GENERAL NOTES

1. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO INCLUDE ALL LABOR, MATERIALS AND SERVICES NECESSARY FOR COMPLETION OF ALL WORK SHOWN, PRESCRIBED OR REASONABLY IMPLIED BUT NOT LIMITED TO THAT EXPLICIT INDICATED IN THE CONTRACT DOCUMENTS.
2. DO NOT SCALE THE DRAWINGS.
3. DRAWINGS PROVIDE BY ENGINEERS / CONSULTANTS ARE SUPPLEMENTAL TO THE ARCHITECTURAL DRAWINGS. THE CONTRACTOR SHALL REVIEW ALL PLANS AND DRAWINGS. IN THE EVENT OF CONFLICTING STATEMENTS, INSUFFICIENT INFORMATION OR ERRORS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ARCHITECT; OBTAIN CLARIFICATION BEFORE ANY WORK IS BEGUN. WORK INSTALLED WHERE CONFLICTING CONDITIONS EXIST SHALL BE CORRECTED AT CONTRACTORS EXPENSE.
4. ANY ITEMS INDICATED WITH (E) SHALL BE DEEMED TO BE EXISTING. ANY ITEMS INDICATED OTHERWISE SHALL BE CONSIDERED NEW WORK, AND SHALL BE PART OF THIS CONTRACT, UNLESS NOTED OTHERWISE.
5. EXISTING CONDITION MAY NOT BE SHOWN EXACTLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. ANY DISCREPANCIES AND/OR OMISSIONS CONTAINED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT THAT TIME, OR IMMEDIATELY UPON DISCOVERY.
6. PROVIDE ATTACHMENT AND CONNECTION DEVICES AND METHODS FOR SECURING WORK PROPERLY AS IT IS INSTALLED; TRUE TO LINE AND LEVEL, PER CODE AND WITHIN RECOGNIZED INDUSTRY TOLERANCES IF NOT OTHERWISE INDICATED. ALLOW FOR EXPANSIONS AND BUILDING MOVEMENTS. PROVIDE UNIFORM JOINT WIDTH IN EXPOSED WORK, ORGANIZED FOR BEST POSSIBLE VISUAL EFFECT. REFER QUESTIONABLE VISUAL-EFFECT CHOICES TO ARCHITECT FOR FINAL DECISION.
7. FINAL CLEANING MUST BE DONE TO THE OWNER'S SATISFACTION AND WILL INCLUDE BUT NOT LIMITED TO CLEANING OF EXISTING LIGHT FIXTURES AND LAMPS AND REMOVAL OF TEMPORARY PROTECTION DEVICES.
8. ANY REQUIRED INTERRUPTION OF OR REMOVAL OF ANY UTILITY SERVICE SERVING THE EXISTING FACILITY SHALL NOT BE PERFORMED UNTIL A MINIMUM OF A ONE WEEK PRIOR NOTICE IS GIVEN TO THE OWNER BY CONTRACTOR. SUCH WORK AS RELATED TO THE NEW OR EXISTING WORK SHALL BE COORDINATED WITH THE OWNER AND APPLICABLE UTILITY COMPANY, AS MAY BE NECESSARY.
9. INSPECTION OF CONDITIONS: INSPECT SUBSTRATE TO RECEIVE WORK, AND CONDITIONS UNDER WHICH WORK WILL BE PERFORMED, AND REPORT UNSATISFACTORY CONDITIONS. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED AS DIRECTED.
10. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT ADOPTED EDITION OF THE CBC, TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND REGULATIONS. NOTHING HEREIN SHALL BE INTERPRETED TO THE CONTRARY.
11. ARCHITECT WILL INTERPRET THE INTENT OF THE DOCUMENTS IN CASE OF POSSIBLE CONFLICT OR DISCREPANCY.
12. DETAILS NOTED AS "TYP" OR "TYPICAL" SHALL APPLY IN ALL CASES WHETHER OR NOT SPECIFICALLY REFERENCED.
13. WORKMANSHIP STANDARDS: REMOVE AND REPLACE WORK WHICH DOES NOT COMPLY WITH WORKMANSHIP STANDARDS AS SPECIFIED AND AS RECOGNIZED IN THE CONSTRUCTION INDUSTRY FOR APPLICATIONS INDICATED REMOVE AND REPLACE OTHER WORK DAMAGED OR DETERIORATED BY FAULTY WORKMANSHIP OR IT'S REPLACEMENT.
14. MANUFACTURER'S INSTRUCTIONS: WHERE INSTALLATIONS INCLUDE MANUFACTURERED PRODUCTS, COMPLY WITH MANUFACTURER'S APPLICABLE INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLATION, TO EXTENT THESE ARE MORE EXPLICIT OR MORE STRINGENT THAN REQUIREMENTS INDICATED IN CONTRACT DOCUMENTS.
15. SCHOOL MAY BE IN SESSION AND THERE MIGHT BE STUDENT ACTIVITIES HAPPENING DURING CONSTRUCTION. CONTRACTOR MUST BARRICADE HIS/HER AREA AND ALSO MUST TAKE ALL PRECAUTIONS TO PROTECT STUDENTS PER CBC, CHAPTER 33
16. MATCH EXISTING GRADE WHERE NEW ASPHALTIC CONCRETE IS TO MEET EXISTING ASPHALTIC CONCRETE.
17. MOUNTING HEIGHTS: WHERE MOUNTING HEIGHTS ARE NOT INCLUDED, MOUNT INDIVIDUAL UNITS OF WORK AT MOUNTING HEIGHTS PER CALIFORNIA TITLE 24, REFER QUESTIONABLE MOUNTING HEIGHT CHOICES TO ARCHITECT FOR FINAL DECISION.
18. PATCH AREAS WHERE ORIGINAL ARE DISTURBED AFTER INSTALLING NEW ITEMS OR DEMOLITION.
19. MATERIALS: EXCEPT AS OTHERWISE INDICATED OR APPROVED BY OWNER, PROVIDE MATERIALS FOR CUTTING-AND-PATCHING WHICH WILL RESULT IN EQUAL -OR-BETTER WORK THAN WORK BEING CUT-AND-PATCHED IN TERMS OF PERFORMANCE CHARACTERISTICS AND VISUAL EFFECT WHERE APPLICABLE. USE MATERIALS IDENTICAL TO ORIGINAL MATERIALS WHERE FEASIBLE AND WHERE RECOGNIZED THAT SATISFACTORY RESULTS CAN BE PRODUCED THEREBY. REMOVE AND REPLACE WORK JUDGED BY ARCHITECT TO BE CUT-AND-PATCHED IN A VISUALLY UNSATISFACTORY OR OTHERWISE OBJECTIONABLE MANNER. RESTORE EXISTING FINISHES ALTERED BY THE NEW WORK ONTO RETAINED WORK ADJOINING, IN A MANNER WHICH WILL ELIMINATE EVIDENCE OF PATCHING.
20. GYPSUM BOARD , LATHING, PLASTERING AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO CHAPTER 25 OF TITLE 24, PART 2, UNLESS NOTED OTHERWISE.
21. ALL TRIM AND EXPOSED CORNER DETAILS SHALL HAVE MILTERED JOINT CONNECTIONS.
22. FLOOR COVERING PREPARATION: CONTRACTOR SHALL EXAMINE EXISTING FLOOR SLAB AND DETERMINE THE ACCEPTABILITY TO RECEIVE ALL OF THE FINISH FLOORING MATERIALS AS DESCRIBED. CONTRACTOR SHALL PERFORM ADDITIONAL CLEANING, SCRAPING AND FILLING AS MAY BE NECESSARY FOR THE PROPER APPLICATION OF THE VARIOUS MATERIALS, PER MANUFACTURER'S RECOMMENDATIONS, SHOULD UNACCEPTABLE CONDITIONS EXIST.
23. PROVIDE BACKING IN WALLS FOR ALL WALL MOUNTED UNITS, ATTACHMENTS AND ACCESSORIES.
24. MAXIMUM EFFORT TO OPERATE INTERIOR DOORS SHALL NOT EXCEED 5 POUNDS WITH SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS.
25. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE FLOOR.
26. DURING PERIODS OF PARTIAL OR RESTRICTED USE OF A BUILDING OF FACILITY, THE ENTRANCES USED FOR PRIMARY ACCESS SHALL BE ACCESSIBLE TO AND USABLE BY PHYSICALLY DISABLED PERSONS.
27. REGARDLESS INDICATED ON THE DRAWINGS OR NOT, CONTRACTOR SHALL COMPLY WITH MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS AND PROVIDE REQUIRED ACCESSORIES IF NEEDED. CONTRACTOR SHALL ALSO PROVIDE COMPLETE SYSTEMS PER VARIOUS INDUSTRIES STANDARDS AND COMPLY WITH CODES AND REGULATIONS.
28. AFTER DEMOLITION IS COMPLETED. CONTRACTOR SHALL VERIFY ALL EXISTING ROOM DIMENSIONS AND CEILING HEIGHT PRIOR TO SUBMITTING SHOP DRAWINGS AND PLUMBING INSTALLATION. DIMENSIONS SHOWN ON THE DRAWINGS ARE ABSOLUTE CODE REQUIREMENTS. ANY DEVIATIONS SHALL BE REVIEWED BY THE ARCHITECT.
29. DETAILS ON A8.X ARE TYPICAL DETAILS AND THEY ARE APPLICABLE TO ALL APPLICABLE LOCATIONS, REGARDLESS SPECIFICALLY REFERENCED OR NOT.
30. CONTRACTOR SHALL PATCH / SACK OR ROUGHEN (E) CONCRETE CURB AS NEEDED FOR NEW WORK.
31. ALL WOOD STUD FRAMING MEMBERS IN CONTACT WITH CONCRETE / MASONRY SHALL BE PRESSURE TREATED.

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020*
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR*
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
(2020 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
(2020 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
(2020 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
(2020 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
(2020 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
(2020 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
2016 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2019 CBC PART 2 CH 35)
NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)	2022 EDITION
NFPA 14	STANDPIPE AND HOSE SYSTEMS (CA AMENDED)	2019 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 20	STATIONARY PUMPS FOR FIRE PROTECTION	2019 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2019 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)	2019 EDITION
NFPA 70	NATIONAL ELECTRICAL CODE	2021 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2022 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVE	2019 EDITION
NFPA 90A	INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS	2021 EDITION
NFPA 101	LIFE SAFETY CODE - SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES	2021 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)	2018 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2019 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2016 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 (R2021)
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 (R2018)
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

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

THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.

A LISTING OF CERTIFIED ATT CAN BE FOUND AT:
HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE.

THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

SCOPE OF WORK

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.
CONSTRUCTION OF NEW FIRE SPRINKLER SYSTEM AT THE GYM.
UPGRADE OF (E) TOILET ROOMS AT THE GYM BUILDING
ACCESSIBILITY AND PATH OF TRAVEL UPGRADE WILL BE CONSTRUCTED UNDER 03-122419
THIS PROJECT SHALL NOT BE CERTIFIED UNTIL 03-122419 AND 03-122518 ARE CLOSED AND CERTIFIED.

DSA NOTES

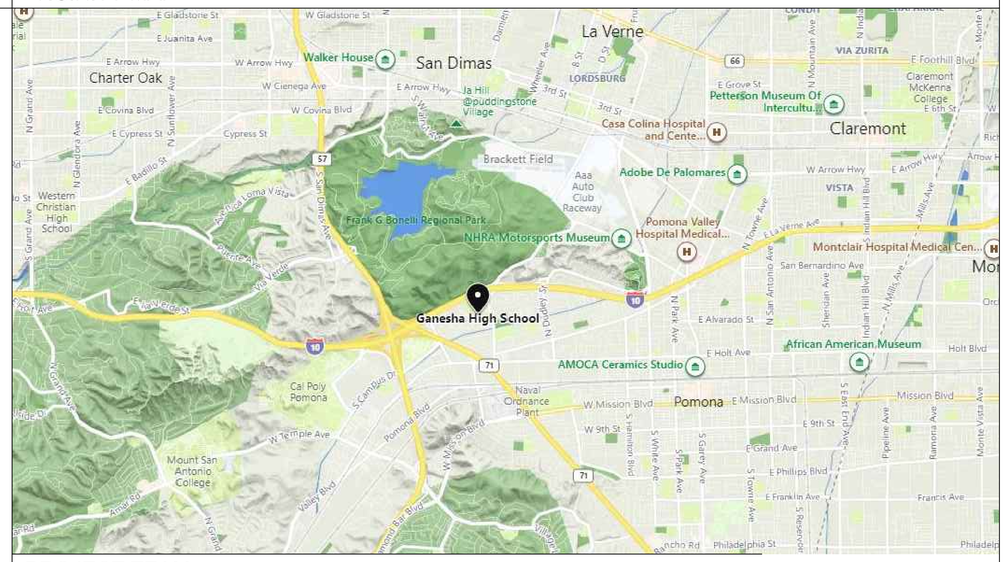
1. ALL WORK SHALL CONFORM TO 2022 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
2. NO DEFERRED APPROVAL FOR THIS PROJECT.
3. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
4. A "DSA CERTIFIED CLASS 3" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
6. 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)
7. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
8. PLANTS FABRICATING FOLDING AND TELESCOPIC SEATING FOR PROJECTS UNDER DSA JURISDICTION WILL REQUIRE DSA ACCEPTANCE PER DSA IR 16-5.16.

CONCRETE AND REINFORCING

CONCRETE
1. ALL CEMENTS SHALL CONFORM TO ASTM (C-150), TYPE V
2. FINE AND COARSE AGGREGATE SHALL CONFORM TO ASTM (C-33) FOR STANDARD WEIGHT CONCRETE. THE MAX. SIZE OF AGGREGATE IS $\frac{3}{4}$".
3. THE SHRINKAGE OF AGGREGATE SHALL BE PER ASTM (C-157) WITH THE AVERAGE DRYING SHRINKAGE AT (28 DAYS) OR DRYING NOT EXCEEDING 0.4%
4. MAX. WATER / CEMENT RATIO IS 0.5
5. FLYASH IS NOT ALLOWED
6. CONTRACTOR SHALL SUBMIT A MIX DESIGN (WITH A CALIFORNIA LICENSED CIVIL ENGINEER STAMP) FOR REVIEW AND APPROVAL.
7. ALL CONCRETE SHALL BE 3,000 PSI MIN.
8. SLUMP: 4" TO 5"

REINFORCING STEEL
REINFORCING STEEL SHALL BE IN COMPLIANT WITH ASTM A615, GR 60, Fy = 60 KSI

VICINITY MAP



PROJECT TEAM

ARCHITECT:
YNL ARCHITECTS
10736 JEFFERSON BLVD. #722
CULVER CITY, CA 90230

CIVIL ENGINEER:
ANDREASEN ENGINEERING
195 NORTH EUCLID AVE., SUITE 101
UPLAND, CA 91786

STRUCTURAL ENGINEER:
GROSSMAN & SPEER
529 HAHN AVE, SUITE 200
GLENDALE, CA 91203

MEP ENGINEER:
MDC ENGINEERS
5101 E LA PALMA AVE. SUITE 205
ANAHEIM HILLS, CA 92807

FIRE SPRINKLER ENGINEER:
POCOCK DESIGN SOLUTIONS
14451 CHAMBERS ROAD, SUITE 210
TUSTIN, CA 92780

SHEET INDEX (54 SHEETS)

THE DSA APPROVED PC DRAWINGS (A02-120827) AND/OR SPECIFICATIONS CALCULATIONS FOR THE ITEMS LISTED BELOW HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. THESE DOCUMENTS HAVE BEEN EXAMINED BY ME FOR DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME.

THE ITEMS LISTED BELOW ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT FOR WHICH I AM THE INDIVIDUAL DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE (OR FOR WHICH I HAVE BEEN DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK).

THIS STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUCTED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTION 1702 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-366, 4-341 AND 4-344 OF TITLE 24, PART 1 (TITLE 24, PART 1, SECTION 4-317 (B)).

LIST ITEMS REVIEWED AND ACCEPTED. (FOR DRAWINGS, A LISTING OF ALL ACCEPTED DRAWINGS ARE REFERRED BELOW)

INTERKAL TELESCOPIC BLEACHER PC
(02-120827) (21 SHEETS)

T0.00	TITLE SHEET
T0.01	SPECIFICATIONS & STRUCTURAL SECTION
T0.02	EXAMPLE DSA-103 & DSA-130
T1.01	SITE SPECIFIC - PLAN VIEW BANK #1
T1.02	SITE SPECIFIC - PLAN VIEW BANK #2
T2.01	SITE SPECIFIC - SIDE ELEVATION BANK #1 & #2
T4.01	UPPER WALL ATTACHMENT - CONCRETE
T4.10	TYPICAL LAST ROW DETAILS
T4.20	LOWER WALL ATTACHMENT
T5.10	10.25" RISE WITH SELF STORING AISLE RAILS PLAN VIEW AND SITE ELEVATIONS
T6.10	10.25" RISE FRAMING PLAN & REAR ELEVATION
T6.30	TYPICAL FRAME ASSEMBLY
T6.31	TYPICAL FRAME ASSEMBLY CONTINUED RISER & NOSE BEAM SPLICES
T7.01	LOW ROW - HORSE WELDMENT & COMBO BRACKET
T7.02	LOW ROW - SWAY BRACE DETAILS
T7.20	FRONT ROW OUTRIGGER
T8.20	SELF-STORING AISLE RAILS & INTERMEDIATE STEP
T8.30	SELF-STORING END RAIL / CURTAIN DETAILS
T8.31	SELF-STORING END RAIL DETAILS CONTINUED
T9.10	WHEELCHAIR NOTCH - 1 ROW PERMANENT
T9.30	SEATING OPTIONS - PLASTIC

YU-NGOK LO (C31804)
YNL ARCHITECTS, INC.

SIGNATURE OF THE ARCHITECT

8 / 26 / 24
DATE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2644
Fax: (213) 746-6463

LICENSED ARCHITECT
YU-NGOK LO
NO. C31804
REN 3-31-25
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

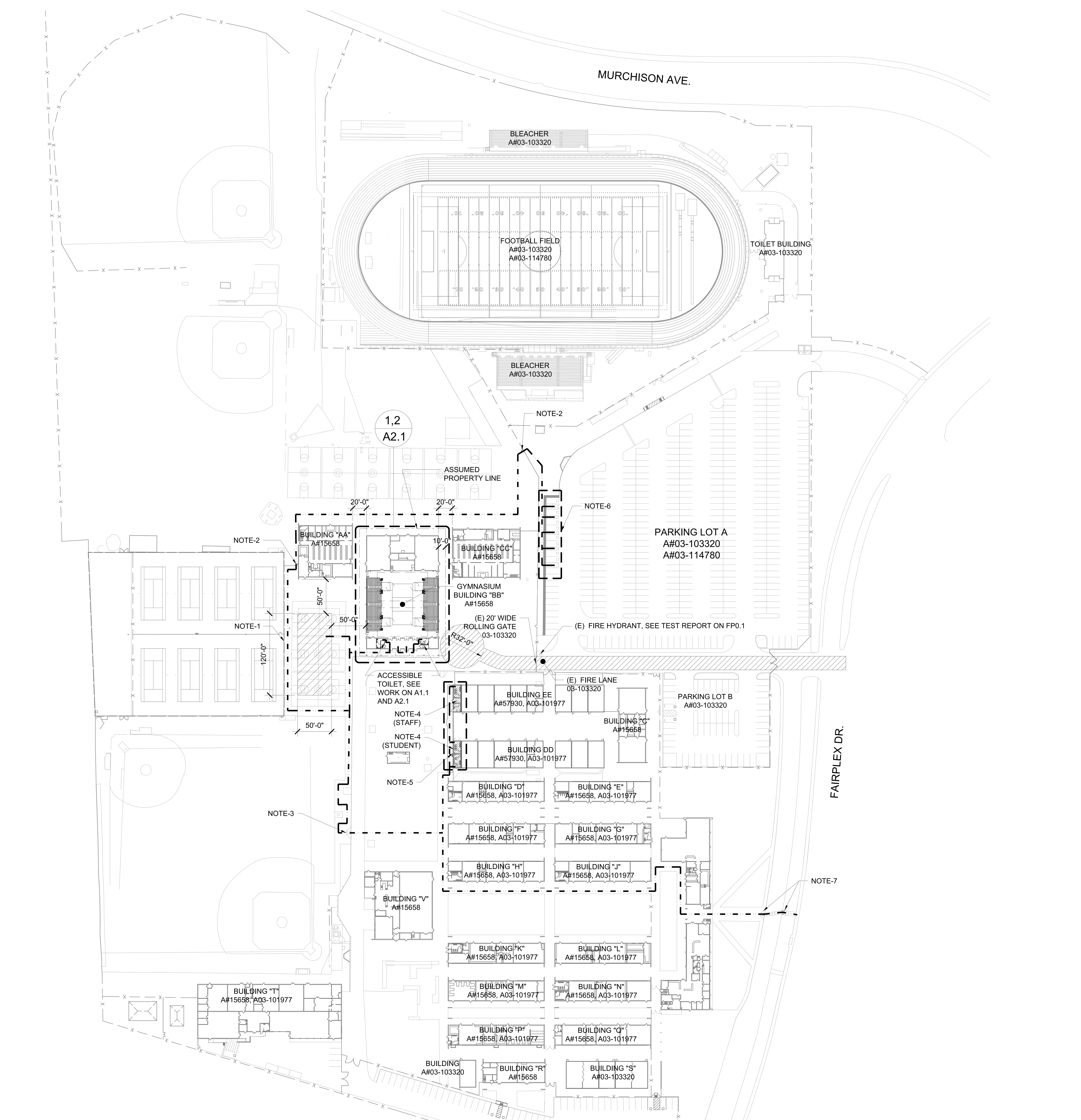
POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

COVER SHEET AND GENERAL NOTES

DATE 08/26/2024
DSA-AR A# 03-123614
FILE NO. 19-H20
SHEET

A0.0



GANESHA H.S. SITE PLAN
SCALE: 1" = 60'-0" @ FULL PLOT (24X36)

CERT TABLE

ACCESSIBLE PARKING SPACES	A03-103320, A03-114780, 03-122518	CERTIFIED / APPROVED
POT UPGRADE	A03-122518, A03-122419	APPROVED
ACCESSIBLE TOILET ROOM	A03-122419	APPROVED
ACCESSIBLE DRINKING FOUNTAIN	A03-122419	APPROVED
BUILDING "BB" (GYMNASIUM)	A15658	CERTIFIED
BUILDING "DD"	A57930, 101977	CERTIFIED
BUILDING "EE"	A57930, 101977	CERTIFIED
FIRE LANE	A03-122518	APPROVED
FIRE ALARM UPGRADE	A03-113154	CERTIFIED

DESIGN PROFESSIONAL STATEMENT

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERNATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS, AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT

LEGEND

PATH OF TRAVEL, TECHNICAL REQUIREMENTS FOR ACCESSIBLE ROUTE: ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING $\frac{1}{2}$" IF BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING $\frac{1}{4}$" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTANT. CROSS SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOE IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:30. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL, ABOVE 27" AND LESS THAN 80" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

20'-0" WIDE FIRE LANE

NOTES

NOTE-1 PROVIDE SAFE DISPERSAL AREA SIGN (ON FENCE), SEE 4/A8.1
NOTE-2 ACCESSIBLE GATE, WORK UNDER A03-122518
NOTE-3 CURB CUT, WORK UNDER A03-122518
NOTE-4 ACCESSIBLE MENS AND WOMENS TOILET ROOMS WORK UNDER A03-122419
NOTE-5 ACCESSIBLE DRINKING FOUNTAIN, WORK UNDER A03-122419
NOTE-6 ACCESSIBLE PARKING SPACES A03-103320, A03-114780, A03-122518
NOTE-7 CURB CUT UNDER A03-122419

SAFE DISPERSAL AREA

TOTAL NO. OF OCCUPANTS: 1,881 (SEE A2.1)
SAFE DISPERSAL AREA REQUIRED: 1,881 X 3 = 5,643 SF

SAFE DISPERSAL AREA PROVIDED: 50'X120' = 6,000 SF

GENERAL NOTES

1. EXISTING CAMPUS WIDE FIRE ALARM UPGRADE: 03-113154.
2. THIS APPLICATION SHALL NOT BE CERTIFIED UNTIL 03-122419 AND 03-122518 ARE CLOSED AND CERTIFIED.

BUILDING BB INFORMATION

TOTAL AREA:	17,640 SF
NO. OF STORY:	1
HEIGHT:	33'-0"
CONSTRUCTION TYPE:	TYPE III-B
OCCUPANCY GROUP:	A-4
FIRE SPRINKLER:	SPRINKLERED

ALLOWABLE HEIGHT (CBC TABLE 504.3): 75' > 33'-0" THEREFORE OK

ALLOWABLE STORY (CBC TABLE 504.4): 3 > 1 THEREFORE OK

ALLOWABLE SF (CBC TABLE 506.2) = 38,000 SF > 17,640 SF THEREFORE OK

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC Engineers, INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

LICENSED ARCHITECT
NO. C31804
REN. 3-31-25
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

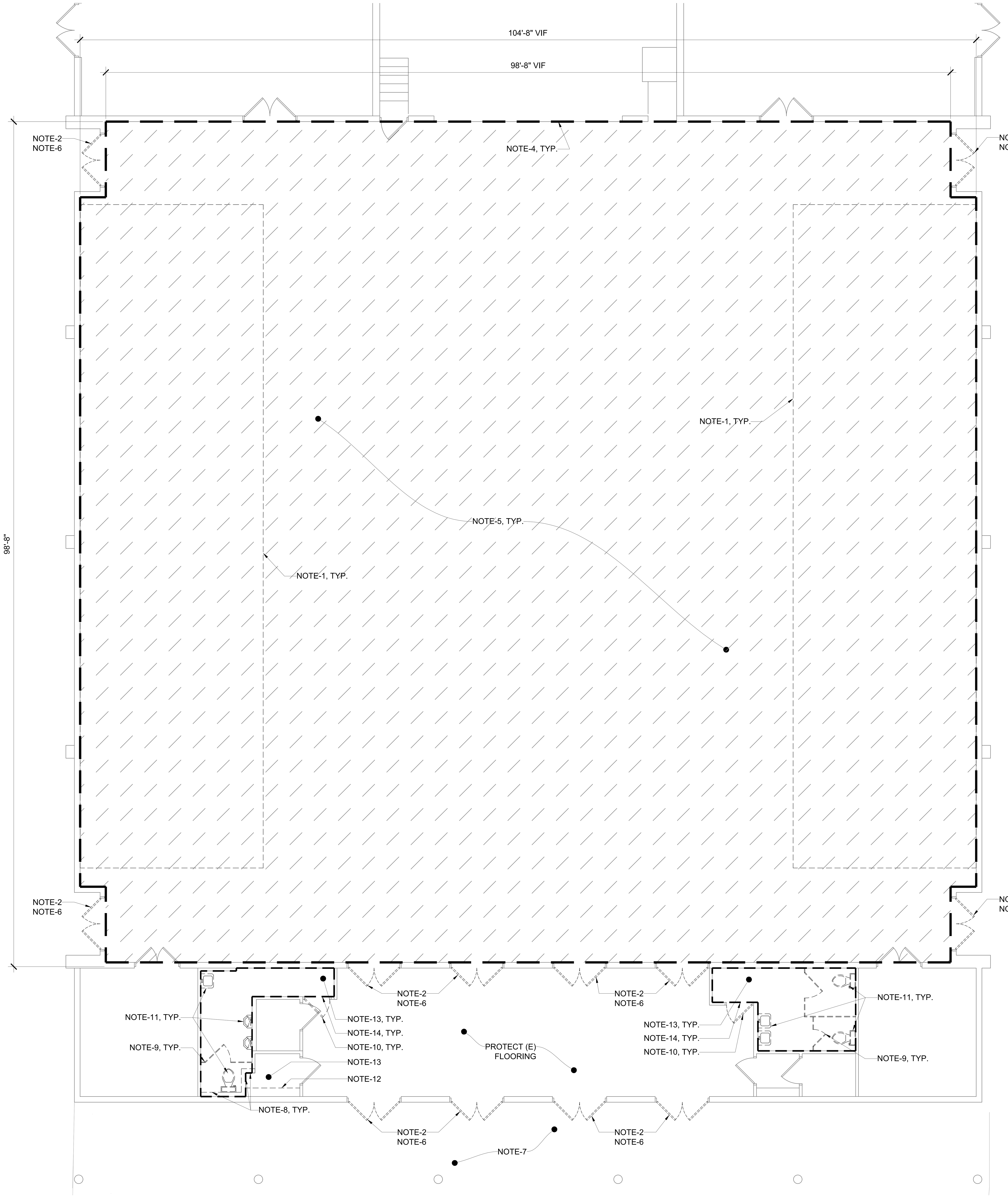
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

SITE PLAN

DATE 08/26/2024
DSA A# 03-123614
FILE NO. 19-H20
SHEET

A0.1



DEMO FLOOR PLAN
SCALE: 3/16" = 1'-0" @ FULL PLOT (24X36)

1
N

LEGEND

REMOVE (E) GYMNASIUM FLOOR SYSTEM DOWN TO (E) CONCRETE SUBSTRATE.

NOTES

NOTE-1	REMOVE (E) BLEACHER AND ASSOCIATED ITEMS.
NOTE-2	REMOVE (E) DOOR AND HARDWARE, EXISTING FRAME TO REMAIN
NOTE-3	NOT USED
NOTE-4	REMOVE (E) PERIMETER ANGLE BASE
NOTE-5	REMOVE (E) GYMNASIUM FLOORING SYSTEM DOWN TO EXISTING CONCRETE SUBSTRATE
NOTE-6	REMOVE (E) DIAMOND PLATE AND/OR THRESHOLD
NOTE-7	SEE A1.2 FOR WORK IN THIS AREA
NOTE-8	REMOVE PORTION OF (E) WOOD STUD WALL FOR NEW WORK
NOTE-9	REMOVE (E) TOILET PARTITIONS
NOTE-10	REMOVE (E) DOOR AND DOOR FRAME
NOTE-11	REMOVE (E) TOILET FIXTURES
NOTE-12	REMOVE (E) SHELVING FOR NEW WORK
NOTE-13	REMOVE (E) CEILING TILE, PLASTER CEILING, AND SUSPENDED CEILING GRID FOR NEW WORK
NOTE-14	REMOVE (E) WALL FINISHES DOWN TO EXISTING STUD FRAMING, CONCRETE, OR BRICK SUBSTRATE

EXISTING OCCUPANCY LOAD

WEST BLEACHER
NO. OF ROWS:11
LENGTH OF BLEACHER: 77'-6" (930")
NO. OF OCCUPANTS = 930" / 18" PER PERSON X 11 ROWS = 568
(PER ICC 300 403.1)

EAST BLEACHER
NO. OF ROWS:11
LENGTH OF BLEACHER: 77'-6" (930")
NO. OF OCCUPANTS = 930" / 18" PER PERSON X 11 ROWS = 568
(PER ICC 300 403.1)

OPEN AREA
6,855 SF / 7 = 979

TOTAL NO. OF OCCUPANTS = 568 + 568 + 979 = 2,115 OCCUPANTS

GENERAL NOTES

1. SCOPE OF DEMOLITION WORK SHOWN IS DIAGRAMMATIC IN NATURE. REGARDLESS SHOWN ON DRAWING OR NOW, CONTRACTOR SHALL DEMOLISH ALL ITEMS NECESSARY FOR INSTALLATION OF NEW WORK.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

LICENSED ARCHITECT
NO. C31804
REN 3-31-25
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

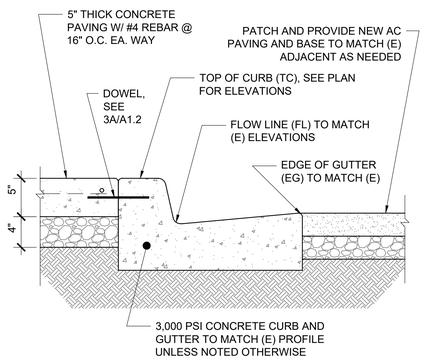
POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

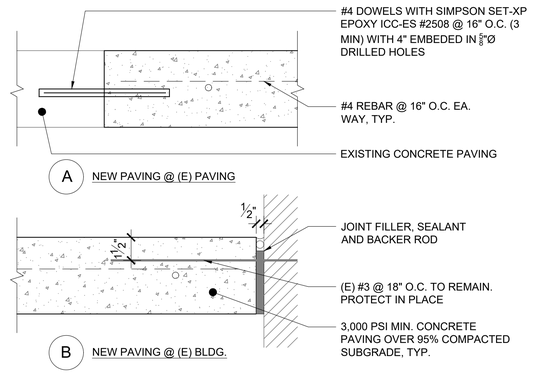
DEMO FLOOR PLAN

DATE 08/26/2024
DSA A# 03-123614
FILE NO. 19-H20

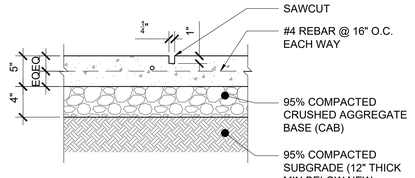
SHEET
A1.1



TYPICAL CURB AND GUTTER DETAIL | SCALE 1-1/2"=1'-0" | 4



TYP. NEW PAVING MEETS EXISTING | SCALE 3"=1'-0" | 3



TYP. CONCRETE PAVING AND CONTROL JOINT | SCALE 1-1/2"=1'-0" | 2

NOTES

NOTE-1	PROVIDE NEW CURB AND GUTTER TO MATCH EXISTING FLOW LINE (FL) AND EDGE OF GUTTER (EG) ELEVATIONS. SEE PLAN FOR NEW TOP OF CURB (TC) ELEVATIONS. TOP OF CURB SHALL BE SET TO ACHIEVE A MAX 2% CROSS SLOPE WALKWAY AS INDICATED, SEE ALSO 4/A1.2
NOTE-2	PROVIDE PAVING EXPANSION JOINT AT EXISTING BUILDING, SEE 3B/A1.2
NOTE-3	CONTROL JOINT, SEE 2/A1.2
NOTE-4	PROVIDE DOWELS AT WHERE NEW CURB AND GUTTER MEET (E), SEE 3A/1.2
NOTE-5	THRESHOLD AT DOOR, SEE 1/A8.1
NOTE-6	SAWCUT PORTION OF (E) AC PAVING FOR NEW WORK AS NEEDED. PATCH AND PROVIDE NEW AC PAVING TO MATCH (E) AS NEEDED
NOTE-7	EXISTING COLUMN, PROTECT IN PLACE. PROVIDE EXPANSION JOINT AROUND COLUMN, SEE DETAIL 3B/A8.1, SIMILAR

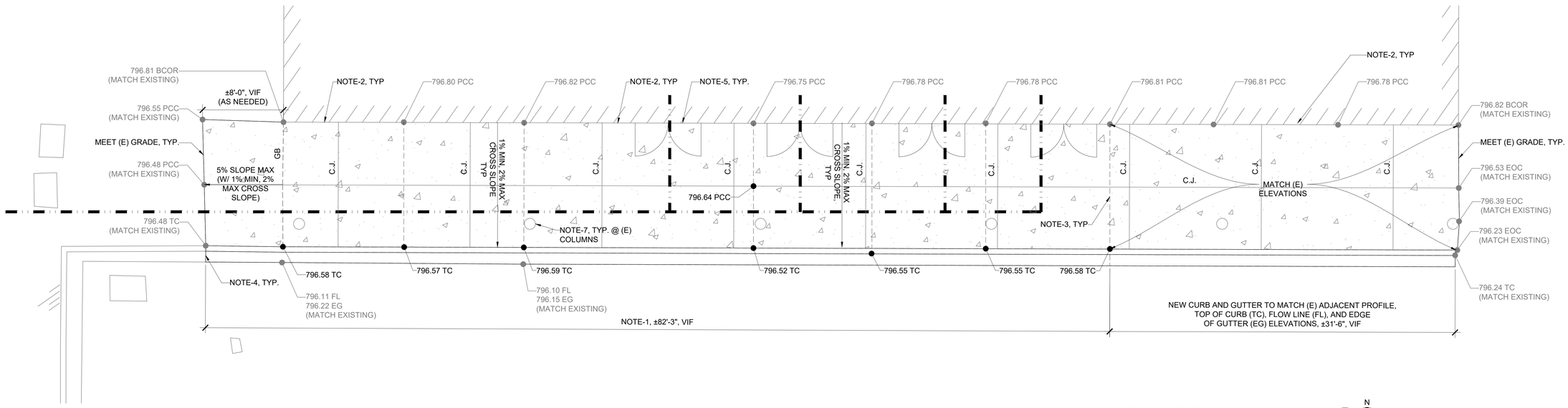
GENERAL NOTES

1. ADJUST (E) VALUE BOXES (IF ANY) TO MEET NEW GRADE.
2. CONTRACTOR SHALL CONDUCT HIS/HER OWN TOPO SURVEY TO VERIFY ALL DIMENSIONS AND SPOT ELEVATIONS IN THE FIELD.

