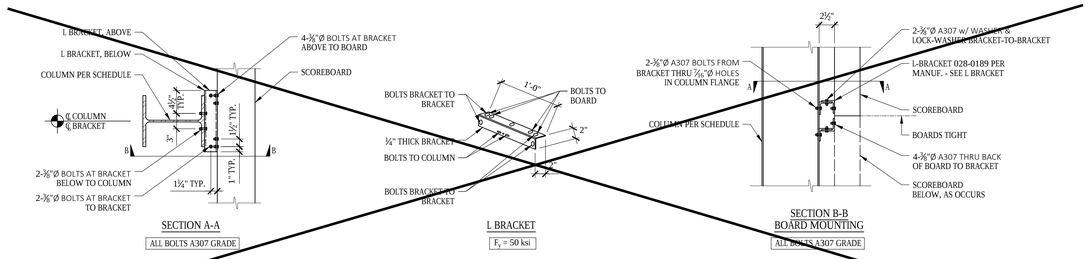
ALL DISPLAYS MUST BE GROUNDED WITH NO MORE THAN 10 OHMS GROUND RESISTANCE

NOTES:
1. ALTERNATE: IT IS PERMISSIBLE TO UTILIZE THE UFER GROUNDING METHOD. DETAILS FOR UFER GROUNDING SHALL BE INCLUDED AS PART OF THE SITE SPECIFIC SUBMITTAL.

GROUNDING DETAIL

N.T.S.

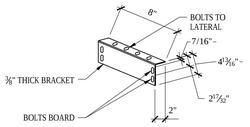
B



SCOREBOARD PART ATTACHMENTS

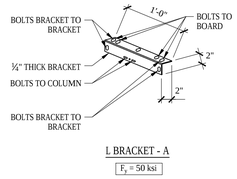
N.T.S.

A



L BRACKET - B

Fy = 50 ksi



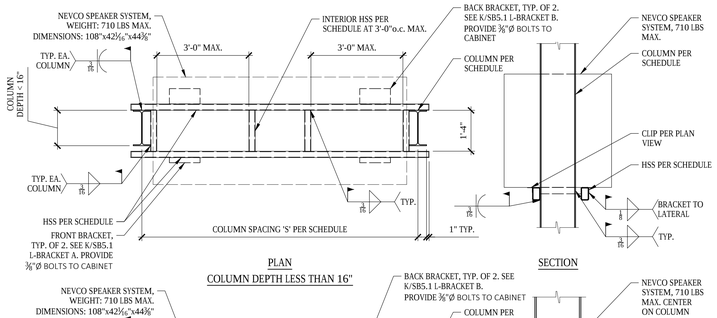
L BRACKET - A

Fy = 50 ksi

L BRACKETS

N.T.S.

K



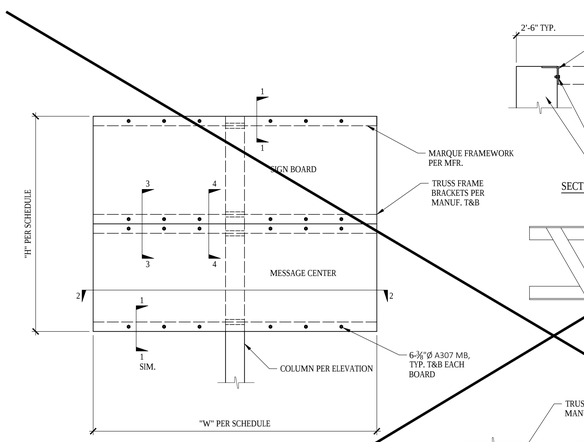
HSS SCHEDULE

COLUMN SPACING, S	HSS SIZE
10'-0"	HSS4x3x5/16 LLV
12'-0"	HSS4x3x⅜ LLV
14'-0"	HSS4x3x5/8 LLV

SPEAKER ATTACHMENT

N.T.S.

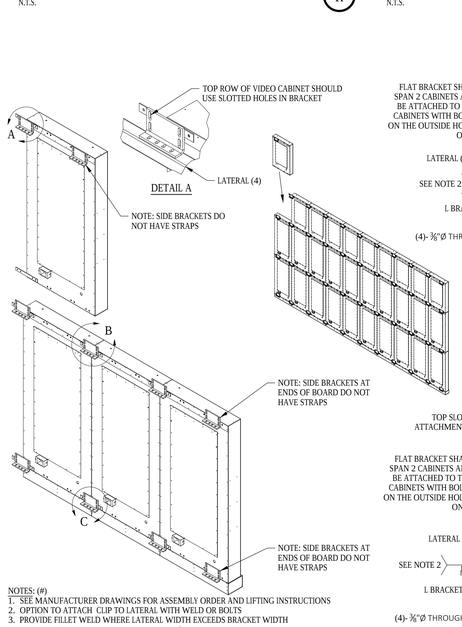
F



MARQUEE CENTER INSTALLATION

N.T.S.

D

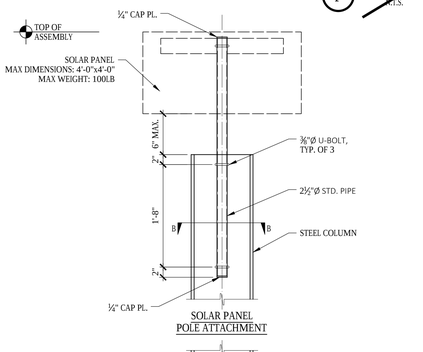


NOTES: (#)
1. SEE MANUFACTURER DRAWINGS FOR ASSEMBLY ORDER AND LIFTING INSTRUCTIONS
2. OPTION TO ATTACH CLIP TO LATERAL WITH WELD OR BOLTS
3. PROVIDE FILLET WELD WHERE LATERAL WIDTH EXCEEDS BRACKET WIDTH
4. TYPICAL VIDEO BOARD LATERAL IS HSS3X3X¼, SEE K/SB5.2 FOR ATTACHMENT TO COLUMN. SEE B/SB6.1 FOR INDOOR WALL ATTACHMENT.
5. MAX TRIBUTARY AREA TO L-BRACKET SHALL NOT EXCEED 20 S.F.

VIDEO BOARD BRACKET ATTACHMENT

N.T.S.

J

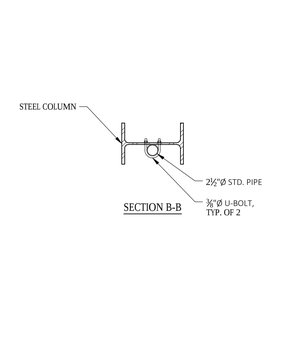


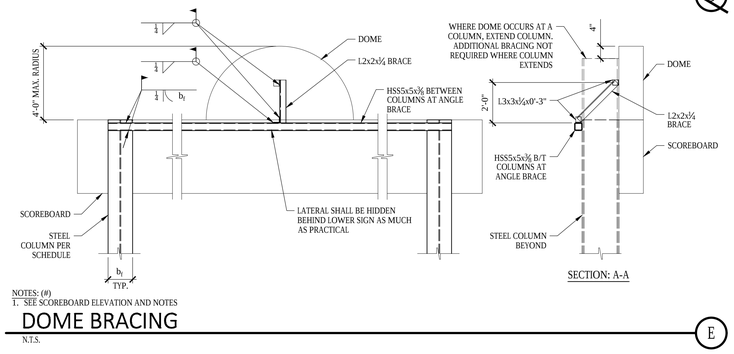
NOTES:
1. THE SOLAR PANEL, BATTERIES AND ENCLOSURE, AND INVERTER/RECEIVER DIMENSIONS SHALL FIT WITHIN THE PERMITTED EXTENT OF SCOREBOARD AS INDICATED IN THE SCOREBOARD ELEVATION AND SCHEDULE.
2. THE SOLAR PANEL, BATTERIES AND ENCLOSURE, AND INVERTER/RECEIVER WEIGHT ALONG WITH ALL OTHER SCOREBOARD COMPONENTS SHALL NOT EXCEED THE WEIGHT INDICATED IN THE SCOREBOARD SCHEDULE.

SOLAR PANEL/BATTERY/ INVERTER/RECEIVER ATTACHMENT

N.T.S.

G





NOTES: (#)
1. SEE SCOREBOARD ELEVATION AND NOTES

DOME BRACING

N.T.S.

