

Addendum No. 03

November 14, 2022



Clovis East Soccer Complex

OWNER: Clovis Unified School District
1450 Herndon Ave. Clovis, CA. 93611

PREPARED BY: PBK Architects, Inc.
7790 N. Palm Avenue
Fresno, California 93711

PBK PROJECT NO.: S2103100AR
DSA FILE NO.: -
DSA APPLICATION NO.: 02-120099, 02-120158, 02-120503

NOTICE TO BIDDERS

- A. Receipt of this Addendum shall be acknowledged on the Proposal Form.
- B. This Addendum forms part of the Contract Documents for the above referenced project and shall be incorporated integrally therewith.
- C. Each proposer shall make necessary adjustments and submit their proposal with full knowledge of all modifications, clarifications, and supplemental data included therein. Where provisions of the following supplemental data differ from those of the original Contract Documents, this Addendum shall govern.

BLEACHERS/ STADIUM LIGHTING/ SCOREBORAD DRAWINGS:

- 3-01 Sheet E0.1 – ELECTRICAL SHEET INDEX, LEGEND & NOTES**, revise as follows:
Add Sheet. See attached
- 3-02 Sheet E1.0 – ELECTRICAL SITE PLAN & PRESS BOX PLAN**, revise as follows:
Revised plans. See attached.
- 3-03 Sheet E6.1 – ELECTRICAL SINGLE LINE DIAGRAM**, revise as follows:
Revised diagram. See attached.
- 3-04 Sheet EX1 – ELECTRICAL DETAILS**, revise as follows:
Adde sheet. See attached.

SPECIFICATION SECTIONS:

- 3-05 Specification Section 07 54 19 – Adhered Single Ply**, revise as follows:
Remove spec section 07 54 19 with spec section 07 54 20. See attached
- 3-06 PRE-BID RFI:**
 - 1. See attached RFI log.

END OF ADDENDUM NO. 3

Addendum No. 03

November 14, 2022



Clovis East Soccer Complex

John Hamilton Smith

NAME OF ARCHITECT, Architect

ELECTRICAL NOTES

EQUIPMENT ANCHORAGE NOTES

MEP COMPONENT ANCHORAGE NOTES

ALL MECHANICAL, PLUMBING AND 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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. PERMANENTLY ATTACHED SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- 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 MECHANICAL AND 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 DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

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

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING 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 ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTES

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN GENERAL SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTION 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 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 START OF AND DURING THE HANGING AND BRACING OF DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E).

MP □ MD □ PP □ E ☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP □ MD □ PP □ E □ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #).

LIST OF APPLICABLE CODES

2019 CALIFORNIA ADMINISTRATIVE CODE (CAC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1

2019 CALIFORNIA BUILDING CODE (CBC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 1 & 2

2019 CALIFORNIA ELECTRICAL CODE (CEC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

2019 CALIFORNIA ENERGY CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 6

2019 CALIFORNIA FIRE CODE (FC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 9

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

2016 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE
WITH CA AMENDMENTS

GENERAL NOTES

- UNLESS SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS, OUTLETS LOCATED AT COUNTERS AND CABINETS SHALL BE MOUNTED AS SHOWN ON ARCHITECTURAL DETAILS AND ELEVATIONS, OR AS DIRECTED BY ARCHITECT.
- COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO DIVISION 26 ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE.
- REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.
- CIRCUITING
 - BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT BX IS ALLOWED AND WHETHER "THROUGH-FIXTURE" OR "DOCTOPUS" (EMT WITH FLEXIBLE PIPES) TYPE LIGHTING BRANCH CIRCUITING IS REQUIRED.
 - WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANEL SCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED.
 - BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO DIVISION 26 SPECIFICATIONS UNDER SECTION ENTITLED "ELECTRICAL WIRING" FOR REQUIREMENTS.
 - THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOME RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.
- WHEN REMOVING EXISTING ELECTRICAL WORK WHERE OTHER ITEMS REMAIN ON THE SAME CIRCUIT, THE CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO MAINTAIN CIRCUIT CONTINUITY.
- ALL ITEMS NOTED TO BE REMOVED ARE TO REMAIN THE PROPERTY OF THE OWNER; HOWEVER, CONTRACTOR SHALL REMOVE FROM JOB SITE ALL MATERIAL NOT RETAINED BY OWNER.
- FIELD VERIFY CONDITION OF, AND MODIFICATIONS AND ADDITIONS TO, ALL EXISTING ELECTRICAL FIXTURES, PANELS, WIRING, ETC.
- CONTRACTOR SHALL FIELD VERIFY EXISTING BRANCH CIRCUIT LOADING WHEN MAKING MODIFICATIONS AND/OR ADDITIONS TO THAT CIRCUIT. IF NEW WORK WOULD OVERLOAD EXISTING CIRCUIT, CONTRACTOR SHALL LOCATE ANOTHER EXISTING CIRCUIT (THE CLOSEST), WHICH WOULD NOT BE OVERLOADED UPON ADDING NEW LOAD, AND SHALL TIE NEW LOAD INTO THAT CIRCUIT.
- CONTRACTOR TO REFER TO ARCHITECTURAL PHASING PLANS AND HAVE A GOOD UNDERSTANDING OF SCOPE OF PROJECT PRIOR TO COMMENCEMENT OF WORK.
- LUMINAIRE SUPPORT IN SUSPENDED CEILING:
 - PROVIDE MEANS OF SUPPORT FOR LUMINAIRES PER NEC 410-16. T BAR CLIPS SHALL BE INSTALLED ON THE LUMINAIRE AND SHALL BE FIELD SECURED TO THE INVERTED CEILING TEES SO THAT THE LUMINAIRE IS SECURELY FASTENED TO THE CEILING SYSTEM FRAMING MEMBERS.
 - CEILING TILES SHALL NOT BEAR THE WEIGHT OF LUMINAIRES. SURFACE MOUNT LUMINAIRES, RECESSED DOWNLIGHTS, LIGHT TRACK, EXIT SIGN, ETC. SHALL BE SUPPORTED BY PROPER FRAMES OR OTHER ATTACHMENT TO MAIN CEILING SYSTEM GRID OR BUILDING STRUCTURE ABOVE CEILING.
 - LUMINAIRES SHALL BE CENTERED IN CEILING TILE.
 - LUMINAIRE SHALL HAVE FLANGE OR TRIM RING FOR CLOSURE OF CEILING CUTOUT OR OPENING.
 - FIRE-RATED CEILING ASSEMBLY: FOR LUMINAIRES TO BE FLUSH-MOUNTED INTO A FIRE-RATED CEILING OR SURFACE MOUNTED TO A FIRE-RATED CEILING, INSTALL WITH INDEPENDENT, SECURE SUPPORT RACEWAY, CABLE ASSEMBLIES, BOXES AND FITTINGS LOCATED ABOVE A FIRE-RATED FLOOR/CEILING OR ROOF CEILING ASSEMBLY SHALL NOT BE SECURED TO, OR SUPPORTED BY, THE CEILING ASSEMBLY INCLUDING THE CEILING SUPPORT WIRES. PROVIDE AN INDEPENDENT MEANS OF SECURE SUPPORT. INDEPENDENT SUPPORT WIRES SHALL BE DISTINGUISHABLE BY COLOR, TAGGING, OR OTHER EFFECTIVE MEANS FROM THOSE THAT ARE PART OF THE FIRE-RATED DESIGN.
- CONTRACTOR SHALL FIELD VERIFY ANY EXISTING UNDERGROUND PIPING, WIRING OR OTHER FACILITIES PRIOR TO TRENCHING, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY INSTALLATION OF NEW WORK.
- THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, CEC, ALL STATE AND LOCAL CODES AND AMENDMENT.

UL LISTINGS NOTE

ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL) AND BEAR THEIR LABEL OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY.

ALL EQUIPMENT/DEVICES INSTALLED RECESSED IN FIRE RATED CEILING OR WALLS SHALL BE ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE CEILING OR WALL.

STRUCTURAL NOTE

UNLESS SPECIFICALLY SHOWN ON THESE PLANS, STRUCTURAL MEMBERS SHALL NOT BE CUT, DRILLED, OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

DIAGRAMMATIC NOTE

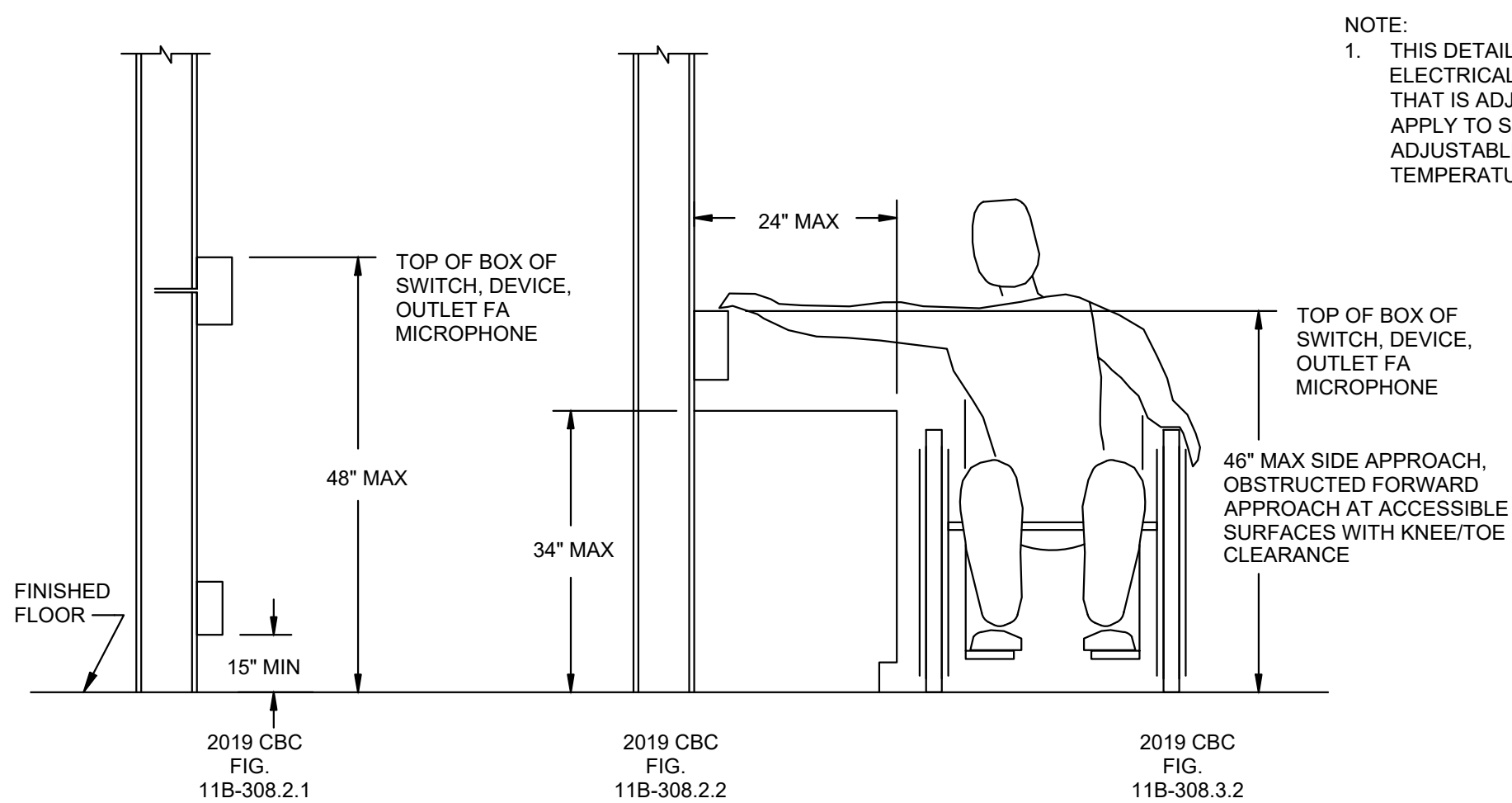
DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE DETAILED CONDUIT ROUTING OR LENGTHS REQUIRED FOR COMPLETE INSTALLATION. ROUTING OF RACEWAYS SHALL BE AT THE OPTION OF THE CONTRACTOR BUT SHALL BE IN STRICT COMPLIANCE WITH STRUCTURAL REQUIREMENTS, CONTRACT DOCUMENTS AND SPECS UNLESS OTHERWISE NOTED. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES. DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS ANY ELECTRICAL ARCHITECTURAL, STRUCTURAL AND/OR MECHANICAL ITEMS OR FEATURES. REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR FEATURES, REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR DIMENSIONS.

DEVICE LOCATION NOTE

THE LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TO INSTALLATIONS. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED IN WALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN, UNLESS OTHERWISE NOTED. ELECTRICAL DEVICES SHALL BE MOUNTED PER "ACCESSIBLE DEVICE MOUNTING HEIGHT" DETAIL.

COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT, DISCONNECT SWITCHES, STARTERS, WIRING, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS SHALL BE PROVIDED THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGHING IN ALL CONDUIT TO THIS EQUIPMENT.

MOUNTING OVER OBSTRUCTION DETAIL



ELECTRICAL SYMBOL LEGEND

REMODEL

- (E) EQUIPMENT WITH "E" ADJACENT IS EXISTING TO REMAIN.
- (R) EXISTING EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY DISCONNECTED AND REMOVED.
- (RR) EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.
- (ER) EQUIPMENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.
- NO TAG INDICATES NEW EQUIPMENT.
- (E) PNL-CKT CIRCUIT DESIGNATION WITH PREFIX "(E)" DENOTES EXISTING CIRCUIT AND EQUIPMENT IS TO REMAIN.