LEGEND

EXISTING ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAX. SLOPE OR VERTICAL CHANGES IS SLIP RESISTANT, STABLE, FIRM AND SMOOTH. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED. ARCHITECT SHALL VERIFY ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THE PROJECT, AND PATH OF TRAVEL COMPILES WITH CBC

REMOVE (E) PAVING, BASE, AND SUBGRADE AND PROVIDE NEW 5" THICK CONCRETE PAVING WITH #4 REBAR @ 16" O.C. EA. WAY OVER 95% COMPACTED BASE OVER 95% COMPACTED SUBGRADE. (E) DOWEL TO REMAIN, VERIFY EXACT LOCATIONS IN THE FIELD



ENLARGED SITE PLAN
SCALE: 1/4" = 1'-0" @ FULL PLOT (30X42) — 1 — N

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2644
Fax: (213) 746-6463

LICENSED ARCHITECT
NO. C31804
REN 3-31-25
STATE OF CALIFORNIA

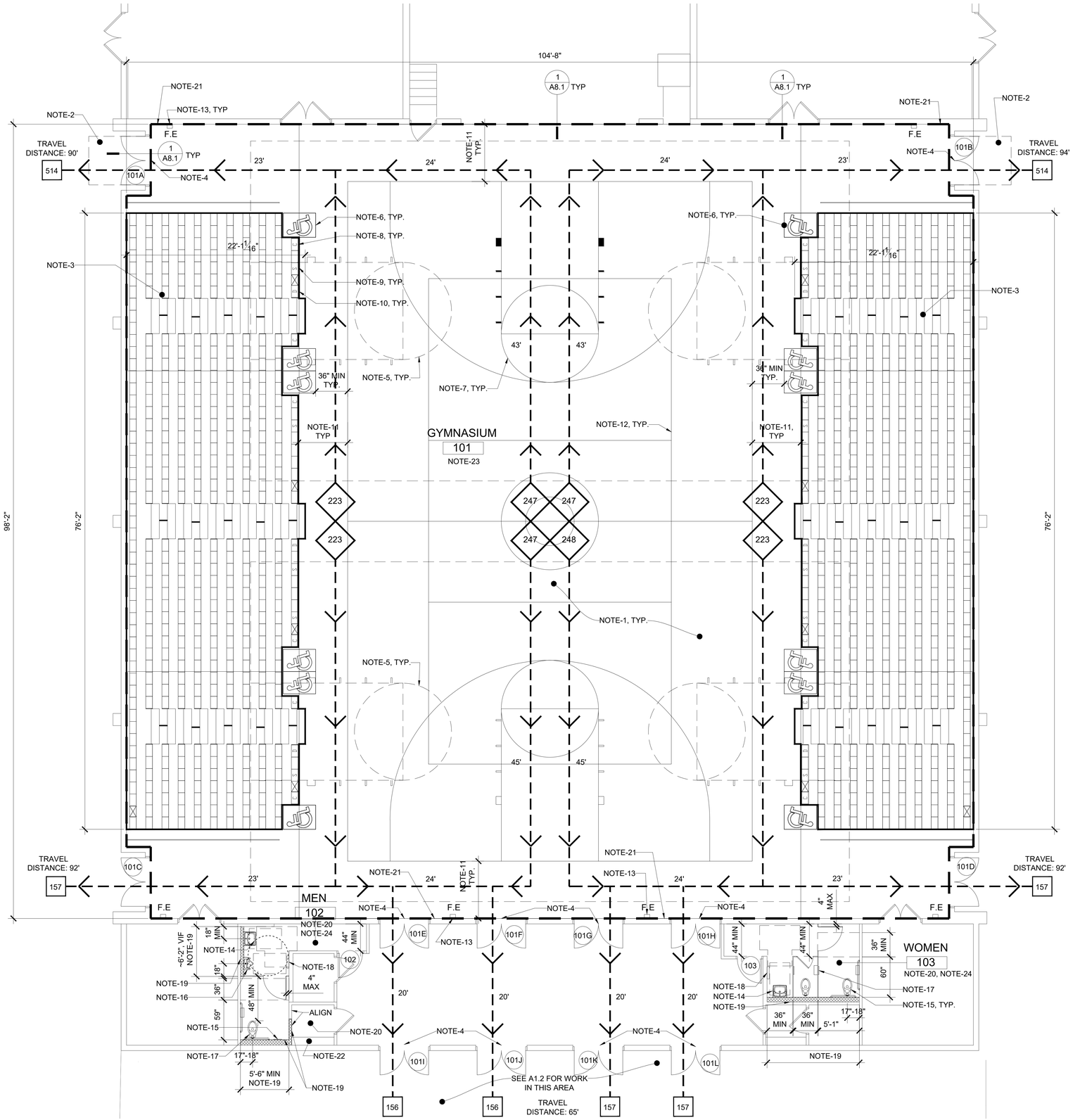
BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ENLARGED SITE PLAN

DATE 08/26/2024
DSA-AR A# 03-123614
FILE NO. 19-H20
SHEET A1.2



ENLARGED FLOOR PLAN
SCALE: 3/16" = 1'-0" @ FULL PLOT (30X42)

N

GENERAL NOTES

1. STRIPING COLOR TO BE DETERMINED BY THE SCHOOL.
2. WOOD FLOORING FINISH AND COLOR TO BE DETERMINED BY THE SCHOOL.
3. LOGO, STRIPING, LETTERS NOT SHOWN FOR CLARITY. COORDINATE WITH THE DISTRICT FOR EXACT STRIPING AND COLOR REQUIREMENTS.
4. PATCH WALL, FLOOR, CEILING, ETC. AS NEEDED TO MATCH ADJACENT SURFACE FOR AREA DISTURBED BY DEMOLITION / CONSTRUCTION.
4. EXISTING FLOOR EQUIPMENT ANCHORS ARE NOT SHOWN. IT IS THE CONTRACTOR TO VERITY EXISTING NO. AND LOCATIONS OF THEM IN THE FIELD. PROVIDE NEW COVER PLATE TO MATCH (E) SIZE AND FINISH.

ASSISTIVE LISTENING SYSTEMS

NO. OF ALS DEVICES REQUIRED (SEE ALSO T1.01 AND T1.02 OF THE PC DRAWINGS):

EAST BLEACHER: 446 OCCUPANTS X 4% = 18
WEST BLEACHER: 446 OCCUPANTS X 4% = 18

TOTAL NUMBER OF ALS DEVICES PROVIDE: 36
SEE SPECIFICATION SECTION 26722

LEGEND

- X / X — OCCUPANT LOAD
- X' — LONGEST TRAVEL DISTANCE
- XXX — DOOR TAG, SEE SCHEDULE ON THIS SHEET
- D — DESIGNATED AISLE SEATS
- S — SEMI AMBULANT SEATS
- C — COMPANION SEATS

OCCUPANT LOAD PER CBC TABLE 1004.5

ROOM	SQUARE FOOTAGE	OCCUPANT LOAD FACTOR	OCCUPANT LOAD
GYM 101	10,567 SF	SEE BELOW	SEE BELOW

WEST BLEACHER: 446 SEATS (SEE SHEET T1.01 OF THE PC DRAWINGS)
EAST BLEACHER: 446 SEATS (SEE SHEET T1.02 OF THE PC DRAWINGS)
OPEN AREAS BEYOND: 6,920 SF / 7 SF PER OCC = 989 OCCUPANTS

TOTAL NO. OF OCCUPANTS (NEW LAYOUT): 446 + 446 + 989 = 1,881
TOTAL NO. OF OCCUPANTS (EXISTING): 2,115 (SEE SHEET A1.1)

TOTAL EGRESS WIDTH REQUIRED: 1,881 X 0.2 = 376.2"
TOTAL PROVIDED: 36" X 16 = 576"

NO. OF EXITS REQUIRED (1006.2.1.1): 4
NO. OF EXITS PROVIDED: 8

MAX TRAVEL DISTANCE PER CBC 1017.2: 200'
LONGEST TRAVEL DISTANCE: 92'

WHEELCHAIR AND COMPANION SPACE (TABLE 11B-221.2.1.1 AND 11B-221.3)

WEST BLEACHER: 446 SEATS (SEE SHEET T1.01 OF THE PC DRAWINGS)
NO. OF WHEELCHAIR SPACE REQUIRED: 6
NO. OF WHEELCHAIR SPACE PROVIDED: 6
NO. OF COMPANION SEATS PROVIDED: 6
(SEE ALSO SHEET T1.01)

EAST BLEACHER: 446 SEATS (SEE SHEET T1.02 OF THE PC DRAWINGS)
NO. OF WHEELCHAIR SPACE REQUIRED: 6
NO. OF WHEEL CHAIR SPACE PROVIDED: 6
NO. OF COMPANION SEATS PROVIDED: 6
(SEE ALSO SHEET T1.02)

SEMI AMBULANT AND DESIGNATED AISLE SEATS (11B-221.6 AND 11B-221.4)

WEST BLEACHER: NO. OF SEMI AMBULANT SEATS REQUIRED:
446 X 1% = 4
NO. OF SEMI AMBULANT SEATS PROVIDED: 4
NO. OF DESIGNATED AISLE SEATS
REQUIRED: 54 X 5% = 3
NO. OF DESIGNATED AISLE SEATS
PROVIDED: 3
(SEE ALSO SHEET T1.01)

EAST BLEACHER: NO. OF SEMI AMBULANT SEATS REQUIRED:
446 X 1% = 5
NO. OF SEMI AMBULANT SEATS PROVIDED: 5
NO. OF DESIGNATED AISLE SEATS
PROVIDED: 54 X 5% = 3
NO. OF DESIGNATED AISLE SEATS
PROVIDED: 3
(SEE ALSO SHEET T1.02)

NOTES

NOTE-1 PROVIDE NEW GYMNASIUM FLOORING SYSTEM AND BASE AT PERIMETER. PROVIDE THRESHOLD AT ALL EXISTING / NEW DOORS AND OPENINGS, SEE 1/A8.1
NOTE-2 PROVIDE 2% LANDING AT DOOR, SEE 3/A8.1
NOTE-3 BLEACHER, SEE PC DRAWINGS
NOTE-4 PROVIDE ILLUMINATED EXIT SIGN ABOVE DOOR
NOTE-5 42'X74' PRACTICE BASEBALL COURT (TOTAL OF 2) (1½" THICK STRIPING). LOCATE PER THE EXISTING BASKETBALL HOOP LOCATIONS
NOTE-6 ACCESSIBLE SPACES, SEE T-5.10 OF THE PC DRAWINGS
NOTE-7 50' X 84' BASKETBALL COURT (3" THICK STRIPING) PER NFHS STANDARDS, COURT SHALL BE CENTERED WITH THE ROOM, LOCATE PER THE EXISTING BASKETBALL HOOP LOCATIONS
NOTE-8 COMPANION SEATS
NOTE-9 SEMI AMBULANT SEATS
NOTE-10 DESIGNATED AISLE SEATS
NOTE-11 PROVIDE SOLID COLOR, LETTERS, AND SCHOOL LOGOS AROUND THE MAIN BASKETBALL COURT.
NOTE-12 30X60' VOLLEY BALL COURTS (TOTAL OF 3) (1" THICK STRIPING) PER THE INTERNATIONAL VOLLEYBALL FEDERATION. LOCATE COURTS PER THE EXISTING EQUIPMENT ANCHOR LOCATIONS.
NOTE-13 FIRE EXTINGUISHER AND SURFACE MOUNTED CABINET, SEE 5/A8.1
NOTE-14 LAVATORY AND SOAP DISPENSER, SEE 2/A8.2
NOTE-15 WATER CLOSET, GRAB BARS, AND TOILET PAPER DISPENSER, SEE 1/A8.2
NOTE-16 URINAL, SEE 3/A8.2
NOTE-17 SEAT COVER DISPENSER
NOTE-18 HAND DRYER
NOTE-19 WOOD STUD WALL, SEE 11, 12, AND 13 ON A8.2
NOTE-20 PROVIDE NEW SUSPENDED GYPSUM BOARD CEILING, SEE SHEET A8.3 FOR TYPICAL DETAILS
NOTE-21 PROVIDE ASSISTIVE LISTENING SIGN, SEE 8/A8.1
NOTE-22 PROVIDE NEW CABINET, SEE 14/A8.2, VERIFY WIDTH IN THE FIELD
NOTE-23 PAINT ALL EXISTING CONCRETE / GYPSUM BOARD WALLS (FULL HEIGHT), BASKETBALL HOOP SUPPORTS, EXISTING AND NEW CONDUITS, J-BOXES, AND UTILITY LINES, LOUVERS, GRILLES, CABINETS, DOORS, FRAMES, WALLS BEHIND BLEACHERS, PREVIOUSLY PAINTED SURFACES, ETC. IN GYM 101. CONTRACTOR SHALL ALSO PROVIDE NEW SCHOOL LOGO ON WALLS / DOORS. COORDINATE EXACT COLOR AND PATTERN IN THE FIELD WITH THE DISTRICT
NOTE-24 PROVIDE NEW CERAMIC TILE WALL TILE OVER WATERPROOFING MEMBRANE OVER ¾" CEMENT BOARD ON EXISTING / NEW WOOD STUD WALL AND PROVIDE NEW CERAMIC TILE OVER WATERPROOFING MEMBRANE OVER MORTAR BED OVER EXISTING CONCRETE / BRICK WALL. TYPICAL OF ALL WALLS IN ROOM

DOOR SCHEDULE

NO.	SIZE	DOOR	FRAME	PANIC H.W.	ACC. H.W.	H.W.	SIGNAGE
101A	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101B	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101C	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101D	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101E	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101F	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101G	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101H	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101I	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101J	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101K	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
101L	6'-0" X 7'-0" VIF	H.M.	EXISTING	YES	YES	01	ROOM AND EXIT SIGNS PER 7/A8.1
102	3'-0" X 7'-0"	H.M.	H.M.	YES	YES	01 (NO CLOSER)	SIGNS PER 4,5,6 ON A8.2
103	6'-0" X 7'-0"	H.M.	H.M.	YES	YES	01 (NO CLOSER)	SIGNS PER 4,5,6 ON A8.2

GENERAL NOTES:
1. HOLLOW METAL DOORS SHALL BE 16GA LEVEL 3 EXTRA HEAVY DUTY WITH A40 COATING, STEEL STIFFENED, EDGE CONSTRUCTION SHALL BE MODEL 2 SEAMLESS. LEVEL A PHYSICAL PERFORMANCE. DOORS SHALL ALSO BE SHOP PRIMED AND FIELD PAINTED. PROVIDE A MIN. OF 5 YEAR WARRANTY.
2. DOORS SHALL BE SHOP PRIMED A MAX OF 30 DAYS PRIOR TO FIELD INSTALLATION. PAINT EXISTING FRAME WITH A MIN. OF (1) COAT OF PRIMER AND (2) COATS OF FINISH PAINTS.
3. CONTRACTOR SHALL REPAIR / PATCH (E) FLOOR AND FRAME AS NEEDED FOR NEW DOOR AND HARDWARE WORK.
4. PROVIDE LOUVERS AT DOOR 102 AND 103

HARDWARE GROUP 01:
- SARGENT 8888 PANIC HARDWARE KEYED WITH CYLINDER DOGGING. PROVIDE THE 5CH FUNCTION TO MAKE SURE THE MAX. OPERATING FORCE IS LESS THAN 5LBS.
- REMOVABLE MULLION PER DISTRICT STANDARD (AT DOUBLE DOORS)
- TRIMCO PULLS ON EXTERIOR - ANTIVANDEL - 1097 SPHA 26D, 2-3/4" BACKSET PREPPED FOR SARGENT
- PEMKO BRUSHED ALUMINUM HINGE (GEARED) (FULL MORTISE CFM)
- LCN 4040 (NO HOLD OPEN CLOSER) [NO AFTER MARKET]
- STAINLESS STEEL KICKPLATE 26D ON BOTH SIDES OF DOORS
- PEMKO ALUMINUM ADA COMPLAINT THRESHOLD (7" DEEP OR SEE DETAIL)
- PEMKO DOOR BOTTOM, PEMKO 345ANB
- WUSQ LARGE FORMAT RESTRICTED DISTRICT INTERCHANGABLE CORE (IC) WITH CONSTRUCTION CORE DURING CONSTRUCTION
- DOOR SEAL / WEATHER STRIPPING
- DOOR STOP, IVES FS 444 SATIN CHROME

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2644
Fax: (213) 746-6463

LICENSED ARCHITECT
JOY NOON
NO. C31804
REN 3-31-25
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

CODE ANALYSIS, FLOOR PLAN, AND DOOR SCHEDULE

DATE 08/26/2024
DSA-AR A# 03-123614
FILE NO. 19-H20
SHEET A2.1

SECTION 09642 - WOOD GYMNASIUM FLOORING

PART 1 - GENERAL

1.1 DESCRIPTION
1. **CONCRETE SUBFLOORS**
   a. Existing slab depression is 1-3/4" (verify in field): RP-222 subfloor with 25/32" (20mm) flooring surface.
   b. Exiting concrete: The general contractor shall provide a sound substrate surface free from loose aggregate or soft unsound material remaining from previous floor installation. Holes created by removal of previous anchorage pins or other causes shall be filled soundly and flush with surrounding concrete surface.

1.2 REFERENCES
A. MFMA - Maple Flooring Manufacturers Association

1.3 QUALITY ASSURANCE
A. Manufacturer
1. Manufacturer of resilient flooring shall be a firm specializing in manufacturing products specified in this section.
2. Manufacturer of flooring and subfloor components must be ISO 14001:2015 Certified.
3. Basis of design shall be "RezillBase" sports floor system as provided by Connor Sports, www.connorfloor.com, (800-833-7144).
4. Materials other than those listed must be approved 10 days prior by written addendum. Materials from non-approved manufacturers will not be accepted.

B. Installer (Flooring Contractor)
1. The complete installation of the flooring system, as described in the scope of these specifications, shall be carried out by an experienced installer (Flooring Contractor), and the work shall be performed in accordance with most recent installation instructions of the manufacturer.
2. Installer (Flooring Contractor) shall be liable for all matters related to installation for a period of one year after the floor has been substantially installed and completed.

C. Performance Testing
1. Floor system shall have been independently evaluated according to established performance standards for the athletic flooring industry.
2. Compliance of athletic floor standard(s) for specified system as provided by Connor Sports at www.connorsports.com.

1.4 SUBMITTALS
A. Specification - Submit Connor RezillBase specification sheets.
B. Sample - Submit one sample of specified system, if requested by architect.
C. Shop Drawing - Provide layout drawings with dimensions including but not limited to: orientation of wood flooring, existing equipment anchor holes, game line and school logo layouts, etc.
D. Maintenance Literature - Upon completion of floor installation, send to owner, attendants or individuals in charge and responsible for the upkeep of the building a CARE CARD. This card spells out care and maintenance instructions including temperature and humidity ranges for areas where flooring is installed.

1.5 WORKING CONDITIONS
A. The concrete subfloor shall be determined dry by industry standard testing procedures, free of foreign materials and turned over to the installer (Flooring Contractor) broom clean. Moderate room temperature of 65 degrees (18 degrees Celsius) or more shall be maintained a week preceding and throughout the duration of the work. Humidity conditions within the building shall approximate the humidity conditions that will prevail when the building is occupied.
B. Permanent heat, light and ventilation shall be installed and operating during and after installation, maintaining a range of temperature and humidity compatible with the expected low and high moisture content of the flooring. The wood moisture content range is determined by the flooring contactor based on the facility's mechanical controls and/or geographical location.
C. Flooring must be stored in a dry, well-ventilated area, not in contact with masonry, to acclimate to building conditions and shall be installed at moisture content compatible with the normally expected environmental range of temperature and relative humidity achieved while the facility is occupied.
D. General Contractor shall lock floor area after floor is finished to allow proper curing time. If general contractor or owner requires use of gym after proper curing time, he shall protect the floor by covering with non-marring Kraft paper or red rosin paper with taped joints until acceptance by owner of complete gymnasium floor.
E. Working conditions as described above shall be followed. Variations and substitutions shall be submitted for approval to the architect who shall advise Connor of the same.

1.6 HUMIDITY CONTROL
A. Since all wood flooring will expand and contract as relative humidity varies, it is important to minimize extremes between low and high. Hardwood flooring is manufactured at moisture content most compatible with a 35%-50% relative humidity range. Geographical regions and available mechanicals determine the typical range of temperature and humidity for each facility. Maintaining a 15% fluctuation between highest and lowest average indoor relative humidity provides limited shrinkage and growth. Facility managers should make use of available HVAC systems to prevent excessive tightening and shrinkage of flooring.

1.7 WARRANTY
A. Connor warrants that the materials it has supplied will be free from manufacturing defects for a period of one year. The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied in operation of law or otherwise, including, but not limited to, any implied warranties of merchantability or fitness. This warranty is expressly limited to the flooring materials (goods) supplied by Connor. This warranty does not cover floor damage caused (wholly or in part) by fire, winds, floods, moisture, other unfavorable atmospheric conditions or chemical action, nor does it apply to damage caused by ordinary wear, misuse, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation, faulty or unsuitable subsurface or site preparation, settlement of the building walls or faulty or unprofessional installation of Connor flooring systems.
B. Connor shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling or use of the materials (goods) or from any other cause relating thereto, and their liability hereunder in any case is expressly limited to the replacement of materials (goods) not complying with this agreement, or at their elections, to the repayment of, or crediting buyer with, an amount equal to the purchase price of such materials (goods), whether such claims are for breach of warranty or negligence. Any claim shall be deemed waived by buyer unless submitted to Connor in writing within 30 days from the date buyer discovered, or should have discovered, any claimed breach.

PART 2 - PRODUCTS

2.1 MATERIALS
A. Vapor Barrier - 10-mil polyethylene.
B. Subfloor Construction
1. RP - 222 Factory machined APA plywood, full surface, Connor Rezill Cushions, sectional steel channel anchorage.

C. Flooring (Connor Laytite Maple)
1. 25/32" X 2-1/4" (20mm x 57mm), Second and better Northern Hard Maple Flooring, TGEM, MFMA Grade marked and stamped as manufactured by Connor Sports, Amasa, MI.

D. Fasteners
1. Flooring Fasteners:
   a. 1-1/2" (44mm) barbed cleats or coated staples when installing Reduced Profile subfloor.
3. Concrete:
   a. For 16-ga Hat Channel: 1-1/4" (32mm) long steel drive pins, (or length as dictated by site conditions achieving minimum 900 lbs. (408.6 Kg) pullout strength).

E. Finish Materials - Connor oil modified polyurethane seal and finish or equal.
F. Game Lines - Game line paint shall be compatible with finish.
G. Wall Base - 3" X 4" (76mm x 102mm), heavy duty, molded, vented cove base with pre-molded outside corners.
H. **Protective Floor Cover**
Court Cover - Rolls selected from manufacturer's standard weights and colors.

PART 3 - EXECUTION

3.1 EXECUTION
A. Inspect concrete slab for proper tolerance and dryness. Report any discrepancies to general contractor and architect in writing.
B. Concrete slab shall be broom cleaned by general contractor.
C. Installer (Flooring Contractor) shall document all working conditions provided in General specifications prior to commencement of installation.

3.2 INSTALLATION
A. Subfloor
1. Cover concrete with poly, sealing and lapping joints a minimum of 6" (152mm).
2. Subfloor Panels:
   a. Full Surface -
      Arrange subfloor panels in a staggered brick pattern diagonally to finished flooring direction with panel ends offset 48" (1219mm) in alternating rows. Provide nominal 1/4" (6mm) spacing between panel edges and provide 1-1/2" (38mm) expansion voids at perimeter and at all vertical obstructions. Install sold blocking at doorways, under bleachers in the stacked position and below portable goals. Align panels with channel slots perpendicular to flooring direction.
3. Concrete Anchorage:
   a. Steel Hat Channel - Apply a secure concrete anchorage pin at each channel location.

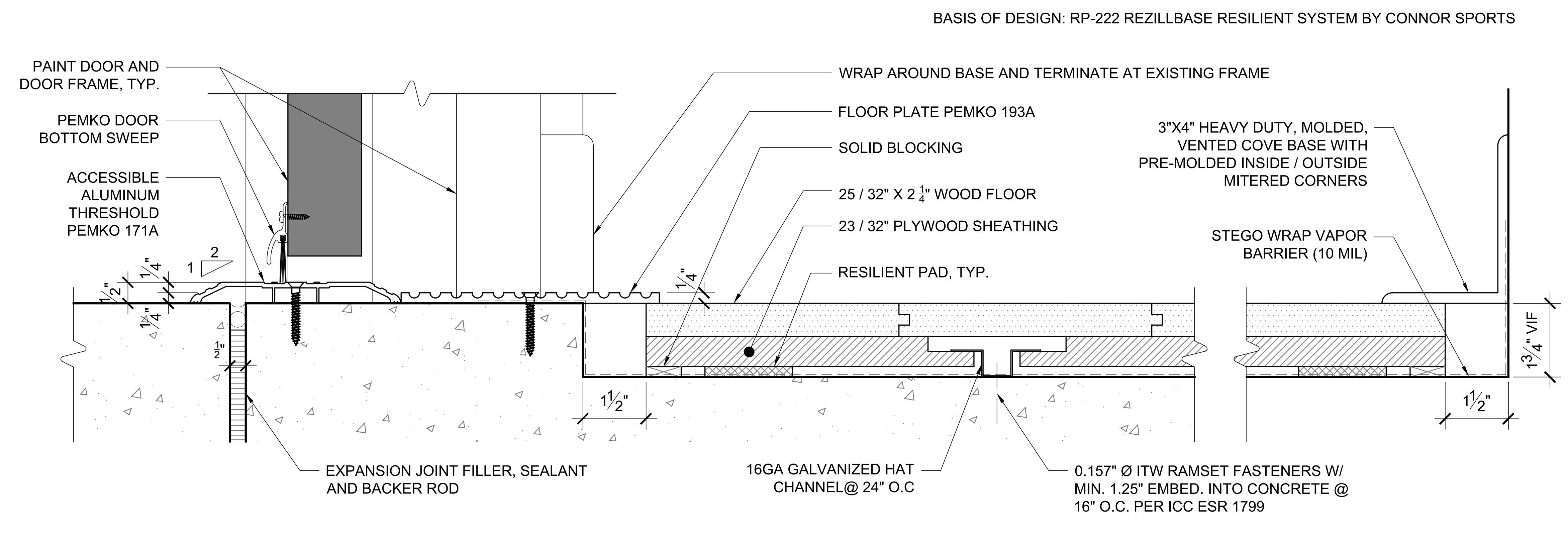
B. Maple Flooring
1. Install maple flooring by power nailing or stapling approximately 12" (305mm) on center (through double layer when installing slotted subfloor) with end joints properly driven together.
2. If required, size joints between flooring strips to allow for intermediate expansion in accordance with local humidity conditions.
3. Provide 1-1/2" (38mm) expansion voids at perimeter and at all vertical obstructions.

3.3 FINISHING
A. Maple Flooring
1. Machine sand with coarse, medium, and fine paper to a smooth, even and uniform surface.
2. Remove sanding dust from entire surface by tack or vacuum.
3. Inspect entire area of floor to ensure that surface is acceptable for finishing, clean and completely free from sanding dust.
4. Apply two (2) coats of approved seal and two (2) coats of approved finish per manufacturer's instructions.
5. Buff and clean floor between coats.
6. Games Lines: Apply game lines as indicated on drawings between seal and first coat of finish. Contractor shall provide school logo and solid stripes as directed by the District.

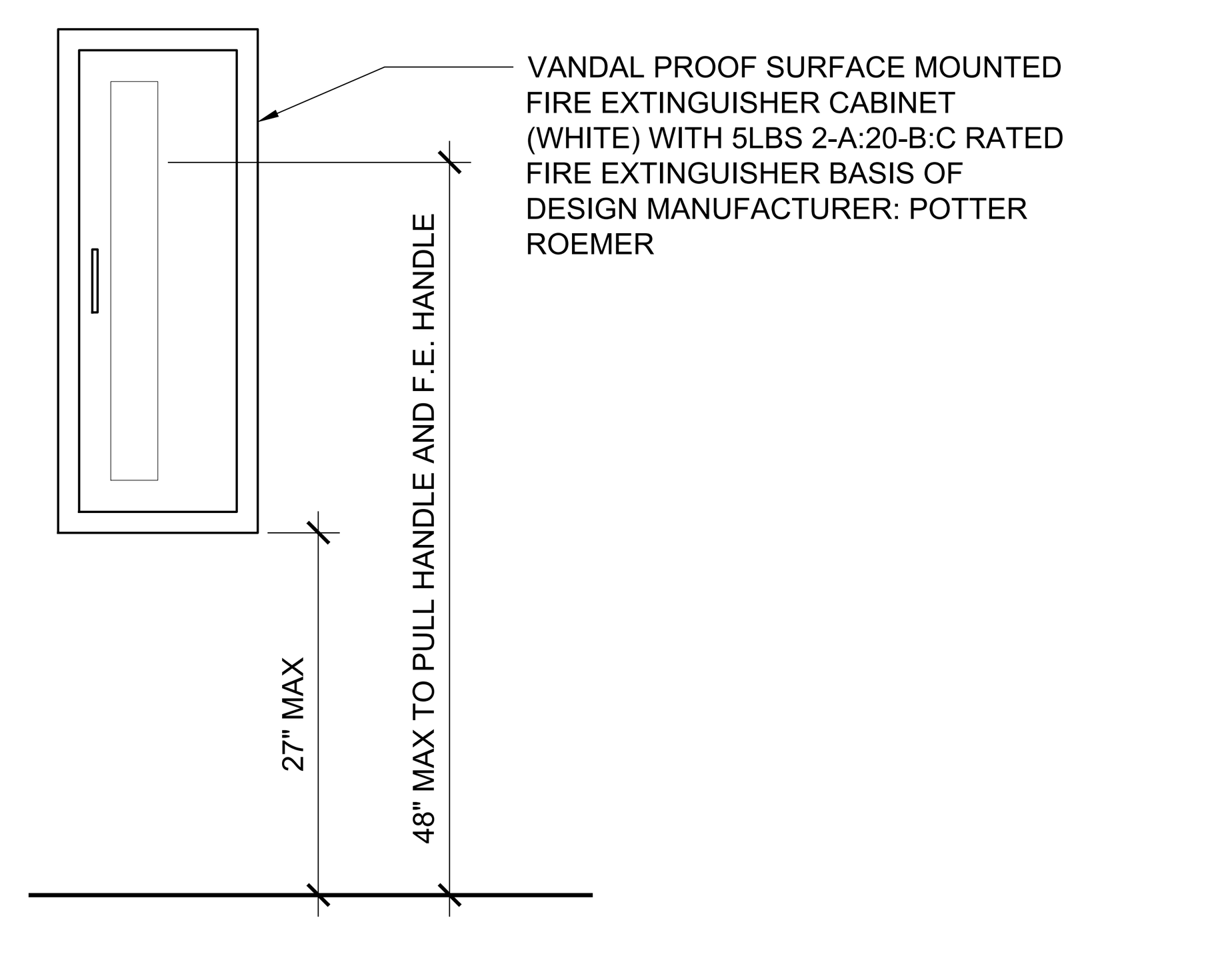
3.4 BASE INSTALLATION
A. Install vent cove base to walls with base cement or screws. Use pre-molded outside corners and mitered inside corners.