E

APPLICATION# 02-122411

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER
DAVID R. RAMEY
No. 5405
STRUCTURAL
STATE OF CALIFORNIA
DATE SIGNED: 08.09.2023
PC SEOR SEAL

nevco
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
www.nevco.com

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122411 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2023
DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

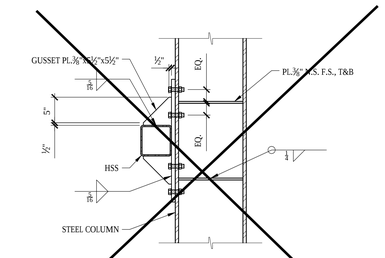
A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER
DAVID R. RAMEY
NO. S23386
EXPIRES 3-31-25
STRUCTURAL
STATE OF CALIFORNIA

ATTACHMENT DETAILS

SHEET INFORMATION

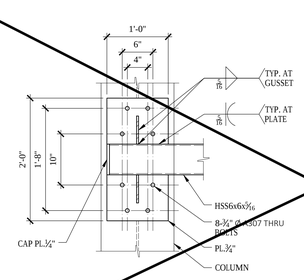
DATE	08.09.2023
DRAWN	JMK
CHECKED	MEP
SSG JOB #	S23109
SHEET	SB5.1



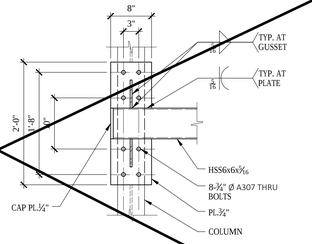
NET MOUNT PLATE

N.T.S.

E



COLUMN WIDTH GREATER THAN OR EQUAL TO 9"

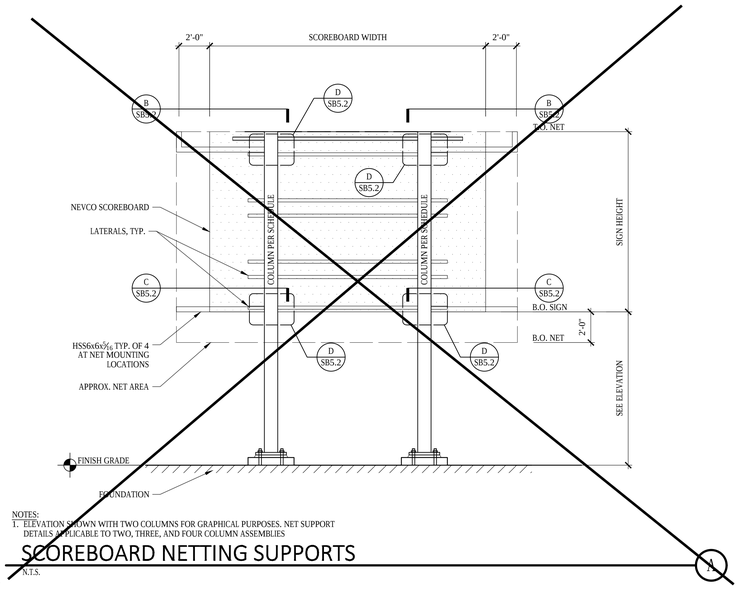


COLUMN WIDTH LESS THAN 9"

NET MOUNT PLATE

N.T.S.

D

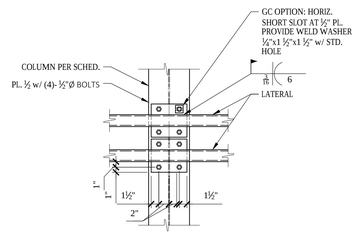


NOTES:
1. ELEVATION SHOWN WITH TWO COLUMNS FOR GRAPHICAL PURPOSES. NET SUPPORT DETAILS APPLICABLE TO TWO, THREE, AND FOUR COLUMN ASSEMBLIES

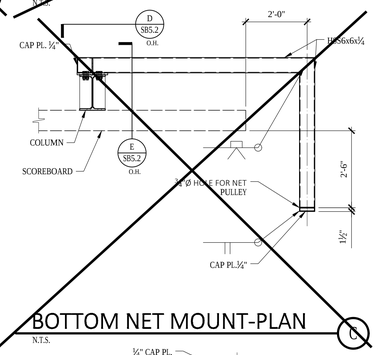
SCOREBOARD NETTING SUPPORTS

N.T.S.

A



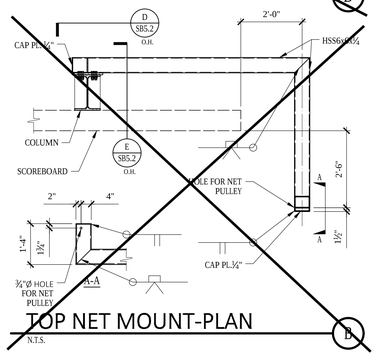
ELEVATION: OPTION C&D-BOLTED LATERAL



BOTTOM NET MOUNT-PLAN

N.T.S.

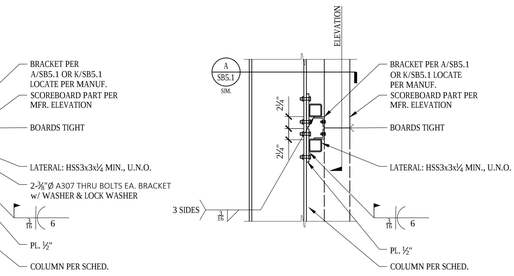
C



TOP NET MOUNT-PLAN

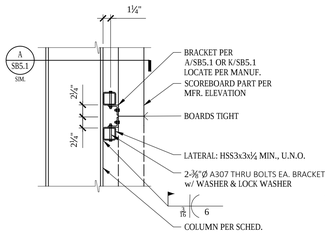
N.T.S.

B

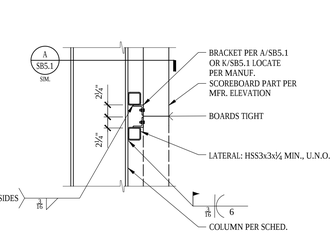


OPTION C: LATERAL BOLTED/CLIP BOLTED

OPTION D: LATERAL BOLTED/CLIP WELDED



OPTION A: LATERAL WELDED/CLIP BOLTED

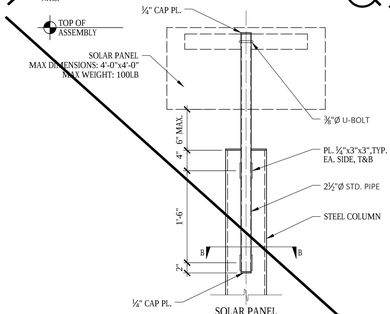


OPTION B: LATERAL WELDED/CLIP WELDED

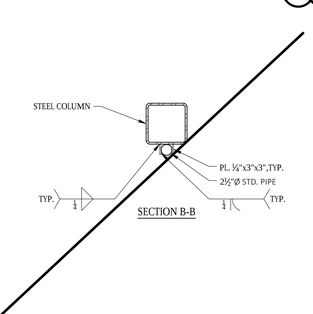
LATERAL/BOARD ATTACHMENT

N.T.S.

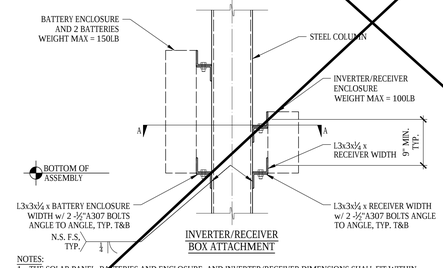
K



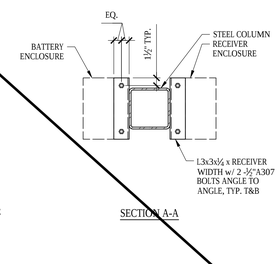
SOLAR PANEL POLE ATTACHMENT



SECTION B-B



INVERTER/RECEIVER BOX ATTACHMENT



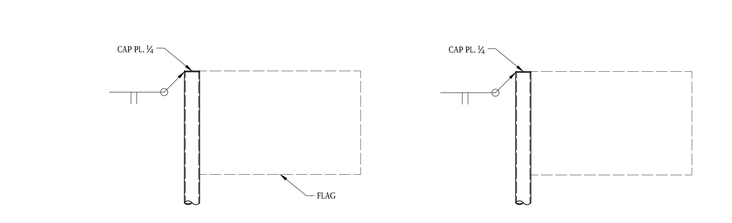
SECTION A-A

NOTES:
1. THE SOLAR PANEL, BATTERIES AND ENCLOSURE, AND INVERTER/RECEIVER DIMENSIONS SHALL FIT WITHIN THE PERMITTED ENVELOPE OF SIGN AS INDICATED IN THE MARQUEE ELEVATION AND SCHEDULE.
2. THE SOLAR PANEL, BATTERIES AND ENCLOSURE, AND INVERTER/RECEIVER WEIGHT ALONG WITH ALL OTHER SIGN COMPONENTS SHALL NOT EXCEED THE WEIGHT INDICATED IN THE MARQUEE SCHEDULE.