EQUIPMENT

- +42" A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE
- MOTOR
- DISCONNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED. "NF" INDICATES NON-FUSIBLE. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED. FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY. ALL DISCONNECT SWITCHES SHALL BE 30NF/3 UNLESS OTHERWISE NOTED
- SINGLE CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE
- MAGNETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE. STARTER NEMA SIZE SHALL BE "NEMA 1" UNLESS OTHERWISE NOTED
- COMBINATION DISCONNECT SWITCH / MOTOR CONTROLLER
- CONTACTOR
- PANELBOARD
- SWITCHBOARD / DP
- TRANSFORMER
- GROUNDING CONNECTION TO GROUNDING ELECTRODE AS DEFINED IN NEC ARTICLE 250
- BELL. "WP" INDICATED OUTDOOR RATED

TELEPHONE/DATA

- DATA OUTLET LOCATION(S) INSTALLED ON WALL. ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT PATHWAY FROM EACH LOCATION TO THE NEAREST ACCESSIBLE CEILING SPACE TO A 1-GANG BACK BOX. COORDINATE DATA AND POWER LOCATIONS SO THAT DATA AND POWER ARE AT THE SAME HEIGHT AND IN CLOSE PROXIMITY. CONSISTS OF (2) ACTIVE CAT6 JACKS UNLESS OTHERWISE NOTED.
- DATA OUTLET(S) INSTALLED IN CEILING. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A 1-GANG BACK BOX WITH A 1" CONDUIT PATHWAY FROM BACK BOX TO NEAREST ACCESSIBLE CEILING SPACE.
- DATA OUTLET INSTALLED IN CEILING, SIMILAR TO ABOVE, FOR WIRELESS ACCESS POINT.
- DATA OUTLET(S) INSTALLED IN FLOOR BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A FLOOR BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL (1) 1" CONDUIT PATHWAY FROM NEAREST ACCESSIBLE CEILING SPACE TO FLOOR BOX LOCATION SHOWN ON PLANS. COORDINATE WITH OTHER DISCIPLINES AND SHARE COMMON FLOOR TRENCH WHERE APPLICABLE.
- COMBINED POWER/DATA FLOOR BOX. SEE NOTES FOR FLOOR MOUNTED DATA DEVICE AND FLOOR MOUNTED POWER DEVICE FOR MORE INFORMATION.
- 360 DEGREE CEILING MOUNTED MOTION DETECTOR.
- WALL MOUNTED MOTION DETECTOR MOUNTED AT HEIGHT INDICATED ON DRAWINGS. (PROVIDE WIRE GUARD FOR ALL DEVICES MOUNTED IN GYMNASIUM AREAS).
- MAGNETIC DOOR CONTACT POSITION SWITCH LOCATED AT ALL EXTERIOR DOORS AND ROOF HATCHES.
- INTRUSION DETECTION SYSTEM ARM/DISARM KEYPAD WITH LOCKING VANDAL RESISTANT COVER.
- ACCESS CONTROL CARD READER
- COMBINED WALL MOUNTED INTERCOM SPEAKER (CABLING CONTRACTOR SHALL PROVIDE (1) CAT6 CABLE ROUTED TO NEAREST MDF/IDF) AND CLOCK (CABLING CONTRACTOR SHALL PROVIDE (1) CAT6 CABLE ROUTED TO NEAREST MDF/IDF)

POWER OUTLETS

- 20A-125V DUPLEX RECEPTACLE
 - 20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE. "WP" INDICATES WEATHER PROOF DEVICE
 - 20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP. REFER TO ARCHITECT FOR EXACT HEIGHT ABOVE COUNTER
 - 20A-125V CONTROLLED DUPLEX RECEPTACLE
 - 20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE
 - 20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS
 - 20A-125V FOURPLEX RECEPTACLE. SAME SYMBOLOGY AS DUPLEX RECEPTACLE
 - SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED). "C" INDICATES CLOCK OUTLET
 - 20A-125V FLUSH FLOOR DUPLEX RECEPTACLE. 20A WHEN INDICATED OR IF BRANCH CIRCUIT SERVES ONLY SINGLE DUPLEX. PROVIDE CARPED FLANGE WHERE APPLICABLE
- CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. SEE PANEL SCHEDULES FOR INFORMATION.

LEGEND NOTES

- EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.
- DASHED OR SCREEN LINEWORK GENERALLY INDICATES EXISTING EQUIPMENT.
- LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCH LINE OR DEFINES AREA FOR SPECIAL NOTE.
- UNLESS INDICATED OTHERWISE, ALL EQUIPMENT SHOWN IS BE CONSIDERED NEW.

CIRCUIT RELATED

LIGHTING OR POWER CIRCUIT(S). ARROW INDICATES HOME RUN. LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE. DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT. "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT. PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.

NOTE: HOMERUN INDICATES INSTALLATION OF NEW WIRE AND CONDUIT (#12 WIRE, 3/4" C. UNLESS OTHERWISE NOTED) FROM SOURCE PANELBOARD TO LOAD. HOMERUN INDICATES CONNECTION OF NEW LOADS TO EXISTING CIRCUITS IN LIEU OF PANELBOARD WHERE NOTED ON PLANS.

- JUNCTION BOX
- GROUNDING FIXTURE

LIGHTING FIXTURES

- LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, CROSS HATCHING INDICATES FIXTURE ON EMERGENCY SYSTEM, FOR SOLID CIRCLE WITHIN FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL
- STRIP TYPE LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE ATTACHED TO FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL
- LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL
- DESIGNATES FIXTURE ON EMERGENCY POWER. RE: LIGHTING PLAN NOTES AND FIXTURE SCHEDULE NOTES FOR ADDITIONAL INFORMATION
- WALL OR BRACKET MOUNTED FIXTURE OR DEVICE
- EXIT LIGHT FIXTURE. LETTER INDICATES TYPE, NUMBER INDICATES CIRCUIT, NUMBER AND LOCATION OF SHADED TRIANGLE SECTIONS INDICATE NUMBER OF EXIT SIGN FACES AND DIRECTION OF EACH FACE. PROVIDE CHEVRON DIRECTIONAL INDICATORS AS SHOWN ON DRAWINGS
- OUTDOOR ARM MOUNT AREA FIXTURE. LETTER INDICATES TYPE, SINGLE OR DOUBLE ARM AS INDICATED.
- OUTDOOR PEDESTRIAN STYLE POST TOP AREA FIXTURE. LETTER INDICATES TYPE
- OUTDOOR PARKING LOT AREA FIXTURE. LETTER INDICATES TYPE, SINGLE OR DOUBLE ARM AS INDICATED.

LIGHTING CONTROLS

- SWITCH. SMALL LETTER INDICATES FIXTURES CONTROLLED, "P" INDICATES PILOT LIGHT, "WP" INDICATES WEATHERPROOF, "K" INDICATES KEY OPERATED, "MO" INDICATES SPDT MOMENTARY CONTACT, "Z" INDICATES DPDT, "3" INDICATES 3-WAY, "4" INDICATES 4-WAY, "M" INDICATES MANUAL MOTOR STARTER, CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER
- WALL BOX DIMMER SWITCH. "MARK" INDICATES WATTAGE IF OTHER THAN 600, "3D" INDICATES 3-WAY DIMMER
- MULTI-LEVEL SWITCH. CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER
- DIGITAL TIME SWITCH
- PHOTOELECTRIC CONTROL
- PUSH BUTTON WALL MOUNT OCCUPANCY SENSOR
- WALL MOUNT OCCUPANCY SENSOR WITH DIMMING CONTROLS DUAL TECHNOLOGY
- CEILING MOUNTED OCCUPANCY SENSOR
- CEILING MOUNTED RESTROOM OCCUPANCY SENSOR

DIAGRAM

- BREAKER, LOW VOLTAGE
- FUSE
- DISTRIBUTION TRANSFORMER
- CONTROL POWER TRANSFORMER
- DRAW-OUT TYPE EQUIPMENT
- MEDIUM VOLTAGE VACUUM CIRCUIT BREAKER
- SWITCH, POWER
- METER
- BATTERY BANK
- CURRENT TRANSFORMER

ELECTRICAL INDEX

E0.1
E1.0
E6.1
EX.1

ELECTRICAL SHEET INDEX, LEGEND & NOTES
ELECTRICAL SITE PLAN & PRESS BOX PLAN
ELECTRICAL SINGLE LINE DIAGRAM
ELECTRICAL DETAILS

SIMPRK

7750 NORTH PALM AVENUE - FRESNO, CALIFORNIA 93711
555.448.8408 - 555.448.8467 - www.simprk.com

ITEM#3-01

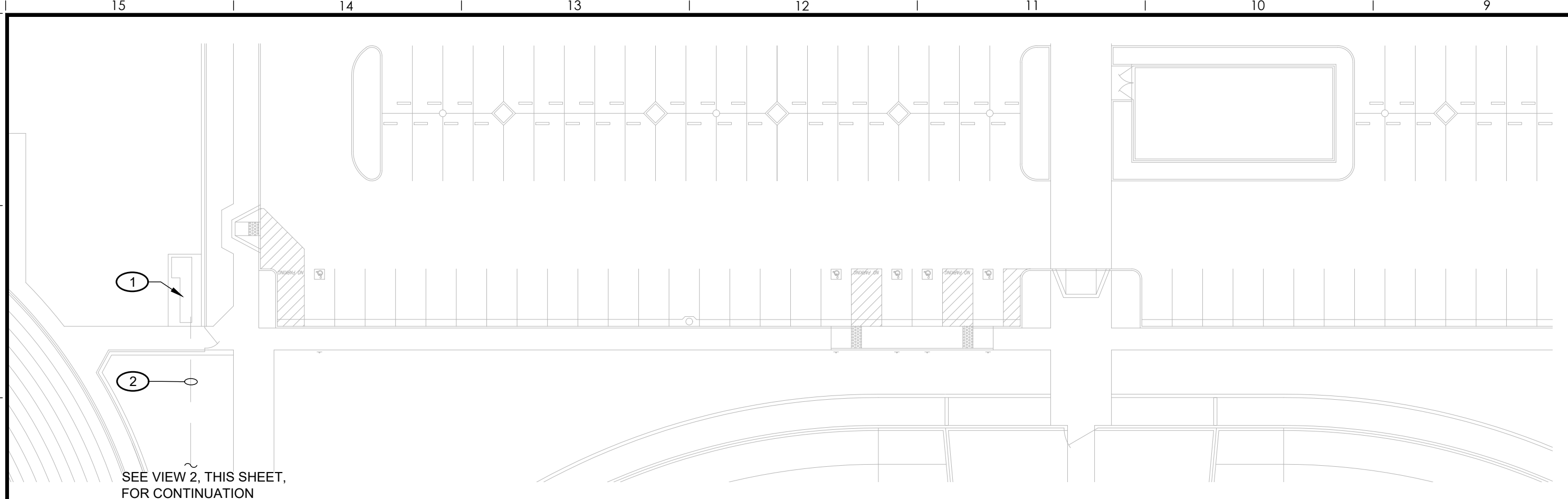
CLOVIS EAST HIGH SCHOOL SOCCER STADIUM
2940 LEONARD AVE., CLOVIS, CA 93619

No.	DATE	DESCRIPTION	No.	DATE	DESCRIPTION
1	11-14-2022	ADDED NUM 03			

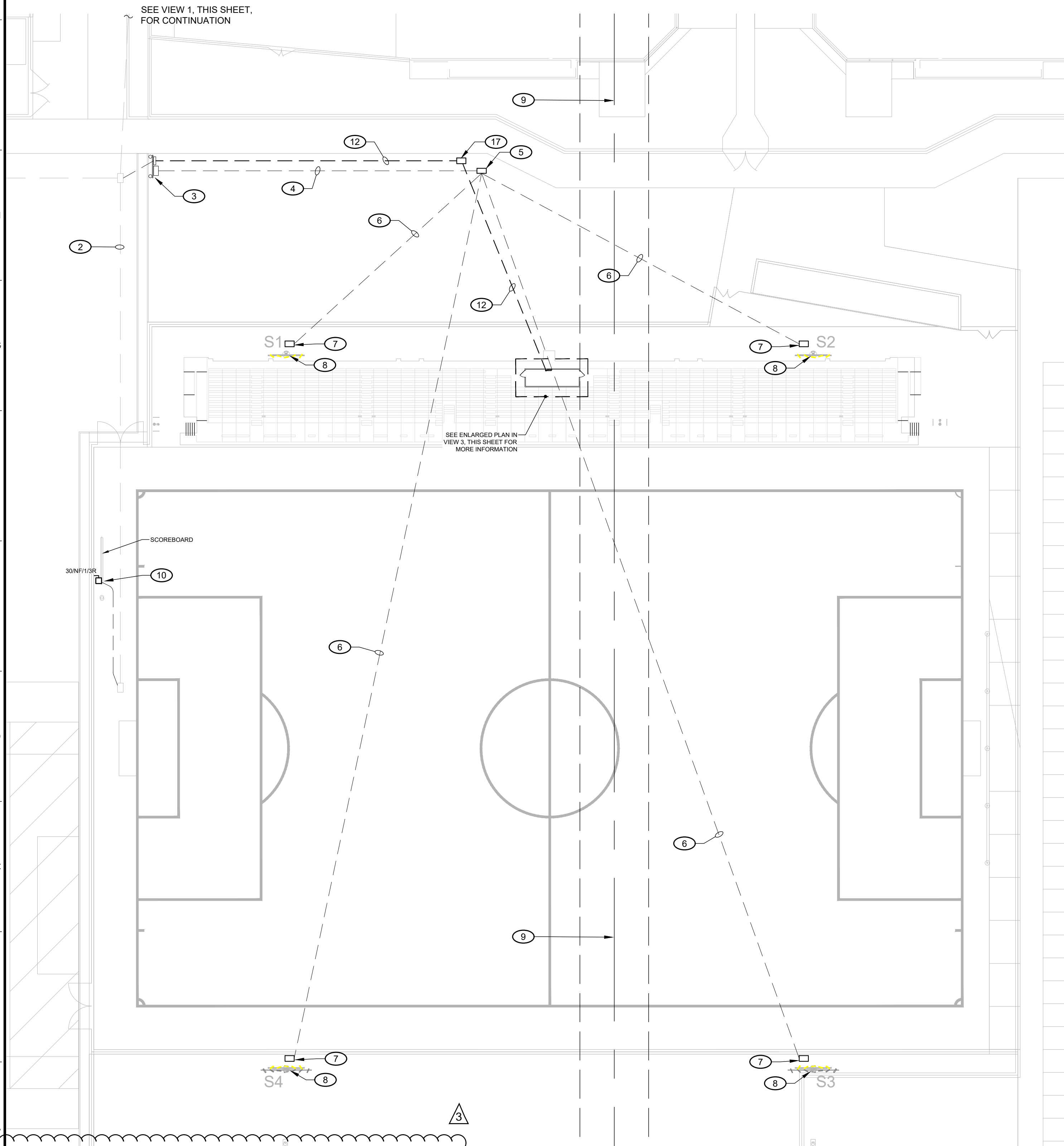
ELECTRICAL SHEET INDEX, LEGEND, & NOTES

PROJECT ARCHITECT	PROJECT NUMBER	SCALE	SHEET NUMBER
JOHN SMITH	S2103100AR	AS SHOWN	E0.1
C.L.	DRAWN BY	CHECKED BY	DATE
G.L.		06.28.22	