3.5 CLEANING
A. Remove excess and waste materials from the area of work.

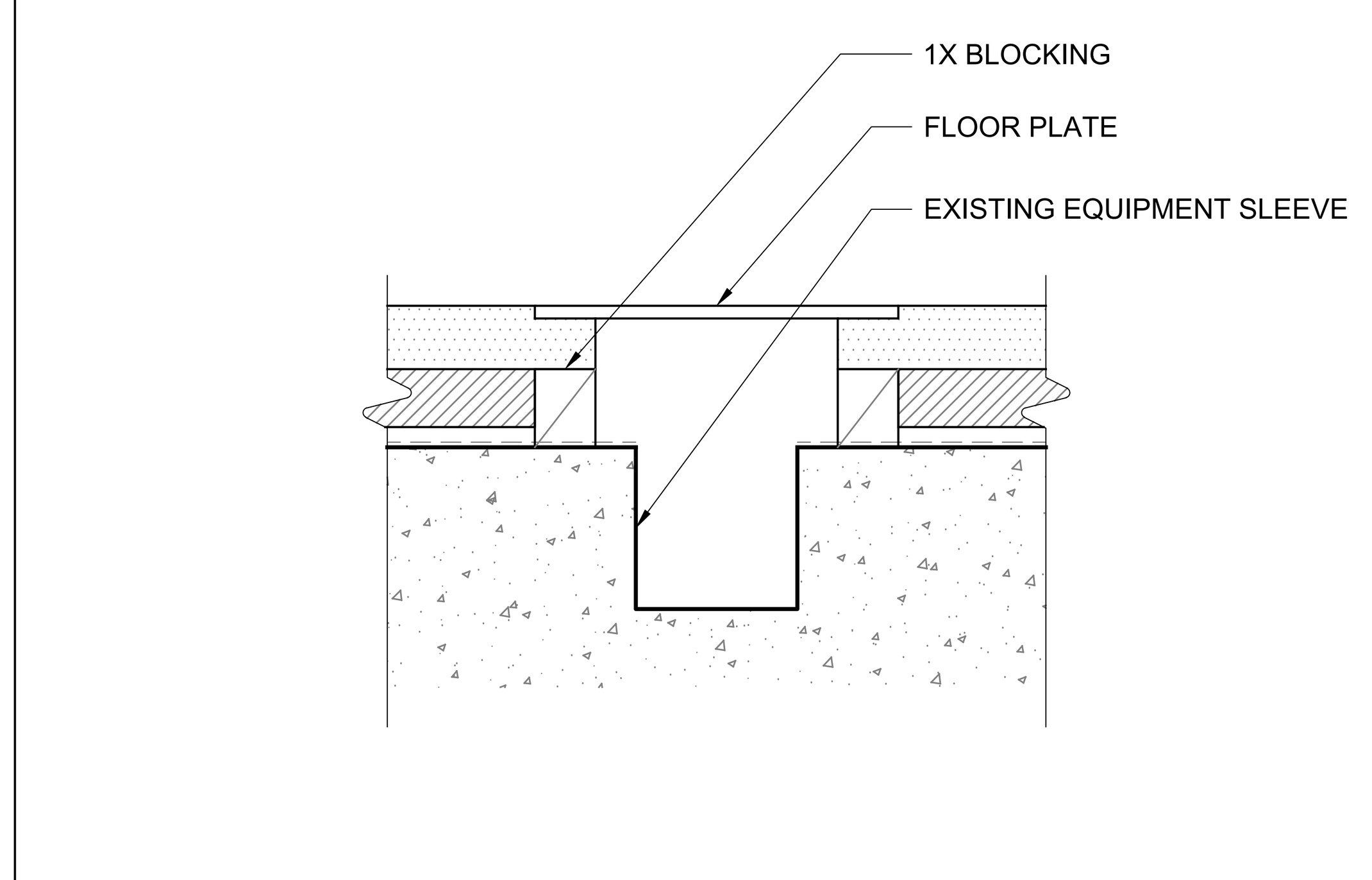
GYMNASIUM FLOORING SPECIFICATION | 6



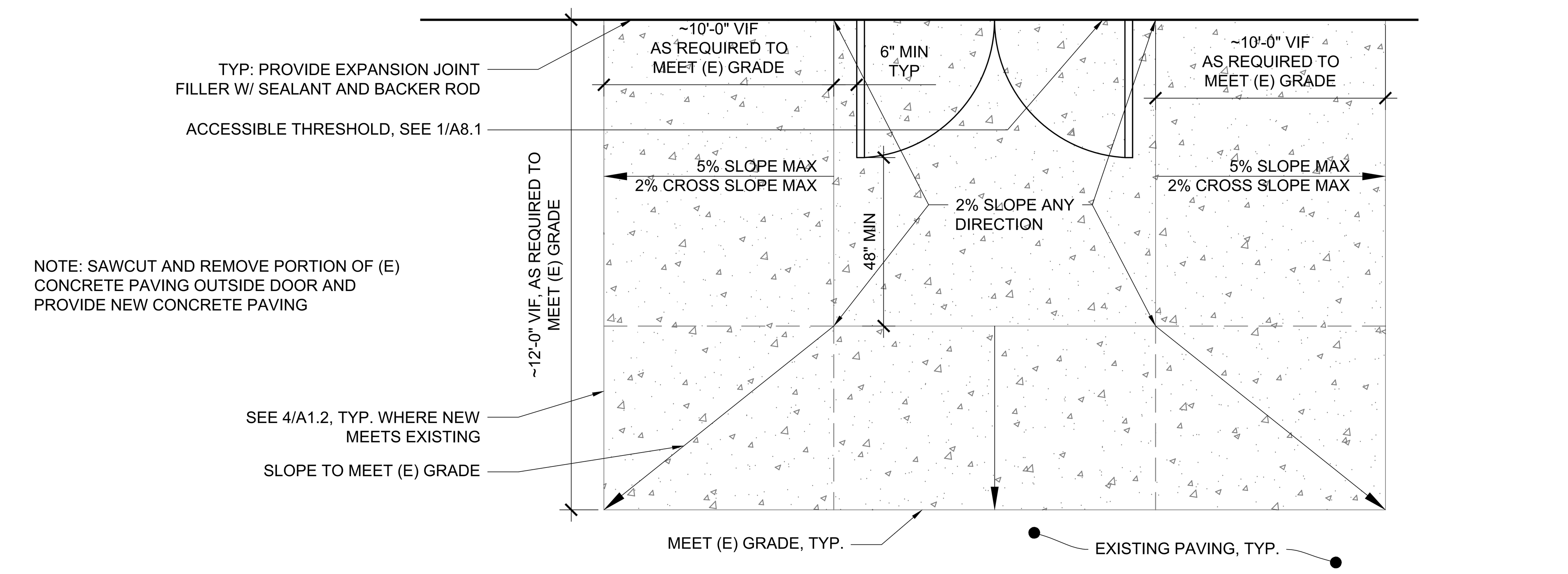
TYPICAL GYMNASIUM FLOOR DETAILS — SCALE 6"=1'-0" — 1



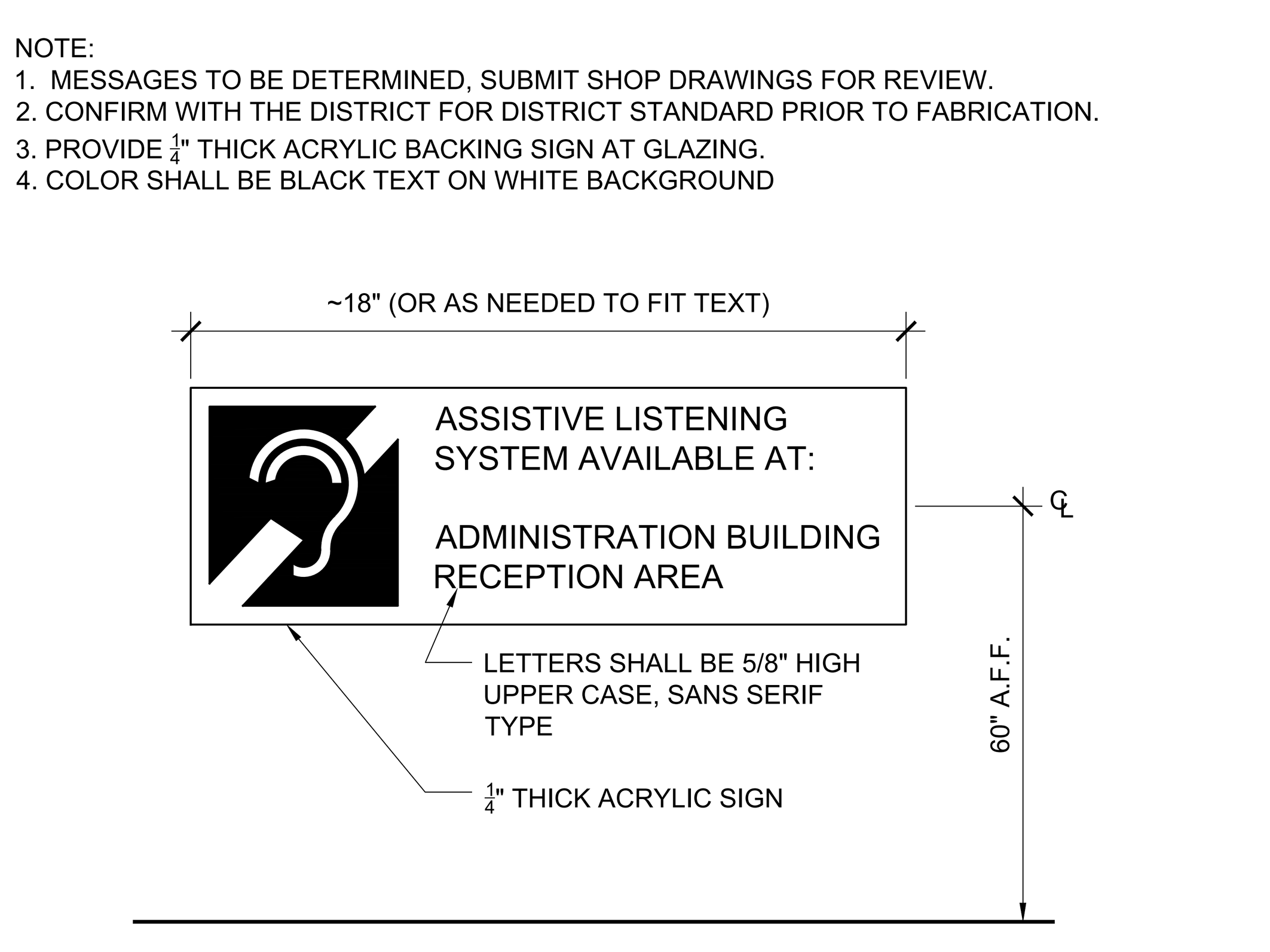
FIRE EXTINGUISHER AND CABINET — SCALE 1-1/2"=1'-0" — 5



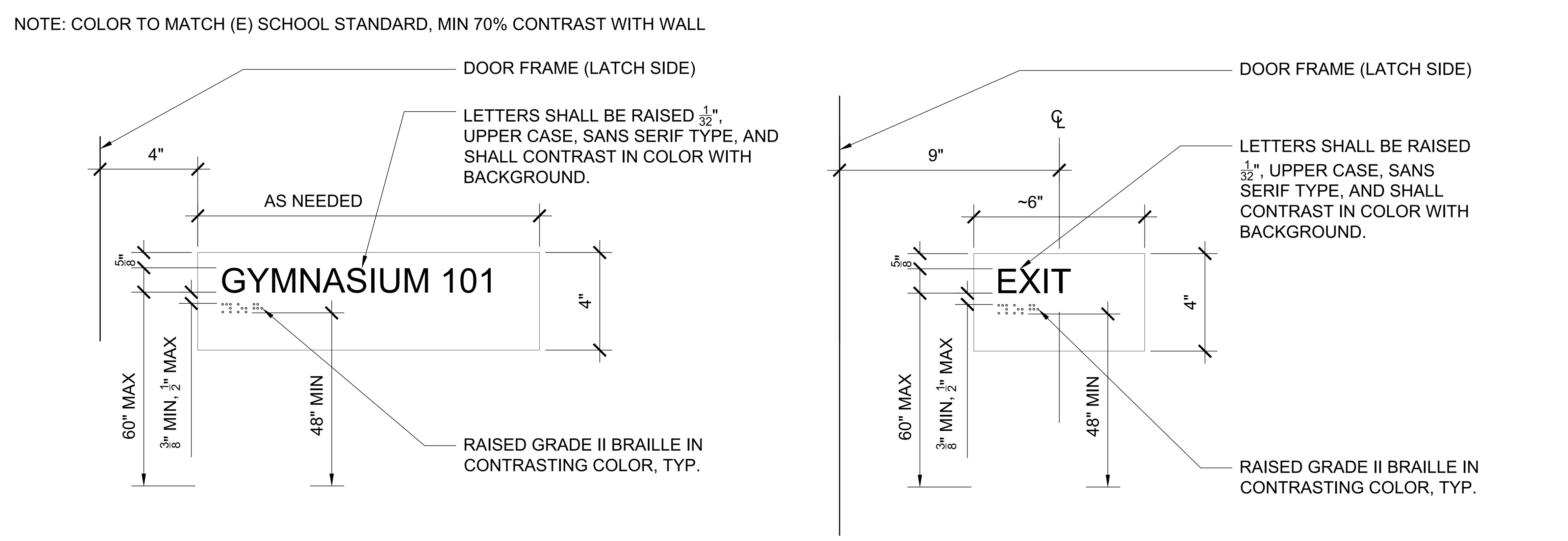
TYP. GYM FLOOR AT (E) EQUIPMENT SLEEVE — SCALE 6"=1'-0" — 2



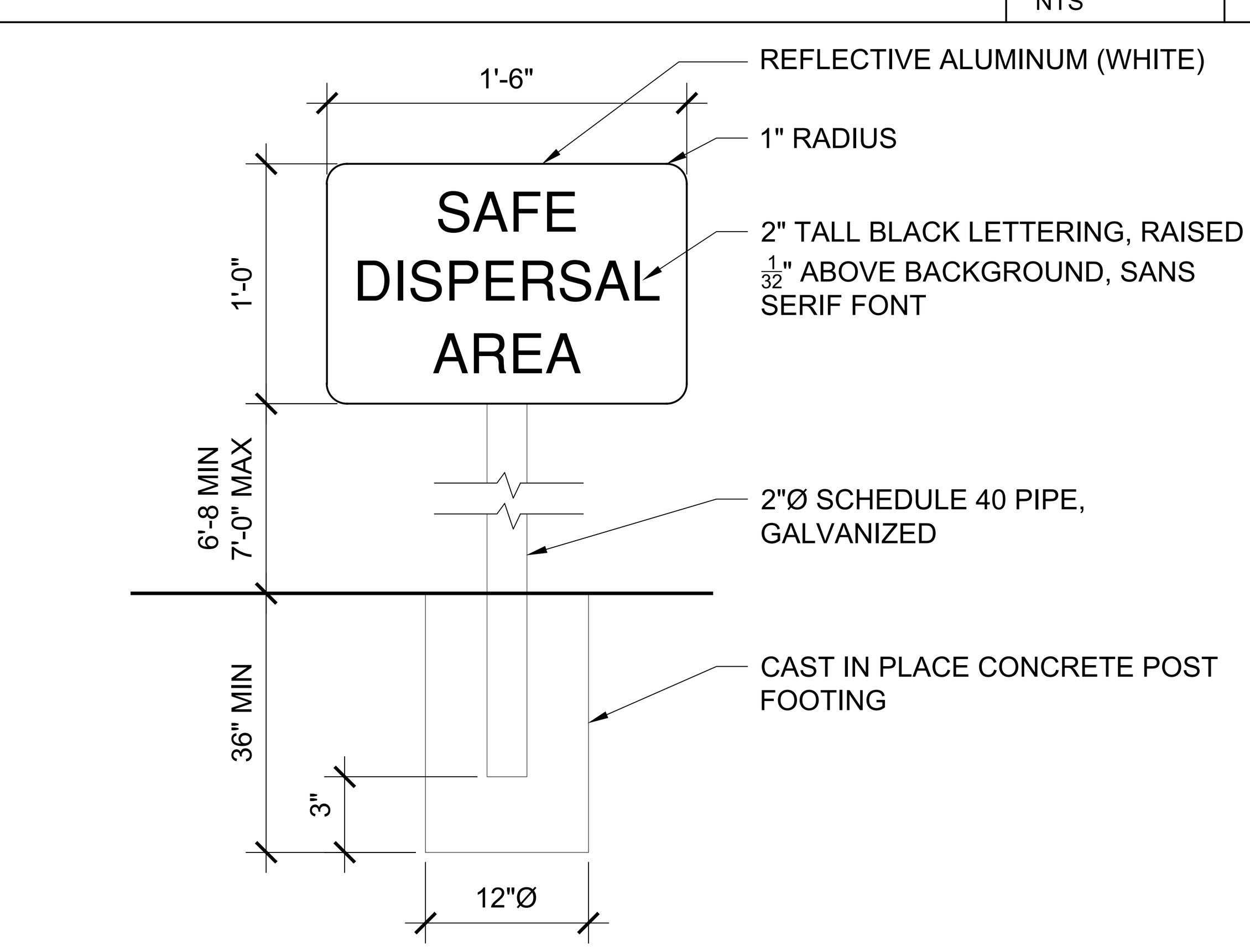
TYP. CONCRETE LANDING AT DOOR — SCALE NTS — 3



TYPICAL ASSISTIVE LISTENING SIGN — SCALE 1-1/2"=1'-0" — 8



TYPICAL ROOM AND EXIT SIGNS — SCALE 3"=1'-0" — 7



SAFE DISPERSAL AREA SIGN — SCALE 1-1/2"=1'-0" — 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

MDC engineers, INC
Consulting Engineers
5101 E La Palma Ave., Suite 205, Anaheim Hills, CA 92807-2056

LICENSED ARCHITECT — STATE OF CALIFORNIA — REN 3-31-25

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

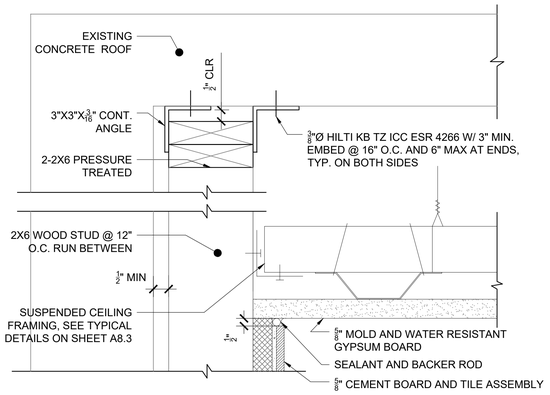
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

TYPICAL DETAILS

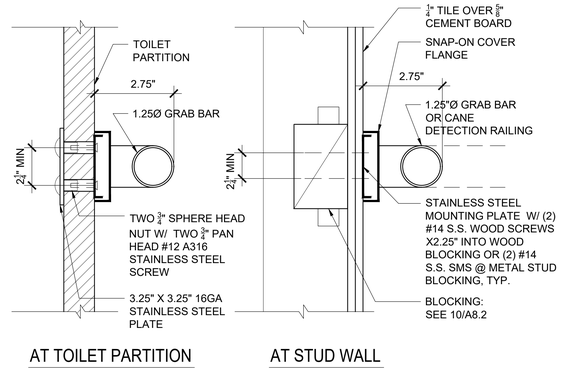
DATE: 08/26/2024
DSA A#: A# 03-123614
FILE NO. 19-H20

SHEET: A8.1



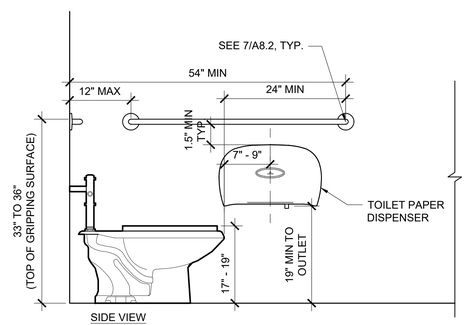
TYPICAL TOP OF WALL DETAIL

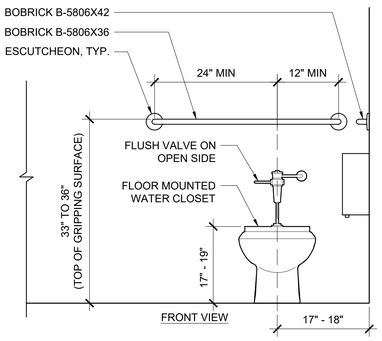
SCALE	
3"=1'-0"	11



TYPICAL GRAB BAR / CANE RAIL ANCHORAGE

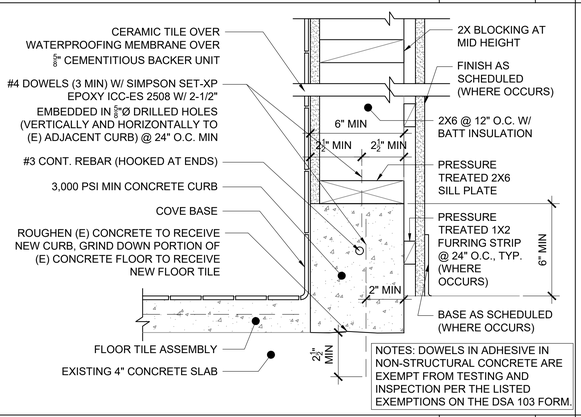
SCALE	
3"=1'-0"	7





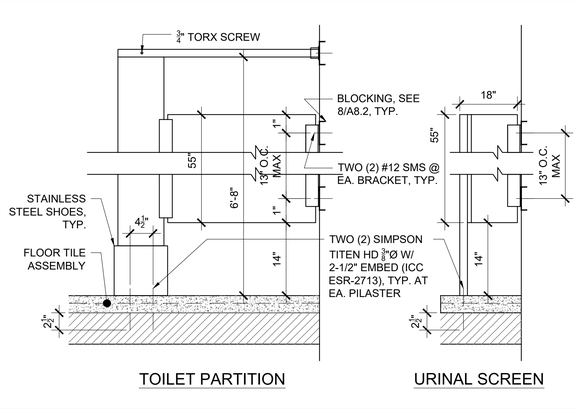
TYP. ACCESSIBLE WATER CLOSET

SCALE	
1"=1'-0"	1



TYPICAL WALL / CURB DETAIL

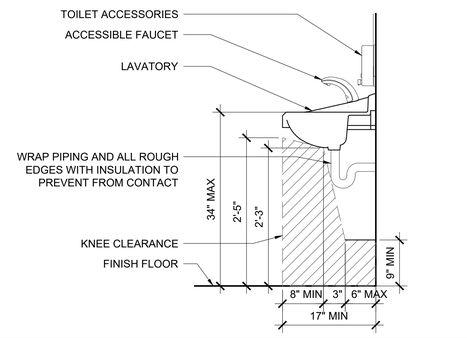
SCALE	
3"=1'-0"	12

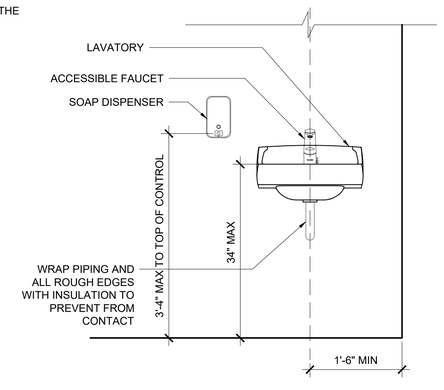


TYPICAL TOILET PARTITION ANCHORAGE

SCALE	
1-1/2"=1'-0"	8

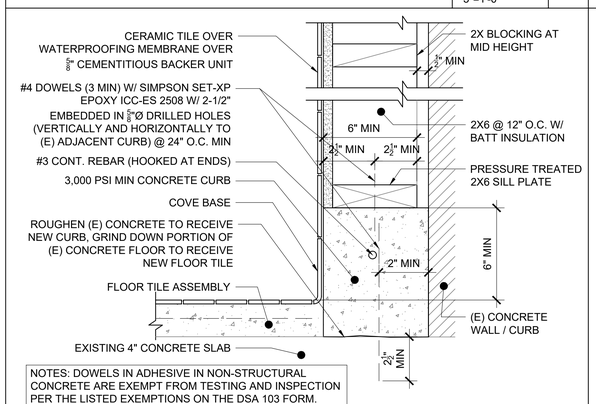
NOTE: ALL FAUCETS CONTROLS SHALL BE WITHIN 17" OF FRONT EDGE OF LAVATORY. IF THE LAVATORY IS INCREASED TO BE 19" DEEP, THEN THE TOP 8" DEPTH INCREASES TO 10" AND THE FAUCET CONTROLS CAN BE WITHIN 19" OF THE FRONT EDGE





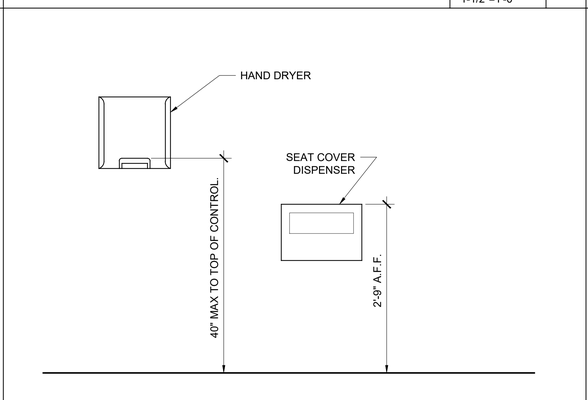
TYPICAL ACCESSIBLE LAVATORY

SCALE	
1"=1'-0"	2



TYPICAL WALL / CURB DETAIL

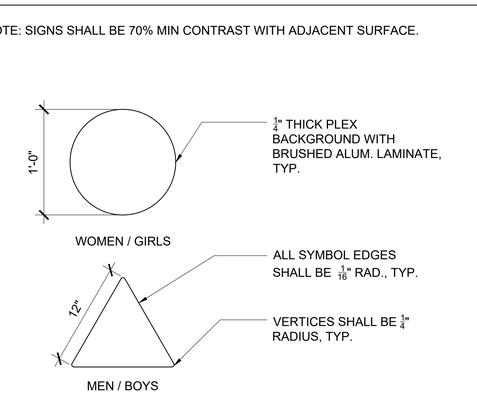
SCALE	
3"=1'-0"	13



TOILET ACCESSORIES MOUNTING

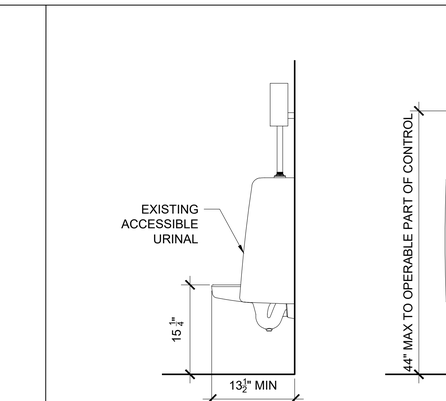
SCALE	
NTS	9

NOTE: SIGNS SHALL BE 70% MIN CONTRAST WITH ADJACENT SURFACE.



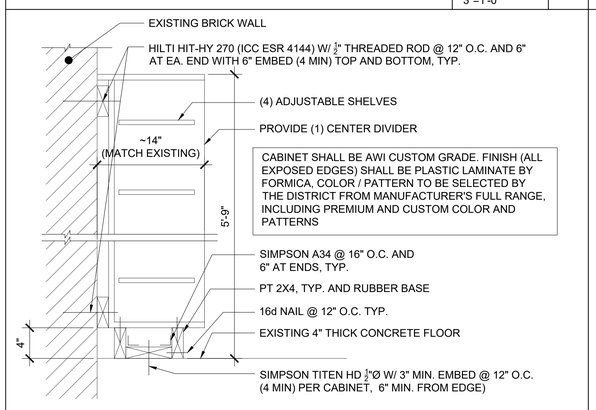
TYPICAL GEOMETRIC DOOR SIGNS

SCALE	
1-1/2"=1'-0"	5



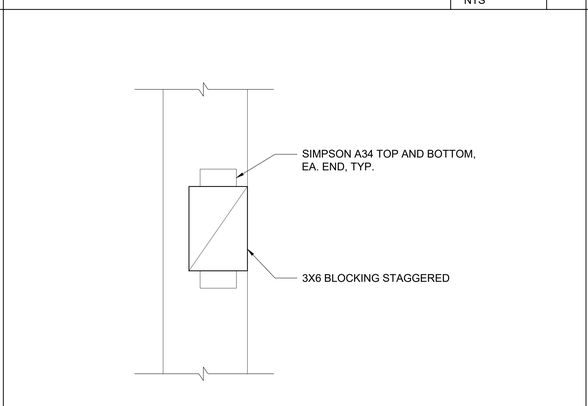
ACCESSIBLE URINAL

SCALE	
1"=1'-0"	3



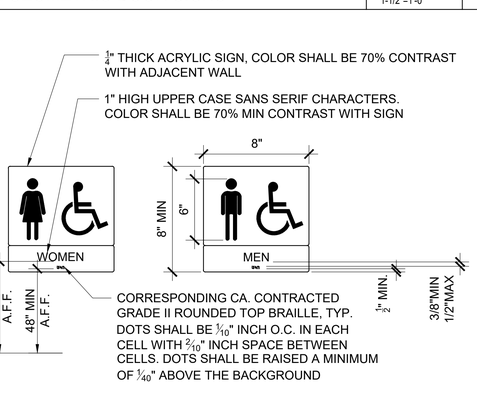
TYPICAL CABINET DETAIL

SCALE	
1-1/2"=1'-0"	14



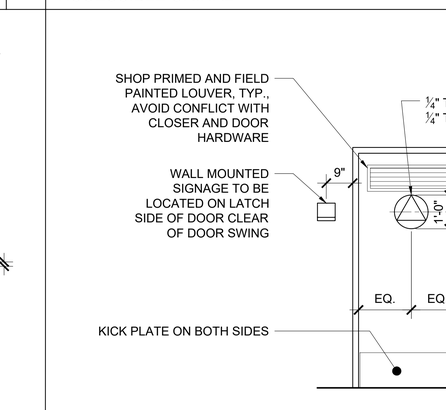
TYPICAL WOOD BLOCKING

SCALE	
3"=1'-0"	10



TYPICAL TOILET ROOM SIGNS

SCALE	
3"=1'-0"	6



TYPICAL ACCESSIBLE TOILET ROOM SIGNS

SCALE	
1/2"=1'-0"	4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2644
Fax: (213) 746-6463

LICENSED ARCHITECT
ROY NOON
NO. C031804
REN 8-31-25
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

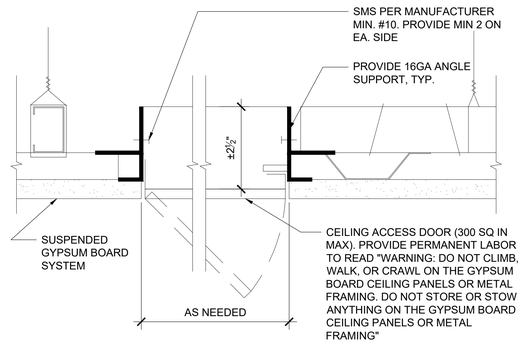
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

TYPICAL DETAILS

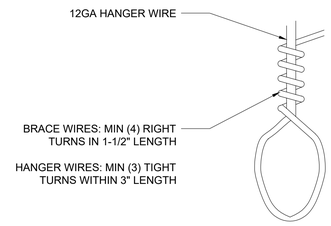
DATE	08/26/2024
DSA-AR	A# 03-123614 FILE NO. 19-H20
SHEET	A8.2

NOTE: ACCESS PANELS ARE NOT SHOWN ON THE DRAWING. CONTRACTOR SHALL PROVIDE ALL NECESSARY ACCESS PANELS AS NEEDED WITH THE CORRECT SIZE (REGARDLESS SHOWN ON THE DRAWINGS OR NOT)



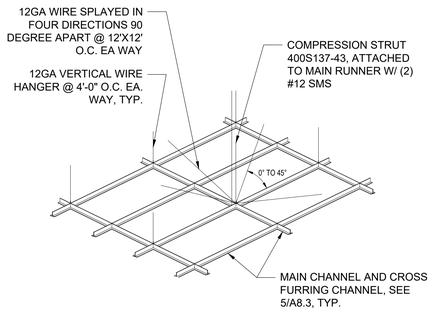
TYP. ACCESS PANEL @ SUSPENDED CEILING

SCALE	
3"=1'-0"	6



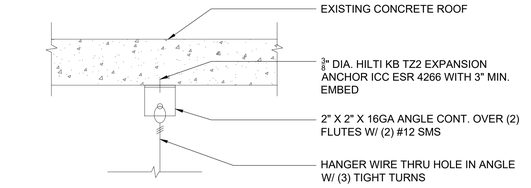
TYPICAL HANGER / BRACING WIRE

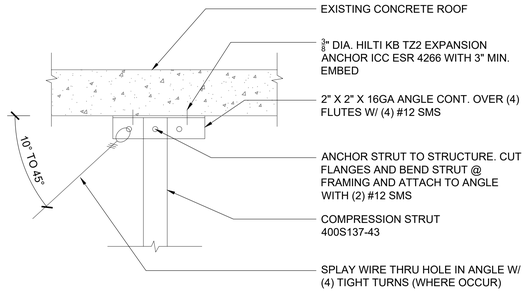
SCALE	
3"=1'-0"	7

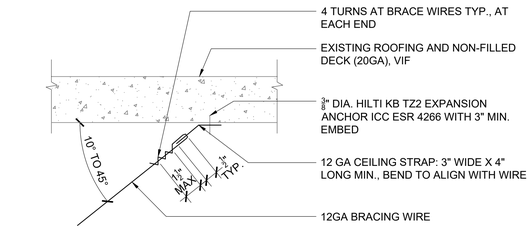


TYP. COMPRESS STRUT DETAIL

SCALE	
3"=1'-0"	8

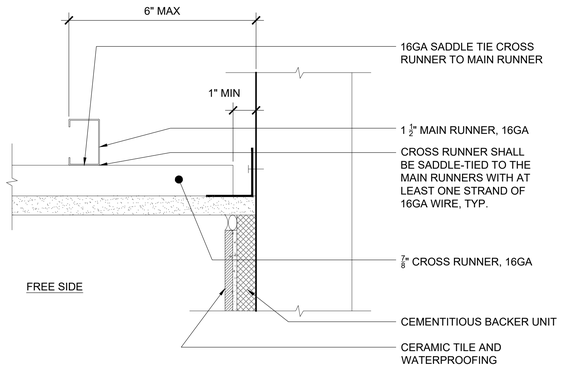


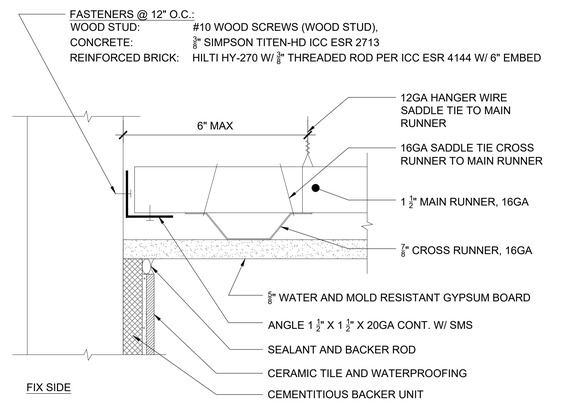




TYPICAL HANGER / BRACING WIRE AND STRUT ATTACHEMENT

SCALE	
NTS	4





TYP. SUSPENDED DRYWALL CEILING DETAILS

SCALE	
3"=1'-0"	5

CEILING SYSTEM GENERA NOTES (ALL WORK SHALL COMPLY WITH DSA IR 25-2 AND 25-3)

1. GENERAL
   - 1.01 Gypsum board shall be either ½ inch or ⅝ inch in thickness
   - 1.02 Contractor shall scan existing concrete wall / floor / slab for rebar prior to the installation of expansion anchors. Do not damage existing rebar.

2. MATERIALS
   - 2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.
   - 2.02 Galvanized sheet steel (including that used for metal stud compression struts) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) thick and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) thick and heavier shall have a minimum yield strength of 50 ksi.
   - 2.03 Electrical metallic tube (EMT) shall conform to ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength of 30 ksi and minimum ultimate strength of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES
   - 3.01 All ceiling hanger and bracing wires shall be separated at least 6 inches from all unbraced ducts, pipes, conduit, etc.
   - 3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit, and equipment.
   - 3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.
   - 3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.
   - 3.05 Hanger and bracing wire anchorage to the structure shall be installed such that the direction of the anchorage aligns with the direction of the wire. Bracing wire ceiling clips shall be bent as shown in the details and rotated as required to align with the direction of the wire. Screws in wood shall be installed to align with the direction of the wire.

4. FASTENERS AND WELDING
   - 4.01 Sheet metal screws shall comply with ASTM C1513 and ASME B18.6.3. Penetration of screws through joined material shall not be less than three exposed threads.
   - 4.02 Expansion anchors shall be: Hilti KB TZ2 (ICC ESR 4266)
   - 4.03 Power-Actuated Fasteners shall be: Hilti X-U (ICC ESR 2269)
   - 4.04 If not otherwise specified in the evaluation report, power-actuated fasteners installed in steel shall be installed so the entire pointed end of the fastener is driven through the steel member.
   - 4.05 Power-actuated fasteners in concrete or masonry are not permitted for bracingwires.
   - 4.06 Concrete reinforcement and prestressing tendons shall be located by non-destructive means prior to installing post-installed anchors.
   - 4.07 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING
   - 5.01 All field testing shall be performed in the presence of the project inspector.
   - 5.02 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power-actuated fasteners in concrete shall be field tested for 200 pounds in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1910A.5.
   - 5.03 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent and in accordance with CBC Section 1910A.5.

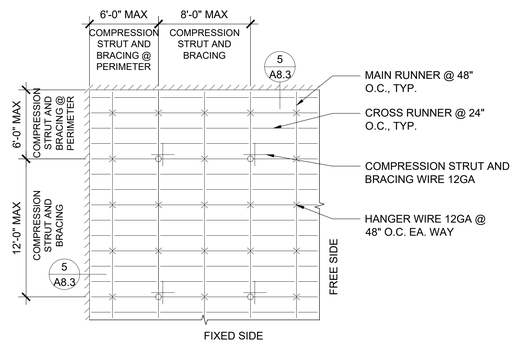
6. LUMINAIRES
   - 6.01 All luminaires shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the luminaire. A minimum of two screws or approved fasteners are required at each luminaire per ASTM E580 Section 5.3.1.
   - 6.02 Surface-mounted luminaires shall be attached to the main runner with at least four #12 screws.
   - 6.03 Luminaires weighing less than or equal to 10 pounds supported directly on the ceiling runners with at least found #12 screws
   - 6.04 Luminaires weighing greater than 10 pounds but less than or equal to 56 pounds supported directly on the ceiling runners shall have a minimum of six #12 screws
   - 6.05 All luminaires weighing greater than 56 pounds shall be independently supported from the structure above. See support details per DSA IR 25-03

7. SERVICES WITHIN THE CEILING
   - 7.01 All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals, or other services shall be positively attached to the ceiling suspension systems by mechanical means. Screws or other fasteners specified on the drawings are required. A minimum of two attachments are required at each component.
   - 7.02 Ceiling-mounted services weighing less than or equal to 20 pounds shall have one #12 gauge slack safety wire attached from the terminal or service to the structure above.
   - 7.03 Ceiling-mounted services weighing more than 20 pounds but less than or equal to 56 pounds shall have two #12 gauge slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.
   - 7.04 Ceiling-mounted services weighing more than 56 pounds shall be independently supported from the structure above. See support details on these drawings for more information.

8. OTHER DEVICES WITHIN THE CEILING
   - 8.01 All lightweight miscellaneous devices, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid. Devices weighing more than 10 pounds shall have a #12 gauge slack safety wire anchored to the structure above. Devices weighing more than 20 pounds shall be independently supported from the structure above.