SOLAR PANEL/BATTERY/ INVERTER/RECEIVER ATTACHMENT

N.T.S.

H



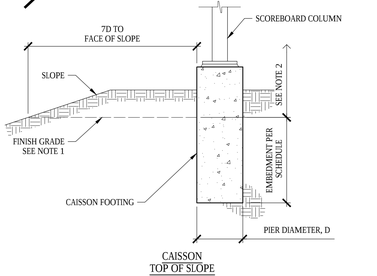
COLUMN DEPTH >= 12"

COLUMN DEPTH < 12"

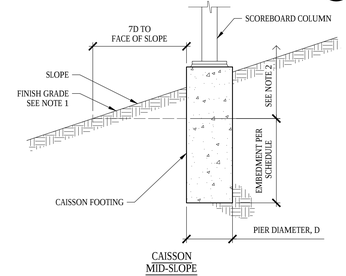
FLAG POLE COLUMN TO WF BEAM

N.T.S.

F



CAISSON BOTTOM OF SLOPE



CAISSON MID-SLOPE

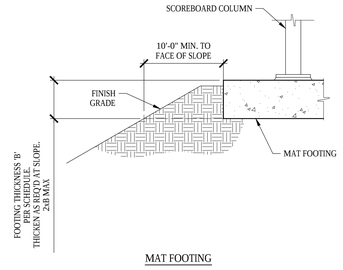
CAISSON TOP OF SLOPE

NOTES:
1. REFERENCE FINISH GRADE FOR DETERMINATION OF MAXIMUM SCOREBOARD HEIGHT.
2. SEE TYPICAL SCOREBOARD INSTALLATION DETAIL FOR MAXIMUM ASSEMBLY HEIGHT AND CLEARANCE TO BOTTOM OF SCOREBOARD.

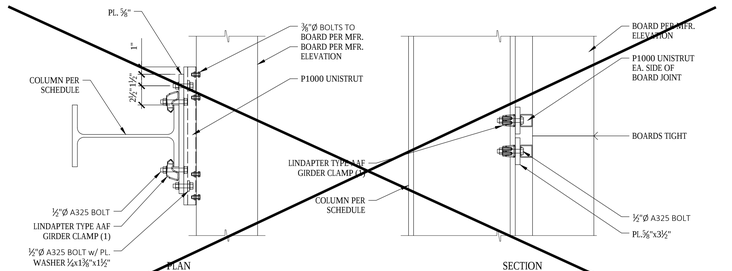
DISTANCE TO SLOPE

N.T.S.

J



MAT FOOTING



PLAN

SECTION

NOTES: (#)
1. LAAF050 CLAMP WITH BLOCKING WASHER - INSTALL PER ICC ESR-3976

ALTERNATE BOARD ATTACHMENT

N.T.S.

G

APPLICATION# 02-122411

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER GALLARD R. RAMSAY No. 5405 STRUCTURAL STATE OF CALIFORNIA
DATE SIGNED: 08.09.2023
PE/SE/GE SEAL

nevco
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
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APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122307 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2023

DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

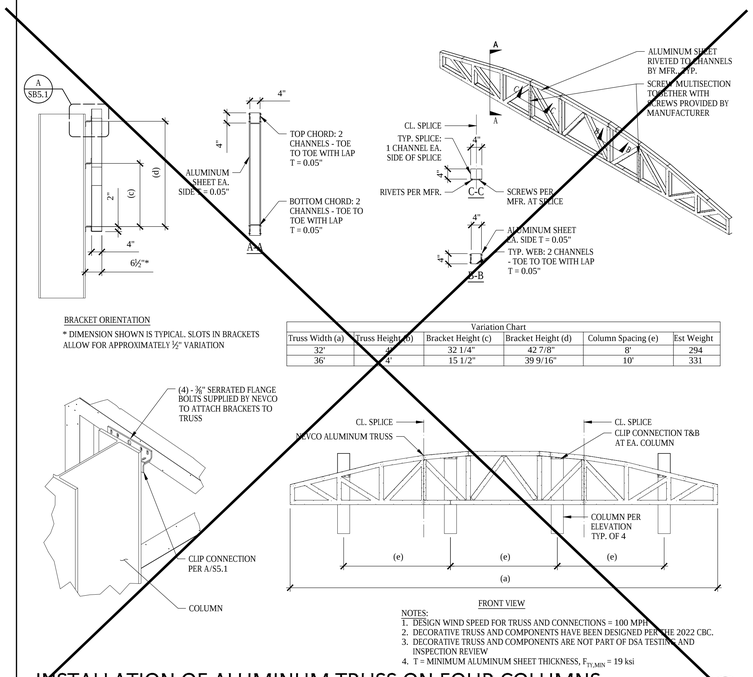
A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER GALLARD R. RAMSAY NO.S23864 EXPIRES 3-31-26 STRUCTURAL STATE OF CALIFORNIA

OPTIONAL SCOREBOARD FEATURE ATTACHMENT DETAILS

SHEET INFORMATION

DATE: 08.09.2023
DRAWN: JMK
CHECKED: MEP
SSG JOB #: S23109
SHEET: SB5.2



BRACKET ORIENTATION

* DIMENSION SHOWN IS TYPICAL. SLOTS IN BRACKETS ALLOW FOR APPROXIMATELY ½" VARIATION

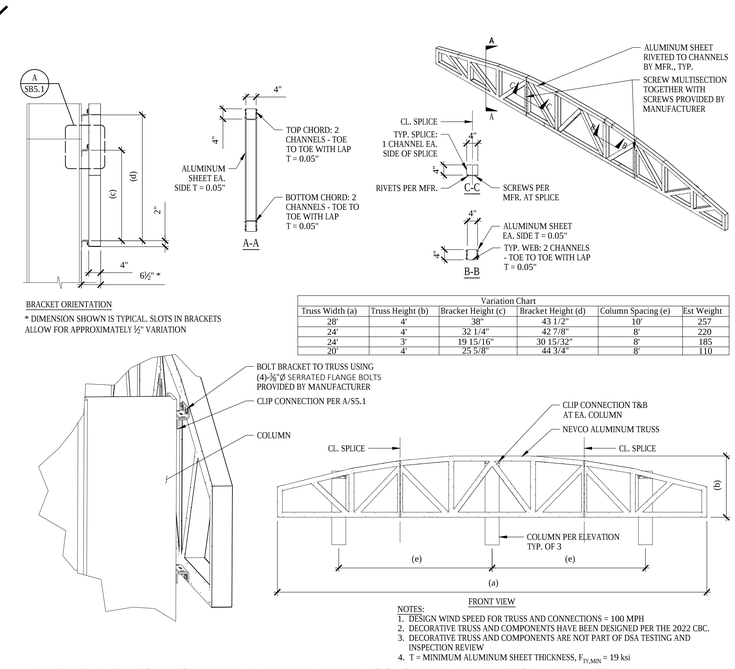
Variation Chart					
Truss Width (a)	Truss Height (b)	Bracket Height (c)	Bracket Height (d)	Column Spacing (e)	Est Weight
32'	3'	32 1/4"	42 7/8"	8'	294
36'	4'	15 1/2"	39 9/16"	10'	331

FRONT VIEW

NOTES:
1. DESIGN WIND SPEED FOR TRUSS AND CONNECTIONS = 100 MPH
2. DECORATIVE TRUSS AND COMPONENTS HAVE BEEN DESIGNED PER THE 2022 CBC.
3. DECORATIVE TRUSS AND COMPONENTS ARE NOT PART OF DSA TESTING AND INSPECTION REVIEW
4. T = MINIMUM ALUMINUM SHEET THICKNESS, $F_{TY,MIN}$ = 19 ksi