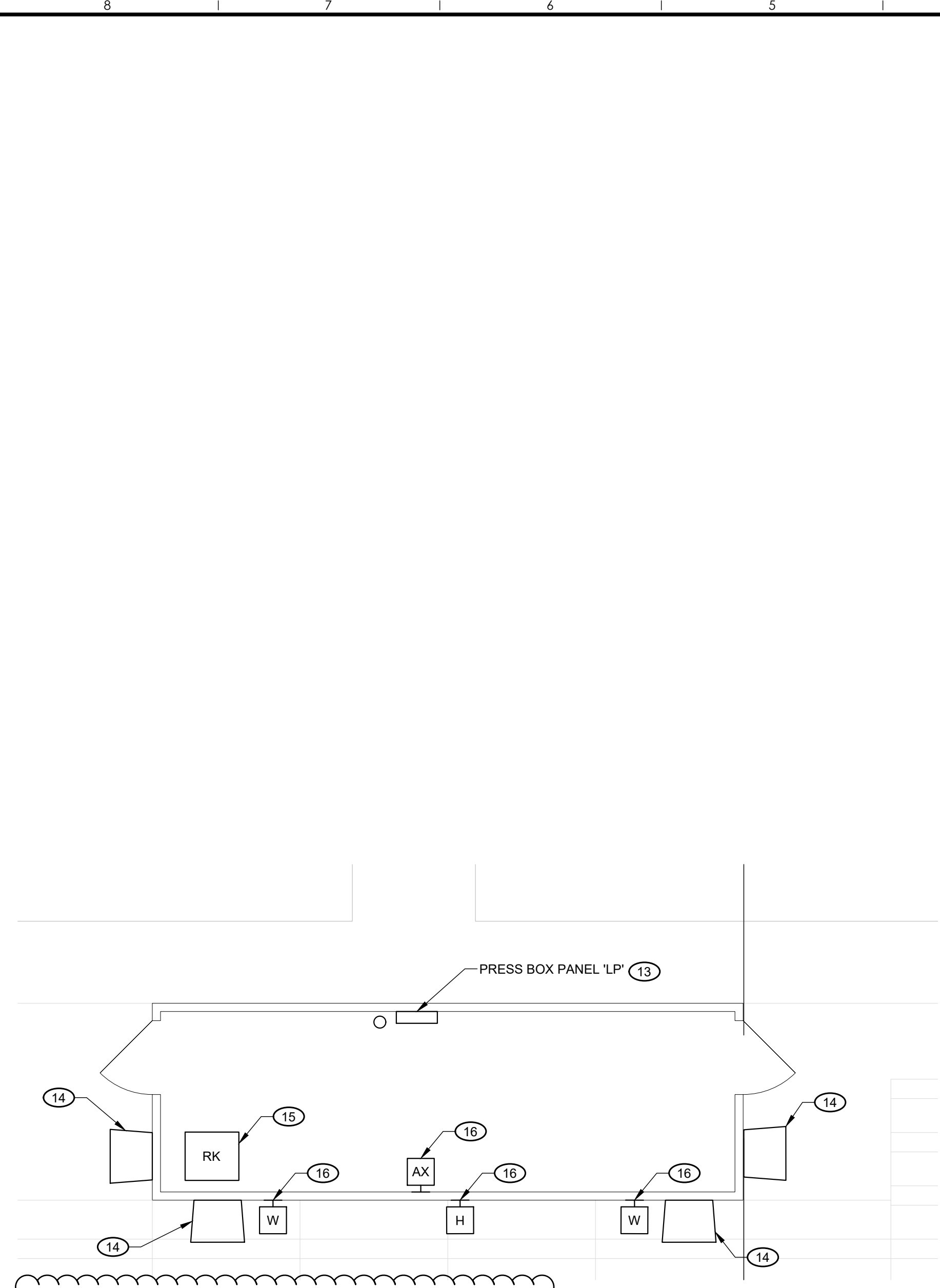




1 ELECTRICAL SITE PLAN AT SERVICE EQUIPMENT
SCALE: 1" = 30'-0"



2 ELECTRICAL SITE PLAN AT SOCCER FIELD
SCALE: 1" = 30'-0"

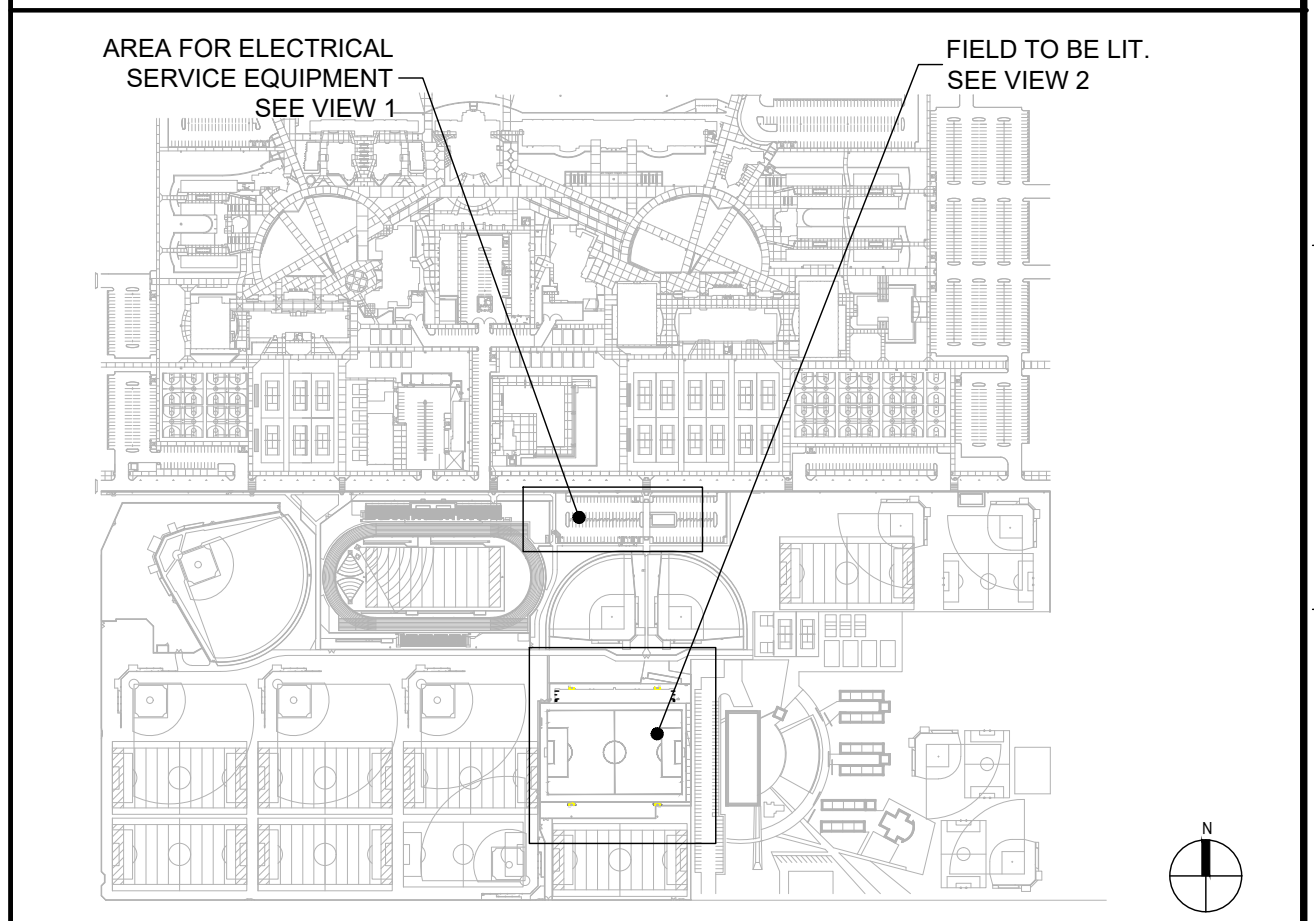


3 ENLARGED PRESS BOX PLAN
SCALE: 1/4" = 1'-0"

KEYNOTES

- 1 EXISTING ELECTRICAL SWITCHBOARD "1A". PROVIDE NEW CIRCUIT BREAKER FOR THIS PROJECT. REFER TO THE SINGLE LINE DIAGRAM.
- 2 EXISTING 2" CONDUIT SPARE TO BE USED FOR THIS PROJECT. INSTALL NEW ELECTRICAL SUPPLY FEEDER PER THE SINGLE LINE DIAGRAM.
- 3 PROVIDE NEW EQUIPMENT BACKBOARD WITH PANELS 'SF-1' AND 'SF-2' AND 25 KVA TRANSFORMER 'SF' PER THE SINGLE LINE DIAGRAM. INSTALL THE SPORTS LIGHTING CONTROL PANEL PER THE SPORTS LIGHTING VENDOR PLANS. SEE DETAIL 06/EX.1 FOR MORE INFORMATION.
- 4 PROVIDE (2) 2" CONDUITS FOR SPORTS LIGHTING CIRCUITS. REFER TO THE SINGLE LINE DIAGRAM. SEE DETAIL 05/EX.1 FOR TYPICAL TRENCH DETAIL.
- 5 PROVIDE NEW FLUSH IN-GRADE PULL BOX. 30"X 42" (MINIMUM), INCIDENTAL TRAFFIC LID. SEE DETAIL 04/EX.1 FOR UNDERGROUND PULL BOX DETAIL.
- 6 PROVIDE NEW (1) 2" CONDUIT UNDERGROUND TO NEW SPORTS LIGHTING POLE LOCATION AS SHOWN. 24" DEPTH (MINIMUM). REFER TO SPECIFICATIONS FOR BORING REQUIREMENTS. SEE DETAIL 05/EX.1 FOR TYPICAL TRENCH DETAIL.
- 7 TERMINATE NEW CONDUIT IN A NEW FLUSH IN-GRADE PULL BOX. 24"X36", INCIDENTAL TRAFFIC LID. PLACE BOX AS NEAR AS PRACTICAL TO STRUCTURAL POLE BASE BUT OUTSIDE THE ZONE REQUIRED FOR THE EXCAVATION AND PLACEMENT OF THE POLE BASE. SEE DETAIL 04/EX.1 FOR UNDERGROUND PULLBOX DETAIL.
- 8 STRUCTURAL POLE BASES SHALL BE PREPARED AND INSTALLED PER THE REQUIREMENTS OF THE SPORTS LIGHTING VENDOR APPROVED DRAWINGS FOR THIS PROJECT. COORDINATE THE FINAL INSTALLATION OF THE SUPPLY CONDUITS INTO THE BASE FROM THE PULL BOX.
- 9 DASHED LINES ARE DESCRIBING AN EXISTING DRAIN LINE AND EASEMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THIS LINE AND AVOID DISTURBING IT. COORDINATE WITH THE OWNER AND CIVIL PLANS THAT INSTALLED THE LINE.
- 10 PROVIDE OUTDOOR RATED DISCONNECT AND OPERATION CIRCUIT FOR NEW SCOREBOARD. COORDINATE CIRCUIT REQUIREMENTS WITH SCOREBOARD SPECIFICATIONS. MOUNT DISCONNECT TO SCOREBOARD VERTICAL SUPPORTS AT HEIGHT THAT IS READILY ACCESSIBLE.
- 11 PROVIDE GROUND ROD AND CONNECTION TO THE SCOREBOARD. SEE DETAIL 02/EX.1 FOR GROUND ROD DETAIL.
- 12 PROVIDE 1" CONDUIT FOR PRESS BOX CIRCUIT. REFER TO THE SINGLE LINE DIAGRAM. SEE DETAIL 05/EX.1 FOR TYPICAL TRENCH DETAIL.
- 13 PANEL LP IS INTEGRAL TO THE PREFABRICATED PRESS BOX AND PROVIDED BY THE PRESS BOX SUPPLIER. SEE B13 FOR THE PANEL SCHEDULE.
- 14 EXTERIOR SPEAKER MOUNTED TO PRESS BOX ROOF RAILING. SEE DETAIL 01/EX.1.
- 15 PROVIDE PUBLIC ADDRESS SYSTEM FLOOR MOUNTED RACK. SEE DETAIL 03/EX.1 FOR RACK RISER AND ELEVATION. PUBLIC ADDRESS SYSTEM TO MEET ICC SECTION 309 EXCEPTION REQUIREMENTS. PROVIDING EGRESS NOTIFICATION WITH A 90 MINUTE UPS BACKUP. UPS TO BE MOUNTED IN THE RACK.
- 16 PROVIDE SURFACE MOUNTED JUNCTION BOX FOR SPEAKER EQUIPMENT. SEE SPEC. FOR ADDITIONAL INFORMATION REGARDING DEVICE LABEL SHOWN.
- 17 PROVIDE NEW FLUSH IN-GRADE PULL BOX. 11"X 17" (MINIMUM), INCIDENTAL TRAFFIC LID. SEE DETAIL 04/EX.1 FOR UNDERGROUND PULL BOX DETAIL.