DSA IR 25-3 SUSPENDED CEILING GENERAL NOTES

	1



NOTES:
1. CEILING SUSPENDED MEMBERS SHALL BE FIXED AT MAX (2) ADJ. WALLS/ROOM

TYPICAL SUSPENDED CEILING PLAN

SCALE	
NTS	3

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2644
Fax: (213) 746-6463

LICENSED ARCHITECT
NO. C31804
REN 3-31-25
STATE OF CALIFORNIA

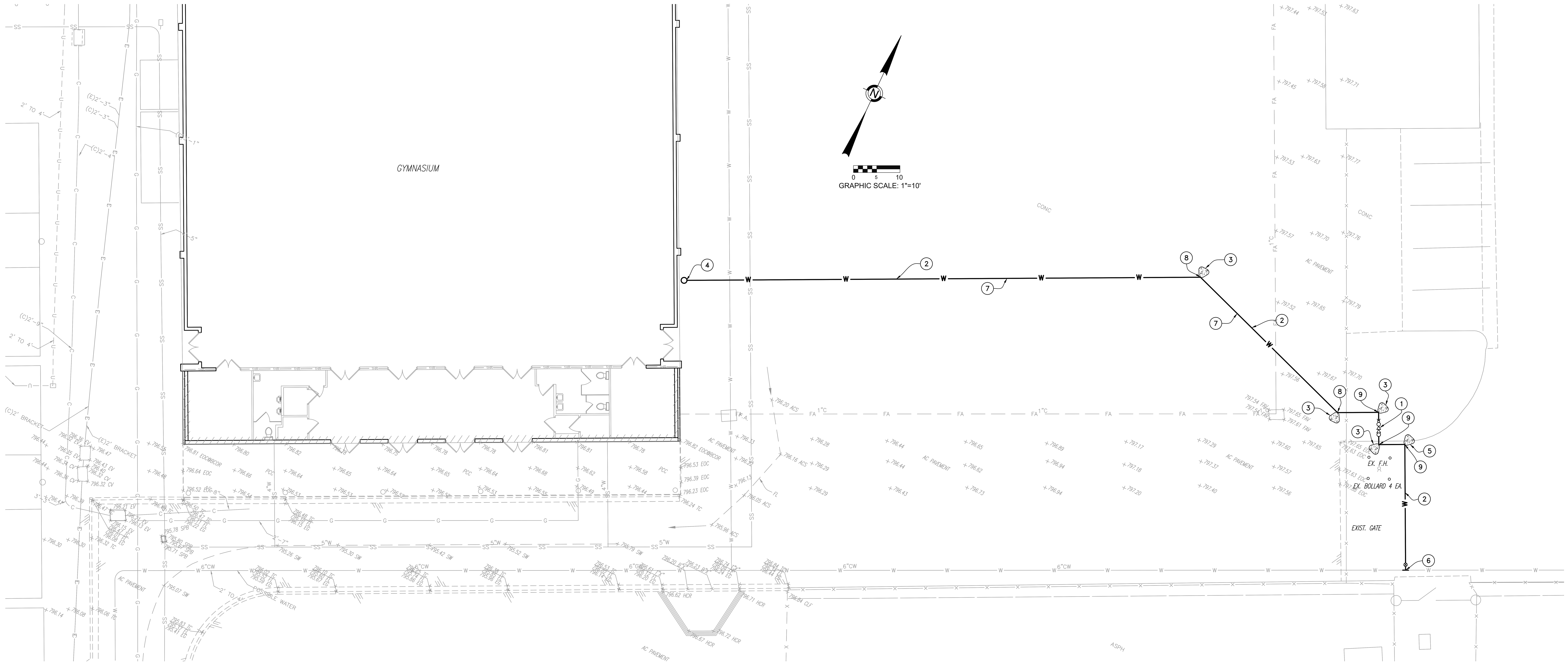
BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

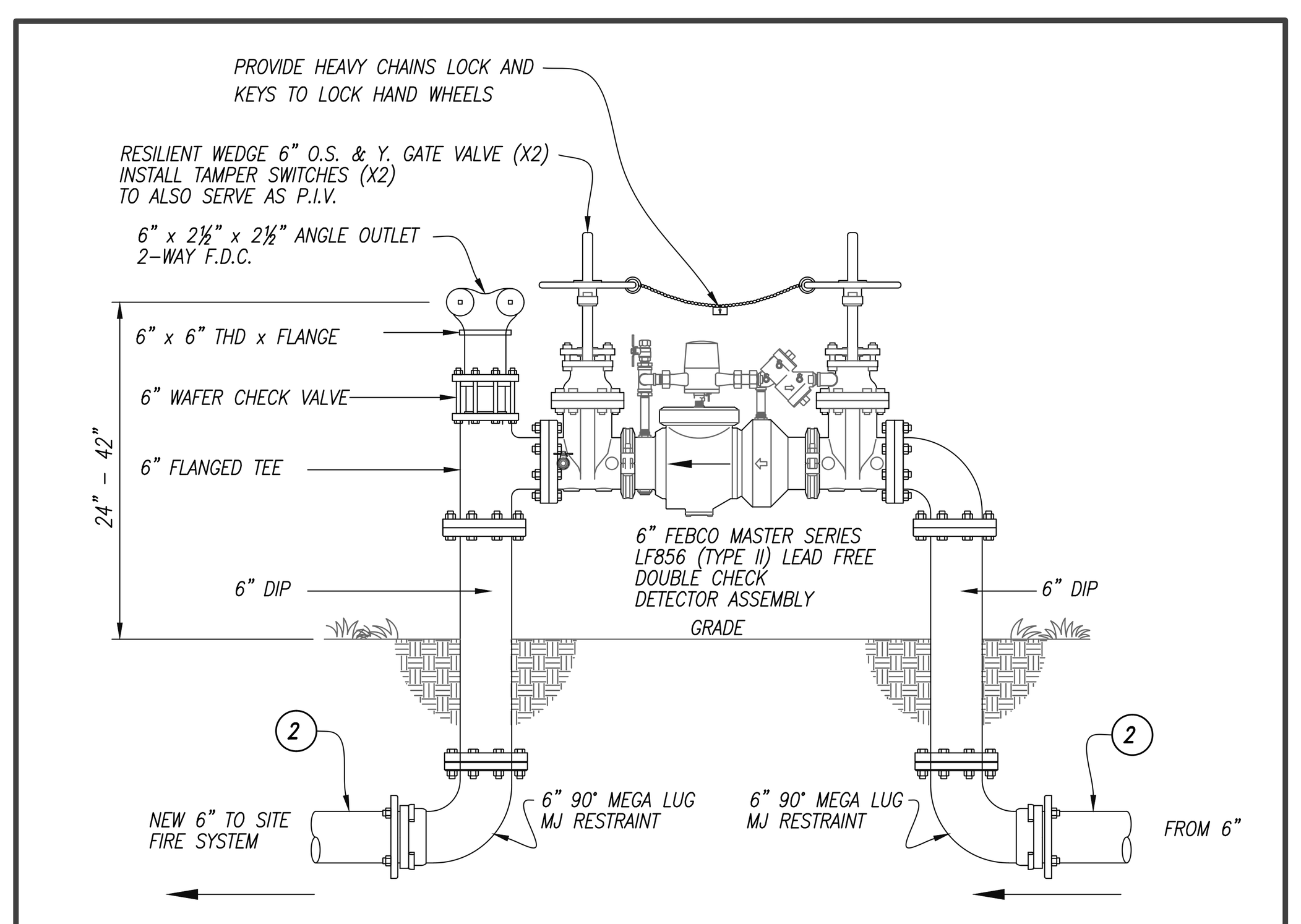
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

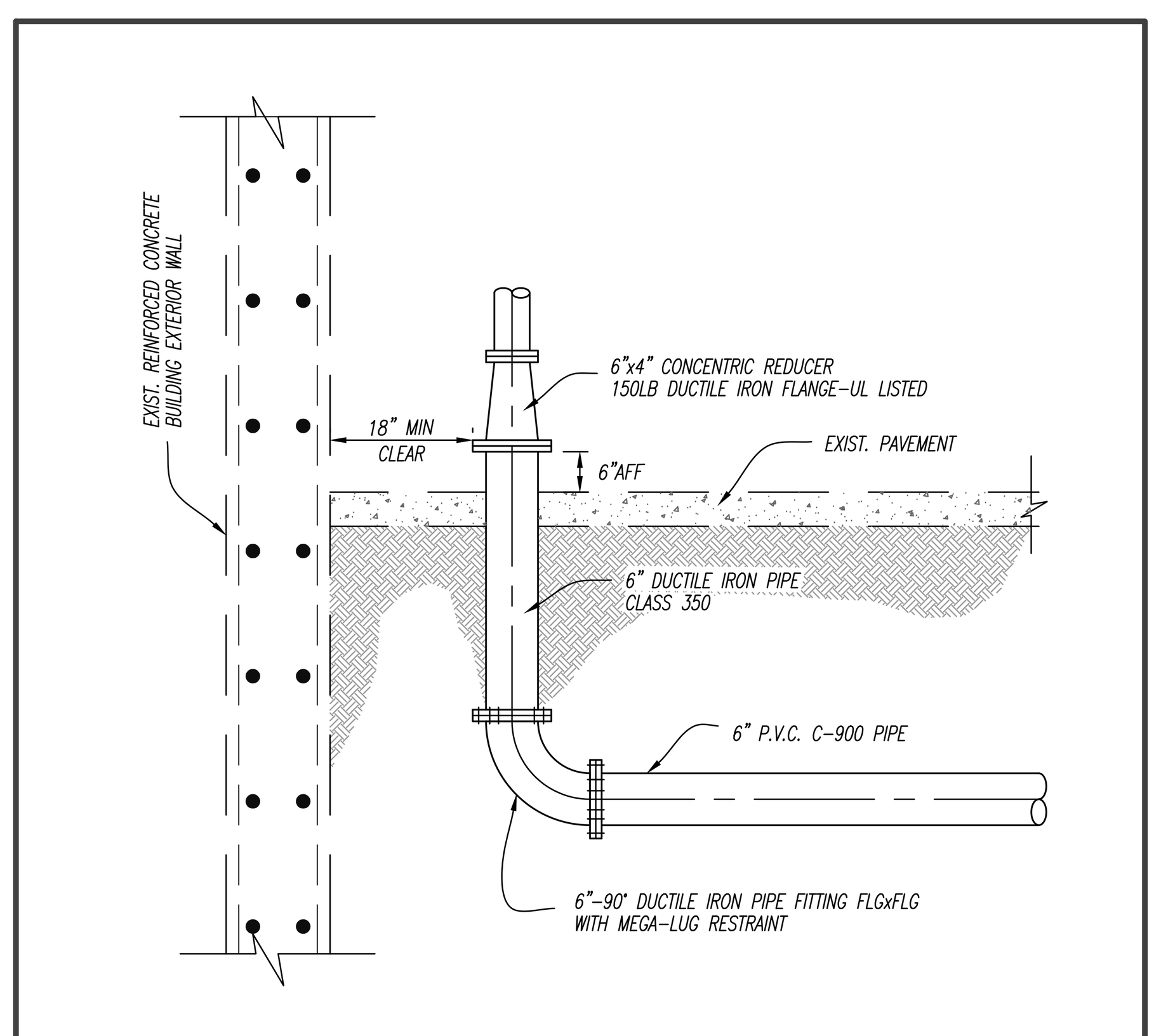
TYPICAL DETAILS

DATE	08/26/2024
DSA-AR	A# 03-123614 FILE NO. 19-H20
SHEET	A8.3





DOUBLE CHECK VALVE DETECTOR ASSEMBLY SPRINKLER CONNECTION — SCALE: N.T.S.



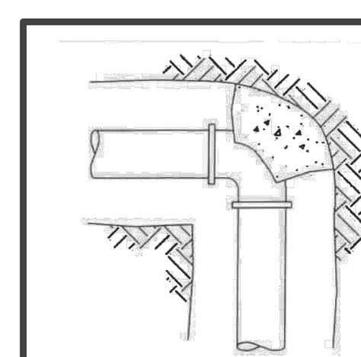
FIRE SPRINKLER STUB-UP DETAIL — SCALE: N.T.S. — DETAIL: 4

NOTE:

THE COVER OVER 6" WATER LINE SHALL BE BETWEEN 30" TO 48", PER CITY OF POMONA WATER DIVISIONS STANDARD NO. 1

NOTE:

COORDINATE LOCATION OF WATER LINE WITH INTERIOR PLUMBING LINE LOCATION



NOTES:
1. THRUST BLOCKS SHALL BE USED FOR PLASTIC PIPE 3" (75 mm) DIAMETER OR LARGER.
2. THRUST BLOCKS SHALL BE PCC, 450-C-2000 (265-C-14).
3. ANCHOR RODS SHALL BE GALVANIZED STEEL, 1/2" (12 mm) DIAMETER, WRAPPED AROUND PIPE.
4. SIZE OF THRUST BLOCKS SHALL BE AS SHOWN ON PLANS.
5. ALL VIEWS ARE PLAN VIEW UNLESS OTHERWISE SHOWN.

SYMBOL ON PLAN TB

STANDARD PLANS FOR PUBLIC WORKS

PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE

THRUST BLOCKS FOR PL

CONSTRUCTION NOTES

1. FURNISH AND INSTALL 6" DOUBLE DETECTOR ASSEMBLY PER DETAIL WITH FIRE DEPT. CONNECTION
2. FURNISH AND INSTALL 6" C-900 PVC PIPE
3. FURNISH AND INSTALL CONCRETE THRUST BLOCK PER S.P.P.W.C. STD. PLAN 508-3
4. FURNISH AND INSTALL FIRE SPRINKLER STUB-UP PER DETAIL SHOWN HEREON
5. FURNISH AND INSTALL 90° DUCTILE IRON PIPE FITTING.
6. FURNISH AND INSTALL 6" GATE VALVE AND TAPPING SLEEVE PER E.J. PRESCOTT
7. REMOVE PAVEMENT BY SAW-CUTTING FOR THE INSTALLATION OF NEW 6" WATERLINE. REPLACE PAVEMENT SAME IN KIND.
8. FURNISH AND INSTALL 45° DUCTILE IRON PIPE FITTING.

PREPARED BY:
ANDREASEN ENGINEERING, INC.
CIVIL ENGINEERING • LAND SURVEYING • MUNICIPAL ENGINEERING
195 NORTH EUCLID AVENUE, SUITE 101, UPLAND, CA 91786
(909)623-1595 • www.aeicivil.com
Under The Supervision Of :
STEPHEN VENTURA R.C.E. 32437 DATE

REGISTERED PROFESSIONAL ENGINEER — STEPHEN VENTURA — RCE 32437 — Exp. 12-31-24 — CIVIL — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative MDC engineers, INC
Consulting Engineers
5101 E La Palma Ave., Suite 205 Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844 Fax: (213) 746-6463

LICENSED ARCHITECT — STATE OF CALIFORNIA — REN 3-31-25

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE SPRINKLER SITE PLAN

DATE: 03/27/24
DSA A#: A# 03-123614
FILE NO. 19-H20

SHEET: C1.0

GENERAL

1. ALL WORKMANSHIP, MATERIAL, AND TESTING SHALL CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS, TO VERIFY CONDITIONS AT THE JOB SITE AND TO CROSSCHECK DETAILS AND DIMENSIONS ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON ALL OTHER PERTINENT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION.
3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. WHERE CONFLICTS OCCUR BETWEEN VARIOUS ELEMENTS OF THE WORKING DRAWINGS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
4. DETAILS MARKED TYPICAL SHALL APPLY IN ALL CASES, UNLESS SPECIFICALLY DETAILED OTHERWISE. WHERE NO DETAIL IS SHOWN, NOTIFY STRUCTURAL ENGINEER OF RECORD. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
5. THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING BRACING, SHORING, AND LAYDOWN OF CONSTRUCTION MATERIALS, ETC. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE DESIGN AND INSTALLATION OF TEMPORARY SHORING AND BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. UNLESS OTHERWISE STATED IN WRITING, SITE VISITS BY REPRESENTATIVES OF THE STRUCTURAL ENGINEER:
   - A. DO NOT INCLUDE INSPECTION OF PROTECTIVE OR TEMPORARY CONSTRUCTION.
   - B. ARE GENERAL IN NATURE AND ARE NOT CONTINUOUS OR DETAILED.
   - C. DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE.
   - D SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
7. DIMENSIONS SHALL GOVERN OVER SCALES SHOWN ON DRAWINGS.

SEISMIC DESIGN DATA

1. RISK CATEGORY = III
2. IMPORTANCE FACTOR I = 1.25
3. MAPPED ACCELERATION PARAMETERS:
   S_S = 1.726
   S_1 = 0.630
4. SITE CLASS = D - DEFAULT
5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
   S_{DS} = 1.381
   S_{D1} = 0.714
6. SEISMIC DESIGN CATEGORY = D
7. TRANSVERSE DIRECTION (PERPENDICULAR TO SEATING AND SUPPORTING WALL):
   Ip = 1.0
   ap = 1.0
   Rp = 2.5
   LONGITUDINAL DIRECTION (PARALLEL TO SEATING AND SUPPORTING WALL):
   Ip = 1.0
   ap = 2.5
   Rp = 2.5

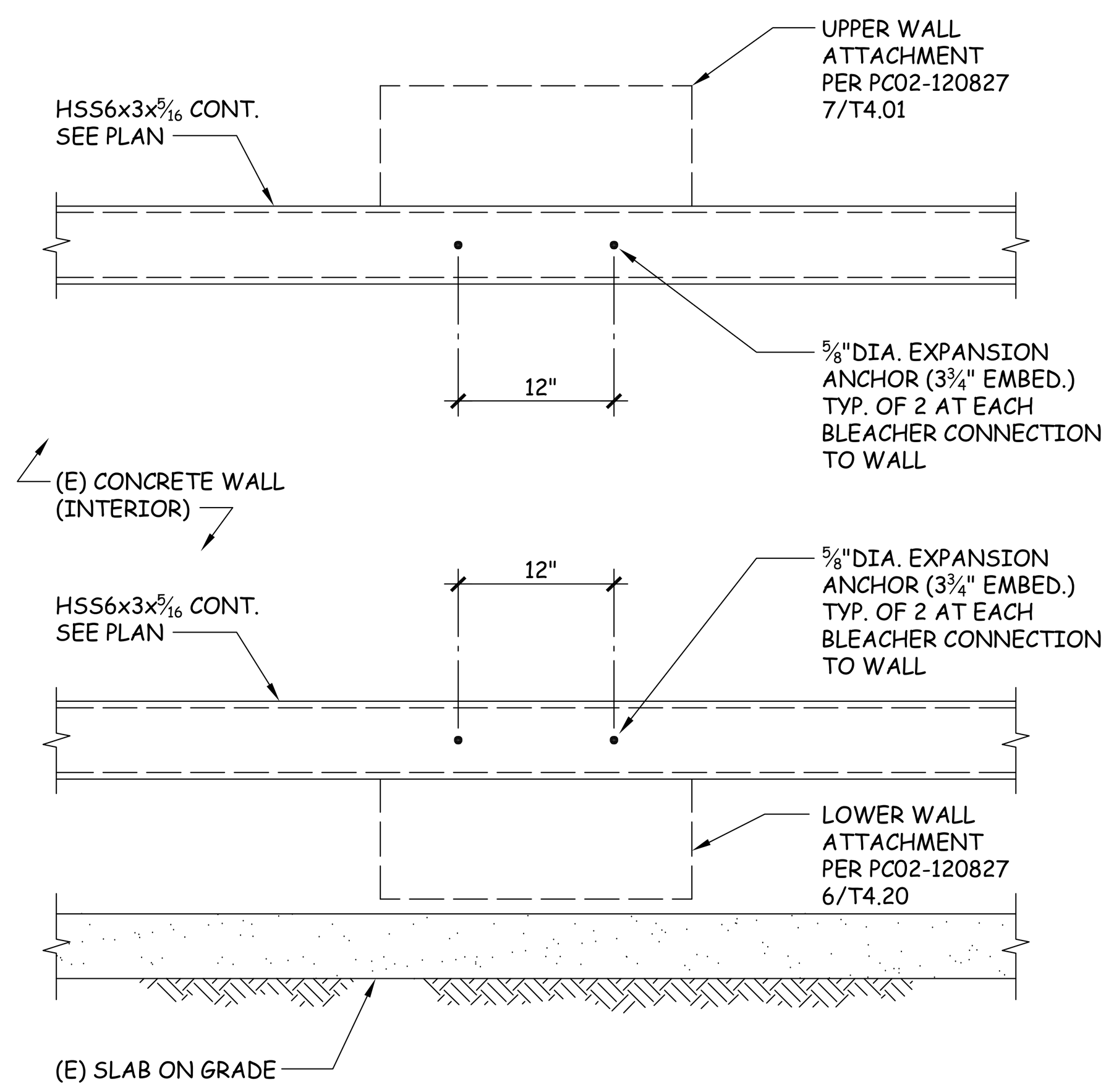
STRUCTURAL STEEL

1. STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED IN ACCORDANCE WITH THE 2016 EDITION A.I.S.C. "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS".
2. STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS.
   - A. WIDE FLANGES: A992
   - B. PLATES: A572, GRADE 50
   - C. STEEL TUBES: A500, GRADE C
   - D. STEEL PIPES: A53, GRADE B
   - E. CHANNELS AND ANGLES: A36
3. TYP. BOLTS SHALL CONFORM TO ASTM A307 UNLESS NOTED OTHERWISE.
4. SHOP DRAWINGS FOR STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE REVIEWED PRIOR TO FABRICATION.
5. ALL EXTERIOR OR EXPOSED STEEL SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL" (AESS) STANDARDS AND BE HOT-DIPPED GALVANIZED U.N.O.
6. ALL STEEL FASTENERS THAT ARE EXTERIOR OR EXPOSED SHALL BE GALVANIZED OR STAINLESS STEEL U.N.O.

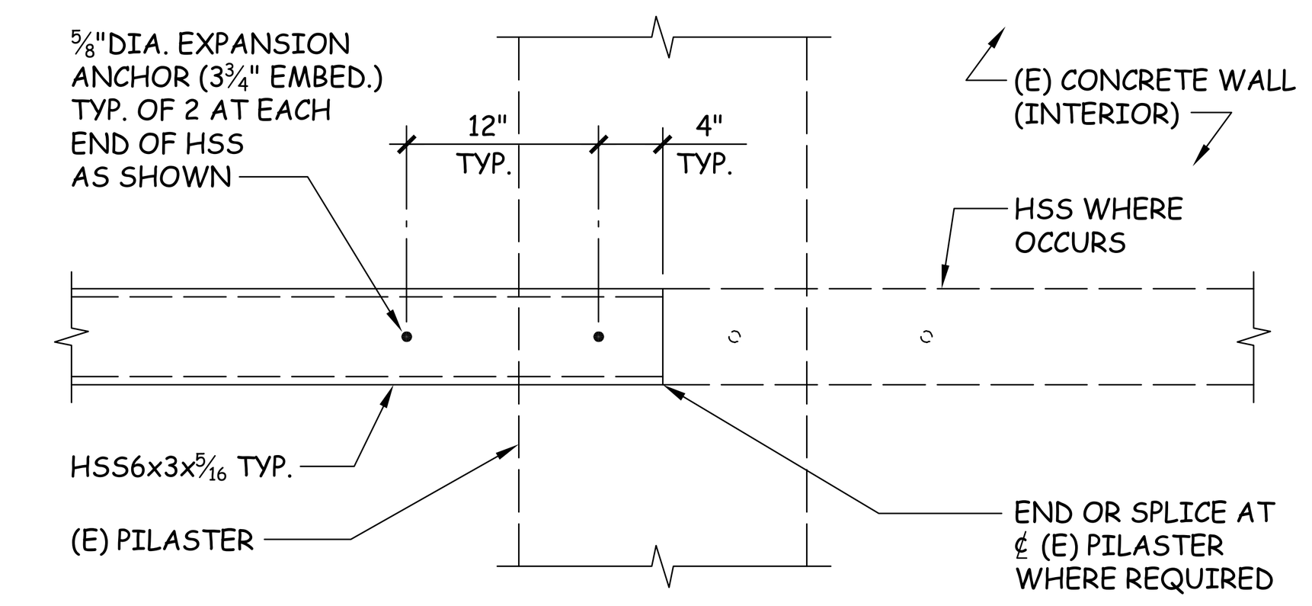
EXPANSION ANCHORS IN CONCRETE

1. ALL EXPANSION ANCHORS SHALL BE CARBON STEEL KWIK BOLT TZ2 CONCRETE ANCHORS MANUFACTURED BY HILTI, INC.
2. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ICC ESR-4266.
3. COMPLY WITH ALL MANUFACTURER'S RECOMMENDATIONS.
4. CONTINUOUS INSPECTION IS REQUIRED FOR ANCHOR INSTALLATION.
5. ALL ANCHOR EMBEDMENTS SHOWN ON THE STRUCTURAL DRAWINGS ARE NOMINAL EMBEDMENTS U.N.O.

GENERAL NOTES



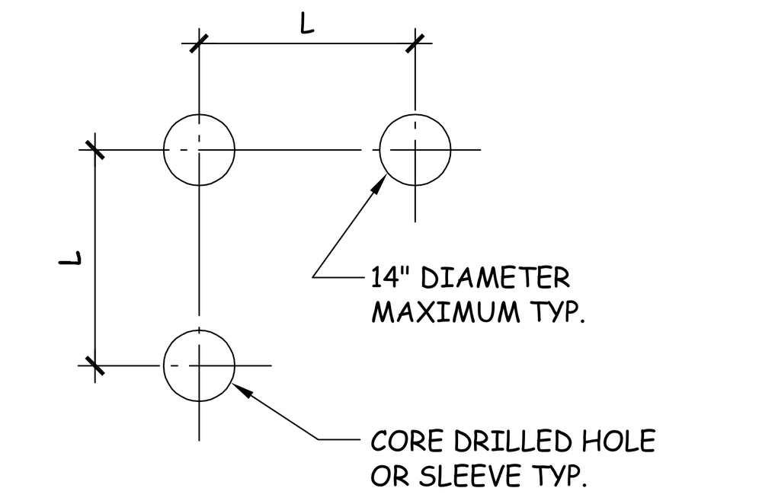
A AT BLEACHER CONNECTION TO WALL



B AT END OF HSS

NOTES:
1. WHERE UPPER BLEACHER CONNECTION OR LOWER BLEACHER CONNECTION TO WALL OCCURS WITHIN 2'-0" OF END OF HSS, OMIT HSS CONNECTION AT BLEACHER WALL AS SHOWN IN 9A SINCE CONNECTION OF HSS TO WALL PER 9B IS PROVIDED.
2. 100% OF EXPANSION ANCHORS SHOULD BE TESTED @ 60 FT-LBS INSTALLATION TORQUE. ANCHORS SHALL ATTAIN THE SPECIFIED TORQUE WITHIN 1/2 TURN OF THE NUT.

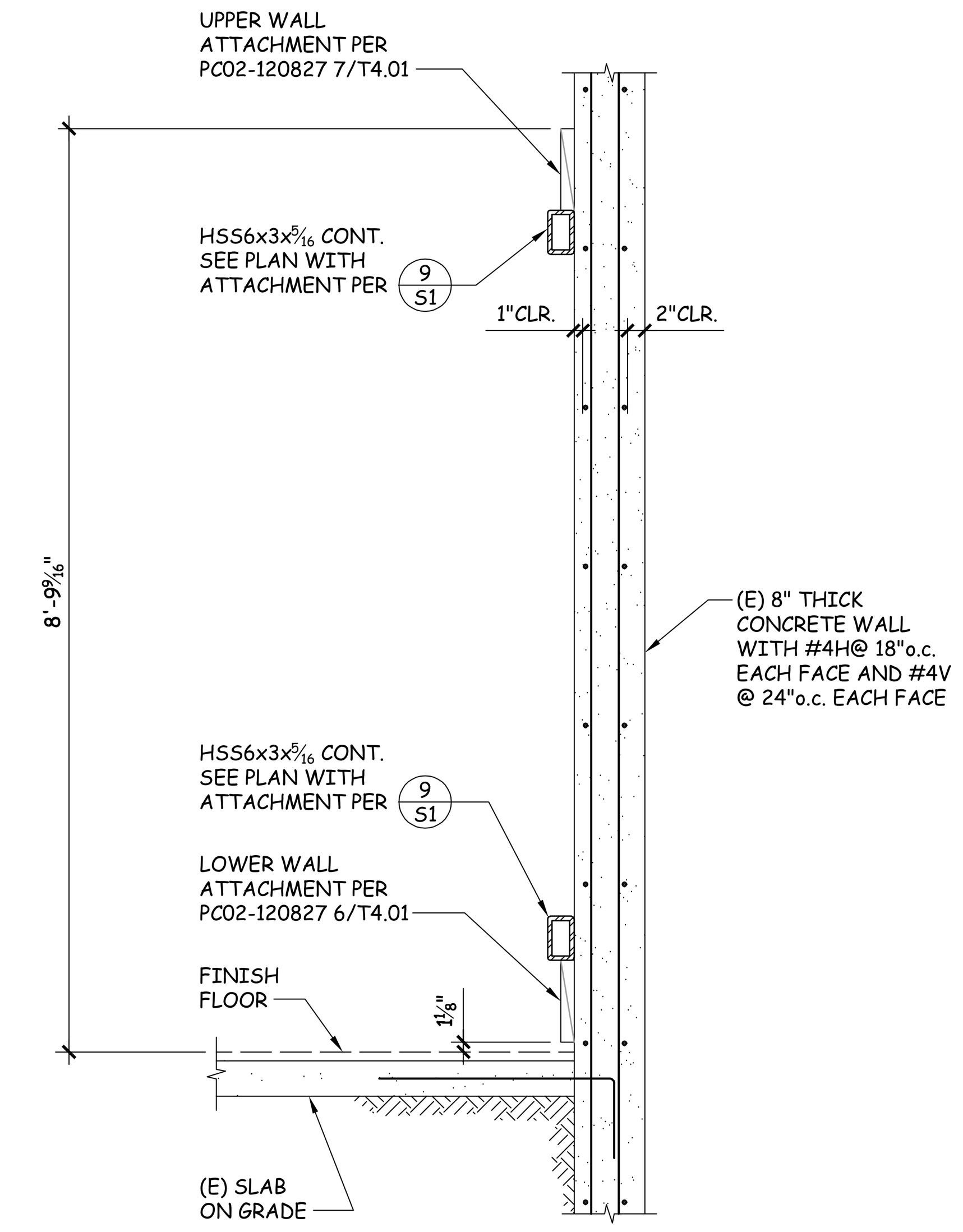
DETAIL 9



ELEVATION

NOTES:
1. L = 3 TIMES THE DIAMETER OF THE LARGEST ADJACENT HOLE OR SLEEVE.
2. LOCATE REBAR PRIOR TO CORE DRILLING OPENING. REBAR MAY NOT BE CUT OR INTERRUPTED.
3. WALL SHALL CONSIST OF MASONRY OR CONCRETE.

TYP. DETAIL 5



SECTION 15

13

14

18

19

20

23

24

25

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

GROSSMAN & SPEER ASSOCIATES, INC.
STRUCTURAL ENGINEERS
#23083
529 HAHN AVENUE, SUITE #200 (818) 507-1020
GLENDALE, CALIFORNIA 91203 FAX (818) 507-1556
E-MAIL ENGINEERS@GROSSMANSPEER.COM

LICENSED ARCHITECT YU-NGOK LO NO. C-31804 REN. 3-31-25 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER DERRICK MASUDA NO. 6228 Exp. 3-31-26 STRUCTURAL STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

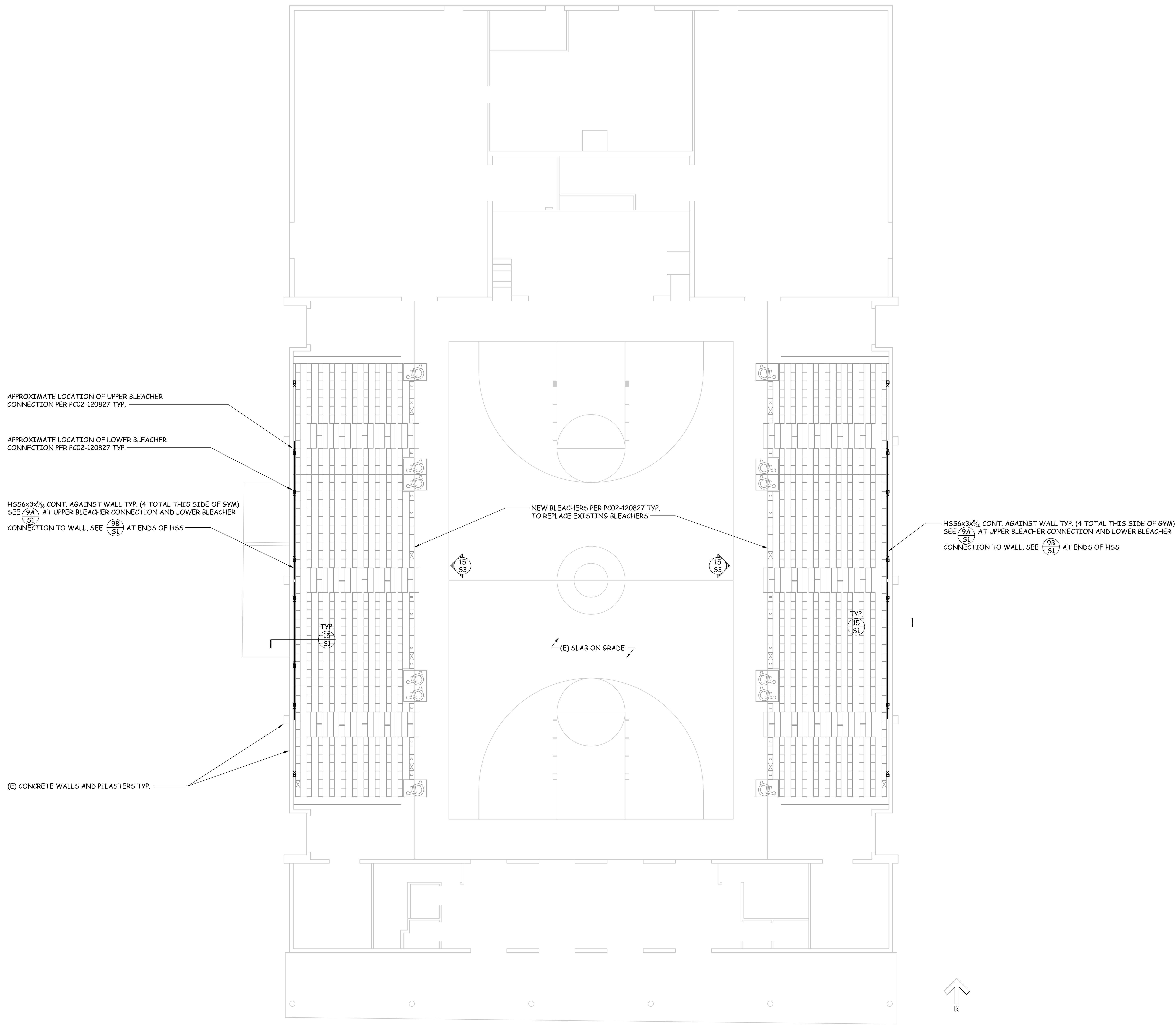
GENERAL NOTES AND DETAILS

DATE 09/19/2023

DSA № A# 03-123614
FILE NO. 19-H20

SHEET S1

DRAWING NAME: 23083S1.DWG



FLOOR PLAN

1/8" = 1'-0"

1

DRAWING NAME: 23083S2.DWG

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

GROSSMAN & SPEER ASSOCIATES, INC.
STRUCTURAL ENGINEERS
#23083
529 HAHN AVENUE, SUITE #200 (818) 507-1020
GLENDALE, CALIFORNIA 91203 FAX (818) 507-1556
E-MAIL ENGINEERS@GROSSMANSPEER.COM

LICENSED ARCHITECT YU-NGOK LO NO. C-31804 REN 3-31-25 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER DERRICK MASUKIS NO. 6228 Exp. 3-31-26 STRUCTURAL STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

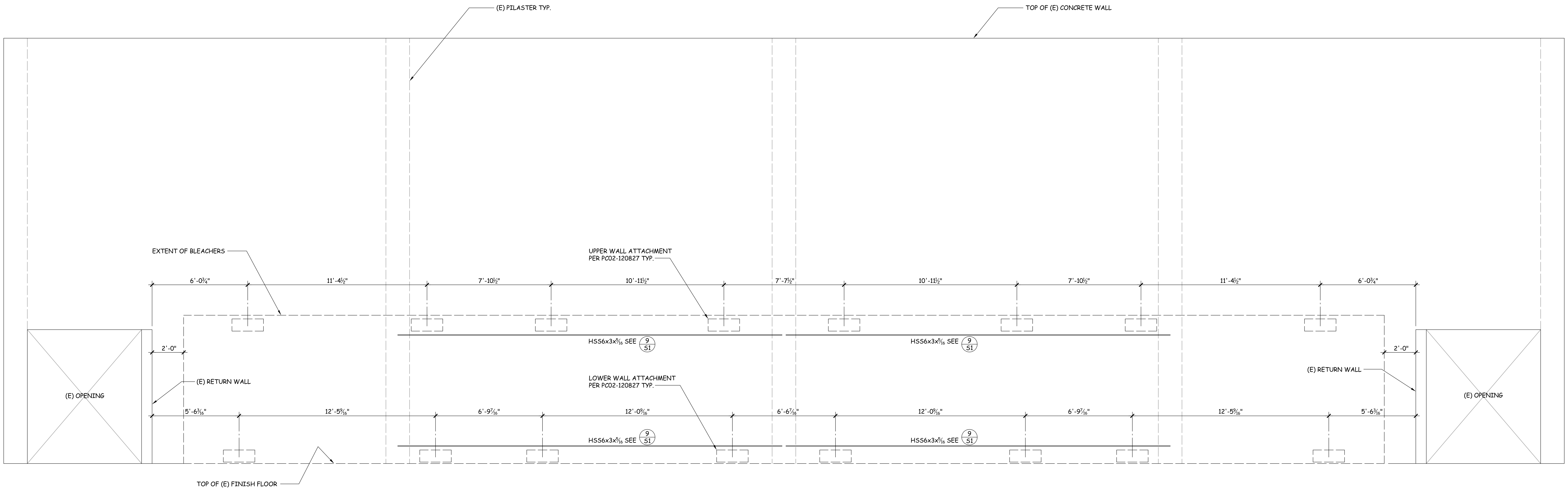
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FLOOR PLAN