INSTALLATION OF ALUMINUM TRUSS ON FOUR COLUMNS

N.T.S. — F



BRACKET ORIENTATION

* DIMENSION SHOWN IS TYPICAL. SLOTS IN BRACKETS ALLOW FOR APPROXIMATELY ½" VARIATION

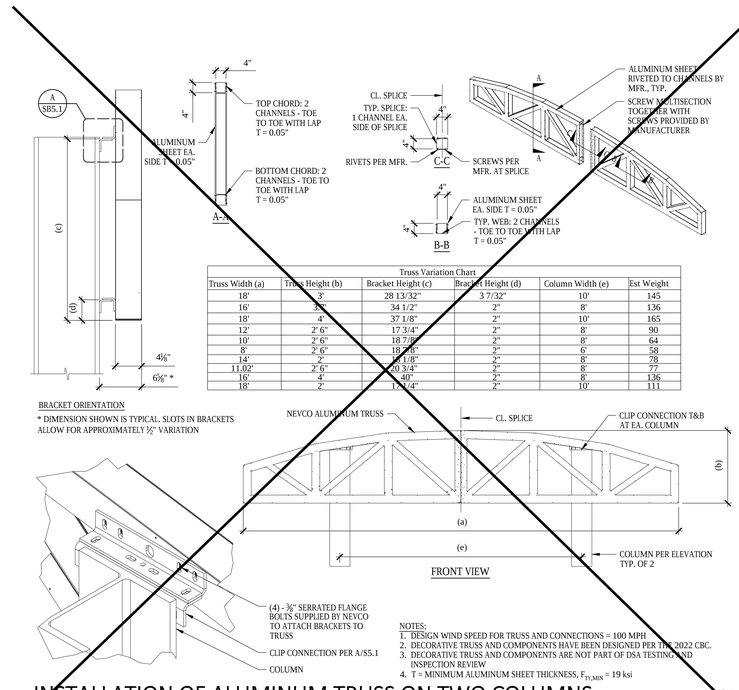
Variation Chart					
Truss Width (a)	Truss Height (b)	Bracket Height (c)	Bracket Height (d)	Column Spacing (e)	Est Weight
28'	4'	38"	43 1/2"	10'	257
24'	4'	32 1/4"	42 7/8"	8'	220
24'	3'	19 15/16"	30 15/32"	8'	165
20'	4'	25 5/8"	44 3/4"	8'	110

FRONT VIEW

NOTES:
1. DESIGN WIND SPEED FOR TRUSS AND CONNECTIONS = 100 MPH
2. DECORATIVE TRUSS AND COMPONENTS HAVE BEEN DESIGNED PER THE 2022 CBC.
3. DECORATIVE TRUSS AND COMPONENTS ARE NOT PART OF DSA TESTING AND INSPECTION REVIEW
4. T = MINIMUM ALUMINUM SHEET THICKNESS, $F_{TY,MIN}$ = 19 ksi

INSTALLATION OF ALUMINUM TRUSS ON THREE COLUMNS

N.T.S. — C



BRACKET ORIENTATION

* DIMENSION SHOWN IS TYPICAL. SLOTS IN BRACKETS ALLOW FOR APPROXIMATELY ½" VARIATION

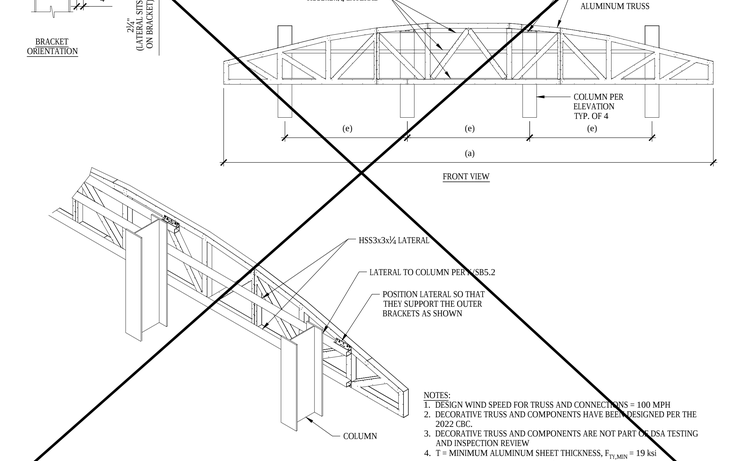
Truss Variation Chart					
Truss Width (a)	Truss Height (b)	Bracket Height (c)	Bracket Height (d)	Column Width (e)	Est Weight
18'	3'	28 13/32"	3 7/32"	10'	145
16'	3'	34 1/2"	2"	8'	136
18'	4'	37 1/8"	2"	10'	165
12'	2' 6"	17 3/4"	2"	8'	90
10'	2' 6"	18 7/8"	2"	8'	64
8'	2' 6"	18 7/8"	2"	6'	58
14'	2'	18 1/8"	2"	8'	78
11.02'	2' 6"	20 3/4"	2"	8'	77
16'	4'	40"	2"	8'	136
18'	2'	17 1/4"	2"	10'	111

FRONT VIEW

NOTES:
1. DESIGN WIND SPEED FOR TRUSS AND CONNECTIONS = 100 MPH
2. DECORATIVE TRUSS AND COMPONENTS HAVE BEEN DESIGNED PER THE 2022 CBC.
3. DECORATIVE TRUSS AND COMPONENTS ARE NOT PART OF DSA TESTING AND INSPECTION REVIEW
4. T = MINIMUM ALUMINUM SHEET THICKNESS, $F_{TY,MIN}$ = 19 ksi

INSTALLATION OF ALUMINUM TRUSS ON TWO COLUMNS

N.T.S. — A

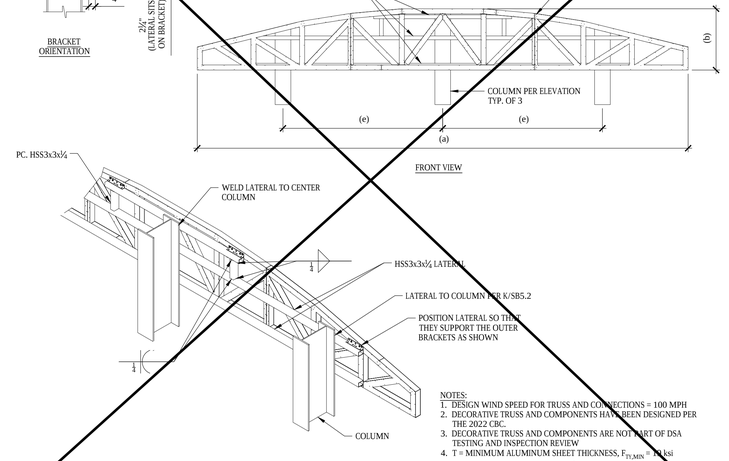


Variation Chart					
Truss Width (a)	Truss Height (b)	Bracket Height (c)	Bracket Height (d)	Column Spacing (e)	Est Weight
32'	4'	32 1/4"	42 7/8"	8'	294
36'	4'	15 1/2"	39 9/16"	10'	331

NOTES:
1. DESIGN WIND SPEED FOR TRUSS AND CONNECTIONS = 100 MPH
2. DECORATIVE TRUSS AND COMPONENTS HAVE BEEN DESIGNED PER THE 2022 CBC.
3. DECORATIVE TRUSS AND COMPONENTS ARE NOT PART OF DSA TESTING AND INSPECTION REVIEW
4. T = MINIMUM ALUMINUM SHEET THICKNESS, $F_{TY,MIN}$ = 19 ksi

INSTALLATION OF ALUMINUM TRUSS ON FOUR COL. w/ LATERAL

N.T.S. — E

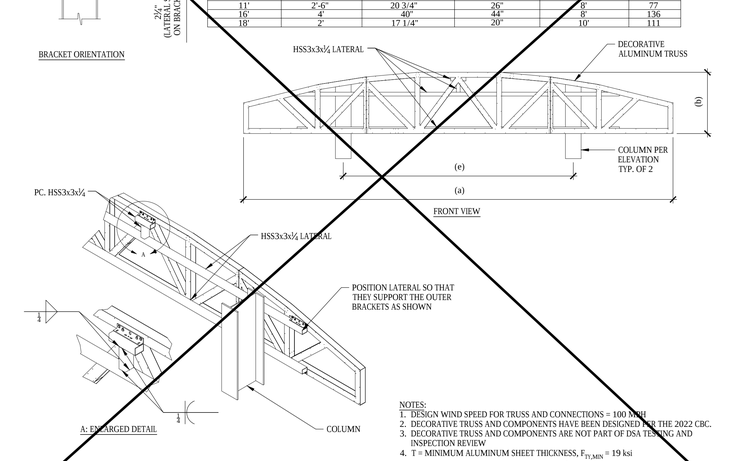


Variation Chart					
Truss Width (a)	Truss Height (b)	Bracket Height (c)	Bracket Height (d)	Column Spacing (e)	Est Weight
28'	4'	38"	43 1/2"	10'	257
24'	4'	32 1/4"	42 7/8"	8'	220
24'	3'	19 15/16"	30 15/32"	8'	165
20'	4'	25 5/8"	44 3/4"	8'	110

NOTES:
1. DESIGN WIND SPEED FOR TRUSS AND CONNECTIONS = 100 MPH
2. DECORATIVE TRUSS AND COMPONENTS HAVE BEEN DESIGNED PER THE 2022 CBC.
3. DECORATIVE TRUSS AND COMPONENTS ARE NOT PART OF DSA TESTING AND INSPECTION REVIEW
4. T = MINIMUM ALUMINUM SHEET THICKNESS, $F_{TY,MIN}$ = 19 ksi