KEY PLAN



7700 NORTH PALM AVENUE - FRESNO, CALIFORNIA 93711
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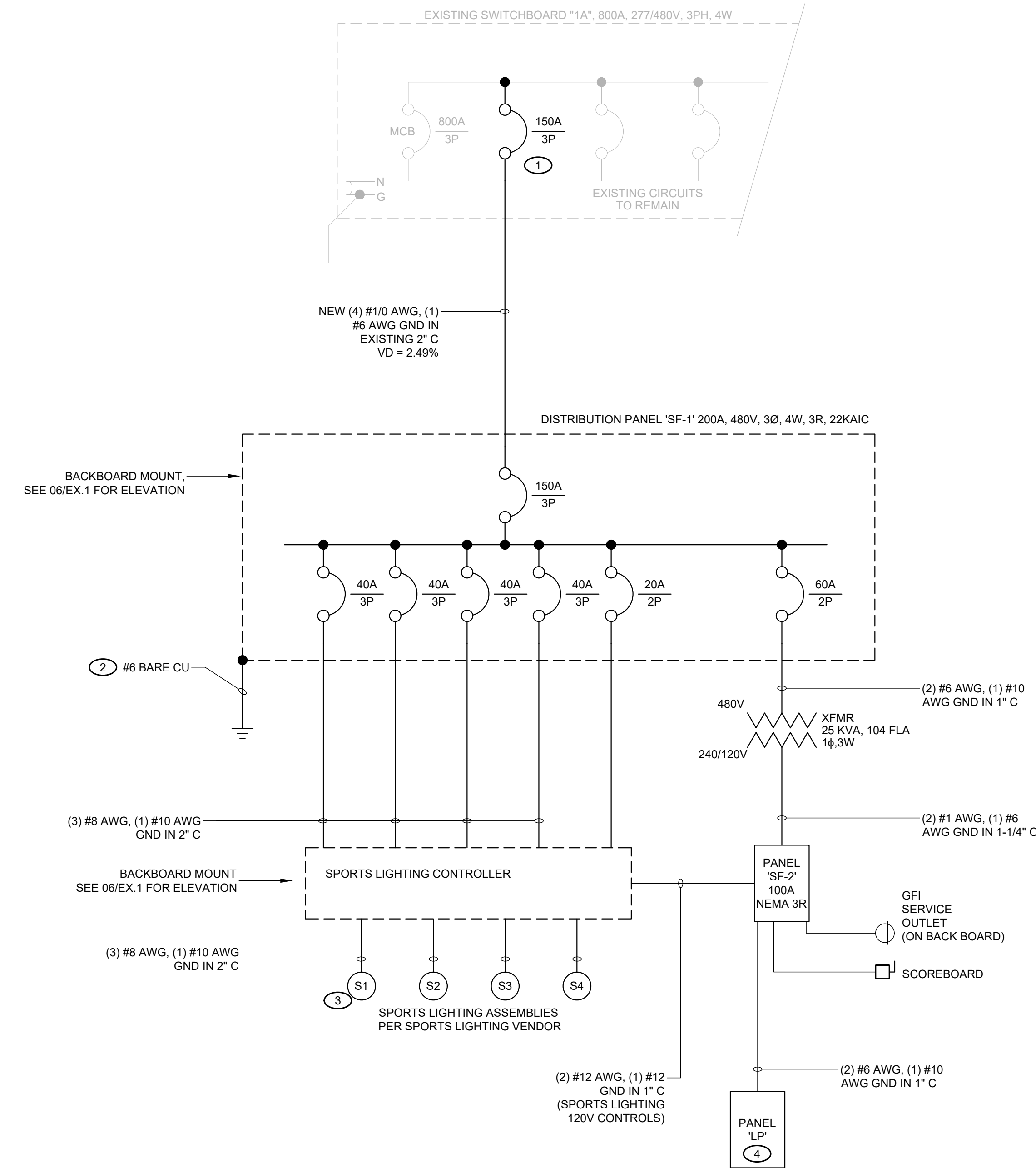
ITEM#3-02

CLOVIS EAST HIGH SCHOOL SOCCER STADIUM
2940 LEONARD AVE., CLOVIS, CA 93619

No.	DATE	DESCRIPTION	No.	DATE	DESCRIPTION	REVISIONS
1	11-14-2022	ADDED NUM 03				

ELECTRICAL SITE PLAN & PRESS BOX PLAN

PROJECT ARCHITECT	PROJECT NUMBER	SHEET NUMBER
JOHN SMITH	S2103100AR	E1.0
C.L.	AS SHOWN	SCALE
G.L.	CHECKED BY 06.28.22	DATE



PANEL: SF-2		ENCLOSURE: 3R		OPTIONS:			
VOLTAGE: 120/240V 1PH 3W		MOUNTING:		100AMP MAIN BREAKER			
LOAD	VA	BKR	CIR	CIR	BKR	VA	LOAD
GFCI SERVICE OUTLET	200	20/1	1	2	60/2	6000	PANEL 'LP'
SCOREBOARD	500	20/1	3	4		6000	" " "
SPORTS LIGHTING CONTROLS	200	20/1	5	6	--	--	SPACE
SPARE	--	20/1	7	8	--	--	SPACE
SPARE	--	20/1	9	10	--	--	SPACE
SPACE	--	--	11	12	--	--	SPACE
SPACE	--	--	13	14	--	--	SPACE
SPACE	--	--	15	16	--	--	SPACE
SPACE	--	--	17	18	--	--	SPACE
SPACE	--	--	19	20	--	--	SPACE
SPACE	--	--	21	22	--	--	SPACE
SPACE	--	--	23	24	--	--	SPACE
SPACE	--	--	25	26	--	--	SPACE
SPACE	--	--	27	28	--	--	SPACE
SPACE	--	--	29	30	--	--	SPACE
KVA FOR PHASE A	6.4					53.3	AMPERES
KVA FOR PHASE B	6.5					54.2	AMPERES
TOTAL KVA	12.9						

GENERAL NOTES

1. MAINTAIN ALL CODE REQUIRED CLEARANCES AROUND EQUIPMENT.
2. SEE SITE PLAN FOR EQUIPMENT LOCATIONS AND EXTERIOR CONDUIT ROUTING.

SLD KEYNOTES

1. PROVIDE NEW CIRCUIT BREAKER IN (E) MAIN SWITCHBOARD AVAILABLE SPACE.
2. PROVIDE A GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH CEC 250.30. AT THE NEW BACKBOARD PROVIDE (2) 5/8"X8' GROUND ROD, SEPARATED BY 6' (MIN). SEE DETAIL 02/EX.1 FOR GROUND ROD DETAIL.
3. PROVIDE GROUNDING ELECTRODE AT EACH SPORTS LIGHTING POLE BASE PER THE SPORTS LIGHTING VENDOR DESIGN DOCUMENTS.
4. PANEL LP IS INTEGRAL TO THE PREFABRICATED PRESS BOX AND PROVIDED BY THE PRESS BOX SUPPLIER. SEE SHEET B13 FOR THE PANEL SCHEDULE.

1 ELECTRICAL SINGLE LINE DIAGRAM SCALE: NTS



ITEM#3-03

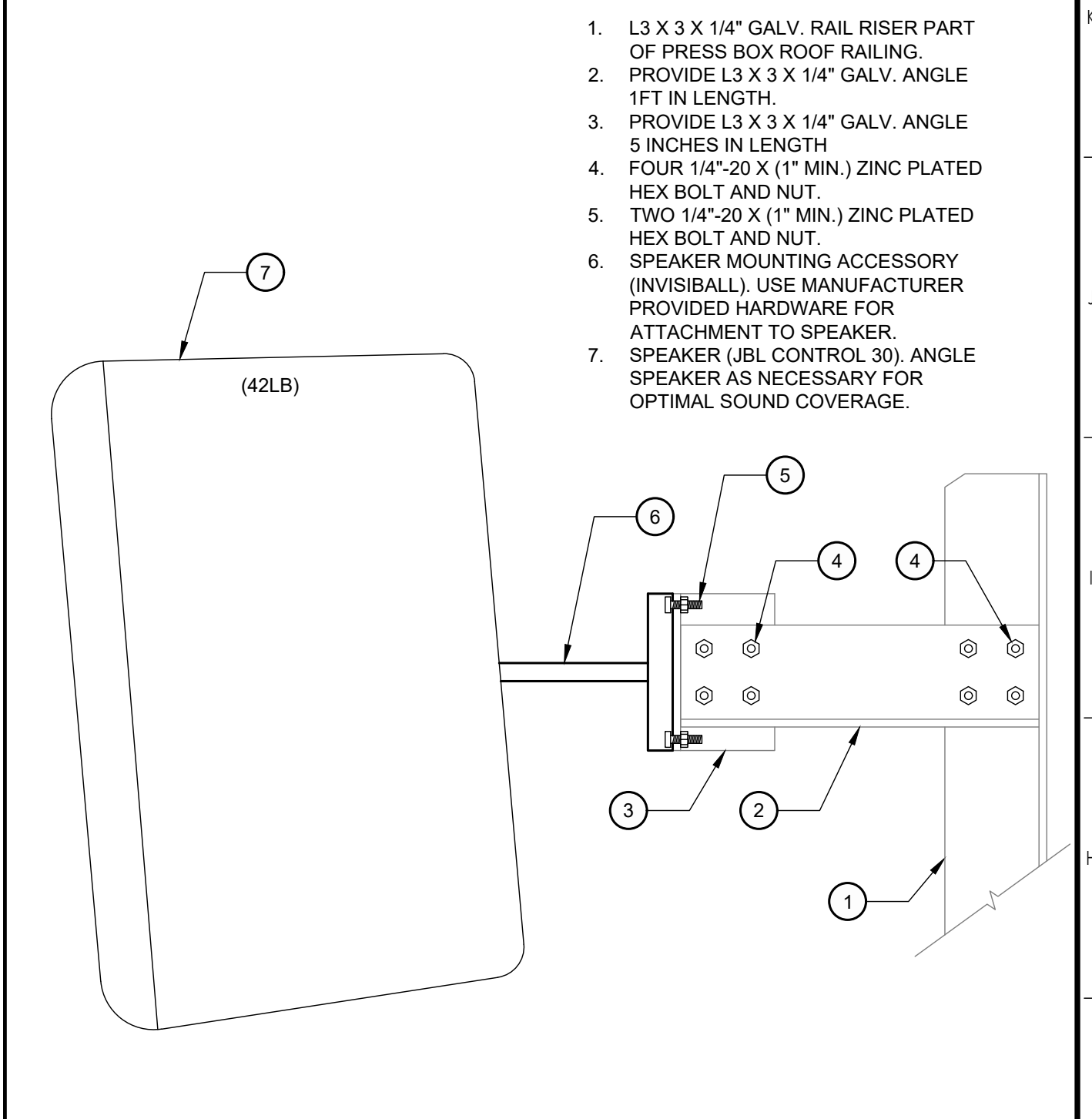
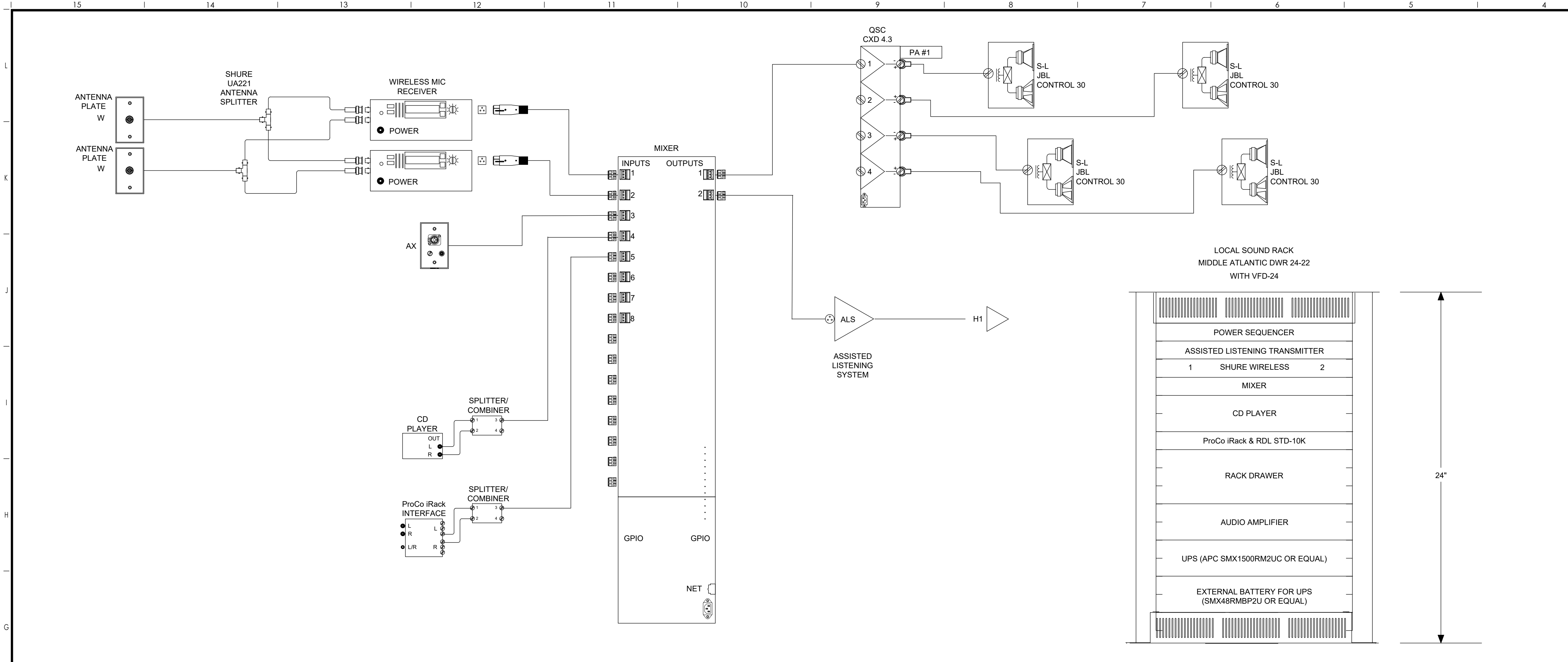
CLOVIS EAST HIGH SCHOOL SOCCER STADIUM
 2940 LEONARD AVE., CLOVIS, CA 93619