DATE 09/19/2023

DSA A# A# 03-123614
FILE NO. 19-H20

SHEET S2



ELEVATION 3/8" = 1'-0" 15

16 17 18 19 20

21 22 23 24 25

DRAWING NAME: 2308353.DWG

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

GROSSMAN & SPEER ASSOCIATES, INC.
STRUCTURAL ENGINEERS
#23083

LICENSED ARCHITECT
NO. C31804
STATE OF CALIFORNIA

STRUCTURAL
Exp. 3-31-26
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELEVATION

DATE 09/19/2023
A# 03-123614
FILE NO. 19-H20

SHEET S3

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

APPLICABLE CODES AS OF JANUARY 1, 2023

TITLE 24 C.C.R., PART1 2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE.
TITLE 24 C.C.R., PART2 2022 CALIFORNIA BUILDING CODE (CBC)
(2021 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)
TITLE 24 C.C.R., PART3 2022 CALIFORNIA ELECTRICAL CODE (CEC)
(2020 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA)
TITLE 24 C.C.R., PART4 2022 CALIFORNIA MECHANICAL CODE (CMC)
(2021 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
TITLE 24 C.C.R., PART5 2022 CALIFORNIA PLUMBING CODE (CPC)
(2021 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
TITLE 24 C.C.R., PART6 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART9 2022 CALIFORNIA FIRE CODE (CFC)
(2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)
TITLE 24 C.C.R., PART10 2022 CALIFORNIA EXISTING BUILDING CODE
(2021 INTERNATIONAL EXISTING BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH AMENDMENTS)
TITLE 24 C.C.R., PART11 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE)
TITLE 24 C.C.R., PART12 2022 CALIFORNIA REFERENCED STANDARDS CODE
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)	2022 EDITION
NFPA 14	STANDPIPE AND HOSE SYSTEMS (CA AMENDED)	2019 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 20	STATIONARY PUMPS FOR FIRE PROTECTION	2019 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2019 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)	2019 EDITION
NFPA 70	NATIONAL ELECTRICAL CODE	2021 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2022 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVE	2019 EDITION
NFPA 90A	INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS	2021 EDITION
NFPA 101	LIFE SAFETY CODE - SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES	2021 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)	2018 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2019 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2016 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 (R2021)
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 (R2018)
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

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

PIPE MATERIAL SCHEDULE

SERVICE	MATERIALS
BELOW GROUND, OUTSIDE BUILDING, ON-SITE SEWER PIPING	LARGER THAN 4": PVC SDR 26 WITH BELL AND SPIGOT ENDS FOR GASKETED JOINTS WITH ELASTOMERIC SEALS, APPROVED FOR GRAVITY SEWER PIPING. PROVIDE APPROPRIATE ADAPTORS FOR CONNECTIONS TO PIPES OF DIFFERENT MATERIALS.
BELOW GROUND, INSIDE AND OUTSIDE THE BLDG, SEWER PIPING	SCHEDULE 80 PVC WITH DWV FITTINGS; PIPE AND FITTINGS SHALL BE APPROVED FOR BELOW GROUND, INSIDE BUILDING DWV APPLICATION. PROVIDE APPROPRIATE ADAPTORS FOR CONNECTIONS TO PIPES OF DIFFERENT MATERIALS.
ABOVE GROUND, INSIDE BUILDING WASTE PIPING	HUBLESS CAST-IRON WITH NEOPRENE GASKET & STAINLESS STEEL BAND/SHIELD. PROVIDE APPROPRIATE ADAPTORS FOR CONNECTIONS TO PIPES OF DIFFERENT MATERIALS.
ABOVE GROUND VENT (V) PIPING	HUBLESS CAST-IRON WITH NEOPRENE GASKET & STAINLESS STEEL BAND/SHIELD OR GALVANIZED STEEL PIPE. PROVIDE APPROPRIATE ADAPTORS FOR CONNECTIONS TO PIPES OF DIFFERENT MATERIALS.
BELOW GROUND, OUTSIDE BUILDING, ON-SITE COLD WATER (CW)	PIPE SIZE, 4" AND LARGER: PVC PRESSURE PIPE C900 WITH MECHANICAL JOINTS AND FITTINGS APPROVED FOR UNDERGROUND PRESSURE WATER PIPING; PIPE SIZE, 3" AND SMALLER: SEAMLESS COPPER TYPE K PIPE, HARD DRAWN, WITH WROUGHT COPPER FITTINGS, LEAD-FREE SOLDER JOINTS, WRAPPED WITH 20-MIL PVC TAPE; PROVIDE THRUST BLOCKS ON EVERY CHANGE OF DIRECTION, CHANGE IN SIZE AND AT TEE FITTINGS. PROVIDE APPROPRIATE ADAPTORS FOR CONNECTIONS TO PIPES OF DIFFERENT MATERIALS.
BELOW GROUND, INSIDE BUILDING, COLD WATER (CW)	SEAMLESS COPPER TYPE K PIPE, HARD DRAWN, WITH WROUGHT COPPER FITTINGS, LEAD-FREE SOLDER JOINTS, WRAPPED WITH 20-MIL PVC TAPE
ABOVE GROUND, DOMESTIC COLD WATER	SEAMLESS COPPER TYPE L PIPE, HARD DRAWN, WITH WROUGHT COPPER FITTINGS, LEAD-FREE SOLDER JOINTS
ABOVE GROUND, DOMESTIC HOT WATER	SEAMLESS COPPER TYPE L PIPE, HARD DRAWN, W/ WROUGHT COPPER FITTINGS & INSULATION, LEAD-FREE SOLDER FOR JOINTS AND CONNECTIONS

NOTE: ALL PIPING MATERIALS & FITTING SHALL BE NEW WITHIN ALL RESTROOMS, AND POC SHALL BE MADE AT ENTRY OF PIPING TO EACH RESTROOMS, DEMO ALL EXISTING PLUMBING PIPING (WATER/SEWER- WASTE /VENT) WITHIN RESTROOM.

FAN SCHEDULE

UNIT TAG	SERVICE	LOCATION	MAKE	MODEL NUMBER	TYPE	CFM	ESP (IN. W.C.)	MAX. RPM	HP	VOLT/PH/HZ	SPEED CONTROL	OPERATING WEIGHT (LBS.)	MIN. ROOF OPENING	SOUND LEVEL (SONES)
EF-1	RESTROOMS	ROOF	EXISTING	EXISTING	ROOF MOUNTED, DIRECT DRIVE	200	0.5	1725	1/6	120/1/60	YES	25	13"x13"	2.9
EF-2	RESTROOMS	ROOF	EXISTING	EXISTING	ROOF MOUNTED, DIRECT DRIVE	300	0.5	1725	1/6	120/1/60	YES	25	13"x13"	4.2
EF-3	RESTROOMS	ROOF	EXISTING	EXISTING	ROOF MOUNTED, DIRECT DRIVE	500	0.45	1725	1/6	120/1/60	YES	25	13"x13"	6.6

NOTES
1. PROVIDED W/ EC MOTORS W/ PRE-WIRED SPEED CONTROL.
2. PROVIDE KRUEGER S580 GRILLES (14"x14" FOR EF-1, 2, 3); PROVIDE DUCT TRANSITIONS/ADAPTERS AS REQUIRED; VERIFY EXACT REQUIREMENTS IN THE FIELD.
3. INTERLOCK EXHAUST FAN W/ LIGHT SWITCH.

LEGEND

SYMBOL	ABBR.	DESCRIPTION
— — W — —	W	SANITARY WASTE PIPING BEL. FLR.
——W——	W	SANITARY WASTE PIPING ABV. FLR.
- - - - V - - - -	V	VENT PIPING
—— CW - —	CW	COLD WATER PIPING
—— HW ——	HW	HOT WATER PIPING
—— HWR ——	HWR	HOT WATER RETURN PIPING
—— ICW - —	ICW	INDUSTRIAL COLD WATER PIPING
—— IHW ——	IHW	INDUSTRIAL HOT WATER PIPING
—— CHW - —	CHW	CHILLER WATER SUPPLY PIPING
—— CHWR - —	CHWR	CHILLER WATER RETURN PIPING
- - - - DE - - - -	DE	DEIONIZED WATER RETURN PIPING
- - - - DER - - - -	DER	DEIONIZED WATER RETURN PIPING
- - - - LA - - - -	LA	LABORATORY LABORATORY COMPRESSED AIR PIPE
—— LG ——	LG	LABORATORY GAS PIPE
- - - - LV - - - -	LV	LABORATORY VACUUM PIPING
— — LW — —	LW	LABORATORY WASTE PIPING
[—		PLUG
◐	POC	POINT OF CONNECTION
——○	UP	PIPING UP
——Ͽ	DN	PIPING DOWN
— — —⦶	FCO COYB	FLOOR CLEANOUT CLEANOUT IN YARD BOX
— — —‖	WCO	WALL CLEANOUT
—— G ——	G	GAS PIPING
—‖—	U.	UNION
—⊘—	B.V.	BALL VALVE
—N—	C.V.	CHECK VALVE
—⋈—	SOV	SHUT-OFF VALVE
—⋈—	3VV	3-WAY VENT VALVE
—▩—	FLEX.	FLEXIBLE CONNECTION
—⋈—	GC	GAS COCK
—— TP - —	TP	TRAP PRIMER LINE
— — SD — —	SD	STORM DRAIN PIPING

GENERAL SYMBOLS

(1A) NUMBERED NOTE FOR SHEET WHERE SHOWN

A / E1.0 DETAIL DESIGNATION FOR ITEM & DRAWING NUMBER

ABBREVIATION

ABS	- ACRYLONITRILE - BUTADIENE - STYRENE	(E)	- EXISTING.		
ABV	- ABOVE	(ER)	- EXISTING TO BE REPLACED		
ACC	- ACCESSIBLE	FD	- FLOOR DRAIN	(ES)	- NEW
AFF	- ABOVE FINISH FLOOR	FHC	- FIRE HOSE CABINET	NIC	- NOT IN CONTRACT
AP	- ACCESS PANEL	FLR	- FLOOR	NTS	- NOT TO SCALE
BEL	- BELOW	FU	- FIXTURE UNIT	(R)	- RELOCATED
BEH	- BEHIND	FV	- FLUSH VALVE	SSS	- SATIN STAINLESS STEEL
CFH	- CUBIC FEET PER HOUR	GPM	- GALLONS PER MINUTE	TYP	- TYPICAL
CI	- CAST IRON	GRD	- GRADE	UON	- UNLESS OTHERWISE NOTED.
CLG	- CEILING	HB	- HOSE BIBB	VTR	- VENT THRU ROOF
CONN	- CONNECT/CONNECTION	HDR	- HEADER	W.P.	- WEATHERPROOF CONSTRUCTION.
CON'T	- CONTINUATION	IE	- INVERT ELEVATION	WT	- WEATHERTIGHT CONSTRUCTION.
DA	- DISABLED ACCESS	MH	- MOUNTING HEIGHT (TO BOTTOM OF FIXTURE)	VCP	- VITRIFIED CLAY PIPE
DN	- DOWN			YB	- YARD BOX
DF	- DRINKING FOUNTAIN	MTD	- MOUNTED	(X)	- EXISTING TO BE REMOVED
DWG	- DRAWINGS	OCEW	- ON CENTER EACH WAY	(XR)	- REMOVE RELOCATE AS SHOWN
EF	- EXHAUST FAN	REQ'D	- REQUIRED	(+)X'-Y"	- MOUNTING HEIGHT (TO CENTER OF DEVICE)

FIXTURE SCHEDULE

TAG	PIPE ROUGH-IN				REMARKS
	WASTE	VENT	CW	HW	
WC-1	4"	2"	1-1/2"	-	VITREOUS CHINA, FLOOR MOUNTED, 1-1/2" TOP SPUD, ELONGATED, SIPHON JET, FLUSH VALVE WATER CLOSET AMERICAN STANDARD MADERA 2857.128, 16-1/2" HIGH, 1.28-GPF; SLOAN ROYAL 111-1.28 FLUSH VALVE, 1.28 GPF, VANDAL RESISTANT; OLSONITE 95CT HEAVY DUTY OPEN FRONT SEAT LESS COVER.; ALL WATER CLOSET FLANGES SHALL BE CAST IRON (PLASTIC NOT ACCEPTABLE). PROVIDE FLANGE FROM JONES STEPHENS CORP. (800-355-6637) PART # C40420 "CODE BLUE" NO CAULK FLANGE
WC-2	4"	2"	1-1/2"	-	ADA WC - VITREOUS CHINA, FLOOR MOUNTED, 1-1/2" TOP SPUD, ELONGATED, SIPHON JET, FLUSH VALVE WATER CLOSET AMERICAN STANDARD MADERA 2857.128, 16-1/2" HIGH, 1.28-GPF; SLOAN ROYAL 111-1.28 FLUSH VALVE, 1.28 GPF, VANDAL RESISTANT; OLSONITE 95CT HEAVY DUTY OPEN FRONT SEAT LESS COVER; ASSEMBLY SHALL BE ADA COMPLIANT; PROVIDE FLANGE FROM JONES STEPHENS CORP. (800-355-6637) PART # C40420 "CODE BLUE" NO CAULK FLANGE.
UR-1	2"	2"	1"	-	VITREOUS CHINA, WALL MOUNTED, 3/4" TOP SPUD, URINAL AMERICAN STANDARD WASHBROOK 6590.001; SLOAN ROYAL 186-0.125 FLUSH VALVE, 0.125 GPF,VANDAL RESISTANT; DISTRICT SHALL FURNISH THE URINAL FIXTURE ONLY.
UR-2	2"	2"	1"	-	ADA URINAL - VITREOUS CHINA, WALL MOUNTED, 3/4" TOP SPUD, URINAL AMERICAN STANDARD WASHBROOK 6590.001; SLOAN ROYAL 186-0.125 FLUSH VALVE, 0.125 GPF, VANDAL RESISTANT; ASSEMBLY SHALL BE ADA COMPLIANT; DISTRICT SHALL FURNISH THE URINAL FIXTURE ONLY.
LV-1	2"	1-1/2"	3/4"	3/4"	VITREOUS CHINA, WALL-HUNG, LAVATORY AMERICAN STANDARD LUCERNE 0355.012, 4" OC FAUCET HOLE, WITH CONCEALED ARM SUPPORT; SELF-CLOSING PUSH BUTTON SINGLE FAUCET CHICAGO 3500-4E2805ABCP 0.5-GPM, PRESSURE COMPENSATING VANDAL-RESISTANT SPRAY OUTLET, LEAD-FREE NSF 61 CERTIFIED, ADA COMPLIANT, CALGREEN COMPLIANT; ANGLE STOP W/ LOOSE KEY HANDLE CHICAGO 1013-ABCP; GRID STRAINER, AND OFFSET LA PATTERN CAST BRASS P-TRAP AND TRAP ARM.
LV-2	2"	1-1/2"	3/4"	3/4"	STUDENT ADA LAV - VITREOUS CHINA, WALL-HUNG, LAVATORY AMERICAN STANDARD LUCERNE 0355.012, 4" OC FAUCET HOLE, WITH CONCEALED ARM SUPPORT; SELF-CLOSING PUSH BUTTON SINGLE FAUCET CHICAGO 3500-4E2805ABCP 0.5-GPM, PRESSURE COMPENSATING VANDAL-RESISTANT SPRAY OUTLET, LEAD-FREE NSF 61 CERTIFIED, ADA COMPLIANT, CALGREEN COMPLIANT; ANGLE STOP W/ LOOSE KEY HANDLE CHICAGO 1013-ABCP; GRID STRAINER, AND OFFSET LA PATTERN CAST BRASS P-TRAP AND TRAP ARM. PROVIDE TRUEBRO LAV GUARD PROTECTIVE SHIELD PIPE COVERS; ASSEMBLY SHALL BE ADA COMPLIANT.
DF-1	2"	1-1/2"	3/4"	-	ADA DUAL HEIGHT DRINKING FOUNTAIN/BOTTLE FILLER - MURDOCK MA172-VR-BF2S, BARRIER FREE, VANDAL RESISTANT BUTTON, UNIVERSAL BI-LEVEL,WALL MOUNTED DRINKING FOUNTAIN WITH -BF2S SENSOR OPERATED BOTTLE FILLER. TYPE 304 STAINLESS STEEL BASIN; ASSEMBLY SHALL BE ADA COMPLIANT AND NSF 61 CERTIFIED FOR LEAD-FREE DRINKING FOUNTAIN.
FD-1	2"	1-1/2"			FLOOR DRAIN MIFAB F1100 SERIES COMPLETE WITH STAINLESS STEEL ADJUSTABLE FLAT STRAINER, RECESSED TILE FLANGE, VANDAL-PROOF SS SCREWS, TRAP PRIMER CONNECTION, ETC.; PROVIDE REQUIRED ACCESSORIES FOR PROPER INSTALLATION ON (E) FLOOR.

NOTE: ALL WATER CLOSET FLANGES SHALL BE CAST IRON (PLASTIC NOT ACCEPTABLE). PROVIDE FLANGE FROM JONES STEPHENS CORP. (800-355-6637) PART # C40420 "CODE BLUE" NO CAULK FLANGE

MECHANICAL NOTES

NOTE: THIS DOCUMENT FORMS A PART OF THE SPECIFICATIONS AND SHALL BE CONSIDERED THE SAME AS IF ATTACHED THERETO.

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AND LISTED LIST OF CALIFORNIA CODE OF REGULATIONS (C.C.R.)
2. BEFORE STARTING ANY WORK, VERIFY THE ADEQUACY, LOCATION, SIZE, AND AVAILABILITY OF ALL UTILITIES CONCERNED.
3. DRAWINGS INDICATE SIZE AND TERMINATION OF PIPING AND SUGGEST PROPER ROUTES OF PIPING TO CONFORM TO THE STRUCTURE TO AVOID OBSTRUCTION AND TO PRESERVE CLEARANCE. IT IS NOT THE INTENT TO INDICATE ALL NECESSARY OFFSETS AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL PIPING IN SUCH A MANNER AS TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM, KEEP OPENINGS AND PASSAGEWAYS CLEAR AND MAKE ALL EQUIPMENT REQUIRING INSPECTION, MAINTENANCE AND REPAIR ACCESSIBLE WITHOUT FURTHER INSPECTIONS OR ADDITIONAL COST.
4. THE WORK OF THIS PROJECT INVOLVES THE REPLACEMENT OF EXISTING SANITARY WASTE AND VENT PIPING BELOW GROUND INSIDE THE BUILDING AND WASTE PIPING ABOVE GROUND AS INDICATED ON THE DRAWINGS. VISIT THE JOBSITE TO DETERMINE THE EXTENT OF WORK REQUIRED BY THE CONSTRUCTION ACTIVITIES. THE DRAWINGS FOR THESE AREAS SHOW THE CHANGES TO BE MADE REVISE, REARRANGE, REROUTE OR REMOVE EXISTING PIPING AND AND RELATED APPURTENANCES AS REQUIRED TO ACCOMMODATE THE CHANGES AND ADDITIONS SHOWN
5. THE ALTERATION OF THE EXISTING CAST IRON SANITARY WASTE PIPING TO NEW PVC SCHEDULE 80 DRAINAGE PIPING BELOW GROUND INSIDE THE BUILDING IS WORK OF A COMPLEX NATURE WHICH WILL REQUIRE ACCURATE PLANNING, CAREFUL PREPARATION AND EXECUTION BY THE CONTRACTOR.
6. UNLESS OTHERWISE NOTED, EXISTING PIPING AND RELATED APPURTENANCES BEING REMOVED SHALL BE DISPOSED OF OFF-SITE AT CONTRACTOR'S EXPENSE.
7. ALL WORK THAT INVOLVES "SHUT-DOWN" OF EXISTING UTILITIES OR PORTIONS THEREOF, SHALL BE DONE AT SUCH TIMES THAT WILL CAUSE THE LEAST INCONVENIENCE TO THE DISTRICT'S ACTIVITIES. THE EXACT TIME AND LENGTH OF "SHUT-DOWN" SHALL BE PRE-ARRANGED WITH THE DISTRICT AND SCHOOL SITE AT LEAST 72 HOURS IN ADVANCE OF THE REQUIRED SHUT-DOWN.
8. ALL PIPING SHALL BE SEISMICALLY RESTRAINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE "SMACNA" GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING SYSTEMS.
9. EXPOSED HOT WATER SUPPLY PIPES, TRAP AND TRAP ARM AT "ACC" OR "D.A." LAVATORIES WITH HOT WATER SHALL BE INSULATED.
10. RUN ALL PLUMBING LINES CONCEALED. NO LINES SHALL BE RUN EXPOSED WITHOUT PRIOR APPROVAL FROM THE DISTRICT & ENGINEER.
11. AESTHETICS ARE A VERY IMPORTANT COMPONENT OF THIS PROJECT. INSTALLATION OF PLUMBING WORK SHALL BE OF THE HIGHEST QUALITY AND CRAFTSMANSHIP POSSIBLE.
12. REMOVE ALL (E) ABANDON PIPING THAT ARE EXPOSED OR WILL BE EXPOSED DURING THE DEMOLITION AND NEW PIPING INSTALLATION; COORDINATE AND VERIFY (E) PIPING PRIOR TO REMOVAL.
13. ALL BRANCH PIPING THAT WILL BE REMOVED SHALL BE CAPPED TO THE NEAREST ACTIVE TEE.
14. ALL EXIST. IRRIGATION PIPING BEL. GRD., VALVES, VACUUM BREAKER & ALL 16. RELATED APPURTENANCES TO REMAIN.
15. AFTER AWARD OF CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE PROTECTION OF ALL EXISTING STRUCTURES (BOTH EXTERIOR AND INTERIOR) WITHIN AND ADJOINING WORK AREA. ANY EXISTING STRUCTURES AND /OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED WITH MATERIALS, WORKMANSHIP, FIXTURES OR EQUIPMENT TEMPORARILY REMOVED SHALL BE RE-ERECTED OR INSTALLED IN AN APPROVED MANNER, THE CONTRACTOR SHALL SUBMIT ALL PROPOSED PROTECTION METHODS TO THE CONSTRUCTION MANAGER FOR REVIEW AND SHALL RECEIVE WRITTEN APPROVAL PRIOR TO THEIR USE.
16. ALL WELDING SHALL BE SPECIALLY INSPECTED BY AN AWS-CWI QUALIFIED INSPECTOR APPROVED BY THE DISTRICT AND IN COMPLIANCE WITH CBC 1704 A.3.
17. THE LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES WHERE SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE DISTRICT, THE ENGINEER OR THEIR REPRESENTATIVES. DETERMINE THE EXACT LOCATION, DEPTH, INVERT ELEVATIONS, POINT OF CONNECTIONS AND PROPER SLOPES BEFORE CONNECTING WORK. FIELD VERIFY AND COORDINATE AS REQUIRED. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).
18. OCCUPANTS OF THE EXISTING BUILDING SHALL NOT BE INCONVENIENCED, DUE TO CONTRACTOR'S WORK DEBRIS, ETC. ENTRANCES AND CORRIDORS SHALL BE PROTECTED AND KEPT FREE OF OBSTRUCTIONS. THE OWNER SHALL BE NOTIFIED IN ADVANCE OF, TIME DELIVERY OF EQUIPMENT IN ORDER TO AVOID INTERFERENCE WITH THE NORMAL ACTIVITY OF THE BUILDING.
19. UPON COMPLETION OF PROJECT, CONTRACTOR SHALL PROVIDE OWNER WITH WRITTEN CERTIFICATION THAT ALL MATERIALS USED ON THIS PROJECT ARE ASBESTOS FREE.
20. PROVIDE PROPER SLEEVING AND CAULKING TO ALL NEW WATER PIPING PASSING THROUGH SLAB ON GRADE AND WALLS.
21. CONTRACTOR SHALL PROVIDE THE DISTRICT WITH A WRITTEN SCHEDULE OF WORK WHICH IS TO BE COORDINATED AND APPROVED BY THE DISTRICT PROJECT MANAGER, PRIOR TO THE START OF CONSTRUCTION.
22. CONTRACTOR TO COMPLY WITH ALL APPLICABLE SAFETY LAWS (OSHA, CAL OSHA ETC.).
23. WHEN CONTRACTOR HAS BEEN AWARDED THE CONTRACT, IT IS HIS RESPONSIBILITY TO SECURE THE AREAS SO NO UNAUTHORIZED PERSONNEL OR STUDENTS GAIN ACCESS TO THE PROJECT AREA OR THE CONTRACTORS STAGING AREA.
24. THE CONTRACTOR SHALL COOPERATE WITH THE DISTRICT TO THE FULLEST EXTENT IN PROVIDING TRAFFIC CONTROL DURING COURSE OF CONSTRUCTION SO AS TO PROVIDE A MAXIMUM PROTECTION FOR STUDENTS AND DISTRICT PERSONNEL. ALL EMPLOYEES ON THE PROJECT WORK SHALL PARK THEIR PRIVATE VEHICLES IN THE AREA DESIGNATED BY THE OWNER.
25. THE CONTRACTOR SHALL EXERCISE MAXIMUM DUST AND NOISE CONTROL EFFORTS TO KEEP AT A MINIMUM THE NUISANCE OF DUST AND CONSTRUCTION NOISE FROM THE CONSTRUCTION.
26. THE DISTRICT SHALL BE NOTIFIED IN ADVANCE OF TIMES OF EQUIPMENT OR MATERIALS DELIVERY IN ORDER TO AVOID INTERFERENCE WITH THE NORMAL ACTIVITY ON THE SCHOOL PREMISES.
27. THE WORK AREA SHALL BE CLEANED DAILY AND ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR AT LEGAL DUMP. AT CONCLUSION OF PROJECT CONTRACTOR SHALL LEAVE WORK AREA AND SITE, BROOM CLEAN AND GENERALLY IN SAME CONDITION AS PRIOR TO THIS CONSTRUCTION WORK.
28. PROTECT-IN PLACE AND CARE FOR LAWNS SHRUBS, ETC, IN THE CONSTRUCTION AREAS DURING CONSTRUCTION PERIOD. REPLACE ALL DAMAGED ITEMS AT NO COST TO DISTRICT.
29. AT NO TIME DURING THE WORK UNDER THE CONTRACT SHALL THE CONTRACTOR PLACE, OR CAUSE TO BE PLACED, ANY MATERIAL OR EQUIPMENT ETC, AT A LOCATION THAT WOULD IMPEDE OR IMPAIR ACCESS TO OR FROM THE PRESENT FACILITIES.
30. IF ASBESTOS/LEAD IS ENCOUNTERED IT SHALL BE IMMEDIATELY REPORTED TO THE DISTRICT. CONTRACTOR SHALL NOT CONTINUE THEIR WORK WHERE ANY HAZARDOUS MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION. REMOVAL AND ABATEMENT OF SUCH ENCOUNTERED SHALL BE PROVIDED BY DISTRICT. DISTRICT SHALL PROVIDE SPOT ABATEMENT WHERE IDENTIFIED BY CONTRACTOR.
31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING STRUCTURES AT THE WORK AREA FROM WEATHER AND OTHER INCLEMENT CONDITIONS. ANY DAMAGE INCURRED DUE TO FAILURE BY THE CONTRACTOR TO PROPERLY PROTECT SUCH WORK SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
32. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED AND OR DEMOLISHED MATERIAL, WASTE AND DEBRIS CAUSED BY THE NEW WORK. THIS MATERIAL SHALL BE REMOVED FROM THE SCHOOL PROPERTY AND TAKEN TO A LEGALLY OPERATED DISPOSAL SITE. SEE NOTE NO.36.
33. CUTTING, BORING, SAW CUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN APPROVED AND ACCEPTED BY THE DISTRICT & ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.
34. THE SEISMIC ANCHORAGE OF MECHANICAL AND ELECTRICAL EQUIPMENT SHALL CONFORM TO ASCE 7-05 SECTION 13.3.1 AND TABLE 13.6-1. ANCHORAGE DETAILS FOR ROOF/FLOOR MOUNTED EQUIPMENT SHALL BE SHOWN ON PLANS.
35. ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES AS APPROVED BY DSA. WHERE BRACING DETAILS ARE NOT SHOWN ON DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECTED TO THE APPROVAL OF ARCHITECT, STRUCTURAL ENGINEER AND DSA FIELD ENGINEER.
36. A COPY OF OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PROVIDED BY CONTRACTOR AND KEPT ON JOB SITE AT ALL TIMES.
37. MEP COMPONENT ANCHORAGE NOTE
    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 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:

    A. ALL PERMANENT EQUIPMENT AND COMPONENTS.
    B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
    C. 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:
    A. 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.
    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 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 NOTE

ELECTRICAL DISTRIBUTION SYSTEMS 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 ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI 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.

ELECTRICAL DISTRIBUTION SYSTEMS (E):

☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAI (OSHPD) PRE-APPROVAL (OPM #) # , AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

DO NOT MIX SEISMIC BRACING DETAILS FROM DIFFERENT OPM'S UNLESS SPECIFICALLY SHOWN ON DRAWINGS AND APPROVED BY DSA.

SEISMIC NOTES

1. CONTRACTOR SHALL PROVIDE COMPLETE SEISMIC ANCHORAGE AND BRACING FOR ALL PLUMBING AND REQUIRED PIPING.
2. CONTRACTOR SHALL COMPLY WITH THE SUPPORT AND ANCHORAGE OF HVAC EQUIPMENT AS SHOWN ON DRAWINGS. IF THERE IS NO ANCHORAGE DETAIL SHOWN ON THE DRAWINGS, SUBMIT SHOP DRAWINGS IF THE FOLLOWING APPLY:
    A. THE EQUIPMENT HAS AN OPERATING WEIGHT OVER 40D POUNDS AND IS MOUNTED DIRECTLY ON THE FLOOR OR ROOF.
    B. THE EQUIPMENT HAS AN OPERATING WEIGHT OVER 20 POUNDS AND IS SUSPENDED FROM THE ROOF, FLOOR, OR WALL OR IS SUPPORTED BY SPRING ISOLATION DEVICES.
    C. THE CONTRACTOR SHALL SUBMIT THE ANCHORAGE DETAILS AND CALCULATIONS FOR ITEMS NOT SHOWN ON THE DRAWINGS AND FOR ALL SUBSTITUTED EQUIPMENT THAT IS GREATER IN WEIGHT OR VARIES MORE THAN 10% IN LENGTH.
3. THE CALCULATIONS AND DETAIL SUBMITTALS SHALL BE SEALED AND SIGNED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA. THE CALCULATIONS SHALL DEMONSTRATE THE FOLLOWING:
    A. THE ADEQUACY OF ANCHORAGE UNDER ALL APPLICABLE LOAD CONDITIONS PRESCRIBED BY THE UNIFORM BUILDING CODE.
    B. THE STRUCTURAL ELEMENTS, WHICH ARE RESISTING THE ANCHORAGE LOADS; SUCH AS CONCRETE FILL ON METAL DECK AND/OR STEEL BEAMS, ARE NOT STRESSED BEYOND ITS ACCEPTABLE VALUE.
4. FOR ALL VIBRATION ISOLATORS AND THEIR ANCHORAGES, THE CONTRACTOR SHILL PROVIDE CALCULATIONS, DETAILS AND TEST DATA TO SUBSTANTIATE THE ISOLATOR'S CAPACITY FOR VERTICAL AND LATERAL LOADS. CALCULATIONS MUST ALSO BE SUBMITTED TO SUBSTANTIATE THE SIZE, QUANTITY, LOCATION AND CONNECTION TO STRUCTURE. THE DRAWINGS MUST BE MADE CONSISTENT WITH THE CALCULATIONS. THE MANUFACTURER, EQUIPMENT AND STRUCTURAL ATTACHMENT PROCEDURE MUST BE CLEARLY SPECIFIED. ISOLATORS WHICH SUPPORT A COMPONENT INSIDE THE ACTUAL UNIT WILL NOT BE REVIEWED.
5. WHERE CONCRETE AND MASONRY EXPANSION OR ADHESIVE TYPE ANCHORS ARE USED, THE ANCHORAGE DETAILS AND CALCULATIONS SHALL INDICATE THE MANUFACTURER, ICBO REPORT NO., TYPE, DIAMETER, MINIMUM EMBEDMENT, CONCRETE TYPE AND STRENGTH.
6. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING DR DAMAGING THE EXISTING REINFORCING BARS. LOCATE REINFORCEMENT BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTILLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE R8NFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
7. NO POWER DRIVEN FASTENERS AND/OR SHOT PINS ARE ALLOWED FOR HANGING EQUIPMENT, DUCTWORK AND PIPING SYSTEMS.
8. ALL EXPANSION ANCHORS SHALL HAVE 50% OF THE BOLTS TESTED. IF ANY ANCHOR FAILS TESTING, ALL ANCHORS OF THE SAME TYPE SHALL BE TESTED, WHICH ARE INSTALLED BY THE SAME TRADE, NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME THE INITIAL TEST FREQUENCY. (CBC 1910A.5.1) TESTING SHALL OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF THE SUBJECT ANCHORS, IN ACCORDANCE WITH IR19-1.
9. FOR ANCHORAGE USE RED HEAD THRU BOLTS ICC ESR-2427 OR HILTI KWIK BOLT 3 WEDGE ANCHORS ICC ESR-1385.
10. THE SEISMIC ANCHORAGE OF MECHANICAL EQUIPMENT SHALL CONFORM TO 2019 CBC SECTIONS 1615A.1.21 AND 1616A.1.22.

EXISTING CONDITIONS

1. THE INFORMATION ON THESE DRAWINGS WAS OBTAINED FROM THE BEST SOURCES AVAILABLE BUT IT IS NOT TO BE ASSUMED CORRECT IN ALL ASPECTS.
2. THE CONTRACTOR SHALL VERIFY IN THE FIELD All EXISTING CONDITIONS. INFORM THE ARCHITECT AND DISTRICT'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO COMMENCING WORK. DO NOT PROCEED WITHOUT APPROVAL BY THE DISTRICT'S REPRESENTATIVE, FOR ANY CHANGES, IF REQUIRED.
3. PLEASE BE ADVISED THAT THIS IS AN ALTERATION TO AN EXISTING STRUCTURE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS.
4. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID & FAMILIARIZE HIMSELF W/ EXISTING CONDITIONS. SUBMITTAL OF BID SHALL BE ONLY AFTER THE CONTRACTOR HAS VISITED THE SITE. CONTRACTOR SHALL IDENTIFY ALL DISCREPANCIES FOUND AND INDICATE ON HIS BID THE CORRESPONDING COST IMPLICATIONS, IF ANY.