INSTALLATION OF ALUMINUM TRUSS ON THREE COL. w/ LATERAL

N.T.S. — D



Truss Variation Chart					
Truss Width (a)	Truss Height (b)	Bracket Height (c)	Bracket Height (d)	Column Width (e)	Est Weight
18'	3'	28 13/32"	32"	10'	145
16'	3'-8½"	34 1/2"	40 3/8"	8'	136
18'	4'	37 1/8"	44"	10'	165
12'	2'-6"	17 3/4"	26"	8'	90
10'	2'-6"	18 7/8"	26"	8'	64
8'	2'-6"	18 7/8"	26"	6'	58
14'	2'	18 1/8"	20"	8'	78
11'	2'-6"	20 3/4"	26"	8'	77
16'	4'	40"	44"	8'	136
18'	2'	17 1/4"	20"	10'	111

NOTES:
1. DESIGN WIND SPEED FOR TRUSS AND CONNECTIONS = 100 MPH
2. DECORATIVE TRUSS AND COMPONENTS HAVE BEEN DESIGNED PER THE 2022 CBC.
3. DECORATIVE TRUSS AND COMPONENTS ARE NOT PART OF DSA TESTING AND INSPECTION REVIEW
4. T = MINIMUM ALUMINUM SHEET THICKNESS, $F_{TY,MIN}$ = 19 ksi

INSTALLATION OF ALUMINUM TRUSS ON TWO COL. w/ LATERAL

N.T.S. — B

APPLICATION# 02-122411

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER — MICHAEL E. PORTER — No. 5405 — STRUCTURAL — STATE OF CALIFORNIA

PE SEOR SEAL

DATE SIGNED: 08.09.2023

nevco
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
www.nevco.com

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122411 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2023

DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

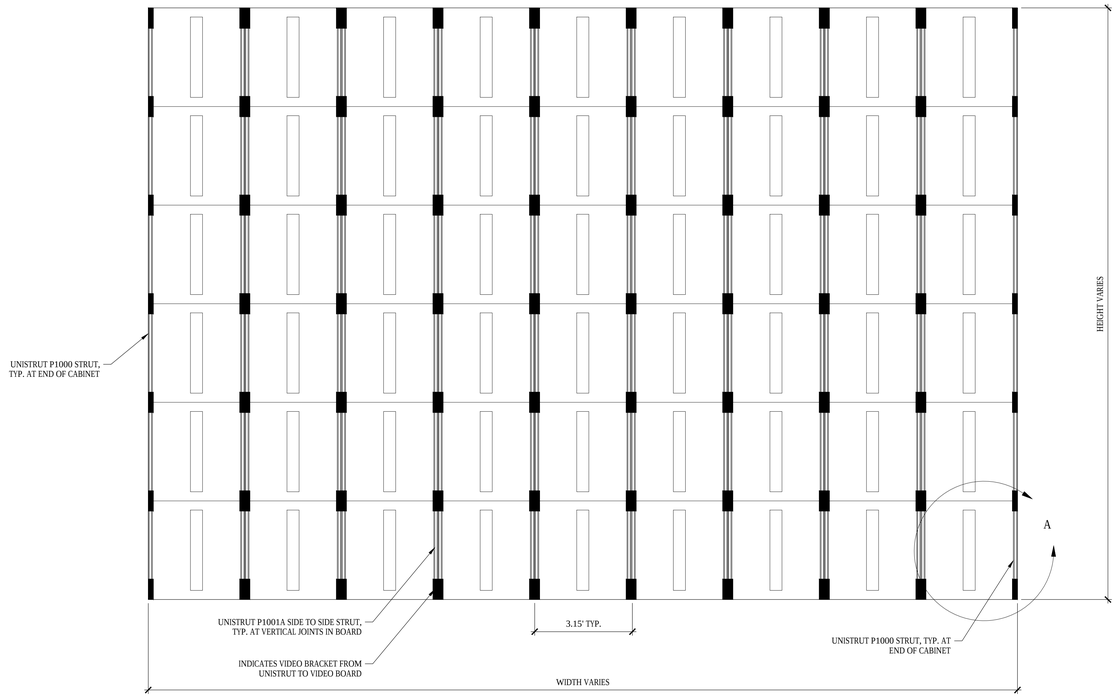
A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER — RAYMOND J. GALLORD — NO. S23184 — EXPIRES 3-31-26 — CIVIL — STATE OF CALIFORNIA

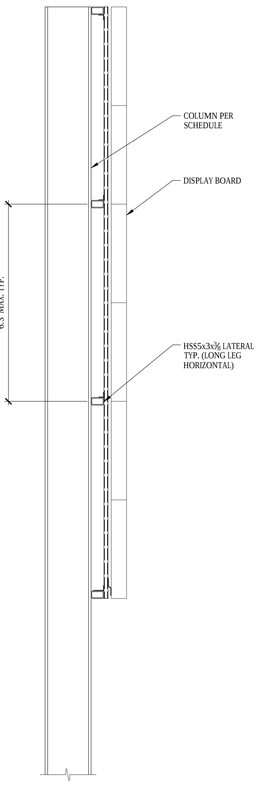
DECORATIVE ALUMINUM TRUSS ATTACHMENT DETAILS

SHEET INFORMATION

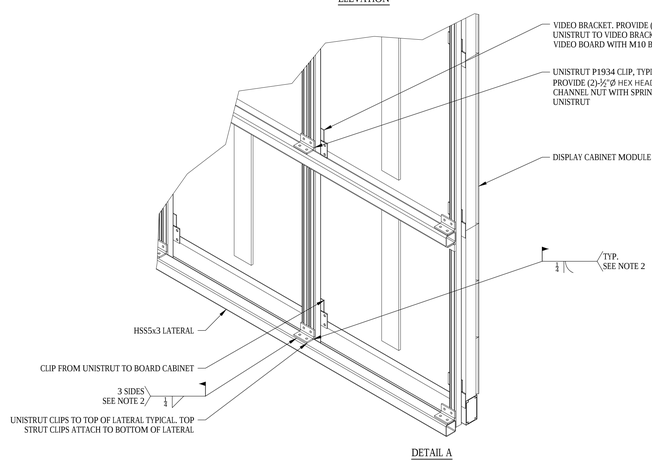
DATE	08.09.2023
DRAWN	JMK
CHECKED	MEP
SSG JOB #	S23109
SHEET	SB5.3



ELEVATION



SECTION

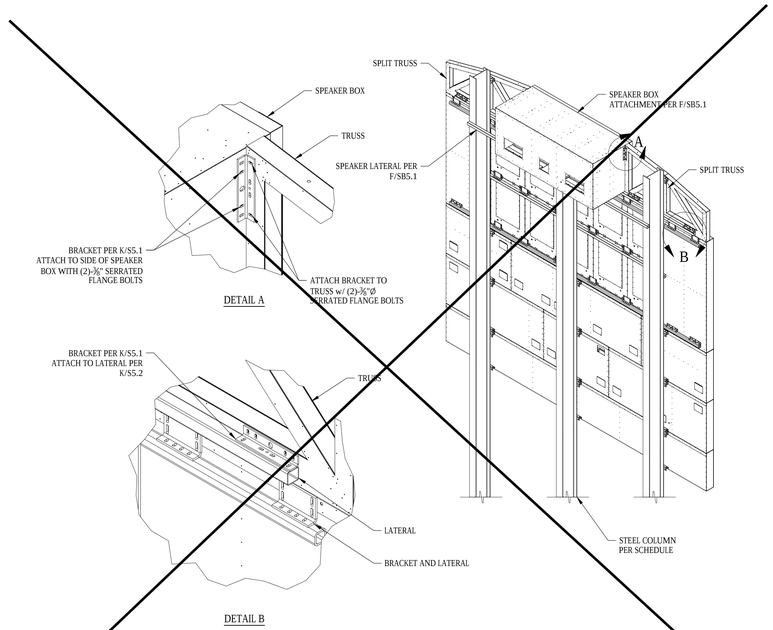


DETAIL A

NOTES: (#)
1. DESIGN OF SUPPORTS AND CONNECTIONS IS BASED ON A VIDEO DISPLAY WITH A WEIGHT OF 8 LB/SQ. FT. TO DETERMINE TOTAL VIDEO DISPLAY WEIGHT CONTACT NEVCO SCOREBOARDS
2. ALTERNATE OPTION TO BOLT CLIP TO LATERAL WITH ½" DIAMETER THROUGH BOLTS IN LIEU OF WELD

10mm VIDEO DISPLAY SUPPORT

N.T.S.