No.	DATE	DESCRIPTION	No.	DATE	DESCRIPTION
1	11-14-2022	ADDED NUM 03			

ELECTRICAL SINGLE LINE DIAGRAM

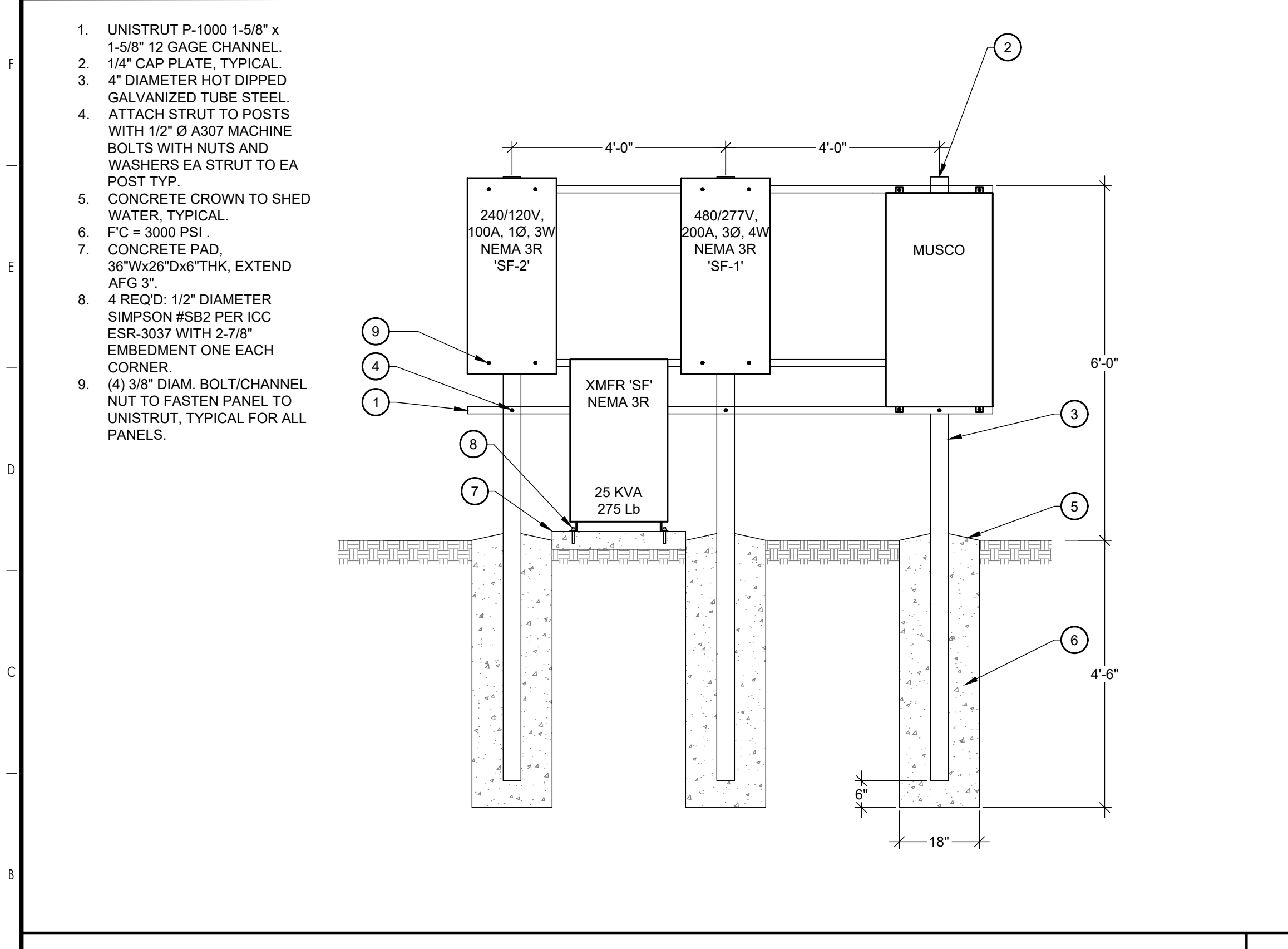
PROJECT ARCHITECT	PROJECT NUMBER	SCALE	SHEET NUMBER
JOHN SMITH	S2103100AR	AS SHOWN	E6.1