SHEET INDEX

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP
LICENSED ARCHITECT
YU- NGOK LO
NO. C-31804
REN. 3-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
RUNGSUB SUMETHASORN
No.M 35815
Exp.03/31/2026
MECHANICAL
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

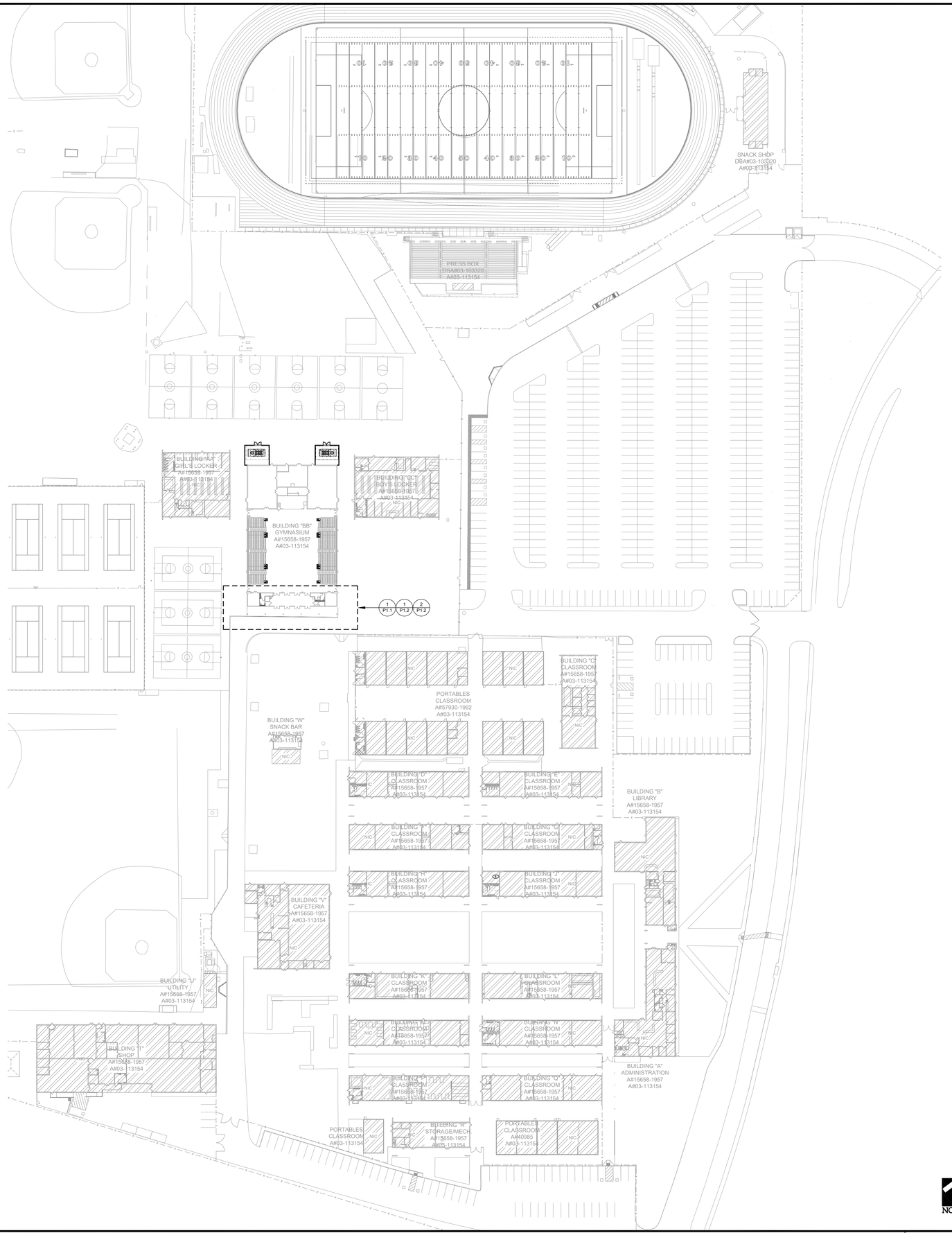
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

PLUMBING NOTES AND SYMBOLS LIST

DATE 07/12/2024
DSA A# A# 03-123614
FILE NO. 19-H20
SHEET P0.1



PLUMBING SITE PLAN | SCALE 1" = 50'-0" | 1

GENERAL NOTES

1. ALL UNDERGROUND UTILITY AND TRENCHING AND PATCHING SHALL BE VERIFIED WITH ALL TRADES & INCLUDED IN THE CONTRACTORS BID, REGARDLESS IF NOT SHOWN ON PLANS; PATCH TRENCHING TO MATCH (E) MATERIALS.
2. DEMOLISH AND REMOVE EXISTING ITEMS, MATERIALS AND FINISHES AS REQUIRED AND NECESSARY FOR (N) WORK; REINSTALL & RESTORE ALL REMOVED MATERIALS & FINISHES AS REQUIRED.
3. SAWCUT AND PATCH EXISTING CONCRETE SLAB AS REQUIRED FOR NEW PIPING; INSTALL (N) FINISH FLOORING TO MATCH (E) AT SAWCUT PATCH.
4. REMOVE CURBS (SAWCUT) AND POUR NEW CONC. SLAB WHERE (E) CONC. CURBS OCCURS.
5. CONTRACTOR SHALL PATCH/FILL-IN ANY OPENINGS AS A RESULT OF DEMOLITION TO MATCH EXISTING CONSTRUCTION; PAINT/FINISH ENTIRE WALL TO MATCH EXISTING ADJACENT WALL FINISH; RESTORE ALL FINISHES AS REQUIRED.
6. EXTRA CARE MUST BE OBSERVED DURING DEMOLITION TO PREVENT DAMAGE TO EXISTING EQUIPMENT, PIPING, CONDUITS, CASEWORK, ETC. NOT RELATED TO THIS PROJECT.
7. CONTRACTOR TO VERIFY EXACT PIPING LOCATIONS, INVERT AND FIXTURE LOCATIONS IN THE FIELD; (E) FIXTURES, PIPING AND FOOTINGS ARE SHOWN FOR REFERENCE ONLY.
8. ALL WASTE PIPING BELOW & ABOVE GRADE/SLAB, AND VENT PIPING BELOW GRADE/SLAB & BELOW FIXTURE FLOOD LEVEL RIM, SHALL BE NEW.
9. TYPICALLY HAND EXCAVATE UTILITY TRENCHES UNDER (E) CONCRETE SLAB & WALL FOOTINGS; AS REQ'D FORM & SLURRY UNDER FOOTING TO PROVIDE COMPLETE SUPPORT BELOW FOOTING; SLEEVE (N) PIPE THROUGH ENCASEMENT.
10. MANUAL DIGGING: CONTRACTOR SHALL EXERCISE CAUTION WHILE EXCAVATING FOR (N) AND (E) PLUMBING PIPING TO AVOID ANY CONFLICT WITH (E) FOOTING AND OTHER UTILITIES; SUCH LOCATIONS SHALL BE HAND DUG AND PROTECT (E) CONDITIONS TO BE MAINTAINED.
11. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF (E) WASTE, VENT AND CW PIPES AND POC PRIOR TO DEMOLITION AND CONSTRUCTION.
12. ALL (E) CW, WASTE AND VENT PIPES FROM OTHER PLUMBING FIXTURES OUTSIDE OF RESTROOMS SHALL BE RECONNECTED BACK TO THE (N) PIPES INSIDE THE RESTROOMS.

REFERENCE NOTES

1. NOT USED

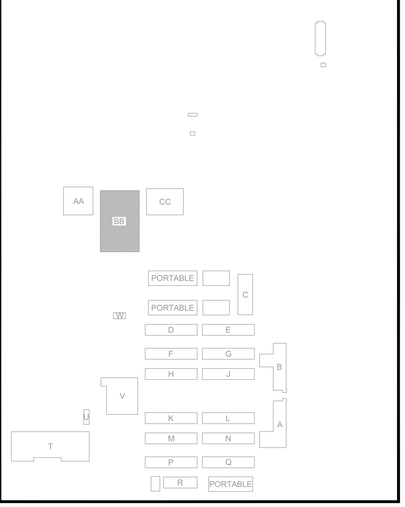
BUILDING SITE PLAN SYMBOLS LIST

EXISTING BUILDING AS PART OF THIS DSA APPLICATION

NIC EXISTING BUILDING NOT PART OF THIS DSA APPLICATION

VICINITY MAP

KEY PLAN



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC Engineers, INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP

LICENSED ARCHITECT
NO. C31804
REN. 8-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No.M 35815
Exp.03/31/2025
MECHANICAL
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

PLUMBING SITE PLAN

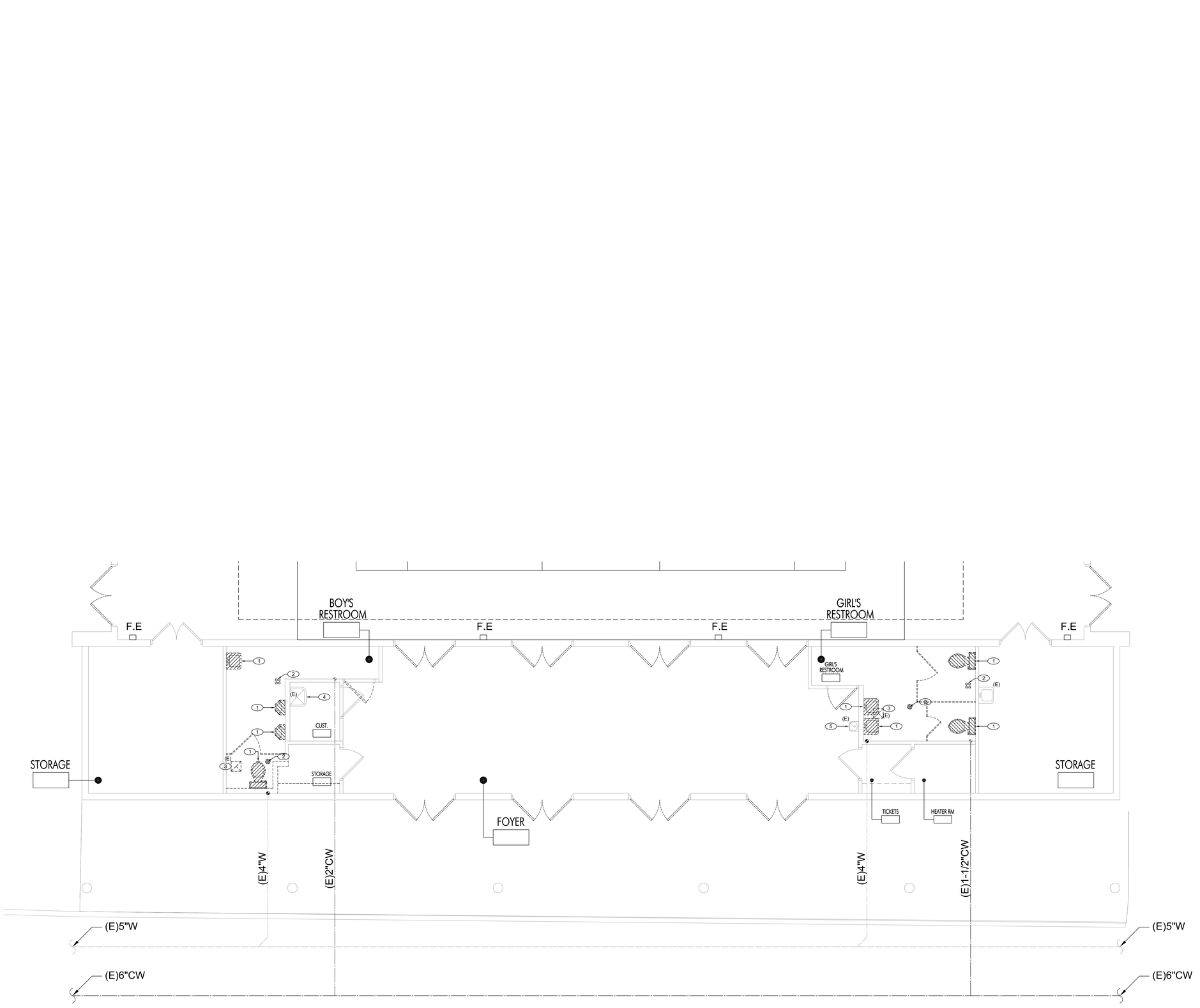
DATE 07/12/2024
DSA A# A# 03-123614
FILE NO. 19-H20
SHEET P1.0

GENERAL NOTES

1. ALL UNDERGROUND UTILITY AND TRENCHING AND PATCHING SHALL BE VERIFIED WITH ALL TRADES & INCLUDED IN THE CONTRACTORS BID, REGARDLESS IF NOT SHOWN ON PLANS; PATCH TRENCHING TO MATCH (E) MATERIALS.
2. DEMOLISH AND REMOVE EXISTING ITEMS, MATERIALS AND FINISHES AS REQUIRED AND NECESSARY FOR (N) WORK; REINSTALL & RESTORE ALL REMOVED MATERIALS & FINISHES AS REQUIRED.
3. SAWCUT AND PATCH EXISTING CONCRETE SLAB AS REQUIRED FOR NEW PIPING; INSTALL (N) FINISH FLOORING TO MATCH (E) AT SAWCUT PATCH.
4. REMOVE CURBS (SAWCUT) AND POUR NEW CONC. SLAB WHERE (E) CONC. CURBS OCCURS.
5. CONTRACTOR SHALL PATCH/FILL-IN ANY OPENINGS AS A RESULT OF DEMOLITION TO MATCH EXISTING CONSTRUCTION; PAINT/FINISH ENTIRE WALL TO MATCH EXISTING ADJACENT WALL FINISH; RESTORE ALL FINISHES AS REQUIRED.
6. EXTRA CARE MUST BE OBSERVED DURING DEMOLITION TO PREVENT DAMAGE TO EXISTING EQUIPMENT, PIPING, CONDUITS, CASEWORK, ETC. NOT RELATED TO THIS PROJECT.
7. CONTRACTOR TO VERIFY EXACT PIPING LOCATIONS, INVERT AND FIXTURE LOCATIONS IN THE FIELD; (E) FIXTURES, PIPING AND FOOTINGS ARE SHOWN FOR REFERENCE ONLY.
8. ALL WASTE PIPING BELOW & ABOVE GRADE/SLAB, AND VENT PIPING BELOW GRADE/SLAB & BELOW FIXTURE FLOOD LEVEL RIM, SHALL BE NEW.
9. TYPICALLY HAND EXCAVATE UTILITY TRENCHES UNDER (E) CONCRETE SLAB & WALL FOOTINGS; AS REQ'D FORM & SLURRY UNDER FOOTING TO PROVIDE COMPLETE SUPPORT BELOW FOOTING; SLEEVE (N) PIPE THROUGH ENCASEMENT.
10. MANUAL DIGGING: CONTRACTOR SHALL EXERCISE CAUTION WHILE EXCAVATING FOR (N) AND (E) PLUMBING PIPING TO AVOID ANY CONFLICT WITH (E) FOOTING AND OTHER UTILITIES; SUCH LOCATIONS SHALL BE HAND DUG AND PROTECT (E) CONDITIONS TO BE MAINTAINED.
11. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF (E) WASTE, VENT AND CW PIPES AND POC PRIOR TO DEMOLITION AND CONSTRUCTION.
12. ALL (E) CW, WASTE AND VENT PIPES FROM OTHER PLUMBING FIXTURES OUTSIDE OF RESTROOMS SHALL BE RECONNECTED BACK TO THE (N) PIPES INSIDE THE RESTROOMS.

REFERENCE NOTES

1. REMOVE AND DISPOSE OF (E) PLUMBING FIXTURES (HATCHED) AND ASSOCIATED WASTE, VENT AND CW PIPING (NOT SHOWN) TO POC; VERIFY EXACT LOCATIONS OF THE FIXTURES AND PIPING IN THE FIELD.
2. REMOVE (E) FLOOR DRAIN/CLEANOUT AND ASSOCIATED WASTE, VENT PIPING AND TRAP PRIMER LINE; VERIFY EXACT LOCATION AND PIPING IN THE FIELD.
3. EXISTING EXHAUST FANS AND ASSOCIATED DUCTS AND GRILLES TO REMAIN; VERIFY EXACT LOCATIONS IN THE FIELD, (E) EXHAUST DUCTS ABOVE CEILING TO REMAIN.
4. EXISTING MOP SINK TO REMAIN.
5. EXISTING DRINKING FOUNTAIN TO REMAIN.



PLUMBING GYM BUILDING "BB" DEMOLITION FLOOR PLAN | SCALE 1/4" = 1'-0" | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC Engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP
LICENSED ARCHITECT
NO. 031804
REN 3-31-25
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
No.M 35815
Exp.03/31/2025
MECHANICAL
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

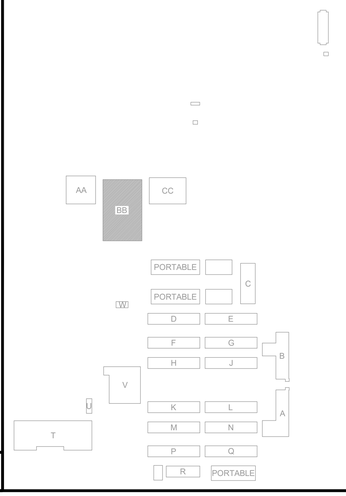
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

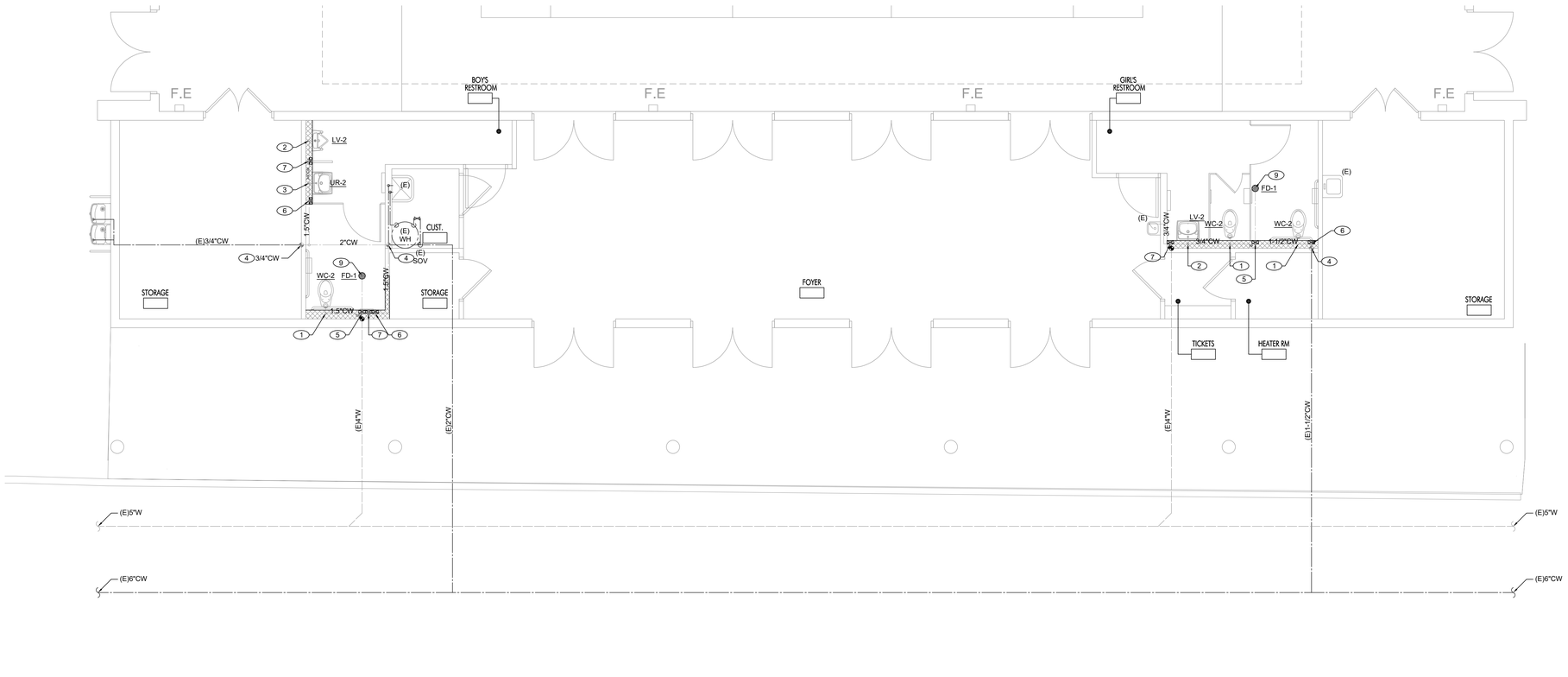
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

PLUMBING
GYM
BUILDING "BB"
DEMOLITION
FLOOR PLAN

KEY PLAN

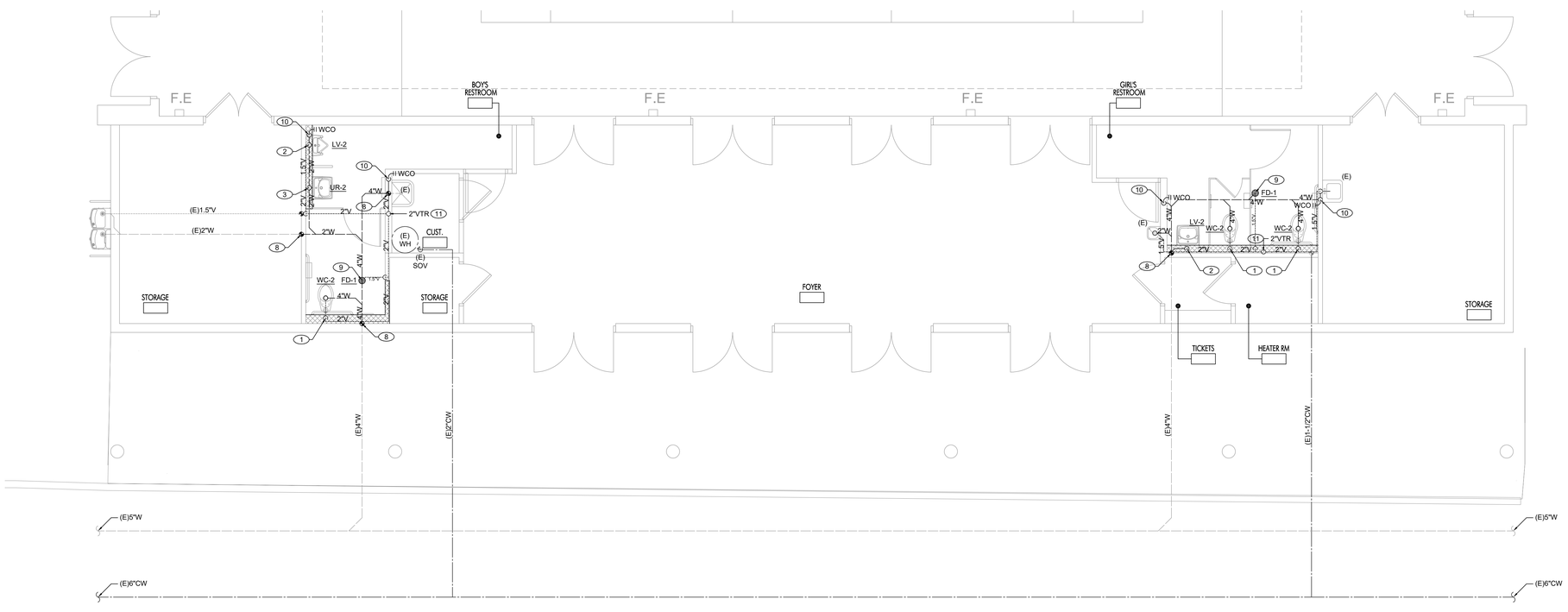


DATE 07/12/2024
DSA A# A# 03-123614
FILE NO. 19-H20
SHEET P1.1



PLUMBING GYM BUILDING "BB" CW FLOOR PLAN

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



PLUMBING GYM BUILDING "BB" W&V FLOOR PLAN

SCALE 1/4" = 1'-0" | 2

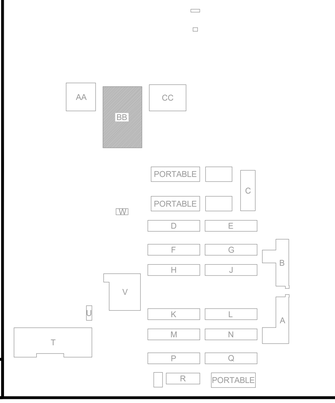
GENERAL NOTES

1. ALL UNDERGROUND UTILITY AND TRENCHING AND PATCHING SHALL BE VERIFIED WITH ALL TRADES & INCLUDED IN THE CONTRACTORS BID, REGARDLESS IF NOT SHOWN ON PLANS; PATCH TRENCHING TO MATCH (E) MATERIALS.
2. DEMOLISH AND REMOVE EXISTING ITEMS, MATERIALS AND FINISHES AS REQUIRED AND NECESSARY FOR (N) WORK; REINSTALL & RESTORE ALL REMOVED MATERIALS & FINISHES AS REQUIRED.
3. SAWCUT AND PATCH EXISTING CONCRETE SLAB AS REQUIRED FOR NEW PIPING; INSTALL (N) FINISH FLOORING TO MATCH (E) AT SAWCUT PATCH.
4. REMOVE CURBS (SAWCUT) AND POUR NEW CONC. SLAB WHERE (E) CONC. CURBS OCCURS.
5. CONTRACTOR SHALL PATCH/FILL-IN ANY OPENINGS AS A RESULT OF DEMOLITION TO MATCH EXISTING CONSTRUCTION; PAINT/FINISH ENTIRE WALL TO MATCH EXISTING ADJACENT WALL FINISH; RESTORE ALL FINISHES AS REQUIRED.
6. EXTRA CARE MUST BE OBSERVED DURING DEMOLITION TO PREVENT DAMAGE TO EXISTING EQUIPMENT, PIPING, CONDUITS, CASEWORK, ETC. NOT RELATED TO THIS PROJECT.
7. CONTRACTOR TO VERIFY EXACT PIPING LOCATIONS, INVERT AND FIXTURE LOCATIONS IN THE FIELD; (E) FIXTURES, PIPING AND FOOTINGS ARE SHOWN FOR REFERENCE ONLY.
8. ALL WASTE PIPING BELOW & ABOVE GRADE/SLAB, AND VENT PIPING BELOW GRADE/SLAB & BELOW FIXTURE FLOOD LEVEL RIM, SHALL BE NEW.
9. TYPICALLY HAND EXCAVATE UTILITY TRENCHES UNDER (E) CONCRETE SLAB & WALL FOOTINGS; AS REQ'D FORM & SLURRY UNDER FOOTING TO PROVIDE COMPLETE SUPPORT BELOW FOOTING; SLEEVE (N) PIPE THROUGH ENCASEMENT.
10. MANUAL DIGGING: CONTRACTOR SHALL EXERCISE CAUTION WHILE EXCAVATING FOR (N) AND (E) PLUMBING PIPING TO AVOID ANY CONFLICT WITH (E) FOOTING AND OTHER UTILITIES; SUCH LOCATIONS SHALL BE HAND DUG AND PROTECT (E) CONDITIONS TO BE MAINTAINED.
11. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF (E) WASTE, VENT AND CW PIPES AND POC PRIOR TO DEMOLITION AND CONSTRUCTION.
12. ALL (E) CW, WASTE AND VENT PIPES FROM OTHER PLUMBING FIXTURES OUTSIDE OF RESTROOMS SHALL BE RECONNECTED BACK TO THE (N) PIPES INSIDE THE RESTROOMS.

REFERENCE NOTES

1. EXTEND 1-1/2"CW, 4"W AND 2"V TO WC.
2. EXTEND 1/2"CW, 2"W AND 1-1/2"V TO LAV.
3. EXTEND 1"CW, 2"W AND 1-1/2"V TO UR; PROVIDE WALL 2" CLEANOUT AT 64" AFF; EXTEND 2"V UP TO CLEANOUT THEN REDUCE TO 1-1/2"V.
4. CONNECT TO (E) CW MAIN PIPE; PROVIDE SOV WITH WALL ACCESS PANEL AT POC.
5. PROVIDE TRAP PRIMER WITH WALL ACCESS PANEL, EXTEND 1/2" TRAP PRIMER LINE FROM WC FLUSH VALVE VACUUM BREAKER (SLOAN VBF-72-A1).
6. PROVIDE LINE SIZE SOV (NIBCO T-585-66-LF LEAD FREE BALL VALVE) ON CW VERTICAL RISER AT 7' AFF WITH WALL ACCESS PANEL; PROVIDE UNION DOWNSTREAM OF BALL; BALL VALVE AND UNION SHALL BE DIRECTLY IN FRONT OF ACCESS OPENING.
7. PROVIDE WATER HAMMER ARRESTER AND SOV WITH WALL ACCESS PANEL.
8. CONNECT TO (E) WASTE PIPE BELOW GRADE; VERIFY EXACT PIPE LOCATION, INVERT AND POC IN THE FIELD.
9. EXTEND 2"W AND 1-1/2"V TO FLOOR DRAIN.
10. PROVIDE WALL CLEANOUT AT 18" AFF.
11. CONNECT TO (E) VENT PIPE THRU ROOF; VERIFY EXACT POC IN THE FIELD.

KEY PLAN



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC Engineers, INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP
LICENSED ARCHITECT
NO. C31804
REN. 8-31-25
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
No.M 35815
Exp. 03/31/2025
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

PLUMBING GYM BUILDING "BB" FLOOR PLAN

DATE 07/12/2024
DSA A# 03-123614
FILE NO. 19-H20
SHEET P1.2

GENERAL NOTES

1. THE FOLLOWING GENERAL NOTES ARE APPLICABLE AS STATED BELOW, EXCEPT WHERE SPECIFICALLY INDICATED AND NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION REQUIREMENTS AND SCOPE OF WORK.
2. INSTALLATION OF THE MECHANICAL & ELECTRICAL SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING ALL APPROVALS OF SHOP DRAWING SUBMITTALS HAVE BEEN APPROVED BY DSA AND ENGINEER OF THE PROJECT.
3. A STAMPED SET OF APPROVED DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
4. ANY DEVIATION FROM THESE PLANS NECESSARY DUE TO FIELD CONDITIONS MUST BE APPROVED BY DSA AND THE ENGINEER OF THE PROJECT. PROVIDED DETAILED AND RECORDED FIELD VERIFIED "RECORD" DRAWINGS.
5. EXAMINE ALL CONTRACT DOCUMENTS AND VERIFY ALL DIMENSIONS AND CONDITIONS, AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER OF THE PROJECT PRIOR TO COMMENCING, ANY WORK. DEVICES, CONTROLS, SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING.
6. ANY FIELD CONDITION MISREPRESENTED IN THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF DISTRICT AND THE ENGINEER OF THE PROJECT.
7. EQUIPMENT AND DEVICE LOCATIONS, ELEVATIONS, RISER DIAGRAMS, CONTROLS WIRING DIAGRAMS, SCHEMATICS AND DETAILS SHOWN ON PLANS ARE CONCEPTUAL AND ILLUSTRATE ONLY THE FUNCTIONAL RELATIONSHIPS BETWEEN COMPONENTS OF THE SYSTEM AND THE DESIGN INTENT OF THE PROJECT. CONTRACTOR SHALL INSTALL DEVICES AS SITE CONDITIONS PERMITS.
8. WORKMANSHIP AND ALL EQUIPMENT/MATERIALS SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS. TITLE 24 C.C.R., SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AS FURNISHED BY THE CONTRACT DRAWINGS. WORKMANSHIP AND ALL EQUIPMENT/MATERIALS NOT IN CONFORMANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE SUBJECT TO REMOVAL AND/OR REPLACEMENT AT CONTRACTOR'S EXPENSE.
9. CONTRACTOR TO PROVIDE ALL NECESSARY COMPONENTS REQUIRED TO MEET THE SPECIFIED SYSTEM OPERATIONAL PER DESIGN INTENT OF THE CONTRACT TO MAKE THE SYSTEM FUNCTIONALLY OPERATIVE AND ACCEPTABLE TO DISTRICT.
10. PROVIDE ADDITIONAL CONDUITS, BOXES AND ADAPTER PLATES AS REQUIRED FOR ALL SURFACE MOUNTED CONDUITS/EQUIPMENT/DEVICES.
11. THE CONTRACTOR SHALL ADJUST/AND INSTALL ALL EQUIPMENT, DEVICES AND CONTROLS TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FAILURE OF THE SYSTEM.
12. ALLOW FOR RELOCATION OF DEVICES WITHIN THE SAME AREA WHERE OBSTRUCTION ARE ENCOUNTERED (STRUCTURAL ELEMENTS, PIPING, CONDUITS, EQUIPMENT DEVICES) THAT WILL PREVENT INSTALLING EQUIPMENT(S), VFD, ELECTRICAL DISCONNECTS, CONTROL PANELS IN THE LOCATIONS SHOWN ON PLANS, SUBJECT TO REQUIRED WORK SPACES, CODE REQUIRED CLEARANCES, ACCESS TO MAINTENANCE ETC.,
13. THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, WAREHOUSING AND ANY OTHER SERVICES REQUIRED TO COMPLETE THE WORK IN A TIMELY AND EFFICIENT MANNER.
14. ALL WORK IS TO BE COMPLETED ON REGULAR HOURS AS DIRECTED BY THE DISTRICT.
15. INDIVIDUAL ITEMS OF WORK ARE DETAILED IN THE VARIOUS SECTIONS OF THIS SCOPE OF WORK. THE ATTACHED DRAWINGS AND THE NOTES AND LEGENDS ON THE DRAWING, THE CONTRACTOR IS RESPONSIBLE TO COMPLETE THE REQUIREMENTS FOUND IN ANY OF THE ABOVE.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL APPLICABLE SAFETY LAWS ARE STRICTLY ENFORCED AND TO MAINTAIN A SAFE CONSTRUCTION PROJECT.
17. SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CAL OSHA AND CALIFORNIA WORK SAFETY CODES.
18. ERECT AND MAINTAIN SUITABLE BARRIERS, PROTECTIVE DEVICES, LIGHTS AND WARNING SIGNS WHERE REQUIRED FOR THE PROTECTION OF THE PUBLIC AND EMPLOYEES. ENTRANCE TO ROOMS AND OTHER GUARDED LOCATIONS THAT CONTAIN LIVE PARTS SHALL BE MARKED WITH A CONSPICUOUS WARNING SIGN FORBIDDING UNQUALIFIED PERSONS TO ENTER.
19. IRRELEVANT INFORMATION ON DRAWINGS AND DATA SHEETS SHALL BE COMPLETELY MARKED OUT LEAVING ONLY DATA THAT PERTAINS TO THE ITEMS SUBMITTED FOR APPROVAL. EQUIPMENT SHALL NOT BE DELIVERED TO THE SITE UNTIL SHOP DRAWINGS HAVE BEEN APPROVED. APPROVAL OF THE SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO CONFORM TO THE PLANS AND SPECIFICATIONS NOR OF RESPONSIBILITY FOR SATISFACTORY PERFORMANCE OF EQUIPMENT.
20. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
21. UPON COMPLETION OF THE INSTALLATION OF THE SYSTEM, COOPERATE IN CONDUCTING AN OPERATING TEST TO DEMONSTRATE THAT ALL EQUIPMENT IS OPERATING IN A SATISFACTORY MANNER. CONTRACTOR SHALL SUBMIT STATEMENT OF COMPLIANCE AND REQUEST FINAL INSPECTION. A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR AND DISTRICT PERSONNEL. PROVIDE TRAINING FOR M & O STAFF.
22. I.O.R. AND SCHOOL DISTRICT SHALL BE NOTIFIED A MINIMUM OF 48 HR. PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
23. THE CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION ("AS-BUILT" DRAWINGS), TESTING ALL EQUIPMENT, DEVICES, CONTROLS AND OPERATIONAL. SYSTEM SHALL BE PROGRAMMED FOR THE ENTIRE SYSTEM. PROVIDE A COPY OF THE COMPLETED RECORD ("AS-BUILT" DRAWINGS) OF COMPLETION TO IOR, ENGINEER AND DISTRICT AT THE COMPLETION OF CONSTRUCTION PRIOR TO FINAL ACCEPTANCE.
24. NOTIFY THE SUPPLIER OF ANY MISSING OR BROKEN PARTS OR ANY MISSING OR BROKEN FIXTURES AT LEAST FOURTEEN (14) DAYS PRIOR TO JOB COMPLETION. EQUIPMENT INSTALLED WITHOUT APPROVAL THEREOF SHALL BE DONE AT THE RISK OF THE CONTRACTOR AND THE COST OF REMOVAL OF SUCH EQUIPMENT OR RELATED WORK WHICH IS JUDGED UNSATISFACTORY FOR ANY REASON SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
25. CONTRACTOR SHALL WARRANTY MATERIALS AND INSTALLATION FOR THREE YEARS FROM THE DATE OF CONTRACT COMPLETION.
26. **THE CONTRACTOR SHALL REPAIR AND/OR REPAINT ALL AREAS DAMAGED BY DEMOLITION OR CONSTRUCTION AND FINISH TO MATCH EXISTING ADJACENT SURFACES.**
27. PROVIDE ALL PATCHING, PAINTING AND FINISHES, INCLUDING BUT NOT LIMITED TO FLOOR/WALL ETC., FOR ALL DEVICES LOCATED IN EXISTING AREAS TO RESTORE TO ORIGINAL CONDITIONS AND MUST BE APPROVED AND COORDINATED WITH THE DISTRICT. EXISTING CONDITIONS SHALL BE DOCUMENTED WITH DIGITAL PHOTOGRAPHY PRIOR TO START OF WORK AND DELIVERED TO DISTRICT.
28. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM (CAULKING) AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED LAB TESTING CRITERIA TO MAINTAIN INTEGRITY OF THE EXISTING RATING. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS.
29. A "DSA 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, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
30. A "DSA CERTIFIED" INSPECTOR WITH CLASS (2) CERTIFICATION IS REQUIRED FOR THIS PROJECT.
31. AN INSPECTOR WHO IS SPECIALLY QUALIFIED IN MECHANICAL AND ELECTRICAL WORK WILL BE REQUIRED FOR THIS PROJECT.
32. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
33. CUTTING, BORING, SAW CUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENT TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA..
34. 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, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT (CCD) OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. SECTION 4-317, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, C.C.R).