NOTES:
1. DETAILS APPLICABLE TO 3 COLUMN AND 4 COLUMN ASSEMBLIES

SPLIT DECORATIVE TRUSS FLANKING SPEAKER BOX

N.T.S.

APPLICATION# 02-122411

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

SSG structural engineers

REGISTERED PROFESSIONAL ENGINEER JAMES K. GIBSON No. 5405 STRUCTURAL STATE OF CALIFORNIA
DATE SIGNED: 08.09.2023
PE/SE/QR SEAL

nevco
301 East Harris Avenue, Greenville, Illinois 62246
Phone: (618) 664-0360
www.nevco.com

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123317 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/20/2023

DSA STAMP

PRE-CHECK (PC) DOCUMENT
CODE: 2022

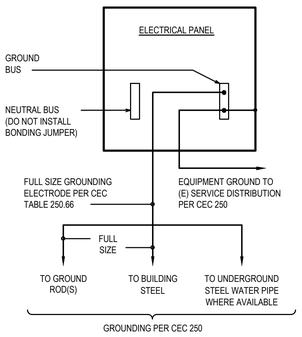
A separate project application for construction is required.

REGISTERED PROFESSIONAL ENGINEER GALILEO R. RAMOS NO. S23864 EXPIRES 3-31-26 STRUCTURAL CIVIL CALIFORNIA

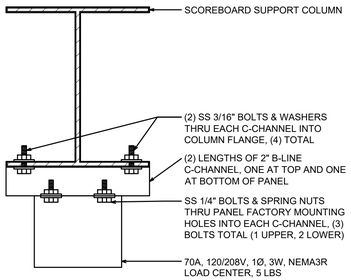
ALUMINUM TRUSS ATTACHMENT DETAILS & 10mm VIDEO DISPLAY SUPPORT

SHEET INFORMATION

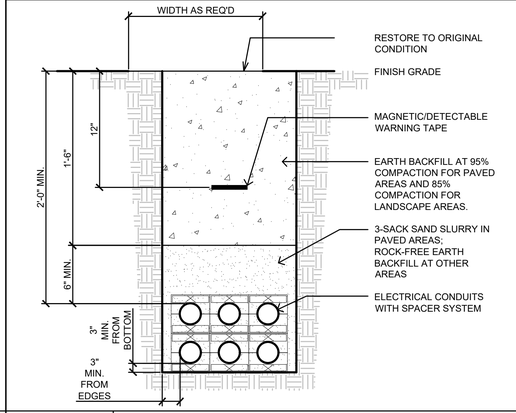
DATE	08.09.2023
DRAWN	JMK
CHECKED	MEP
SSG JOB #	S23109
SHEET	SB5.4



3 Panel Grounding Detail
No Scale



2 Panel Mounting Detail
No Scale



5 Trenching Detail
No Scale

ELECTRICAL EQUIPMENT ANCHORAGE NOTES

ALL ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16, CHAPTERS 13, 26 AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING ELECTRICAL UTILITY SERVICE. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORTS THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL ELECTRICAL COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

ELECTRICAL DISTRIBUTION BRACING NOTES

THE ELECTRICAL DISTRIBUTION SYSTEM SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16, SECTION 13.3 AS DEFINED IN ASCE 7-16, SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

OPTION 2: THE ELECTRICAL DISTRIBUTION SYSTEM IS DETAILED ON THE APPROVED DRAWINGS WITH SPECIFIC NOTES AND DETAILS.

ELECTRICAL GENERAL NOTES

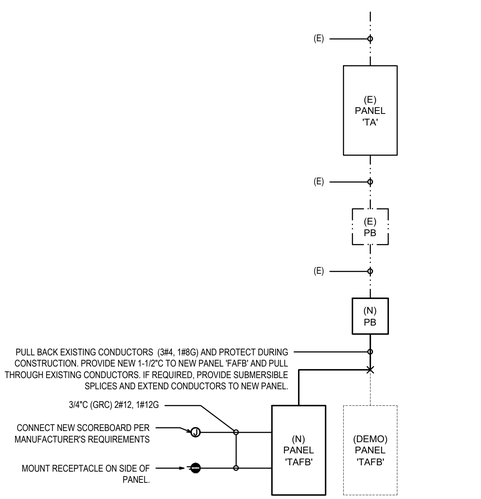
1. ALL WORK SHALL MEET THE LATEST ADOPTED ADDITIONS OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND ALL OTHER APPLICABLE REGULATIONS, WHICH INCLUDE:

CALIFORNIA BUILDING CODE	2022
CALIFORNIA ELECTRICAL CODE	2022
NON RESIDENTIAL CEC ENERGY STANDARDS	2022

2. NOTHING IN THE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
3. IT IS THE INTENTION OF THESE PLANS AND SPECIFICATIONS TO COVER EVERYTHING REQUIRED TO PROVIDE FOR COMPLETE AND OPERATIVE SYSTEMS. THE CONTRACTOR IS TO FURNISH LABOR, MATERIAL, TRANSPORTATION, EQUIPMENT, MISCELLANEOUS SERVICES, ETC. REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION IS TO BE INCLUDED, WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED.
4. THE CONTRACTOR SHALL EXAMINE THE SITE AND EXISTING CONDITIONS AND MAKE ALLOWANCES IN THE BID FOR ANY CONDITIONS NOT SHOWN ON THE ELECTRICAL DOCUMENTS.
5. THE PLANS AND SPECIFICATIONS ARE INTENDED TO BE USED AS CONSTRUCTION GUIDELINES AND ARE NOT THE TOTAL INSTRUMENT OF CONTRACT DOCUMENTS. IT IS NOT THE INTENTION OF ANY CONSTRUCTION PLANS TO DIVIDE WORK AMONG DIFFERENT TRADES. VERIFY THE SCOPE OF WORK WITH THE ARCHITECT AND THE GENERAL CONTRACTOR.
6. ELECTRICAL ROUTING IS DIAGRAMMATIC ONLY. ACTUAL ROUTING & PHYSICAL CONDITIONS MAY VARY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL ROUTING, CONNECTIONS, & PROVISION OF ALL APPURTENANCES NECESSARY FOR A COMPLETE & OPERATING SYSTEM.
7. ELECTRICAL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED (UL, CSA ETC.) PER CEC 110.2.
8. PROVIDE LABELING AND DIRECTORIES FOR ALL SWITCHBOARDS AND PANELBOARDS PER CEC 408.4.
9. ELECTRICAL EQUIPMENT SHALL HAVE A SHORT CIRCUIT CURRENT RATING CAPABLE OF WITHSTANDING THE AVAILABLE SHORT CIRCUIT CURRENT PER CEC 110.9.
10. PROVIDE MINIMUM 30" WIDE x 78" HIGH x 36" DEEP [42" DEEP] WORK CLEARANCES IN FRONT OF PANELS, SERVICE OR EQUIPMENT RATED AT 120/208V 3Ø 4W [277/480V 3Ø 4W] PER CEC 110.26.
11. ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUIT OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE MOUNTED BETWEEN 15" AFF AND 48" AFF AND SHALL COMPLY WITH CBC SECTION 11B-308. THE LOW REACH SHALL BE MEASURED TO THE BOTTOM OF THE OUTLET BOX AND THE HIGH REACH SHALL BE MEASURED TO THE TOP OF THE OUTLET BOX. IF THE REACH IS OBSTRUCTED (E.G. BY CASEWORK, COUNTERS, ETC.), RECEPTACLES SHALL BE LOCATED WITHIN THE REACH RANGES SPECIFIED IN CBC 11B-308.2.2 AND 11B-308.3.2.
12. CONTROLS OR SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF A ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT SHALL BE MOUNTED BETWEEN 15" AFF AND 48" AFF AND SHALL COMPLY WITH CBC SECTION 11B-308. THE LOW REACH SHALL BE MEASURED TO THE BOTTOM OF THE OUTLET BOX AND THE HIGH REACH SHALL BE MEASURED TO THE TOP OF THE OUTLET BOX. IF THE REACH IS OBSTRUCTED (E.G. BY CASEWORK, COUNTERS, ETC.), SWITCHES AND CONTROLS SHALL BE LOCATED WITHIN THE REACH RANGES SPECIFIED IN CBC 11B-308.2.2 AND 11B-308.3.2.
13. ALL WALL AND SURFACE MOUNTED FIXTURES PROTRUDING IN THE PATH OF TRAVEL (POT) OR COMMON PEDESTRIAN WAYS SHALL COMPLY WITH CBC 11B-307.2, OR SHALL BE MOUNTED LESS THAN 27" AFF OR GREATER THAN 80" AFF, OR SHALL BE PROVIDED WITH A BARRIER CONFORMING TO CBC 11B-307.4.
14. WIRING FOR 120/208V AND 277/480V SYSTEMS SHALL BE MIN. #12 AWG THHN/THWN-2 COPPER.
15. FEEDERS SIZE #4 AND LARGER SHALL BE MEGGER TESTED. TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER.
16. COLORS/FINISHES/MATERIALS FOR ALL ELECTRICAL DEVICES, PLATES, LIGHT FIXTURES, ETC. SHALL BE CHOSEN BY THE ARCHITECT.
17. EXISTING EQUIPMENT TO BE REMOVED AND/OR REPLACED SHALL BE DELIVERED TO THE DISTRICT MAINTENANCE DEPARTMENT OR DISPOSED OF, AT THE DISCRETION OF THE DISTRICT.
18. CALL USA UNDERGROUND ALERT AND VERIFY WITH DISTRICT THE DESIRED ROUTING AND LOCATIONS OF UNDERGROUND CONDUITS AND STRUCTURES PRIOR TO TRENCHING.
19. ALL UNDERGROUND CONDUITS SHALL HAVE MINIMUM 24" COVER. TRENCH PER DETAIL 5/E-1. INSTALL GALVANIZED RIGID STEEL RISERS & ELBOWS WHERE RISERS OCCUR. WRAP GRS BELOW GRADE OR PROVIDE PVC COATED GRS. EXPOSED CONDUIT SHALL BE GRS TO 8'-0", THEN EMT ABOVE AS APPROPRIATE. UNDER NO CIRCUMSTANCE SHALL PVC CONDUIT BE INSTALLED ABOVE GRADE.
20. CONDUIT INSTALLED ABOVE GRADE SHALL BE MIN. 3/4" TRADE SIZE. CONDUIT BELOW GRADE SHALL BE MIN. 1" TRADE SIZE.
21. INCLUDE ALL WORK REQUIRED TO INVESTIGATE, DEMOLISH, & RECONNECT EXISTING ITEMS.
22. ALL LOW VOLTAGE EQUIPMENT SHALL BE DEENERGIZED PRIOR TO DEMO WORK. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO LIVE EQUIPMENT.

ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION	NOTES
	POLE WITH POST TOP AREA LUMINAIRE	
	POLE WITH AREA LUMINAIRE	
	RECESSED TROFFER LIGHT FIXTURE	
	SURFACE CEILING LIGHT FIXTURE	
	RECESSED DOWN LIGHT	
	WALL LIGHT	
	EXIT SIGN, CEILING	
	EXIT SIGN, WALL	AT +80" AFF
	EMERGENCY LIGHT FIXTURE	PROVIDE UNSWITCHED HOT CONDUCTOR TO BATTERIES
	SWITCHBOARD	REFER TO POWER SINGLE LINE DIAG.
	POWER PANEL	REFER TO PANEL SCHEDULE
	TERMINAL CABINET	
	DISCONNECT SWITCH, FUSIBLE, WP	REFER TO MECH. PLANS & SPECS.
	COMBO STARTER/DISCONNECT SWITCH, WP	REFER TO MECH. PLANS & SPECS.
	JUNCTION BOX	4-11/16" SQUARE BOX & COVER PLATE MIN.
	MOTOR	REFER TO MECH. PLANS AND SPECS.
	DUPLEX CONVENIENCE OUTLET AT +18" AFF TO CENTER OF BOX, U.O.N.	20A SPEC. GRADE, NEMA GROUNDED
	QUADPLEX CONVENIENCE OUTLET AT +18" AFF TO CENTER OF BOX, U.O.N.	20A SPEC. GRADE, NEMA GROUNDED
	GFI DUPLEX OUTLET AT +18" AFF TO CENTER OF BOX, U.O.N.	20A SPEC. GRADE, NEMA GROUNDED
	WP, GFI DUPLEX OUTLET AT +18" AFF TO CENTER OF BOX, U.O.N.	20A SPEC. GRADE, NEMA GROUNDED
	DATA OUTLET (RJ-45 CAT6) WITH 2 JACKS AT +18" AFF TO CENTER OF BOX, U.O.N. 2 BLUE JACKS & CABLES	HOMERUN CABLES TO IDF.
WAP-C	(2) WAP DATA JACKS (RJ-45 CAT6A) MOUNTED IN ATTIC SPACE 2 YELLOW JACKS & CABLES	HOMERUN CABLES TO IDF.
	WALL MOUNT VoIP OUTLET (RJ-45 CAT6) AT +45" AFF TO CENTER OF BOX, U.O.N. 1 WHITE JACK & CABLE	HOMERUN CABLES TO IDF.
	WALL MOUNT DATA/COMM OUTLET AT +18" AFF TO CENTER OF BOX, U.O.N. 2 BLUE AND 1 WHITE JACKS & CABLES	HOMERUN CABLES TO IDF.
	WIREMOLD 5400 SURFACE WIREWAY	
S	CEILING MOUNT PA SPEAKER	MATCH EXISTING SYSTEM COMPONENTS
S	WALL MOUNT PA SPEAKER IN SURFACE ENCLOSURE	MATCH EXISTING SYSTEM COMPONENTS
AV	AUDIO/VISUAL INPUT WITH HDMI/VGA/ 3.5MM AUDIO/USB JACKS AND WALL PLATE AT +18" AFF TO CENTER OF BOX, U.O.N.	INSTALL CABLES BETWEEN TEACHER STATION AND PROJECTOR. SEE DETAIL 6/E-2.
	ANALOG CLOCK, BATTERY POWERED	VERIFY COMPATIBILITY WITH EXISTING SYSTEM
MDF	MAIN DISTRIBUTION FRAME (MDF)	SEE SCHOOL DISTRICT STANDARD SPECIFICATIONS
IDF	INTERMEDIATE DISTRIBUTION FRAME (IDF)	SEE SCHOOL DISTRICT STANDARD SPECIFICATIONS
PT	P.A. SYSTEM TERMINAL BLOCK	SEE SCHOOL DISTRICT STANDARD SPECIFICATIONS
PA	P.A. SYSTEM HEAD END	SEE SCHOOL DISTRICT STANDARD SPECIFICATIONS
TT	TEL. SYSTEM TERMINAL BLOCK	WHERE EXISTING
TEA	TEL. SYSTEM HEAD END	WHERE EXISTING
FOS	FIBER OPTIC SPLICE LOCATION	SEE SCHOOL DISTRICT STANDARD SPECIFICATIONS
CP	CAT6 PATCH PANEL	WHERE EXISTING
FAT	FIRE ALARM SLC & NAC TERMINAL BLOCKS	LOCATION FOR REFERENCE. SEE F.A. PLANS.
FXP	FIRE ALARM EXPANDER PANEL	SEE F.A. PLANS
FCP	FIRE ALARM CONTROL PANEL	SEE F.A. PLANS
EVAC	EMERGENCY VOICE/ALARM COMMUNICATION PANEL	SEE F.A. PLANS
	EXISTING WIRING TO REMAIN	
	WIRING BELOW GRADE	3/4" CONDUIT MIN.
	WIRING IN WALL OR CEILING	3/4" CONDUIT MIN.
LV	LOW VOLTAGE WIRING	
	CONDUIT RISER	3/4" CONDUIT MIN.
	FLEXIBLE CONDUIT	3/4" CONDUIT MIN.
	CONDUIT STUB AND CAP	3/4" CONDUIT MIN.
#10	HASH MARKS DENOTES QTY. OF CONDUCTORS WIRE SIZE INDICATED, IF OTHER THAN #12 AWG	3/4" CONDUIT MIN.
A-2	HOME RUN (TO PANEL "A", CIRCUIT "15")	3/4" CONDUIT MIN.
(E)	"EXISTING"	
UON	"UNLESS OTHERWISE NOTED"	
WP	"WEATHERPROOF" / NEMA 3R	
GFI	"GROUND FAULT INTERRUPTER"	



1 Single Line Diagram
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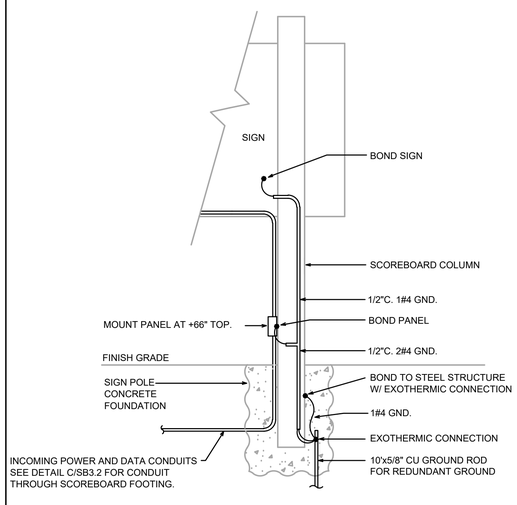

4 Scoreboard Grounding Detail
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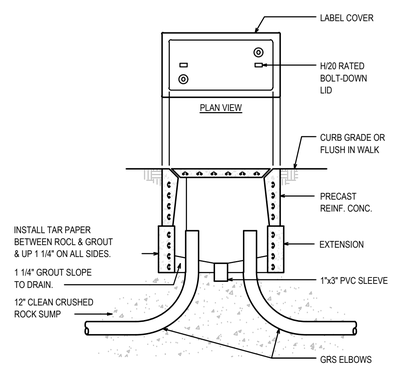


NOTE:
COORDINATE WITH SCHOOL DISTRICT ALL LOCATIONS AT UNDERGROUND PULL BOXES PRIOR TO INSTALLATION.