895 W. Ashlan Ave, Suite 101 Clovis, CA 93612
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 job #: S2103100AR

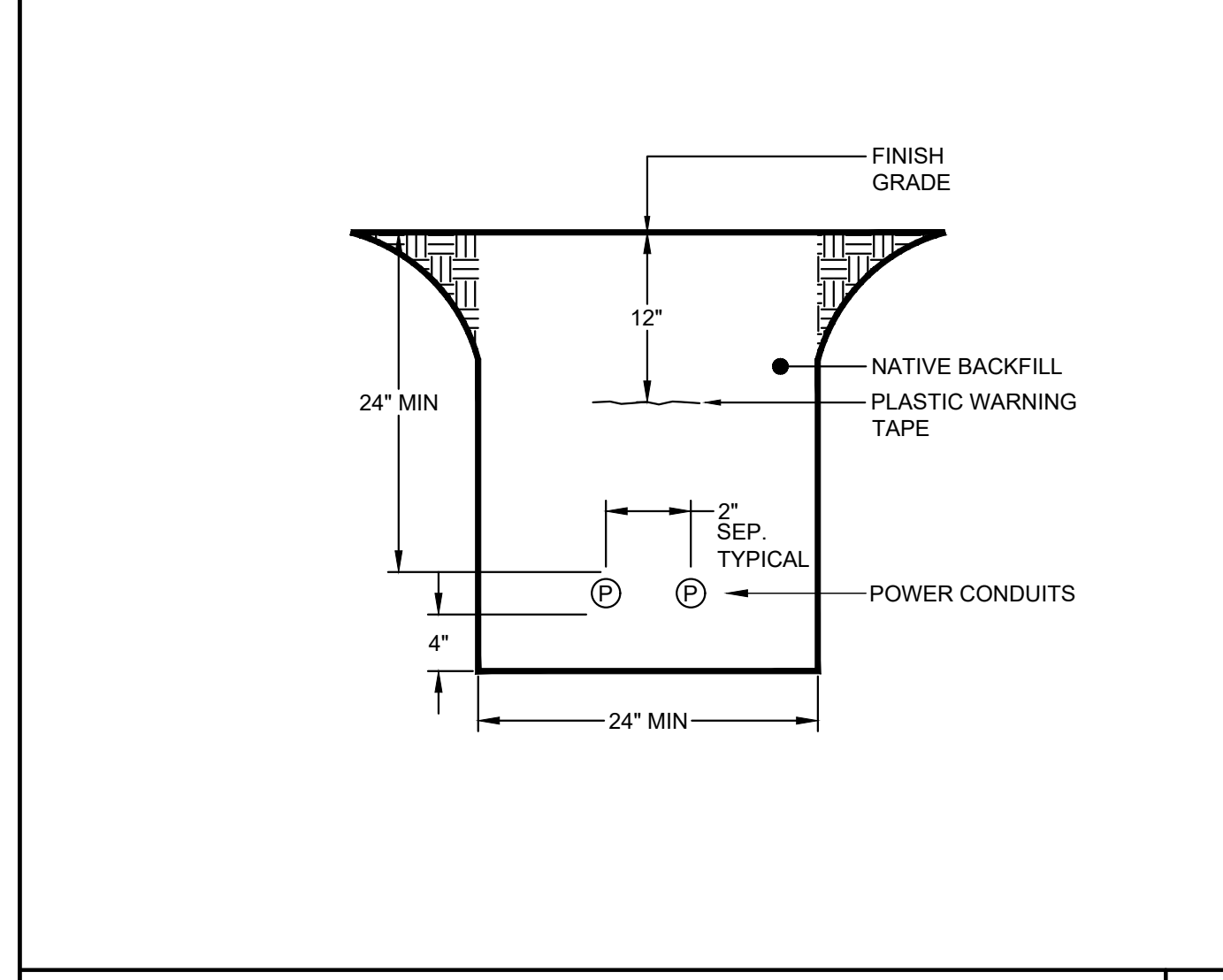


EXTERIOR PRESS BOX SPEAKER MOUNTING DETAIL N.T.S 01

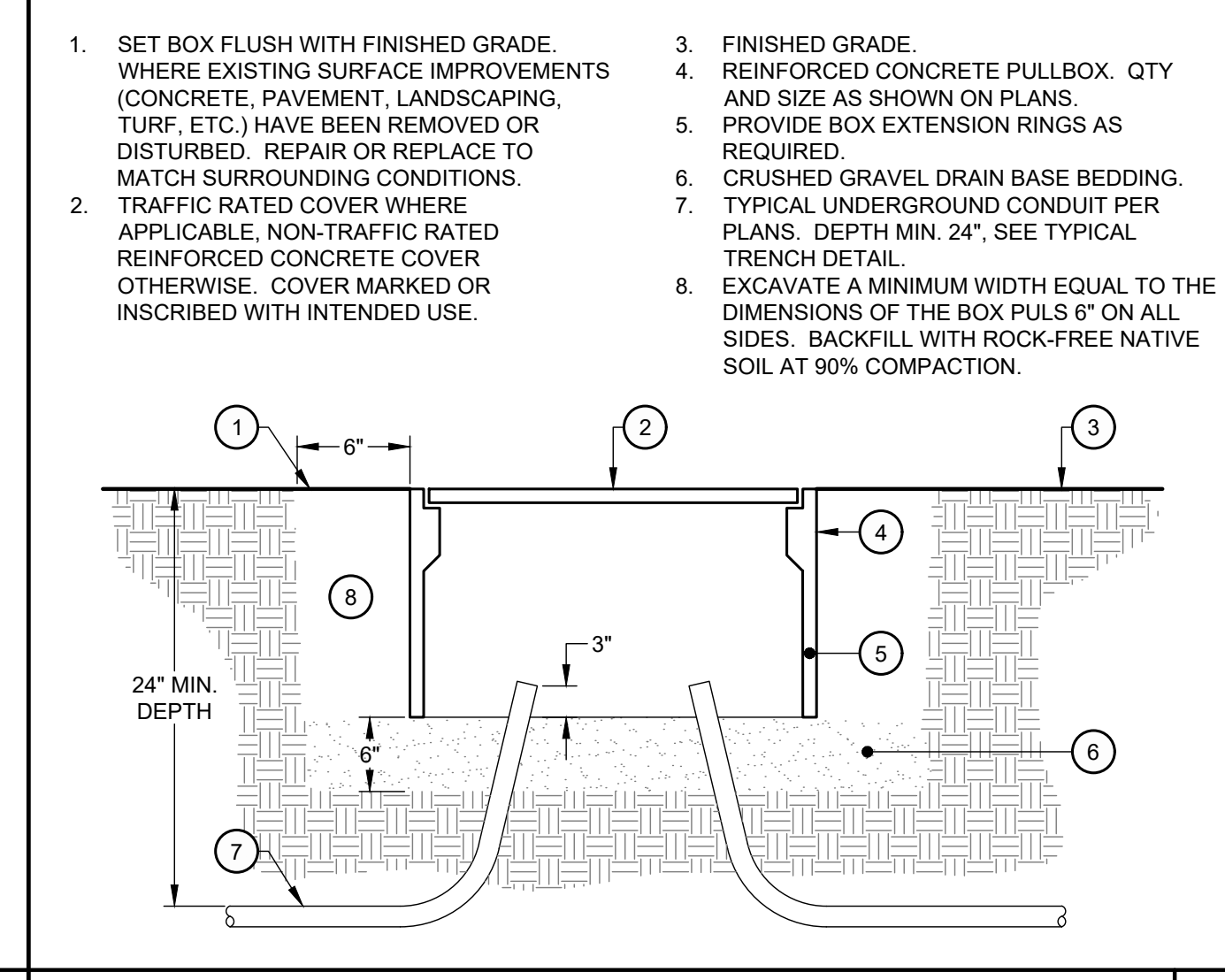
PRESS BOX PUBLIC ADDRESS SYSTEM RISER DIAGRAM N.T.S 03



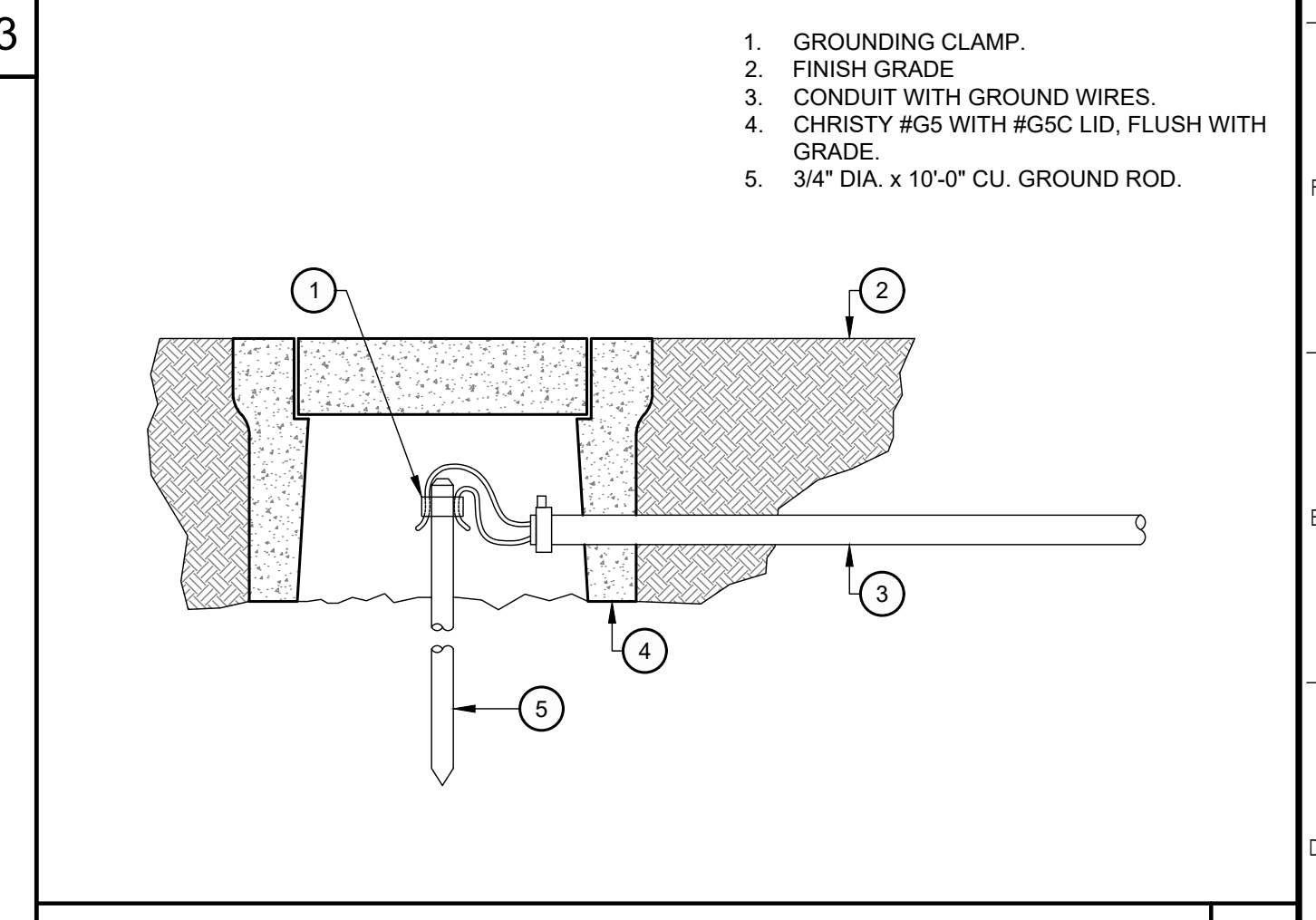
ELECTRICAL EQUIPMENT ELEVATION N.T.S 06



TRENCH DETAIL N.T.S 05



UNDERGROUND PULLBOX DETAIL N.T.S 04



TYPICAL GROUND ROD DETAIL N.T.S 02

LEAF ENGINEERS
 A PBK COMPANY
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 job #: S2103100AR

REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 ELECTRICAL
 No. 10000

SIMPRBK
 7790 NORTH PALM AVENUE - FRESNO, CALIFORNIA 93711
 T559-446-8400 - F559-446-8467 - www.simpbk.com

ITEM#3-04

CLOVIS EAST HIGH SCHOOL SOCCER STADIUM
 2940 LEONARD AVE., CLOVIS, CA 93619

No.	DATE	DESCRIPTION	No.	DATE	DESCRIPTION
1	11-14-2022	ADDENDUM 03			

PROJECT ARCHITECT: JOHN SMITH PROJECT NUMBER: S2103100AR PROJECT NUMBER: S2103100AR
 DRAWN BY: AS SHOWN SCALE: AS SHOWN
 CHECKED BY: G.L. DATE: 06.28.22

ELECTRICAL DETAILS
 SHEET NUMBER: EX.1

SECTION 07 54 20 ADHERED PVC THERMOPLASTIC MEMBRANE ROOFING

PART 1 - GENERAL CONDITIONS

DESCRIPTION

A. Scope

To install an adhered 80mil Single Ply Thermoplastic (PVC) Roofing Membrane, ¼" DensDeck Prime Hardboard and Polyisocyanurate Insulation with flashings and other components to comprise a total roofing system. The system is to be installed to the existing roofing or roof deck.

1. Remove existing roof system and all of the flashings down to the existing substrate. Provide and install a new layer of ¼" Dens Deck, Polyisocyanurate insulation (R Value to be determined by the District) and new adhered 80 mil PVC Roofing System.
2. Install new layer of Polyisocyanurate insulation over existing substrate, stagger all joints and mechanically attach per FM 1-75 attachment requirements utilizing a #12 fastener and approved insulation plate.
3. Install new layer of ¼" Dens Deck over existing substrate, stagger all joints and mechanically attach per FM 1-75 attachment requirements utilizing a #12 fastener and approved insulation plate..
4. Provide and install new adhered 80 mil PVC Membrane over new ¼" Dens Deck. Dens Deck should be mechanically attached through to the existing deck conforming to FM 1-75 fastening pattern and per the PVC manufacturer's standard written and detail requirements utilizing a #15 XP fastener and XPN membrane disc.
5. Flash each penetration with a cone flashing membrane per PVC manufacturer's standard written and detail requirements. Pitch pans are to be removed and each penetration flashed individually.
6. Flash each mechanical curb using extender metal piece as necessary. At curbs with sheet metal pans and no units, remove metal pan and flash membrane to top of curb. Reset metal pan.
7. Flash scuppers with clad metal per PVC manufacturer's standard written and detail requirements.
8. At existing parapets, remove all flashings and coping caps and install new membrane flashing up to the existing coping cap. Provide and install new galvanized metal extender piece at parapet transition, see manufacturer's standard details. Encapsulate walls with 60 mil PVC flashing membrane, and install new clad edge metal where required to match existing conditions.
9. Provide walk tread at roof access points and HVAC access points. Lay out of walkway to be determined by owner.
10. At HVAC unit, lift and flash each curb support. Replace angle plate support with stainless steel. Set attachment fasteners in urethane caulking.
11. Flash heat stacks per PVC manufacturer's standard detail and installation requirements.
12. Remove and dispose of existing sleepers / supports and replace with new redwood or synthetic supports, flashing each per PVC manufacturer's standard detail and installation requirements.

B. Related Work

The work includes but is not necessarily limited to the installation of:

1. Substrate Preparation
2. Roof Drains
3. Hardboard / Insulation
4. Roof Membrane / Slipsheet
5. Fasteners
6. Membrane Adhesive
7. Adhesive for Flashings
8. Roof Membrane Flashings
9. Metal Flashings
10. Sealants

c. Upon successful completion of work the following warranties may be obtained:

1. Manufacturer Warranty
2. Roofing Contractor Warranty

1.09 QUALITY ASSURANCE

- A. This roofing system shall be applied only by a Roofing Contractor authorized by the Manufacturer prior to bid ("Applicator"). The Roofing Contractor shall have at least 10 years of experience as an applicator with the submitted manufacturer as certified by the manufacturer.
- B. Upon completion of the installation and the delivery to the Manufacturer by the Applicator of a certification that all work has been done in strict accordance with the contract specifications and the Manufacturer's requirements, an inspection shall be made by a Technical Representative of the Manufacturer to review the installed roof system.
- C. There shall be no deviation made from the Project Specification or the approved shop drawings without prior written approval by the Owner, the Owner's Representative and the Manufacturer.
- D. All work pertaining to the installation of the membrane and flashings shall only be completed by Applicator personnel trained and authorized by the Manufacturer in those procedures.
- E. Membrane to have no significant formulation changes in the last (20) years as certified by the manufacturer.
- F. Roofing membrane is to be certified mil thickness **80** mil. Membrane shall have 30mils of polymer above the fiberglass reinforcement scrim.
- G. PVC membrane shall be directly manufactured by the company issuing the warranty. No third party private label manufactures will be accepted.

1.10 SUBMITTALS

All submittals which do not conform to the following requirements will be rejected.

A. SUBMITTALS

Submit proposed equals to be considered for use on this project ten days prior to bid date. Proposed roof systems which have been reviewed, are determined by the owner to meet the specified criteria and are accepted will be listed in an addendum prior to bid date.

Submittals shall include the following:

1. Copies of Specification including physical properties.
2. Samples of each primary component to be used in the roof system and the manufacturer's current literature for each component.
3. Written approval by the insulation manufacturer (as applicable) for use and performance of the product in the proposed system.
4. Sample copy of Manufacturer's warranty including no exclusion for ponding water.
5. Sample copy of Applicator's warranty.
6. Dimensioned shop drawings which shall include:
 - a. Outline of roof with roof size and elevations shown.
 - b. Profile details of flashing methods for penetrations.
 - c. Technical acceptance from Manufacturer.
7. Certifications by manufacturers of roofing and insulating materials that all materials supplied comply with all requirements of the identified ASTM and industry standards or practices and requirements of this specification as stated in Section 2.01, C & D and Quality Assurance.
8. Certification from the Applicator that the system specified meets all identified code and insurance requirements as required by the Specification.
9. Letter from the proposed manufacturer confirming the number of years it has DIRECTLY manufactured the proposed roof system under the trade names and/or trademarks as proposed.
10. Material Safety Data Sheets (MSDS)

1.11 CODE REQUIREMENTS

The applicator shall submit evidence that the proposed roof system meets the requirements of the local building code and has been tested and approved or listed by the following test organizations. These requirements are minimum standards and no roofing work shall commence without written documentation of the system's compliance, as required in the "Submittals" section of this specification.

- A. Factory Mutual Research Corporation (FM) - Norwood, MA
 - 1. Class 1-60
- B. Underwriters Laboratories, Inc. - Northbrook, IL
 - 1. Class A assembly

1.12 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All products delivered to the job site shall be in the original unopened containers or wrappings bearing all seals and approvals.
- B. Handle all materials to prevent damage. Place all materials on pallets and fully protect from moisture.
- C. Membrane rolls shall be stored lying down on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect the ease of membrane weldability.
- D. All adhesives shall be stored at temperatures between 40° F (5° C) and 80° F (27° C).
- E. All flammable materials shall be stored in a cool, dry area away from sparks and open flames. Follow precautions outlined on containers or supplied by material manufacturer/supplier.
- F. All materials which are determined to be damaged by the Owner's Representative or the manufacturer are to be removed from the job site and replaced at no cost to the Owner.

1.13 JOB CONDITIONS

- A. Membrane materials may be installed under certain adverse weather conditions but only after consultation with the Manufacturer, as installation time and system integrity may be affected.
- B. Only as much of the new roofing as can be made weathertight each day, including all flashing and detail work, shall be installed. All seams shall be cleaned and heat welded before leaving the job site that day.
- C. All work shall be scheduled and executed without exposing the interior building areas to the effects of inclement weather. The existing building and its contents shall be protected against all risks.
- D. All surfaces to receive new insulation, membrane or flashings shall be dry. Should surface moisture occur, the Applicator shall provide the necessary equipment to dry the surface prior to application.
- E. All new and temporary construction, including equipment and accessories, shall be secured in such a manner as to preclude wind blow-off and subsequent roof or equipment damage.
- F. Uninterrupted waterstops shall be installed at the end of each day's work and shall be completely removed before proceeding with the next day's work. Waterstops shall not emit dangerous or unsafe fumes and shall not remain in contact with the finished roof as the installation progresses. Contaminated membrane shall be replaced at no cost to the Owner.

- G. The Applicator is cautioned that certain membranes are incompatible with asphalt, coal tar, heavy oils, roofing cements, creosote and some preservative materials. Such materials shall not remain in contact with the membranes. The Applicator shall consult the manufacturer regarding compatibility, precautions and recommendations.
- H. Arrange work sequence to avoid use of newly constructed roofing as a walking surface or for equipment movement and storage. Where such access is absolutely required, the Applicator shall provide all necessary protection and barriers to segregate the work area and to prevent damage to adjacent areas. A substantial protection layer consisting of plywood over Felt or plywood over insulation board shall be provided for all new and existing roof areas that receive rooftop traffic during construction.
- I. Prior to and during application, all dirt, debris and dust shall be removed from surfaces either by vacuuming, sweeping, blowing with compressed air and/or similar methods.
- J. The Applicator shall follow all safety regulations as required by OSHA and any other applicable authority having jurisdiction.
- K. All roofing, insulation, flashings and metal work removed during construction shall be immediately taken off site to a legal dumping area authorized to receive such materials. Hazardous materials, such as materials containing asbestos, are to be removed and disposed of in strict accordance with applicable City, State and Federal requirements.
- L. All new roofing waste material (i.e., scrap roof membrane, empty cans of adhesive) shall be immediately removed from the site by the Applicator and properly transported to a legal dumping area authorized to receive such material.
- M. The Applicator shall take precautions that storage and/or application of materials and/or equipment does not overload the roof deck or building structure.
- N. Installation of the membrane over coal tar pitch or a resaturated roof requires special consideration to protect the membrane from volatile fumes and materials. Consult the manufacturer for precautions prior to bid.
- O. Flammable adhesives and deck primers shall not be stored and not be used in the vicinity of open flames, sparks and excessive heat.
- P. All rooftop contamination that is anticipated or that is occurring shall be reported to the manufacturer to determine the corrective steps to be taken.
- Q. The Applicator shall verify that all roof drain lines are functioning correctly (not clogged or blocked) before starting work. Applicator shall report any such blockages in writing (letter copy to the manufacturer) to the Owner's Representative for corrective action prior to installation of the roof system.
- R. Applicator shall immediately stop work if any unusual or concealed condition is discovered and shall immediately notify Owner of such condition in writing for correction at the Owner's expense (letter copy to the manufacturer).
- S. Site cleanup, including both interior and exterior building areas that have been affected by construction, shall be completed to the Owner's satisfaction.