DEMOLITION NOTES

1. BEFORE COMMENCING DEMOLITION WORK, THE CONTRACTOR SHALL REVIEW THE COMPLETE SET OF CONSTRUCTION DOCUMENTS AND WORKING DRAWINGS AND FIELD VERIFY ALL EXISTING CONDITIONS AND ANY QUESTIONABLE WORK ASSOCIATED WITH DISCONNECTING AND/OR REMOVAL OF EXISTING FIRE ALARM DEVICES AND EQUIPMENT SHOWN FOR DEMOLITION; COORDINATE DEMOLITION WORK WITH CONSTRUCTION SCHEDULE.
2. CONTRACTOR SHALL NOTIFY THE DISTRICT, CONSTRUCTION MANAGER AND ENGINEER IMMEDIATELY WHEREVER REMOVAL OF EXISTING CONDUIT AND/OR EQUIPMENT WILL INTERFERE WITH EQUIPMENT THAT IS TO REMAIN OR INTERFERE WITH THE NEW EQUIPMENT INSTALLATION. IN SUCH SITUATIONS CONTRACTOR SHALL EXTEND PATHWAYS AND WIRING TO MATCH EXISTING BY TYPE & SIZE TO PROVIDE OPERABLE SYSTEM.
3. **THESE DRAWINGS INDICATE EXISTING CONDITIONS WHICH WERE TAKEN FROM RECORD DRAWINGS/FIELD VISUAL VERIFICATIONS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THESE CONDITIONS. THE CONTRACTOR SHALL VERIFY AND INVESTIGATE ALL EXISTING FIELD CONDITIONS AND EXERCISE CAUTION IN THE DEMOLITION PROCESS, AND PROMPTLY NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES ENCOUNTERED.**
4. **EXISTING DEVICES AND EQUIPMENT NOT INDICATED TO BE REMOVED OR ABANDONED ARE TO REMAIN IN USE, PER PROVISIONS OF CFC SECTION 104.7.1. EXCEPT FOR SHORT DESIGNATED INTERVALS DURING WHICH CONNECTIONS ARE MADE, SHUT-DOWN TIME OF THE EXISTING ELECTRICAL EQUIPMENT SHALL BE AT A TIME CONVENIENT AND AGREEABLE TO THE DISTRICT. EXISTING EQUIPMENT REMOVED FOR PROTECTION SHALL BE PLACED BACK TO ITS ORIGINAL LOCATION. EXISTING EQUIPMENT DAMAGED DURING THE PROCESS SHALL BE REPAIRED AND/OR REPLACED AS REQUIRED TO MAINTAIN A COMPLETE AND OPERABLE SYSTEM. NO ADDITIONAL CHARGES WILL BE ALLOWED FOR REPAIRING, REPLACING AND/OR RECONNECTING THE EXISTING SYSTEM DISTURBED DURING CONSTRUCTION.**
5. UNLESS OTHERWISE NOTED, DISCONNECT AND REMOVE ALL DEVICES ASSOCIATED WITH THE EXISTING EQUIPMENT BEING REMOVED.
6. THE CONTRACTOR, ACCOMPANIED BY THE DISTRICT, SHALL TAKE INVENTORY OF THE EXISTING MATERIAL AND EQUIPMENT. ALL MATERIAL AND EQUIPMENT WHICH ARE SELECTED BY THE DISTRICT FOR SALVAGE SHALL REMAIN THE PROPERTY OF THE DISTRICT. THE CONTRACTOR SHALL DELIVER SUCH SALVAGED EQUIPMENT AND MATERIAL TO THE LOCATION(S) CHOSEN BY THE DISTRICT. THE EQUIPMENT AND DEVICES SHALL BE NEATLY PILED, STORED AND PROTECTED FROM DAMAGE. ALL MATERIAL AND EQUIPMENT NOT SELECTED BY THE DISTRICT SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM PREMISES, AND DISPOSED OF.
7. COORDINATE ALL DEMOLITION WITH THE NEW REQUIREMENTS TO ASSURE THAT NEW INSTALLED SYSTEM IS COMPLETE AND OPERABLE.
8. CAREFULLY PROTECT ALL EXISTING WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES LIMIT DAMAGE TO THE CONFINED SPACE AND RESTORE TO ORIGINAL CONDITION.
9. THE PATCHING AND PAINTING OF FLOORS, WALLS, CEILINGS, ETC SHALL MATCH EXISTING FINISHES.
10. PRIOR APPROVAL MUST BE OBTAINED FROM THE ENGINEER BEFORE NOTCHING, CORING AND/OR CUTTING OF EXISTING STRUCTURE IS DONE.
11. PROVIDE BLANK COVER PLATES TO REMOVED DEVICES. COLOR WHITE OR AS SELECTED BY DISTRICT. TYPICAL U.O.N.
12. ALL REMOVED EQUIPMENT SHALL BE DISPOSED OF BY CONTRACTOR UNLESS OTHERWISE SALVAGED AS DIRECTED BY DISTRICT.
13. THE PROVISIONS OF CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33 SHALL BE ENFORCED ON THIS PROJECT.
14. NO DEMOLITION SHALL BEGIN UNTIL PLANS INCLUDING THE DEMOLITION WORK HAVE BEEN APPROVED BY DSA.
15. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
    - **EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.**
    - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
    - **PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.**

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

APPLICABLE CODES AS OF JANUARY 1, 2023

TITLE 24 C.C.R., PART1 2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE.
TITLE 24 C.C.R., PART2 2022 CALIFORNIA BUILDING CODE (CBC)
(2021 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)
TITLE 24 C.C.R., PART3 2022 CALIFORNIA ELECTRICAL CODE (CEC)
(2020 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA)
TITLE 24 C.C.R., PART4 2022 CALIFORNIA MECHANICAL CODE (CMC)
(2021 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
TITLE 24 C.C.R., PART5 2022 CALIFORNIA PLUMBING CODE (CPC)
(2021 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
TITLE 24 C.C.R., PART6 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART9 2022 CALIFORNIA FIRE CODE (CFC)
(2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)
TITLE 24 C.C.R., PART10 2022 CALIFORNIA EXISTING BUILDING CODE
(2021 INTERNATIONAL EXISTING BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH AMENDMENTS)
TITLE 24 C.C.R., PART11 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE)
TITLE 24 C.C.R., PART12 2022 CALIFORNIA REFERENCED STANDARDS CODE
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)	2022 EDITION
NFPA 14	STANDPIPE AND HOSE SYSTEMS (CA AMENDED)	2019 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 20	STATIONARY PUMPS FOR FIRE PROTECTION	2019 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2019 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)	2019 EDITION
NFPA 70	NATIONAL ELECTRICAL CODE	2021 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2022 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVE	2019 EDITION
NFPA 90A	INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS	2021 EDITION
NFPA 101	LIFE SAFETY CODE - SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES	2021 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)	2018 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2019 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2016 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 (R2021)
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 (R2018)
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

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

ELECTRICAL NOTES

NOTE: THIS DOCUMENT FORMS A PART OF THE SPECIFICATIONS AND SHALL BE CONSIDERED THE SAME AS IF ATTACHED THERETO.

1. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT A COMPLETE AND WORKABLE ELECTRICAL INSTALLATION BE PROVIDED FOR THE EQUIPMENT DESCRIBED OR SHOWN AS BEING IN THIS CONTRACT.FURNISH LABOR AND TOOLS NECESSARY AND INSTALL APPARATUS, MATERIALS, AND EQUIPMENT IN A FASHION COMPLYING WITH ALL APPLICABLE CODES, INCLUDING ITEMS REQUIRED BUT NOT NECESSARILY SHOWN, SUCH AS COUPLINGS, HANGERS, BRACKETS, CLAMPS, BOXES, CONNECTORS, AND HARDWARE.
2. BEFORE SUBMITTING THE BID PROPOSAL, VISIT THE JOB SITE AND FULLY ACQUAINT WITH THE EXISTING JOB CONDITIONS, VERIFY EXISTING AND NEW REQUIREMENT, INCLUDING NECESSARY PULL BOXES, SIZE AND NUMBER OF CONDUITS AND CONDUCTORS, PANELS, DISCONNECT SWITCHES CABLES, TIME CLOCKS ETC., WHETHER SHOWN ON DRAWINGS OR NOT, BUT REQUIRED FOR PROVIDING A COMPLETE AND OPERABLE, WITHOUT ADDITIONAL COST TO THE DISTRICT.
3. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE LOCATION OF FIRE ALARM DEVICES AND EQUIPMENT AND THE CIRCUIT ARRANGEMENT OF THE REQUIRED WIRING, AND THOUGH NOT NECESSARILY INDICATING THE ACTUAL ROUTES OF CONDUITS, THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS PROPER COORDINATION WITH THE EXISTING FIELD CONDITIONS AND SPACE WILL PERMIT.SIMPLIFY INSTALLATION WHEREVER POSSIBLE BUT SUBJECT TO APPROVAL OF THE DISTRICT FOR VISUAL AND STRUCTURAL REASONS.THE DRAWINGS DO NOT SHOW NECESSARY OFFSETS, BENDS, PULL BOXES AND OBSTRUCTIONS.THE DRAWINGS ARE NOT INTENDED TO BE SCALED AND THE CONTRACTOR SHALL REFER TO THE GENERAL CONSTRUCTION DRAWINGS FOR DIMENSIONS. FIELD COORDINATE WITH EXISTING CONDITIONS.
4. UNLESS OTHERWISE SHOWN OR SPECIFIED, ALL CONDUITS SHALL BE G.R.C/I.M.T TYPE THREADED FITTINGS. CONDUIT SHALL BE SURFACE MOUNTED ON WALLS, PIPE SUPPORTS, SURFACE MOUNTED ON ROOF FLOOR WITH DURA-BLOCK PIPE/CONDUIT SUPPORTS.

   A. EXPOSED CONDUIT SHALL BE RUN PARALLEL TO, OR AT RIGHT ANGLES WITH THE LINES OF THE BUILDING.BEND SHALL BE FREE FROM DENTS OR FLATTENING.CONDUIT SHALL BE SUPPORTED AND SECURELY FASTENED.
   B. CONDUIT SHALL BE INSTALLED AS A COMPLETE SYSTEM BEFORE WIRE OR CONDUCTORS ARE PULLED IN.
   C. CONDUIT SHALL BE INSTALLED ENTIRELY FREE FROM OTHER PIPING, VALVES OR OTHER MECHANICAL EQUIPMENT, AND SHALL NOT BE INSTALLED WITHIN 6 INCHES OF HOT WATER OR HEATING FLUES.
   D. POCKETS OR TRAPS IN ALL CONDUIT RUNS WHERE MOISTURE MAY COLLECT SHALL BE AVOIDED.WHERE DIPS ARE UNAVOIDABLE, A PULL BOX SHALL BE LOCATED AT EACH LOW POINT IN ORDER TO PROVIDE A MEANS OF DRAINAGE.
   E. THE CONDUIT SYSTEM AND CONDUCTING WIRE ENCLOSURES SHALL BE SECURELY BONDED TOGETHER SO THAT FOR EVERY CONDUCTING COMPONENT IS PROVIDED WITH A LOW RESISTANCE PATH TO GROUND.
   F. DOUBLE LOCKNUTS SHALL BE USED FOR SECURING CONDUIT AT A BOX OR CABINET UNLESS A THREADED HUB IS PROVIDED AS PART OF THE BOX OR CABINET.
   G. RUNNING THREADS SHALL NOT BE USED ON CONDUIT FOR CONNECTION AT COUPLINGS.WHERE 2 LENGTHS OF CONDUIT MUST BE COUPLED TOGETHER, AND IT IS IMPOSSIBLE TO SCREW BOTH LENGTHS INTO AN ORDINARY COUPLING, THEN THE "ERICKSON" TYPE OF COUPLING MUST BE USED IN ORDER TO PROVIDE A RIGID JOINT THAT WILL BE BOTH MECHANICALLY AND ELECTRICALLY EFFECTIVE.
   H. COUPLING AND CONNECTORS USED ON G.R.C./ I.M.T SHALL BE, THREADED TYPE.
   I. CONDUIT SHALL BE TERMINATED WITH SUITABLE BUSHINGS OR EQUIVALENT DEVICES WHICH SHALL PROTECT THE ENCLOSED WIRES FROM ABRASION AT THE ENDS.
   J. ALL BUILDING INTERIOR CONDUIT SIZES SHALL BE MINIMUM OF 3/4" IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE "CEC".
   K. IN EACH CONDUIT WITHOUT CONDUCTORS, PROVIDE ROPE PULL STRING WITH A TAG IDENTIFYING LOCATION OF OPPOSITE END.
   L. PROVIDE SLEEVES, NIPPLES, AND COUPLINGS REQUIRED FOR THE INSTALLATION OF CONDUIT. SLEEVES SHALL PROJECT 2" ABOVE FLOOR.
   M. SEAL TIGHT FLEXIBLE CONDUIT SHALL BE PROVIDED TO CONNECT MOTORS ON SLIDING BASES, TO CONTROLS, AND TO VIBRATING EQUIPMENT.
   N. PROTECT CONDUIT FROM DAMAGE AND THE ENTRANCE OF WATER AND FOREIGN MATTER DURING THE CONSTRUCTION PERIOD.WATERTIGHT STOPPERS OR CAPS SHALL BE INSTALLED IMMEDIATELY AFTER THE CONDUIT IS INSTALLED, REMOVED ONLY WHEN WIRE IS TO BE INSTALLED.
   O. THOROUGHLY CLEAN THE INSIDE OF CONDUITS TO ASCERTAIN FOREIGN MATERIALS ARE REMOVED BEFORE PULLING WIRE OR CABLE.

5. PROVIDE AND INSTALL ALL CONDUIT/PIPE SUPPORTS AND FASTENERS WITH DURA-BLOK AS REQUIRED.
   A. INSTALLATION OF HANGERS AND SUPPORTS SHALL BE MADE TO THE STRUCTURE.
   B. INSTALLATION SHALL BE SUCH SO AS TO SUPPORT CONDUIT WITHOUT SAGGING AND WORK HAZARD AND SHALL BE CLEAR OF THE WORK OF OTHER TRADES. PROVISION FOR EXPANSION AND CONTRACTION SHALL BE MADE.
   C. SPACING OF SUPPORTS FOR EXPOSED HORIZONTAL CONDUIT RUNS SHALL BE AS FOLLOWS.

SIZE OF CONDUIT (INCHES)	NUMBER OF CONDUITS IN RUN	LOCATION	MAXIMUM SUPPORT SPACING (FEET)
3/4	1 OR 2	ON A FLAT CEILING OR WALL	5
3/4	1 OR 2	WHERE IT IS DIFFICULT TO PROVIDE SUPPORTS EXCEPT AT INTERVALS FIXED BY BUILDING CONSTRUCTION	7
3/4	3 OR MORE	ANY LOCATION	7
1 & 2	1 OR 2	ON A FLAT CEILING OR WALL	6
1 & 2	1 OR 2	WHERE IT IS DIFFICULT TO PROVIDE SUPPORTS EXCEPT AT INTERVALS FIXED BY BUILDING CONSTRUCTION	10
1 & 2	3 OR MORE	ANY LOCATION	10

   D. SPACING OF SUPPORTS FOR EXPOSED VERTICAL CONDUIT RUNS SHALL BE AS FOLLOWS.

SIZE OF CONDUIT (INCHES)	MAXIMUM SUPPORT SPACING (FEET)
3/4	7
1 AND 1¼	8
1½ AND 2	10

   E. ELECTRICAL ENCLOSURES SHALL BE WEATHERPROOF WHEN EXPOSED TO OUTDOORS OR WET AREAS.

6. EXACT LOCATION OF EQUIPMENT SHALL BE VERIFIED IN FIELD. COORDINATE INSTALLATION OF ELECTRICAL SYSTEM WITH EXISTING BUILDING STRUCTURES. PRIOR TO COMPLETION OF AFFECTED WORK, CONTRACTOR SHALL INSTRUCT THE DISTRICT ON THE USE AND MAINTENANCE OF THE INSTALLED SYSTEM.
7. SIZE OUTLET BOXES IN CONFORMITY WITH CODE FOR NUMBER AND GAUGE OF CONDUCTORS THEREIN. EXCEPT WHERE NOTED TO BE LARGER, MINIMUM BOX SIZE SHALL BE 4" SQUARE BY 2 1/8" DEEP. JUNCTION BOXES SHALL BE LABELED WITH RESPECTIVE CIRCUIT NUMBERS.
8. ALL OUTLET BOXES SHALL BE FLUSHED WITH THE FINISHED SURFACE OF WALLS AND CEILINGS OF COMBUSTIBLE MATERIALS.
9. ALL CONDUITS AND OUTLET BOXES SHALL BE SURFACE MOUNTED IN CMU, CONCRETE WALL/SLABS.
10. OPENINGS IN BOXES, CONDUIT BODIES AND FITTINGS SHALL BE ADEQUATELY CLOSED.
11. SURFACE MOUNTED BOXES AND CABINETS MOUNTED IN WET AND DAMP LOCATIONS SHALL BE WEATHERPROOF NEMA 3R OR NEMA 4X AND SHALL HAVE AT LEAST 1/4 INCH AIR SPACE BETWEEN THE BOX AND MOUNTING SURFACE.
12. CUT FLOORS, CEILINGS AND WALLS AS REQUIRED FOR INSTALLATION OF WORK. ALL PENETRATION THROUGH MASONRY/CONCRETE WALL/CEILING SHALL BE X-RAYED PRIOR TO START OF WORK TO AVOID EXISTING STRUCTURAL RE-BAR AND PROVIDED BY MEANS OF SLEEVES OR CORE DRILLING. EXACT LOCATION OF CORING SHALL BE DETERMINED BASED ON STRUCTURAL CONDITION, EXISTING OBSTRUCTION AND FIELD CONDITION. CONTRACTOR SHALL COORDINATE WITH DISTRICT. CONDUITS SHALL NOT PENETRATE STRUCTURAL SLAB. ALL WORK SHALL BE PATCHED AND REPAIRED AS DIRECTED BY DISTRICT.
13. CUTTING, BORING, SAW CUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENT TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA.
14. ALL PENETRATION THRU EXISTING EXTERIOR WALL SHALL BE PROVIDED ALL UL LISTED SEAL AND WATERPROOF
15. ALL WORK SHALL BE CONFORMANCE WITH TITLE 24, 2022 CALIFORNIA CODE REGULATIONS (CCR),
    2022 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR,
    2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR.
16. AFTER AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL ALL REQUIRED SHOP DRAWINGS, BROCHURES AND OTHER SATISFACTORY DESCRIPTIONS INDICATING MANUFACTURER, CATALOG NUMBER, DIMENSIONS AND PERFORMANCE OF THE EQUIPMENT IN ELECTRONIC FORMAT AND FINAL APPROVED COPIES IN HARD COPY TO DISTRICT.

    A. PANEL BOARDS, TERMINAL CABINETS AND CONTROL DEVICES. DATA SHALL INCLUDE CABINET DIMENSIONS, SIZE AND CAPACITY OF BUSSES, CIRCUIT BREAKERS, SWITCHES, FUSES AND OTHER COMPONENTS.

16. USE "THNN" COPPER WIRES OR EQUAL FOR ALL BRANCH CIRCUIT WIRING WITH A SEPARATE GREEN GROUNDING CONDUCTOR. SIZE PER CEC 250-122.
17. EQUIPMENT SHALL BE LISTED BY A RECOGNIZED TESTING LABORATORY.
18. DATA CABLE INSTALLATION, TERMINATING, AND EQUIPMENT SHALL BE IN CONFORMITY WITH THE REQUIREMENTS AND SUBJECT TO APPROVAL OF THE DISTRICT'S COMMUNICATION PERSONNEL AND SHALL COMPLY WITH DISTRICT'S COMMUNICATION SPECIFICATIONS (DIVISION 27) AND REQUIREMENTS.
19. THE NON-CURRENT CARRYING METALLIC PARTS OF ALL ELECTRICAL EQUIPMENT AND ENCLOSURES, INCLUDING CONDUITS, SUPPORTS, CABINETS, AND ASSOCIATED EQUIPMENT, WHICH ARE INSTALLED OR CONNECTED UNDER THIS CONTRACT, SHALL BE PROPERLY GROUNDED BY CONNECTION TO THE GROUNDING SYSTEM, REGARDLESS OF WHETHER OR NOT THESE CONNECTIONS ARE SHOWN ON THE DRAWINGS.

    A. THE GROUNDING INSTALLATION SHALL HAVE PROVISIONS FOR BOTH SYSTEM AND EQUIPMENT GROUNDS AS DEFINED BY THE "CEC" THESE GROUNDING SYSTEMS ARE TO BE EFFECTIVELY INSULATED FROM EACH OTHER EXCEPT AT THE SERVICE CONNECTION.
    B. GROUNDING SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF "CEC" AND THE "NESC". LOCAL REQUIREMENTS OF THE INSPECTION AUTHORITY HAVING JURISDICTION SHALL GOVERN IN ALL MATTERS OF INTERPRETATION.
    C. IF WATER SERVICE IS USED FOR GROUNDING POINT, IT SHALL BE ASCERTAINED THAT THE WATER PIPING IS ELECTRICALLY CONTINUOUS AT JOINTS AND IS OF CONDUCTING MATERIAL. WATER PIPING WITH SWEATED JOINTS IN ELECTRICAL PATH SHALL HAVE SUCH JOINTS BONDED.
    D. WHERE GROUND CABLES ENTER AND LEAVE FERROUS CONDUITS, THEY SHALL BE MECHANICALLY CONNECTED TO THE END OF THE RACEWAY. WHERE GROUND CABLE PASSES THROUGH FERROUS FLOORING OR FRAMING, CONNECTION SHALL BE MADE TO SUCH METAL.

20. THE CONTRACTOR SHALL KEEP ALL PARTS OF THE BUILDING AND SITE FREE FROM ANY ACCUMULATIONS OF RUBBISH OR WASTE MATERIALS CAUSED BY HIS WORKMEN, AND SHALL REMOVE SUCH ACCUMULATIONS FROM THE BUILDING, SITE AND PROPERTY. JOB SITE SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
21. THOROUGHLY CLEAN ALL PARTS OF THE EQUIPMENT AND MATERIAL INSTALLED UNDER THIS DIVISION. SURFACES OF EXPOSED CONDUIT SHALL BE CLEANED OF CEMENT, PLASTER, DIRT, RUST, GREASE, AND OTHER FOREIGN MATTER, AND BE LEFT IN CONDITION SUITABLE TO THE CONTRACTOR AND ACCEPTABLE FOR PAINTING.
    A. EQUIPMENT FURNISHED WITHOUT SHOP APPLIED FINISH SHALL BE FIELD PAINTED.
    B. CONCEALED SURFACES OF METAL RACKS, FRAMES, AND BOXES SHALL BE PAINTED BEFORE MOUNTING.
    C. AFTER TESTS HAVE BEEN COMPLETED, CLEAN ALL EQUIPMENT WITH SOAP AND WATER, LEAVING EVERYTHING IN WORKING ORDER AT THE COMPLETION OF THE WORK.
22. A. WIRING AND CONNECTIONS SHALL BE TESTED FOR CONTINUITY, GROUNDS, SHORT CIRCUITS, AND OTHER DEFECTS BEFORE ANY EQUIPMENT OR FIXTURES ARE CONNECTED THERETO. CABLES SHALL BE CHECKED FOR CONTINUITY, SHORTS, INSULATION RESISTANCE, AND PROPER PHASING.
    B. CONTRACTOR SHALL TERMINATE ALL CABLES & WIRES WITH TERMINAL LUGS (SUPPLIED BY CONTRACTOR).
23. INSULATION SHALL BE TESTED BEFORE AND AFTER INSTALLATION, AND BEFORE ENERGIZING.
    A. RUBBER INSULATION SHALL BE TESTED FOR ACCEPTANCE BY APPLYING DIRECT CURRENT POTENTIAL NOT OVER 3 TIMES THE RATIO OF DIRECT CURRENT TO 60% OF EQUIVALENT "RMS" ALTERNATING CURRENT FACTORY TEST VOLTAGE FOR 5 MINUTES.
    B. VARNISHED CAMBRIC, PAPER, AND OTHER INSULATION SHALL BE TESTED IN THE MANNER DIRECTED BY AND UP TO THE LIMITS RECOMMENDED BY THE MANUFACTURER.
    C. INSULATION RESISTANCE SHALL BE TESTED BY MEGGER OF NOT LESS THAN 600 VOLTS OUTPUT FOR CIRCUITS 480 VOLTS AND LESS. ANY CIRCUIT SHOWING AN INSULATION RESISTANCE OF LESS THAN 1 MEGOHM SHALL BE INVESTIGATED AND THE WEEK POINT CORRECTED. CORRECT OR REPLACE ANY CIRCUIT DEFECTIVE OR GROUNDED AND MAKE WIRE-BY-WIRE TEST.
24. THE ENTIRE SYSTEM SHALL BE PLACED IN PROPER OPERATING CONDITION.
    A. OVERLOAD DEVICES SHALL BE ADJUSTED AND SET TO SUIT THE LOADS WHICH THEY CONTROL.
    B. LOADS ON ALL PARTS OF SYSTEMS SHALL BE BALANCED, INSOFAR AS IS PRACTICAL.
    C. ALL CHANGES SHALL BE MADE THAT ARE NECESSARY FOR ADJUSTING, SETTING AND BALANCING.
    D. PHASE ROTATION AT ALL BUSES, PANELS, SWITCHBOARD ETC., SHALL BE CHECKED TO SEE IF IT CONFORMS WITH RECOGNIZED STANDARDS.
    E. GROUND TESTS SHALL BE MADE WITH THE 3 ELECTRODE "AC" OR "DC" VOLTAGE DROP METHOD TO ESTABLISH INITIAL READINGS FOR RECORDS, AND TO ASCERTAIN THAT THEY MEET DESIGN AND CODE REQUIREMENTS.
    F. CONTROL CIRCUITS SHALL BE CHECKED OUT FOR PROPER FUNCTIONING AND FAIL-SAFE QUALITIES.
25. DETERMINE EXACT ROUTING OF CONCEALED FEEDERS AND BRANCH HOME RUNS IN COOPERATION WITH OTHER TRADES TO SIMPLIFY INSTALLATION WHEREVER POSSIBLE BUT SUBJECT TO APPROVAL OF ARCHITECT FOR VISUAL AND STRUCTURAL REASONS.
26. ANY POWER OUTAGES SHALL BE APPROVED BY THE USER OF THE DISTRICT. A 7 DAY WRITTEN NOTICE SHALL BE GIVEN FOR ANY OUTAGE REQUEST.
27. CHECK PANEL SCHEDULES IDENTIFICATION FOR VALIDITY. RE-IDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD. WHILE PANEL COVER IS REMOVED TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES ARE INDICATED ON PANEL SCHEDULE CARD.
28. USE "DYMO" LABEL ON FACE OF EACH CONTROL DEVICE AND JUNCTION BOXES INDICATING THE SOURCE PANEL AND CIRCUIT USED.
29. CONTRACTOR SHALL CORE DRILL, SAW CUT, PATCH TO MATCH ADJACENT SURFACES, AND PAINT ALL EXPOSED CONDUITS & BOXES TO MATCH EXTERIOR FINISH. USE UL LISTED FIRE RATED CAULK FOR PENETRATION AT RATED FLOORS/WALL/CEILING.
30. MEP COMPONENT ANCHORAGE NOTE
    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 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:

    A. ALL PERMANENT EQUIPMENT AND COMPONENTS.
    B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
    C. 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:
    A. 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.
    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 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.

ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

ELECTRICAL DISTRIBUTION SYSTEMS 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 ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI 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.

ELECTRICAL DISTRIBUTION SYSTEMS (E):

☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAI (OSHPD) PRE-APPROVAL (OPM #) # , AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

DO NOT MIX SEISMIC BRACING DETAILS FROM DIFFERENT OPM'S UNLESS SPECIFICALLY SHOWN ON DRAWINGS AND APPROVED BY DSA.