6 Pull Box Detail
No Scale

APPROVALS
APPLICATION # 02-121895

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 02-122411 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 06/25/2024

DATE: 10/17/2023

MADERA SOUTH HIGH SCHOOL
FOOTBALL SCOREBOARD
MADERA, CA 93637

REVISIONS

BrooksRansom ASSOCIATES
7415 N. PALM AVE. STE 100 | FRESNO, CA 93711
(559) 449-8444 OFFICE | (559) 449-8404 FAX

REGISTERED PROFESSIONAL ENGINEER C. SCOTT DAVIDSON E17850 ELECTRICAL STATE OF CALIFORNIA

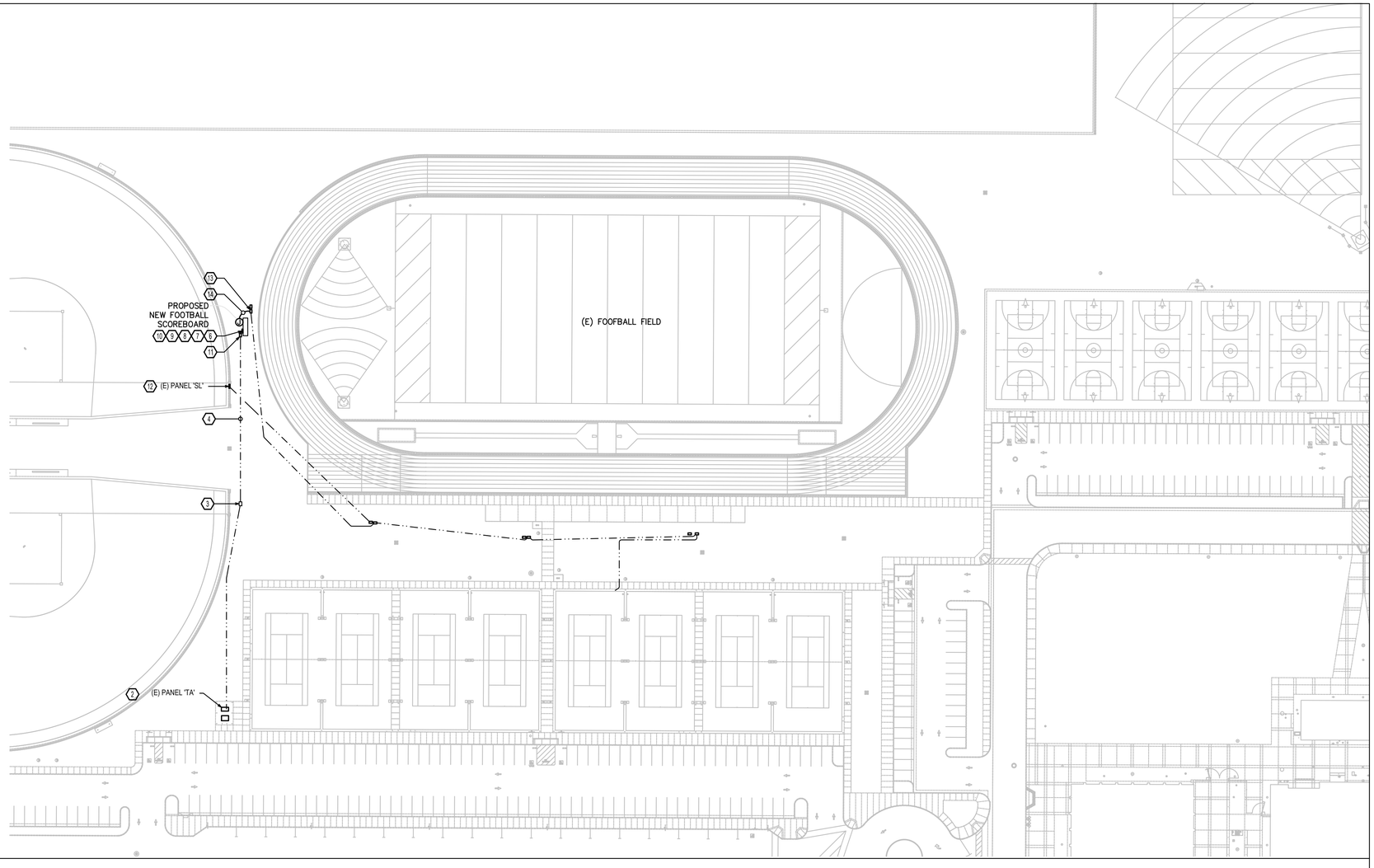
Hardin-Davidson Engineering
356 Pollasky Ave. Suite 200
Clovis, CA 93612
559.323.4995 tel
559.323.4928 fax

SHEET: E-1
PROJECT 23314

7 June 2024 8:20 AM moy Z:\Clients\BrooksRansom Associates\23134 – Modera USD Scoreboards (MHS, MSHS)\CAD Files\23134 – Modera South Football – Electrical – v2.dwg pdrick

KEY NOTES

1. NOT USED.
2. EXISTING PANEL 'TA' TO REMAIN. 200A, 120/208V, 3Ø, 4W, 10KAIC, NEMA 3R.
3. EXISTING PULL BOX TO REMAIN. VERIFY LOCATION IN FIELD.
4. EXISTING SCOREBOARD PANEL FEEDER TO REMAIN. 1-1/2"C. 3#4, 1#8G. EXTEND FEEDER IF REQUIRED. PROVIDE SUBMERSIBLE SPLICES.
5. NOT USED.
6. DEMO EXISTING PANEL 'TAFB' FROM STEEL SCROREBOARD SUPPORT COLUMN. DISCONNECT EXISTING FEEDER AND PULL BACK TO LAST PULL BOX AND PRESERVE FOR RECONNECTION TO NEW PANEL.
7. PROVIDE AND INSTALL NEW LOAD CENTER 'TAFB'. 70A, 4 CKT, 120/208V, 1Ø, 10KAIC, NEMA 3R. SQ.D #QO24L70RB (OR APPROVED EQUAL) PROVIDE (2) 20A/1P CIRCUIT BREAKERS. RECONNECT EXISTING CONDUCTORS. SEE DETAIL 1/E-1, 2/E-1, 3/E-1, 4/E-1, 5/E-1.
8. DISCONNECT EXISTING SCOREBOARD POWER AND DATA/CONTROL. REMOVE EXISTING CONDUCTORS AND EXPOSED CONDUIT BACK TO LAST PULL BOX.
9. POWER CONNECTION BY SCOREBOARD SUPPLIER. NEVCO MODEL #3617, 120V, 6.2A. 3/4"C. 2#12, 1#12G. SEE DETAIL 4/E-1.
10. PROVIDE RECEPTACLE +42", 20A, 120V, GFCI-PROTECTED, WEATHER-RESISTANT RECEPTACLE WITH WEATHERPROOF WHILE-IN-USE COVER. 3/4"C. 2#12, 1#12G. SEE SINGLE LINE DIAGRAM 1/E-1.
11. INTERCEPT EXISTING SCOREBOARD PANEL FEEDER AND CONDUIT ±6' FROM SCOREBOARD AND PROVIDE NEW 10X17, H20-RATED PULLBOX WITH 12" EXTENSION AND COVER. PROVIDE 1-1/2" TO SCOREBOARD PANEL 'TAFB'. SEE DETAILS 5/E-1 AND 6/E-1.
12. EXISTING INFRASTRUCTURE SHOWN FOR REFERENCE ONLY.
13. EXISTING LOW VOLTAGE PULL BOX
14. PROVIDE 2"C FROM NEW SCOREBOARD TO EXISTING L.V. PULL BOX FOR SCOREBOARD CONTROL. WIRING BY SCOREBOARD SUPPLIER.



1 PARTIAL ELECTRICAL SITE PLAN

-

SCALE: 1"= 50'-0"

APPROVALS:

APPLICATION #
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