- T. All landscaped areas damaged by construction activities shall be repaired at no cost to the Owner.
- U. The Applicator shall conduct fastener pullout tests in accordance with the latest revision of the SPRI/ANSI Fastener Pullout Standard to help verify condition of deck/substrate and to confirm expected pullout values.
- V. The adhered membrane shall not be installed under the following conditions without consulting the manufacturer's technical department for precautionary steps:
 1. The roof assembly permits interior air to pressurize the membrane underside.
 2. Any exterior wall has 10% or more of the surface area comprised of opening doors or windows.
 3. The wall/deck intersection permits air entry into the wall flashing area.
- W. Precautions shall be taken when using adhesives at or near rooftop vents or air intakes. Adhesive odors could enter the building. Coordinate the operation of vents and air intakes in such a manner as to avoid the intake of adhesive odor while ventilating the building. Keep lids on unused cans at all times.
- X. Protective wear shall be worn when using solvents or adhesives or as required by job conditions.

1.14 BIDDING REQUIREMENTS

A. Pre-Bid Meeting:

A pre-bid meeting shall be held with the Owner's Representative and involved trades to discuss all aspects of the project. The Applicator's field representative or roofing foreman for the work shall be in attendance. Procedures to avoid rooftop damage by other trades shall be determined.
Site Visit:

Bidders shall visit the site and carefully examine the areas in question as to conditions that may affect proper execution of the work. All dimensions and quantities shall be determined or verified by the contractor. No claims for extra costs will be allowed because of lack of full knowledge of the existing conditions unless agreed to in advance with the Owner or Owner's Representative.

1.15 WARRANTIES

A. Manufacturer's System Warranty (only products purchased from the membrane manufacturer are covered under System Warranty).

Upon successful completion of the work to the Roofing Manufacturer's and Owner's satisfaction, and receipt of final payment, the twenty (20) Year System Warranty shall be issued. The System Warranty shall provide for the roof membrane, all accessories that comprise a roof system, and contractor labor. The Warranty shall be **Non-Prorated** provide for No Dollar Limit (NDL), and **shall not exclude ponding water and no time limit shall be assigned for any such ponding water during the warranty period**. Warranty shall provide for maximum 60 mph wind speeds.

B. Applicator/Roofing Contractor Warranty

The Applicator shall supply the Owner with a separate three-year workmanship warranty. In the event any work related to roofing, flashing, or metal is found to be within the Applicator warranty term, defective or otherwise not in accordance with the Contract Documents, the Applicator shall repair that defect at no cost to the Owner. The Applicator's warranty obligation shall run directly to the Owner, and a copy shall be sent to the manufacturer.

C. Owner Responsibility

Owner shall notify both the manufacturer and the Applicator of any leaks as they occur during the time period when both warranties are in effect.

PART 2 - PRODUCTS

2.01 GENERAL

- A. The components of the Adhered roof system are to be products of the membrane manufacturer as indicated on the Detail Drawings and specified in the Contract Documents.
- B. Components to be used that are other than those supplied or manufactured by the membrane manufacturer may be submitted for review and acceptance by the manufacturer. The manufacturer's acceptance of any other product is only for a determination of compatibility with membrane products and not for inclusion in the manufacturer's warranty. The specifications, installation instructions, limitations, and/or restrictions of the respective manufacturers must be reviewed by the Owner's Representative for acceptability for the intended use with the manufacturer's products.
- C. Membrane shall have **minimum of (30) mils of waterproofing polymer above the** reinforcement as documented by a third party source.
- D. PVC fiberglass reinforced membrane with a factory-applied integral lacquer coating to repel dirt and sustain reflectivity. Or pre-approved equal subject to compliance with all specification requirements.
- E. Membrane shall conform to ASTM D4434-96 (or latest revision), "Standard for Polyvinyl Chloride Sheet Roofing". Classification: Type II, Grade I. KEE and other like-type, non-conforming membrane products submitted will not be considered as equal.

- 2. **Type 1: PVC 80mil, thermoplastic membrane with fiberglass reinforcement with a factory lacquer coating for low sloped application.**

2.03 MANUFACTURERS

BASE BID

The following roofing membrane shall be bid as **BASE BID**.

- A. **PVC Sheet:** ASTM D 4434, Type III, fabric reinforced.
 - 1. **Available Manufacturers:**
 - a. **Sika Sarnafil Inc**
 - b. **Soprema.**

- c. **Johns Manville**
2. **Thickness: 80 mils Minimum.**
3. **20 Year Full System Warranty Required.**
4. **Exposed Face Color:** EnergySmart (white), initial reflectivity of 0.83, initial emissivity 0.90, solar reflective index (SRI) of >104.

2.04 FLASHING MATERIALS

A. Wall/Curb Flashing

1. Flashing Membrane – 60 mil

A fiberglass reinforced membrane adhered to approved substrate using adhesive.

2. Flashing Membrane (if asphalt contamination exists) – 60 mil G459.

An asphalt-resistant, fiberglass reinforced membrane adhered to approved substrate using adhesive.

3. PVC Clad Metal

A PVC-coated, heat-weldable sheet metal capable of being formed into a variety of shapes and profiles. Clad is a 25 gauge, G90 galvanized metal sheet with a 20 mil unsupported membrane laminated on one side. Color to match membrane.

B. Miscellaneous Flashing

1. Stack

A prefabricated vent pipe flashing.

2. Circles

Circular thick membrane patch welded over T-joints formed by overlapping thick membranes.

3. Corners

Prefabricated outside and inside flashing corners made of 60 mil membrane that are heat-welded to membrane or clad base flashings.

4. Multi-Purpose Sealant

A polyurethane sealant used at flashing terminations.

5. Solvent Based Adhesive

A solvent-based reactivating-type adhesive used to attach flashing membrane to flashing substrate.

2.05 ATTACHMENT COMPONENTS

A. Membrane adhesive

1. Water Based Adhesive:

A water-based adhesive used to attach the membrane to horizontal or near-horizontal substrates.

Notes:

There is a significant increase in drying time due to an increase in humidity and/or a decrease in temperature. Do not install when outdoor or substrate temperatures during drying period are expected to fall below 40° F (5° C).

Do not allow adhesive to skin-over or surface-dry prior to installation of membrane.

2. Fastener-XP

3. A #15, heavy-duty, corrosion-resistant fastener used with Plate to attach insulation or Stop to attach roof membrane to steel or wood roof curbs. Fastener-XP has a shank diameter of approximately 0.21 inch and the thread diameter is approximately 0.26 inch. The driving head has a diameter of approximately 0.435 inch with a #3 Phillips recess for positive engagement.

INSULATION AND SEPARATION BOARD

4. Dens-Deck Prime®- 1/4" thick

A siliconized gypsum, fire-tested hardboard with glass-mat facers. Dens-Deck is provided in a 4 ft x 8 ft board size and in thickness of 1/4".

5. Polyisocyanurate Insulation – (R Value to be determined by District)

A rigid Polyisocyanurate insulation board with paper facer and is installed directly on the roof deck or directly on the old roof surface prior to application of the hardboard and membrane.

The core is isocyanurate foam. The standard paper facer contains recycled materials and fiberglass-reinforcement for dimensional stability. It is available in 4 ft x 4 or 4 ft x 8 ft sizes and various thicknesses depending upon thermal resistance requirements.

6. Plate

Used with various Fasteners to attach insulation boards to roof deck. Plate is a 3 inch square or round, 26 gauge stamping of SAE 1010 steel with an AZ 55 Galvalume coating

7. Fastener No. 12

Number 12 corrosion-resistant fastener used with Plates to attach insulation boards to steel or wood roof decks. Fastener No. 12 has a modified buttress thread, a shank diameter of approximately 0.168 inch and a thread diameter of approximately 0.214 inch. The driving head has a diameter of approximately 0.435 inch with a #3 Phillips recess for positive engagement.

8. Fastener-XP, No. 15

A #15, heavy-duty, corrosion-resistant fastener used with Plate to attach insulation or Stop and Bar to attach G410 roof membrane to steel or wood roof decks. Fastener-XP has a shank diameter of approximately 0.21 inch and the thread diameter is approximately 0.26 inch. The driving head has a diameter of approximately 0.435 inch with a #3 Phillips recess for positive engagement.

9. Termination/Stop Bar

An extruded aluminum, low profile bar used with certain Fasteners to attach to the roof deck or to walls/curbs at terminations, penetrations and at incline changes of the substrate. Stop is a 1 inch wide, flat aluminum bar 1/8 inch thick that has predrilled holes every 6 inches on center.

2.05.1 WALKWAY PROTECTION

1. Tread

A polyester reinforced, 0.096 inch (96 mil), weldable membrane with surface embossment. Used as a protection layer from rooftop traffic. Tread is supplied in rolls of 39 inches wide and 50 feet long.

2. Crossgrip Walkway

A rolled-out walkway protection mat used to protect roofing membrane from mechanical abuse. Crossgrip Walkway is 9/16 inch thick flexible PVC 3 feet wide by 33' long with a heavily textured surface. Crossgrip Walkway is loose laid on top of completed roof assemblies. Where design windspeeds exceed 94 mph (150 km/h) the walkway must be secured with loops of membrane welded to the field sheet. Consult Product Data Sheet for additional information.

2.06 MISCELLANEOUS ACCESSORIES

1. Aluminum Tape

A 2 inch wide pressure-sensitive aluminum tape used as a separation layer between small areas of asphalt contamination and the membrane and as a bond-breaker under the cover strip at clad joints.

2. Multi-Purpose Tape

A high performance sealant tape with used with metal flashings as a preventive measure against air and wind blown moisture entry.

3. Cleaning Solvent

A high quality solvent cleaner used for the general cleaning of residual asphalt, scuff marks, etc., from the membrane surface. Solvent is also used daily to clean seam areas prior to hot-air welding in tear off or dirty conditions or if the membrane is not welded the same day it is unrolled. Consult Product Data Sheet for additional information.

2.07 MISCELLANEOUS FASTENERS AND ANCHORS

- A. All fasteners, anchors, nails, straps, bars, etc. shall be post-galvanized steel, aluminum or stainless steel. Mixing metal types and methods of contact shall be assembled in such a manner as to avoid galvanic corrosion. Fasteners for attachment of metal to masonry shall be expansion type fasteners with stainless steel pins. All concrete fasteners and anchors shall have a minimum embedment of 1¼ inch and shall be approved for such use by the fastener manufacturer. All miscellaneous wood fasteners and anchors used for flashings shall have a minimum embedment of 1 inch and shall be approved for such use by the fastener manufacturer.

2.08 RELATED MATERIALS

EXECUTION

2.09 PRE-CONSTRUCTION CONFERENCE

- A. The Applicator, Owner's Representative/Designer and Manufacturer(s) shall attend a pre-construction conference.
- B. The meeting shall discuss all aspects of the project including but not limited to:
1. Safety
 2. Set up
 3. Construction schedule
 4. Contract conditions
 5. Coordination of the work

3.01 SUBSTRATE CONDITION

- A. Applicator shall be responsible for acceptance or provision of proper substrate to receive new roofing materials.

- B. Applicator shall verify that the work done under related sections meets the following conditions:
1. Roof drains and/or scuppers have been reconditioned and/or replaced and installed properly.
 2. Roof curbs, nailers, equipment supports, vents and other roof penetrations are properly secured and prepared to receive new roofing materials.
 3. All surfaces are smooth and free of dirt, debris and incompatible materials.
 4. All roof surfaces shall be free of water, ice and snow.

3.02 SUBSTRATE PREPARATION

The roof deck and existing roof construction must be structurally sound to provide support for the new roof system. The Applicator shall load materials on the rooftop in such a manner to eliminate risk of deck overload due to concentrated weight. The Owner's Representative shall ensure that the roof deck is secured to the structural framing according to local building code and in such a manner as to resist all anticipated wind loads in that location.

1. Poured Normal Weight Structural Concrete Deck:

The roof deck shall be installed and cured in accordance with industry standards. The surface shall have a smooth and level finish and shall be free of dust, excess moisture, oil-based curing agents and loose debris. Sharp ridges or other projections above the surface shall be removed before roofing.

3.03 SUBSTRATE INSPECTION

- A. A dry, clean and smooth substrate shall be prepared to receive the Adhered roof system.
- B. The Applicator shall inspect the substrate for defects such as excessive surface roughness, contamination, structural inadequacy, or any other condition that will adversely affect the quality of work.
- C. The substrate shall be clean, smooth, dry, and free of flaws, sharp edges, loose and foreign material, oil and grease. Roofing shall not start until all defects have been corrected.
- D. All roof surfaces shall be free of water, ice and snow.
- E. The membrane shall be applied over compatible and accepted substrates only.

3.04 INSTALLATION OF ROOF MEMBRANE

The surface of the concrete substrate shall be inspected prior to installation of the roof membrane. The substrate shall be clean, dry, free from debris and smooth with no surface roughness or contamination.

- A. Adhesive:
 1. Over the properly installed and prepared substrate, the adhesive shall be applied at a rate and method according to the manufacturer's requirements. No adhesive is applied to the back of the membrane. **Do not allow adhesive to skin-over or surface-dry prior to installation of membrane.**

2. The roof membrane is unrolled immediately into the wet adhesive. Adjacent rolls overlap previous rolls by manufacturer's requirements. This process is repeated throughout the roof area. Immediately after application into adhesive, each roll shall be pressed firmly into place with a water-filled, foam-covered lawn roller by frequent rolling in two directions. **Do not allow adhesive to skin-over or surface-dry prior to installation of membrane.**
3. Weld coverstrips at all seams that do not have a factory selvage edge.

Notes:

- a) Adhesive shall not be used if temperatures below 40° F (5° C) are expected during application or subsequent drying time.
- b) No adhesive shall be applied in seam areas. All membrane shall be applied in the same manner.

3.05 HOT-AIR WELDING OF SEAM OVERLAPS

A. General

1. All seams shall be hot-air welded. Seam overlaps should be 3 inches wide when automatic machine-welding and 4 inches wide when hand-welding, except for certain details.
2. Welding equipment shall be provided by or approved by the manufacturer. All mechanics intending to use the equipment shall have successfully completed a training course provided by a Technical Representative prior to welding.
3. All membrane to be welded shall be clean and dry.

B. Hand-Welding

Hand-welded seams shall be completed in two stages. Hot-air welding equipment shall be allowed to warm up for at least one minute prior to welding.

1. The back edge of the seam shall be welded with a narrow but continuous weld to prevent loss of hot air during the final welding.
2. The nozzle shall be inserted into the seam at a 45 degree angle to the edge of the membrane. Once the proper welding temperature has been reached and the membrane begins to "flow," the hand roller is positioned perpendicular to the nozzle and pressed lightly. For straight seams, the 1½ inch wide nozzle is recommended for use. For corners and compound connections, the ¾ inch wide nozzle shall be used.

C. Machine Welding

1. Machine welded seams are achieved by the use of automatic welding equipment. When using this equipment, the manufacturer's instructions shall be followed and local codes for electric supply, grounding and over current protection observed. Dedicated circuit house power or a dedicated portable generator is recommended. No other equipment shall be operated off the generator.
2. Metal tracks may be used over the deck membrane and under the machine welder to minimize or eliminate wrinkles.

D. Quality Control of Welded Seams

1. The Applicator shall check all welded seams for continuity using a rounded screwdriver. Visible evidence that welding is proceeding correctly is smoke during the welding operation, shiny membrane surfaces, and an uninterrupted flow of dark grey material from the underside of the top membrane. On-site evaluation of welded seams shall be made daily by the Applicator to locations as directed by the Owner's Representative or a manufacturer's representative. One inch wide cross-section samples of welded seams shall be taken at least three times a day. Correct welds display failure from shearing of the membrane prior to separation of the weld. Each test cut shall be patched by the Applicator at no extra cost to the Owner.

3.06 MEMBRANE FLASHINGS

All flashings shall be installed concurrently with the roof membrane as the job progresses. No temporary flashings shall be allowed without the prior written approval of the Owner's Representative and the manufacturer. Approval shall only be for specific locations on specific dates. If any water is allowed to enter under the newly completed roofing, the affected area shall be removed and replaced at the Applicator's expense. Flashing shall be adhered to compatible, dry, smooth, and solvent-resistant surfaces. Use caution to ensure adhesive fumes are not drawn into the building.

A. Adhesive for Membrane Flashings

1. Over the properly installed and prepared flashing substrate, adhesive shall be applied according to instructions found on the Product Data Sheet. The adhesive shall be applied in smooth, even coats with no gaps, globs or similar inconsistencies. Only an area which can be completely covered in the same day's operations shall be flashed. The bonded sheet shall be pressed firmly in place with a hand roller.
2. No adhesive shall be applied in seam areas that are to be welded. All panels of membrane shall be applied in the same manner, overlapping the edges of the panels as required by welding techniques.

B. Install Stop/Bar/Cord according to the Detail Drawings with approved fasteners into the structural deck at the base of parapets, walls and curbs. Stop is required by the manufacturer at the base of all tapered edge strips and at transitions, peaks, and valleys according to the manufacturer's details.

C. The manufacturer's requirements and recommendations and the specifications shall be followed. All material submittals shall have been accepted by the manufacturer prior to installation.

D. All flashings shall extend a minimum of 8 inches above roofing level unless otherwise accepted in writing by the Owner's Representative and the Technical Department.

E. All flashing membranes shall be consistently adhered to substrates. All interior and exterior corners and miters shall be cut and hot-air welded into place. No bitumen shall be in contact with the membrane.

F. All flashing membranes shall be mechanically fastened along the counter-flashed top edge with Stop at 6-8 inches on center.

G. Flashings shall be terminated according to the manufacturer's recommended details.

- H. All flashings that exceed 30 inches in height shall receive additional securement. Consult Technical Department for securement methods.

3.07 METAL FLASHINGS

- A. Metal details, fabrication practices and installation methods shall conform to the applicable requirements of the following:
 - 1. Factory Mutual Loss Prevention Data Sheet 1-49 (latest issue).
 - 2. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - latest issue.
- B. Metal, other than that provided by the manufacturer, is not covered under the warranty.
- C. Complete all metal work in conjunction with roofing and flashings so that a watertight condition exists daily.
- D. Metal shall be installed to provide adequate resistance to bending to allow for normal thermal expansion and contraction.
- E. Metal joints shall be watertight.
- F. Metal flashings shall be securely fastened into solid wood blocking. Fasteners shall penetrate the wood nailer a minimum of 1 inch.
- G. Airtight and continuous metal hook strips are required behind metal fascias. Hook strips are to be fastened 12 inches on center into the wood nailer or masonry wall.
- H. Counter flashings shall overlap base flashings at least 4 inches.
- I. Hook strips shall extend past wood nailers over wall surfaces by 1½ inch minimum and shall be securely sealed from air entry.

3.08 TEMPORARY CUT-OFF

All flashings shall be installed concurrently with the roof membrane in order to maintain a watertight condition as the work progresses. All temporary waterstops shall be constructed to provide a 100% watertight seal. The stagger of the insulation joints shall be made even by installing partial panels of insulation. The new membrane shall be carried into the waterstop. The waterstop shall be sealed to the deck and/or substrate so that water will not be allowed to travel under the new or existing roofing. The edge of the membrane shall be sealed in a continuous heavy application of sealant as described in Section 2.10. When work resumes, the contaminated membrane shall be cut out. All sealant, contaminated membrane, insulation fillers, etc. shall be removed from the work area and properly disposed of off site. None of these materials shall be used in the new work.

If inclement weather occurs while a temporary waterstop is in place, the Applicator shall provide the labor necessary to monitor the situation to maintain a watertight condition.

If any water is allowed to enter under the newly-completed roofing, the affected area shall be removed and replaced at the Applicator's expense.

3.09 COMPLETION

Prior to demobilization from the site, the work shall be reviewed by the Owner's Representative and the Applicator. All defects noted and non-compliances with the Specifications or the recommendations of the manufacturer shall be itemized in a punch list. These items must be corrected immediately by the Applicator to the satisfaction of the Owner's Representative and the manufacturer prior to demobilization.

All Warranties referenced in this Specification shall have been submitted and have been accepted at time of contract award.

END OF SECTION



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PRE-BID REQUEST FOR INFORMATION LOG

ARCHITECT'S PROJECT NO: S2103100AR
 PROJECT NAME: Clovis East Soccer Complex
 CONTRACTOR: Durham Construction
 DSA File No: _____
 DSA App No: 02-120099, 02-120158, 02-120503

RFI #	DATE RECEIVED	QUESTION	CONTRACTOR/SUBCONTRACTOR TRADE	RESPONSE	TO	FROM	TO	FROM	DATE RETURNED
1	11/2/22	Items Specified & Not Shown: Please note if desired & if yes, provide locations / Qty 1 Bobrick 3644-Waste Receptacle 2 Bobrick 2706 Napkin Dispenser / Vendor Items Shown & Not Specified: Please note if desired, please provide manufacturer & Model # 1 Recessed Toilet Tissue Dispensers in ADA Stalls	Murphy Specialties	See attached plans indicating location and quantities. See attached spec section for the recessed toilet tissue dispenser at accessible stalls.					11/4/22
2	11/2/22	1) Spec 084113, 1.3 Submittals indicate Engineer's calculations. Please verify manufacturer storefront system standard engineering submittal is required and job specific CA stamped calcs are not required. 2) Spec 084113, indicate class 1 clear anodized finish. Window Schedule on page A_A3.1 indicates most of the frame's finish as "S.G.P." Please clarify	San Joaquin Glass	Manufacturer's standard submittal is acceptable, but shall be stamped by CA structural engineer. Frames are clear anodized. S.G.P. will be removed from schedule. SM - PBK 11/3/22					11/4/22
3	11/2/22	Spec 085800, 2.1 indicate manual service windows. Please verify the Concession service windows do not need to be self-closing with screens per Health Department codes.	San Joaquin Glass	Self closing is not required. Luis Olvera PBK 11-03-2022					11/4/22
4	11/2/22	Spec 088000 list G-1: 1" insulated gray low-e glass & G-3: 1/4" clear tempered glass. 1) Window "A" calls for speak-hole. Detail 19/A_DT3.1 calls for a Backer Voice Port. a) Speak-hole/Voice ports can not be used on insulated glass. Please verify if indicate single pane glass type. b) Please indicate either speak-hole or backer voice port 2) Please indicate if glass in service windows will be 1/4" clear or tinted.	San Joaquin Glass	1a. single pane glass type. 1b. speak-hole. 2. 1/4" clear Luis Olvera PBK 11-03-2022					11/4/22
5	11/3/22	Window "A": Window Styles show a sliding service window. Detail 19/A_DT3.1 appears to be a full height bullet resistant ticket window with a deal tray insert. Specs indicate a sliding window with no mention of deal tray or speak-thru. Please clarify what is required or a completed spec.	San Joaquin Glass	The sliding service windows are in spec section 08 58 00. The windows above will be single-glazed storefront. Window A05 will be single-glazed storefront above the sliding service window with a speak hole in the storefront section. All service windows have counters. A05 has an accessible dropped counter per 19/A_DT3.1. SM - PBK 11/4/22					11/4/22
6	11/3/22	Is there a detail for the panel backboard that is mentioned on keynote 3 on sheet C_1.0 in the bleacher drawings?	Durham Construction	To be addressed in Addendum 3	LEAF 11/4/22				
7	11/3/22	At the pre-bid we walked the site looking for the existing panels that are noted in the concession stand plans on sheet E_1.1. The location that is shown is not where the panels are located. The location of the panels is also shown on the bleacher drawings on sheet E_1.0, but these are different panels that what is noted on the concession drawings. Can I please get clarification on where the existing panels are located?	Durham Construction	To be addressed in Addendum 3	LEAF 11/4/22				
8	11/3/22	Is there a General Conditions section? Specifically 00700?	New England Sheet Metal	See attached spec section 00700. SM - PBK 11/4/22					11/4/22

RFI #	DATE RECEIVED	QUESTION	CONTRACTOR/SUBCONTRACTOR TRADE	RESPONSE	TO	FROM	TO	FROM	DATE RETURNED
9	11/3/22	<p>I have a few concerns with the Glass Scope. Can you help me identify the glass types.</p> <ol style="list-style-type: none"> 1. Transaction Windows 2. Speak-hole Window 3. All other <p>On Sheet A_A3.1 Window A (the Speak hole can only be done on single pain glass. See below for reference.</p> <p>These plans and specs for the glass/ glazing are misleading.</p> <p>Example: Plans call out Dual Glazed for all window types, yet on the window details most are single pain 1/4\".</p> <p>4.1 GLAZING SCHEDULE</p> <p>The sp</p> <p>A. G-1 Insulated Glass: 1 inch (25 mm) sealed insulated unit consisting of an exterior lite of 1/4 inch (6 mm) low-e tinted tempered float glass, 1/2 inch gas filled air space, and 1/4 inch (6 mm) clear tempered float glass interior lite.</p> <p>B. G-3 Clear Tempered Glass: 1/4 inch (6 mm) clear tempered float glass.</p>	Giroux Glass	All glazing will be 1/4", tempered where required by code. Spec section 08 58 00 requires tempered glass in sliding service windows. Speak hole will be in storefront glazing above sliding service window at window A05.					11/4/22
10	11/10/22	Can you tell me if both buildings require tapered insulation for the slope or are they structurally sloped?	Nations Roof West/Durham	Both buildings are tapered rigid insulation. Framing is not sloped for drainage.					11/10/22
11	11/10/22	<p>Can you have the architect verify the roof system In the Summary, located in 07 54 19 it states glass mat root board but none is indicated nor is a thickness mentioned It states flat rigid insulation, but no thickness is shown.</p> <p>Is his intention to install the glass mat roof board over the plywood, apply self-adhering vapor barrier, install flat insulation(what size), install tapered roof system, install 1/4" Dens Deck and/or Dexcell roof board and fully adhere the 80 mil PVCS</p> <p>The details are no help because the indicate a built-up roof system.</p>	Nations Roof West	To be addressed in Addendum 3					
12	11/11/22	Please clarify the source of electrical power for the OFCI press box. Also please provide the electrical connection requirements for the OFCI scoreboard.	Valley Unique Electric	To be addressed in Addendum 3					
13	11/11/22	<p>1. spec section 27 51 23 Local Sound Reinforcing systems details a sound system installation in a Press box. Is there a Press box Plan that shows this work? Are the 4 speakers to be mounted at the press box or at the musco Poles at the field? Please clarify</p> <p>2.furnish and install item 29 furnish and install new Clocks and speakers These items are not shown on the plans please clarify</p> <p>3.Furnish and Install Item 54 mentions fiber Optics however nowhere does it specify Strand Count/Type or destination for Fiber Optics to be pulled to. Please clarify</p> <p>4.Cameras are show on the plans page E A1 1 and listed in Furnish and Install items #55 complete but provide no specifications please clarify</p> <p>5.Motion detectors are shown on Pages E A1 1 and E B1 1 but are not specified Furnish and Install Item #54 shows to Furnish and install complete Intrusion. No specification Please clarify</p> <p>6.Keypads are shown on Pages E A1 1 and E B1 1 but are not specified. Furnish and Install Item #54 shows to Furnish and install complete Intrusion. No specification Please clarify.</p>	Magnetar US						