FIRE ALARM NOTES

1. ALL WIRING SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MINOR AS DEDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS. CONDUIT FILL SHALL BE PER TABLE 3B OF ELECTRICAL CODE. PROVIDE PVC SCHEDULE 40 FOR CONDUITS UNDERGROUND, EMT CONDUIT FOR INTERIOR EXPOSED AREAS, AND GALVANIZED RIGID STEEL FOR EXPOSED EXTERIOR AREAS. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE APPROVED FOR WET LOCATIONS.
2. MINIMUM CONDUIT SIZE SHALL BE 3/4" UON CONTRACTOR TO ADJUST SIZE FOR FIELD CONDITIONS (I.E. NO. OF BENDS, ETC.) BUT SHALL NOT BE SMALLER THAN 3/4". MAXIMUM CONDUIT SIZE SHALL BE 2"
3. FIRE ALARM JUNCTION BOX COVER SHALL BE PAINTED RED AND LABELED "FIRE ALARM". ALL FIRE ALARM CONDUITS SHALL HAVE A RED STRIPE EVERY 10FT.
4. ALL FIRE ALARM WIRING SHALL BE FIRE POWER LIMIT OR FIRE POWER LIMITED PLENUM AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE UNDERGROUND MAY BE THHN OR THWN. CONDUIT FILL SHALL BE PER TABLE 3B OF ELECTRICAL CODE
5. ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECT DIRECTLY TO EACH FIRE ALARM DEVICE. DO NOT SPLICE THE WIRE. THERE MUST BE AT LEAST 6 FT OF LEAD WIRE FROM BOX TO THE DEVICE. ALL BOX TO BE SIZED PER CEC. WIRING SHALL NOT BE LOOPED THROUGH DEVICES; WIRE MUST BE CUT FOR IN AND OUT AT DEVICE JUNCTION BOX.
6. POINT AND COMMON ANNUNCIATION AND T-TAPPING PROHIBITED. (EXCEPT WITH ADDRESSABLE CLASS B DEVICES)
7. ALL WIRING, INITIATING DEVICE AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION (FIRE ALARM PANEL TO SUPERVISE THE ANNUNCIATOR PANEL, ALL CIRCUITS AND INITIATING DEVICES).
8. ALL PENETRATIONS OF FIRE-RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER LAB TESTING CRITERIA. APPROVE TYPE OF MATERIALS SHALL BE IDENTIFIED WITHIN THE SPECIFICATION WITHIN A FIRE ALARM SECTION. INSTALLATION AND APPLICATION, PER MANUFACTURER'S INSTRUCTIONS. REFER TO FIRE ALARM DETAIL DRAWING THROUGH-PENETRATION FIRE STOPPING FOR ALL FIRE RATED WALLS.
9. CONDUIT AND JUNCTION BOXES ARE NOT TO BE USED FOR UNRELATED WIRING.
10. ALL TERMINATION ON MAIN PULL BOXES AND TERMINAL CABINETS SHALL BE ON BOX MOUNTED TERMINAL BLOCKS
11. THE FIRE ALARM CONTROL PANEL IS NOT TO BE USED AS A TERMINAL CABINET. PROVIDE SEPARATE TERMINAL CABINET.
12. FIRE ALARM LOCKED PANEL SHALL BE ACCESSIBLE ONLY TO FIRE DEPT. PERSONNEL, AUTHORIZED MAINTENANCE PERSONNEL AND SHALL BE MARKED "FIRE ALARM CONTROL PANEL".
13. PROVIDE SIGNAGE "FIRE ALARM CONTROL PANEL INSIDE" ON DOORS OF THE ROOM WHERE FACP/FCPS IS LOCATED TO INDICATE LOCATION OF FACP/FCPS. PROVIDE SIGNAGE AT THE INSPECTORS TEST VALVE, RISER, AND SUPERVISORY DEVICE INDICATING THAT THE FIRE SPRINKLER SYSTEM IS BEING MONITORED. THE LOCATION OF THE INSPECTORS TEST IS TO BE LABELED ON THE INTERIOR OF THE FACP DOOR.
14. BATTERIES ARE TO BE LABELED WITH THE MONTH AND YEAR OF INSTALLATION.
15. FIRE ALARM PANEL, REMOTE ANNUNCIATOR, AND COMPONENTS SHALL BE SECURE TO MOUNTING SURFACE PER MANUFACTURES SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
16. All ELECTRICAL CONTROLS AND SWITCHES SHALL BE INSTALLED NO MORE THAN +48" ABOVE FINISH FLOOR FROM THE TOP OF THE OUTLET BOX AND NO LESS THAN +15" ABOVE FINISH FLOOR FROM THE BOTTOM OF THE OUTLET BOX, PER CBC 11B-308.
17. FIRE ALARM EQUIPMENTS AND POWER SUPPLIES SHALL BE CONNECTED TO A DEDICATED 120 V CIRCUIT. CIRCUIT BREAKER SHALL MATCH BY TYPE/STYLE/AIC RATING. PROVIDE LOCK ON DEVICE TO CIRCUIT BREAKER HANDLE, WITH RED MARKING, ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, IDENTIFIED AS "FIRE ALARM CIRCUIT", AND LOCATION OF CIRCUIT BREAKER PERMANENTLY IDENTIFIED AT FIRE ALARM CONTROL UNIT IN COMPLIANCE WITH NFPA 72, 10.6.5.2.
18. ALL EQUIPMENT, I.E. AUTOMATIC DETECTION DEVICES, MANUAL PULL STATIONS, AUDIO/VISUAL DEVICES, DUCT DETECTORS, ETC., SHALL BE INSTALLED AND LOCATED IN ACCORDANCE WITH LISTINGS AND APPLICABLE PROVISIONS OF TITLE 24, PARTS 2,3,4 & 9 STANDARDS. ALL EXTERIOR DEVICES SHALL BE LISTED FOR OUTDOOR USE AND MOUNTED IN APPROVED WEATHERPROOF BOXES AND IN ACCORDANCE WITH TITLE 19, CHAPTER 1.5, ARTICLE 1, SECTION 200.
19. ALARM SIGNALS SHALL BE DISTINCTIVE FROM ANY OTHER SIGNAL AND SHALL NOT BE USED FOR ANY OTHER PURPOSE. (NFPA 72, 2022 EDITION) SUPERVISORY SIGNALS AND TROUBLE SIGNALS SHALL ACTIVATE THE SAME SOUND AT THE CONTROL PANEL AND WILL BE DISTINCTIVELY ANNUNCIATED ON THE LCD DISPLAY OF THE CONTROL UNIT (AND REMOTE ANNUNCIATOR WHERE PROVIDED) THE EST PANELS HAVE SEPARATE DISPLAY QUEUES FOR ALARM, SUPERVISORY AND TROUBLE. (NFPA 72, 2022 EDITION)
20. THE FIRE ALARM SYSTEM SHALL BE ADDRESSABLE TYPE FOR EST FIRE ALARM SYSTEM AND COMPONENTS. EACH INITIATING DEVICE SHALL BE INDIVIDUALLY ANNUNCIATED AS ONE ADDRESS.
21. AUDIBLE NOTIFICATION APPLIANCES SHALL HAVE SOUND LEVEL AT LEAST 15 dB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 dB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5 FT ABOVE THE FLOOR IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM USING THE A-WEIGHTED SCALE (dBA) THROUGHOUT AREA OF ALARM. ACCORDANCE WITH CFC 907.5.2.1.1 AND NFPA 72, 18.4 WITH CALIFORNIA AMENDMENTS.
22. THE ALARM AUDIBLE SIGNAL PATTERN USED TO NOTIFY BUILDING OCCUPANTS OF THE NEED TO EVACUATE SHALL BE THE STANDARD ALARM EVACUATION SIGNAL CONSISTING OF THREE-PULSE TEMPORAL PATTERN. (NFPA 72, 18.4.2.1)
23. THE ALARM AUDIBLE SIGNAL PATTERN USED TO NOTIFY BUILDING OCCUPANTS FOR CARBON MONOXIDE (CO) ALARM SHALL BE FOUR-PULSE TEMPORAL PATTERN. (NFPA 72, 18.4.3.1)
24. VOICE EVACUATION MESSAGES SHALL BE INSTALLED PER NFPA 72, 2022 EDITION, 24.4.2.2. (18.4.10.2.1, UNLESS SPECIFICALLY SHOWN INTELLIGIBILITY SHALL NOT BE REQUIRED: PRIVATE BATHROOMS, MECHANICAL/ELECTRICAL/ELEVATOR EQUIPMENT ROOMS, INDIVIDUAL OFFICES, KITCHENS, STORAGE ROOMS, CLOSETS, AND ROOMS/AREAS WHERE INTELLIGIBILITY CANNOT REASONABLY BE PREDICTED)
25. WALL MOUNTED AUDIBLE NOTIFICATION APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOOR AT HEIGHTS OF NOT LESS THAN 90" (MAXIMUM 100") AND BELOW THE FINISHED CEILINGS AT DISTANCE OF NOT LESS THAN 6". (NFPA 72, 18.4.8)
26. WALL MOUNTED VISIBLE NOTIFICATION APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE THE FINISH FLOOR. WHERE LOW CEILING HEIGHTS DO NOT PERMIT MOUNTING AT A MINIMUM 80", APPLIANCES SHALL BE MOUNTED WITHIN 6" OF THE CEILING. (NFPA 72, 18.5.5)
27. VISIBLE NOTIFICATION APPLIANCES SHALL BE RATED NOT LESS THAN 15 CD AND SHALL NOT EXCEED TWO FLASHES PER SECOND NOR BE LESS THAN ONE FLASH PER SECOND. (NFPA 72, 18.5.5). WHERE THERE ARE MORE THAN TWO APPLIANCES IN A FIELD OF VIEW, THEY NEED TO BE SYNCHRONIZED.
    IN ROOMS: VISIBLE NOTIFICATION APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72, 18.5.5.4, EITHER TABLE 18.5.5.4.1(A) OR TABLE 18.5.5.4.1(B).
    IN CORRIDORS: VISIBLE NOTIFICATION APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72, 18.5.5.5. VISIBLE NOTIFICATION APPLIANCES SHALL BE LOCATED NOT MORE THAN 15 FT FROM THE END OF THE CORRIDOR WITH SEPARATION NOT GREATER THAN 100 FT BETWEEN APPLIANCES.
28. ALL AREAS REQUIRED TO BE "STROBE" MUST HAVE A DIRECTION LINE OF SIGHT TO AT LEAST ONE STROBE LIGHT.
29. THE OPERABLE PART OF A MANUALLY ACCURATE ALARM-INITIATING DEVICE SHALL BE NOT LESS THAN 42"AFF AND NOT MORE THAN 48"AFF. (NFPA72, 17.14.5)
30. DETECTOR LOCATIONS ARE BASED ON SMOOTH CEILING. ALL POINT ON THE CEILING SHALL HAVE A DETECTOR WITHIN A DISTANCE EQUAL TO OR LESS THAN 0.7 TIMES THE LISTED SPACING. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND INSTALL ACCORDINGLY.
    a. SPACING FOR HEAT DETECTOR (ATTIC) SHALL BE INSTALLED MAXIMUM 35 FT RADIUS SPACING (NON-PLENUM/NON-SPRINKLER).
    b. SPACING FOR SMOKE DETECTORS SHALL BE INSTALLED MAXIMUM 21 FT RADIUS SPACING.
31. SMOKE DETECTOR SHALL NOT BE ANY CLOSER THAN 12" FROM FIRE SPRINKLER/LIGHTING FIXTURE OR 36" FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURN OVER TO THE OWNER.
32. OPERATION OF NON-FIRE SYSTEM FUNCTION(S) ORIGINATING WITHIN A CONNECTED NON-FIRE SYSTEM SHALL NOT INTERFERE WITH THE REQUIRED OPERATION OF FIRE ALARM SYSTEM UNLESS OTHERWISE PERMITTED BY NFPA.
33. SHORT CIRCUITS, OPEN CIRCUITS, OR GROUNDS IN THE EQUIPMENT OR BETWEEN THIS EQUIPMENT AND THE FIRE ALARM SYSTEM WIRING SHALL NOT INTERFERE WITH THE MONITORING FOR INTEGRITY OF THE FIRE ALARM SYSTEM OR PREVENT ALARM, SUPERVISORY, OR FIRE SAFETY CONTROL SIGNAL TRANSMISSIONS.
34. ALL NON-FIRE ALARM COMPONENTS OF A COMBINATION SYSTEM SHALL BE LISTED FOR FIRE ALARM USE UNLESS REMOVAL, REPLACEMENT, FAILURE, OR MAINTENANCE PROCEDURE ON ANY NON-FIRE ALARM HARDWARE, SOFTWARE, OR CIRCUITS DOSE NOT IMPAIR THE REQUIRED OPERATION OF THE FIRE ALARM SYSTEM.
35. IN COMBINATION SYSTEMS, FIRE ALARM SIGNALS SHALL BE DISTINCTIVE, CLEARLY RECOGNIZABLE, AND, WITH WITH THE EXCEPTION OF MASS NOTIFICATION INPUTS, TAKE PRECEDENCE OVER ANY OTHER SIGNAL EVEN WHEN A NON-FIRE ALARM SIGNAL IS INITIATED FIRST AND SHALL BE INDICATED AS FOLLOWS IN DESCENDING ORDER OF PRIORITY UNLESS OTHERWISE PERMITTED BY THIS CODE:
    1) SIGNALS ASSOCIATED WITH LIFE SAFETY
    2) SIGNALS ASSOCIATED WITH PROPERTY PROTECTION
    3) TROUBLE SIGNALS ASSOCIATED WITH LIFE AND/OR PROPERTY PROTECTION
    4) ALL OTHER SIGNALS
36. LIVE VOICE INSTRUCTIONS ORIGINATING FROM THE PROTECTED PREMISES FIRE OR MASS NOTIFICATION SYSTEMS SHALL OVERRIDE ALL PREVIOUSLY INITIATED SIGNALS AND SHALL HAVE PRIORITY OVER BOTH OF THE FOLLOWING;
    1) ANY SUBSEQUENT AUTOMATICALLY INITIATED SIGNALS ON THAT CHANNEL
    2) REMOTELY GENERATED MASS NOTIFICATION MESSAGE
37. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEM (EVAC) SHALL BE ACCESSIBLE FOR USEM, INSTALLED IN COMPLIANCE WITH CBC SECTION 11B-305 AND 11B-308.
38. PROVIDE HVAC/AIR HANDLING UNIT SHUT DOWN UPON ACTIVATION OF AREA/DUCT SMOKE DETECTION SYSTEM INCLUDING ANY DAMPER, FAN CONTROL WIRING.
39. THE ACCESSIBLE PORTION OF ABANDON FIRE ALARM CABLES SHALL BE REMOVED (2022 CEC, 760.25)
40. THE ACCESSIBLE PORTION OF ABANDON FIRE ALARM CABLES SHALL BE REMOVED (2019 CEC, 760.25)

ELECTRICAL SYMBOLS LIST

NOTE:
- SYMBOLS REPRESENT EQUIPMENT AND OUTLET BOXES TO WHICH CONDUIT AND WIRE IS RUN FOR CONNECTION TO FIXTURES AND DEVICES.
- NOT ALL SYMBOLS APPLY TO THIS PROJECT; DISREGARD THOSE NOT USED ON PLANS AND IN DETAILS.
- MOUNTING HEIGHTS IN SYMBOL LIST APPLY UNLESS OTHERWISE NOTED ON DRAWINGS.

▨	ELECTRICAL WALL MOUNTED PANEL (+60" AFF), SEE SCHEDULE.
▨	ELECTRICAL FLUSH MOUNTED PANEL (+60" AFF), SEE SCHEDULE.
▭	DISCONNECT SWITCH, MANUAL EXO, H.P. RATED (FUSED TO AMPERE RATING SHOWN) WEATHER PROOF, HEAVY DUTY PAD LOCKABLE IN ON POSITION.
Ⓙ	JUNCTION BOX, WITH COVER (4S" SQUARE, DEEP, WITH PLASTER RING)
Ⓙ	JUNCTION BOX, WALL MOUNTED, WITH COVER, +18"
⊖	DUPLEX RECEPTACLE, "DECORA" STYLE FLUSH IN WALL, GROUNDING TYPE +18"AFF (UON) (20A, 120V, COVER PLATE & RECEPTACLE FINISH AS SELECTED BY ARCHITECT)
⊕	DOUBLE DUPLEX RECEPTACLE, "DECORA" STYLE FLUSH IN WALL, GROUNDING TYPE +18"AFF (UON) (20A, 120V, COVER PLATE & RECEPTACLE FINISH AS SELECTED BY ARCHITECT)
⊟	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER, "DECORA" STYLE FLUSH IN WALL (20A, 120V, 3W, COVER PLATE & RECEPTACLE FINISH AS SELECTED BY ARCHITECT)
⊘	SPECIAL RECEPTACLE, WALL MOUNTED, +18"AFF (UON), SEE REFERENCE NOTE FOR DETAILS (COVER PLATE & RECEPTACLE FINISH AS SELECTED BY ARCHITECT)
S_a	SWITCH, FLUSH IN WALL, "DECORA", SINGLE-POLE S.T., +42"AFF (SUBSCRIPT DENOTES UNIT CONTROLLED, COVER PLATE & SWITCH FINISH AS SELECTED BY ARCHITECT)
S_m	SWITCH, MOTOR RATED, S.P.S.T.
S_3	SWITCH, 3-POSITION (UP/DOWN/STOP)
S^{WP}	WEATHERPROOF SWITCH.
S_2^T	SQUARE-D TOGGLE TYPE, 2 POLE. FRACTIONAL HP MANUAL STARTER WITH MELTING ALLOY TYPE THERMAL OVERLOAD RELAYS NEMA1 ENCLOSURE.
S	SWITCH, FLUSH IN WALL WITH INTEGRAL OCCUPANCY SENSOR, DUAL TECHNOLOGY SINGLE-POLE S.T., +42"AFF
IDF	IDF (DATA SWITCH WITH PATCH PANEL CABINET)
V	EXISTING ACCESS CEILING PANEL
SS	SMART VAPE SENSOR
FACP	FIRE ALARM CONTROL PANEL
FCPS	FIRE ALARM REMOTE POWER SUPPLIES
FATC	FIRE ALARM TERMINAL CABINET
ANN	ANNUNCIATOR
FSD	FIRE SMOKE DAMPER
F	FIRE ALARM PULL STATION
SD	SMOKE DETECTOR
CD	MULTI-SENSOR SMOKE/HEAT DETECTOR
HD	HEAT DETECTOR
HD_A	HEAT ATTIC DETECTOR
☐○	MULTI CANDELA STROBE (15/30/75/110CD), WALL MOUNTED
☐◁	MULTI CANDELA SPEAKER/STROBE (15/30/75/110CD), WALL MOUNTED
☐○	MULTI CANDELA STROBE (15/30/75/95CD), CEILING MOUNTED
☐◁	MULTI CANDELA SPEAKER/STROBE (15/30/75/95CD), CEILING MOUNTED
H◁	HORN, WALL MOUNTED
S	EXTERIOR SPEAKER, WEATHERPROOF WALL MOUNTED
R	ADDRESSABLE CONTROL RELAY MODULE
RIBUIC	MULTI-VOLTAGE RELAY MODULES
B	FIRE ALARM BELL (24VDC)
FS⋈TS	SPRINKLER FLOW
PIV	POST INDICATOR VALVE (PIV)
SRD	SYSTEM RECORD DOCUMENT (SRD) CABINET

CONDUIT FOR CIRCUIT

— —c∘	CONDUIT STUB-UP WITH COUPLING FLUSH IN FLOOR (TO PERMIT FUTURE REMOVAL)
— —	CONDUIT CONCEALED IN OR UNDER FLOOR: OR UNDERGROUND
——	BRANCH CIRCUIT WITH GREEN INSOLATED GROUND CONDUCTOR, SAME SIZE WIRE
——	3/4" CONDUIT WITH 2#12 WIRES AND 1#12 GND.
——	3/4" CONDUIT WITH 3#12 WIRES AND 1#12 GND.
—///—	3/4" CONDUIT WITH 4#12 WIRES AND 1#12 GND.
—////—	3/4" CONDUIT WITH 5#12 WIRES AND 1#12 GND.
—/////—	3/4" CONDUIT WITH 6#12 WIRES AND 1#12 GND.
—#10—	NUMBER INDICATES GAUGE OF WIRE IN CODE SIZED CONDUIT.
——	CONDUIT-ONLY WITH #12 TW COPPER PULL-WIRE (3/4" MINIMUM SIZE, UON)
—A-1,3→	**HOMERUN TO CIRCUITS #1 & #3 IN PANEL "A" (CROSSMARKS INDICATE NUMBER OF WIRES)**
—⊣	**GROUND CONNECTION WITH ACCESSIBLE CLAMP (TO COLD WATER PIPE OR DRIVEN GROUND ROD)**
——]	STUB CONDUIT
——	CONDUIT DROPPING DOWN FROM RUN (IF CONDUIT IS USED, KEEP COVER ACCESSIBLE)
——∘	CONDUIT RISING UP FROM RUN (IF CONDUIT IS USED, KEEP COVER ACCESSIBLE)
—⁓—	END OF LINE FIRE ALARM WIRE

ALL WIRING TO BE CU. THHN INSULATION & GROUND PER NEC 250-122 CONCEALED IN WALL OR CEILING

GENERAL SYMBOLS

(1A)	NUMBERED NOTE FOR SHEET WHERE SHOWN
A E1.0	DETAIL DESIGNATION FOR ITEM & DRAWING NUMBER

CENTRAL STATION MONITORING INFORMATION

CENTRALIZED FIRE ALARM SYSTEM FOR POMONA UNIFIED SCHOOL DISTRICT'S SCHOOLS (ALL SCHOOL SITES) ARE MONITORED 24/7 WITH MASTER CONTROL STATION VIA DISTRICT'S LAN NETWORK PER UL 2572 REQUIREMENTS AT

POMONA SECURITY OFFICE
POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE, POMONA, CALIFORNIA 91766
TEL: (909) 397-4800

ABBREVIATION

AFF	- ABOVE FINISH FLOOR
BLDG	- BUILDING
C.O.	- CONDUIT ONLY.
D.P.	- DISTRIBUTION PANEL.
EM	- EMERGENCY.
EF	- EXHAUST FAN
(E)	- EXISTING.
(ER)	- EXISTING DEVICE TO BE REPLACED
FA	- FIRE ALARM.
GND	- GROUND.
HP	- HORSEPOWER RATING.
J-BOX	- JUNCTION BOX.
KA	- KILO AMPERES.
KW	- KILOWATT.
KVA	- KILO-VOLT AMPS.
LCP	- LIGHTING CONTROL PANEL
LTG	- LIGHTING.
L.O.	- LUGS ONLY.
LV	- LOW VOLTAGE.
MH	- MOUNTING HEIGHT (TO BOTTOM OF FIXTURE)
MLO	- MAIN LUGS ONLY.
(N)	- NEW
NIC	- NOT IN CONTRACT
NTS	- NOT TO SCALE.
PNL	- PANEL BOARD
(R)	- RELOCATED
TEL	- TELEPHONE
TTB	- TELEPHONE TERMINAL BOARD.
TYP	- TYPICAL.
UON	- UNLESS OTHERWISE NOTED.
V	- VOLTS.
W.P.	- WEATHERPROOF CONSTRUCTION.
XFMR	- TRANSFORMER
(X)	- EXISTING DEVICE/EQUIPMENT TO BE REMOVED EXISTING DEVICE MOUNTING BOX AND WIRING MAY BE REUSED AS JUNCTION BOX WHERE POSSIBLE. ELECTRICAL CONTRACTOR TO PROVIDE J-BOX COVER PLATE AND HANGING STRAP TO COMPLY WITH CEC.
(XR)	- REMOVE RELOCATE AS SHOWN
(+)X'-Y"	- MOUNTING HEIGHT (TO CENTER OF DEVICE)

SHEET INDEX

E0.1	ELECTRICAL NOTES AND SYMBOLS LIST		
		E3.0	FIRE ALARM SITE PLAN
E1.0	ELECTRICAL SITE PLAN	E3.1	FIRE ALARM GYM BUILDING "BB" DEMOLITION FLOOR PLAN
E1.1	ELECTRICAL GYM BUILDING "BB" DEMOLITION FLOOR PLAN	E3.2	FIRE ALARM GYM BUILDING "BB" FLOOR PLAN
E1.2	ELECTRICAL GYM BUILDING "BB" FLOOR PLAN	E3.3	FIRE ALARM RISER DIAGRAM
		E3.4	FIRE ALARM CALCULATIONS
E2.1	ELECTRICAL GYM BUILDING "BB" DEMOLITION LIGHTING PLAN		
E2.2	ELECTRICAL GYM BUILDING "BB" LIGHTING PLAN	E4.1	ELECTRICAL DETAILS
		E4.2	ELECTRICAL DETAILS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP
YU-NGOK LO
NO. C-31804
REN. 3-31-25

RUNGSUB SUMETHASORN
No.E 19325
Exp.12/31/2024

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL NOTES AND SYMBOLS LIST

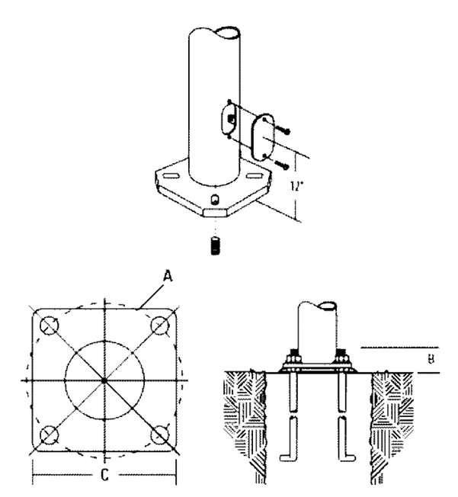
DATE 07/12/2024
DSA A# A# 03-123614
FILE NO. 19-H20
SHEET E0.1

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	MANUFACTURE	MODEL	DESCRIPTION	MOUNTING	LAMP TYPE	WATT	VOLTAGE	BUG RATING
P1	LITHONIA	DSX1 LED P2 40K 70CRI T4M MVOLT RPA PIR POLE: RSS-15'-4B-DM19AS-DDBXD (see base detail Below)	LED POLE FIXTURE, WITH MOTION SENSOR, TYPE IV DISTRIBUTION WITH ROUND 15' POLE	POLE	LED 4000K	68	MVOLT	1-0-3

NOTES: Shaft Base Size: 4" ; Bolt Circle: 7.5" - 8.5". Bolt Projection: 3.50"-3.75" Base Square: 10.50" Template Description: ABTEMPLATE PJ50041; Anchor Bolt Description: AB18-0; Bolt Size 3/4" x 18" x 3"
Anchor Bolts are made of Steel Rod having a maximum yield strength of 55,000 PSI and Top Portion of anchor bolt is galvanized per ASTM A- 153

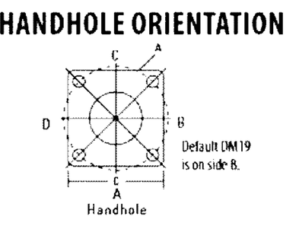
BASE DETAIL

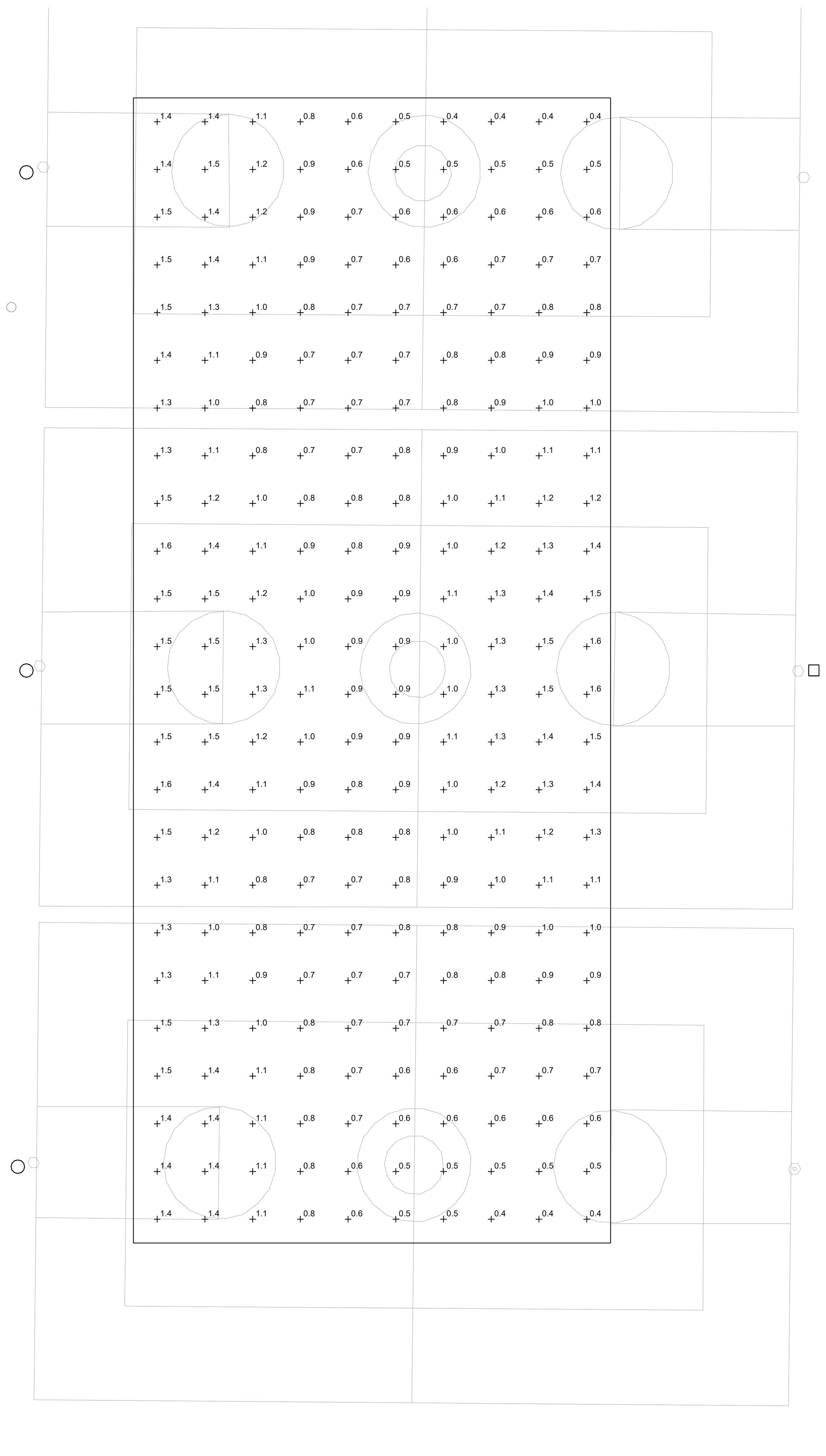


ANCHORAGE AND TEMPLATE INFORMATION

Shaft base size	Bolt circle A	Bolt projection B	Base square C	Template description	Anchor bolt description	Bolt size (in. x in. x in.)
3"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3
4"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3
4.5"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3
5"	7.5" - 8.5"	3.50"-3.75"	10.50"	ABTEMPLATE PJ50041	AB18-0	3/4 x 18 x 3

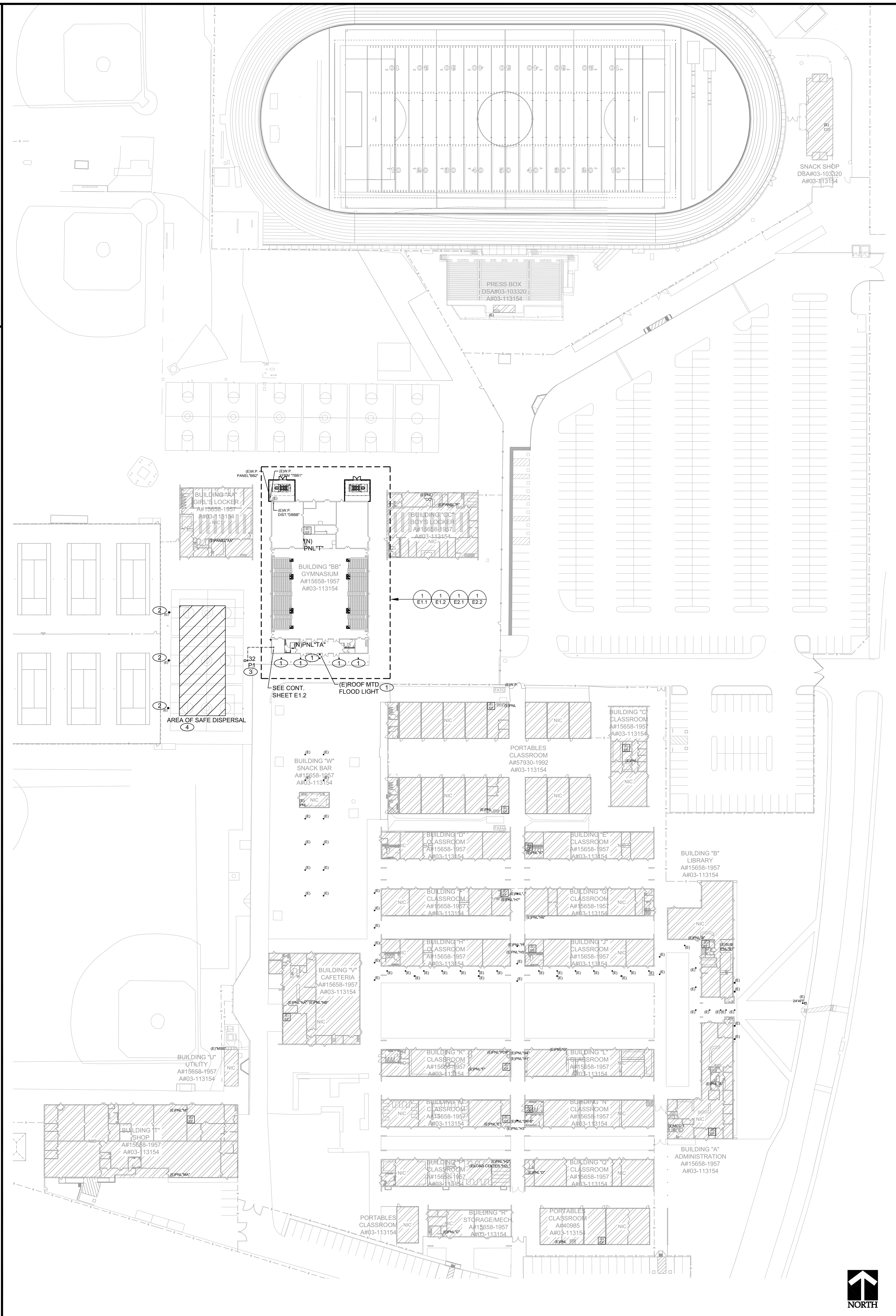
HANDHOLE ORIENTATION





Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Safe Dispersal	+	1.0 fc	1.6 fc	0.4 fc	4.0:1	2.5:1

SAFE DISPERSAL AREA PHOTOMETRIC(TYP) — SCALE 1/8"=1'-0" — 2



ELECTRICAL SITE PLAN — SCALE 1" = 50'-0" — 1

GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

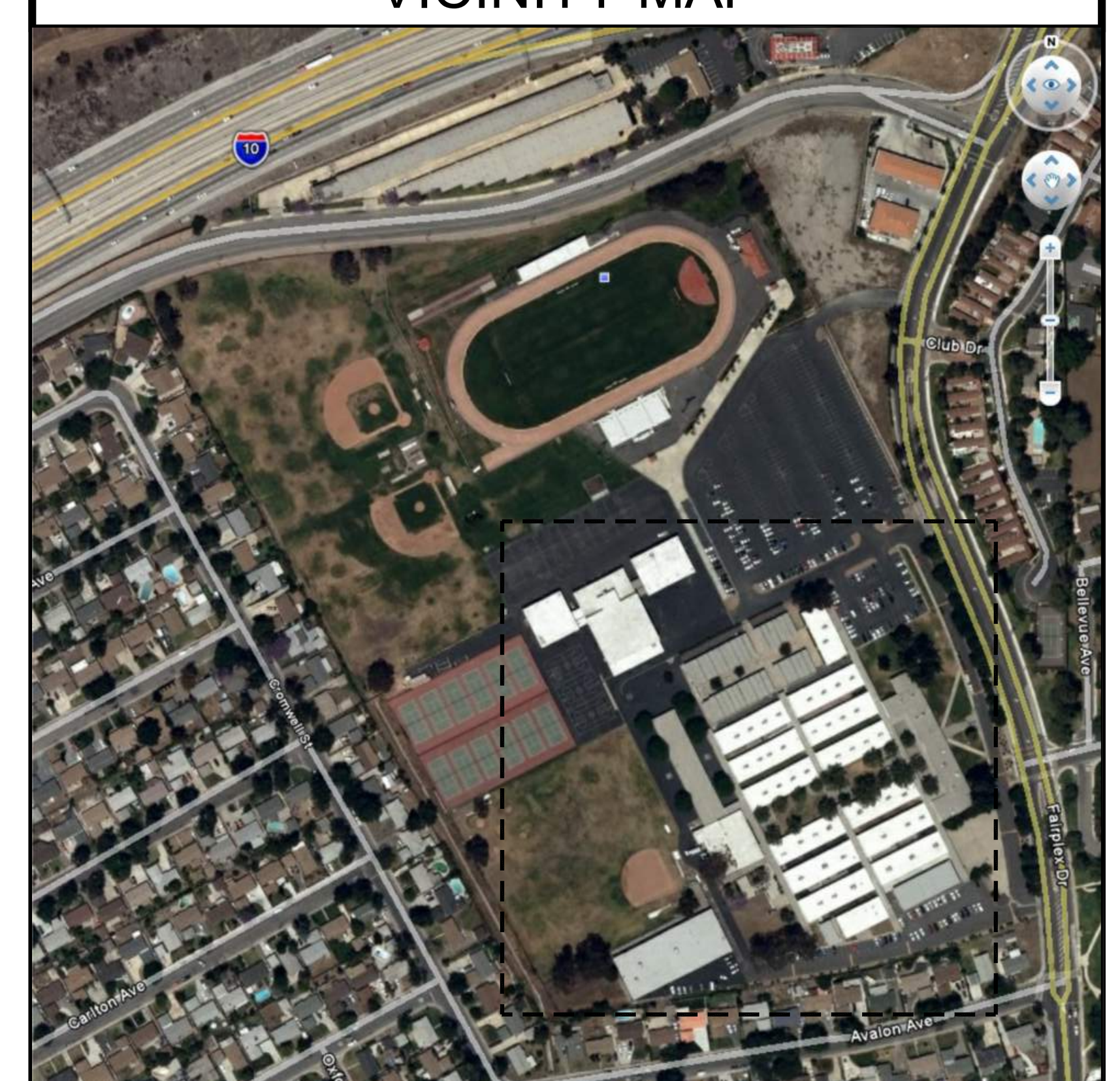
REFERENCE NOTES

1. (E)LIGHT FIXTURE AT EXISTING PATH OF TRAVEL TO PUBLIC WAY
2. (E)POLE LIGHT FIXTURE, ANP #LA262-1-R5-P078LD4D-35K. SEE PHOTOMETRIC CALC, DETAIL 2/THIS SHEET FOR LIGHTING DISTRIBUTION AT AREA OF SAFE DISPERSAL
3. SEE LIGHTING FIXTURE SCHEDULE, THIS SHEET, AND DETAIL 4/E4.2 FOR NEW LIGHT POLE AND BASE.
4. SEE DETAIL 2, THIS SHEET, FOR PHOTOMETRIC CALCULATION OF SAFE DISPERSAL AREA.

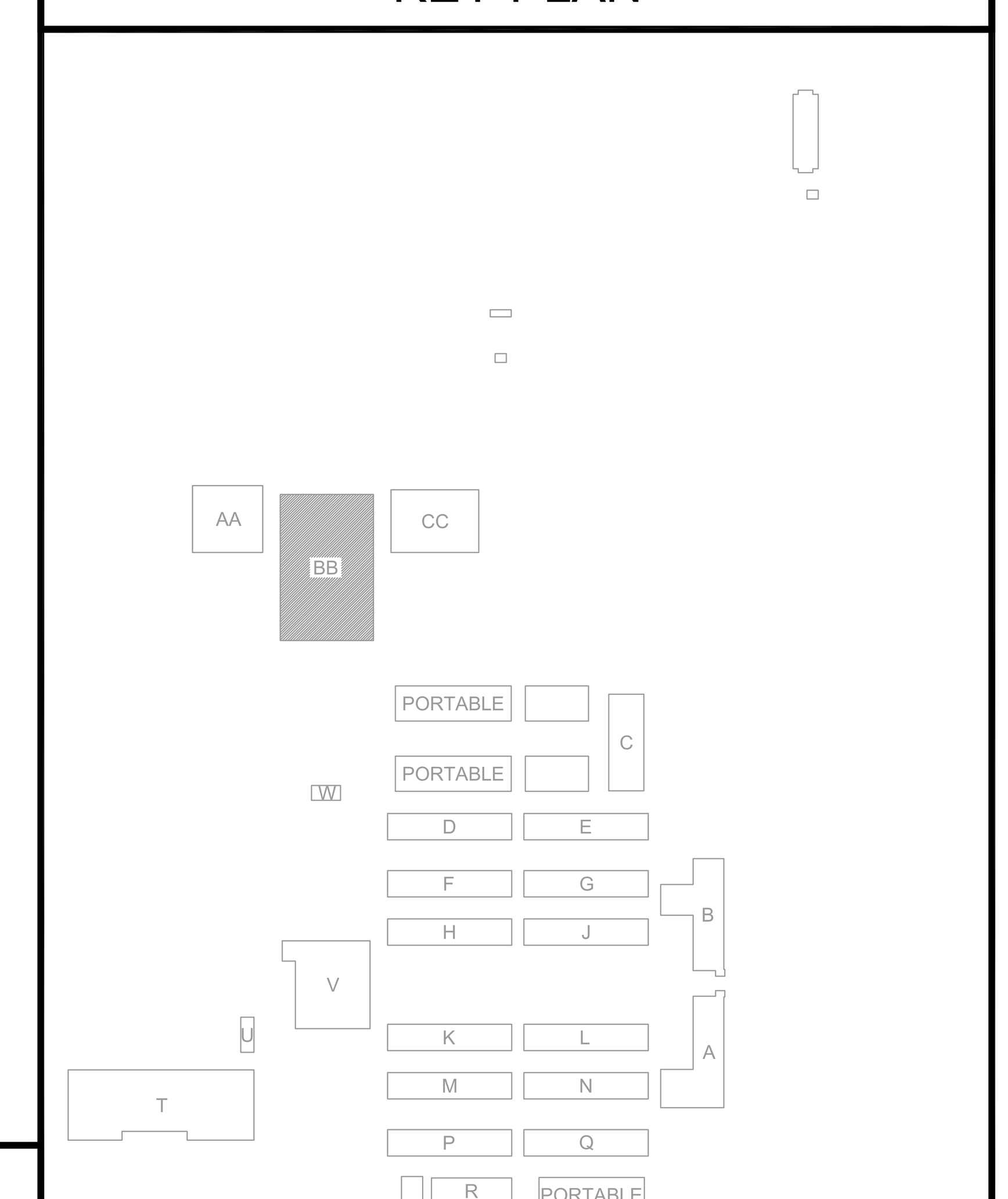
BUILDING SITE PLAN SYMBOLS LIST

- EXISTING BUILDING AS PART OF THIS DSA APPLICATION
- NIC — EXISTING BUILDING NOT PART OF THIS DSA APPLICATION

VICINITY MAP



KEY PLAN



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative MDC engineers, INC
Consulting Engineers
5101 E. La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056

STAMP

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

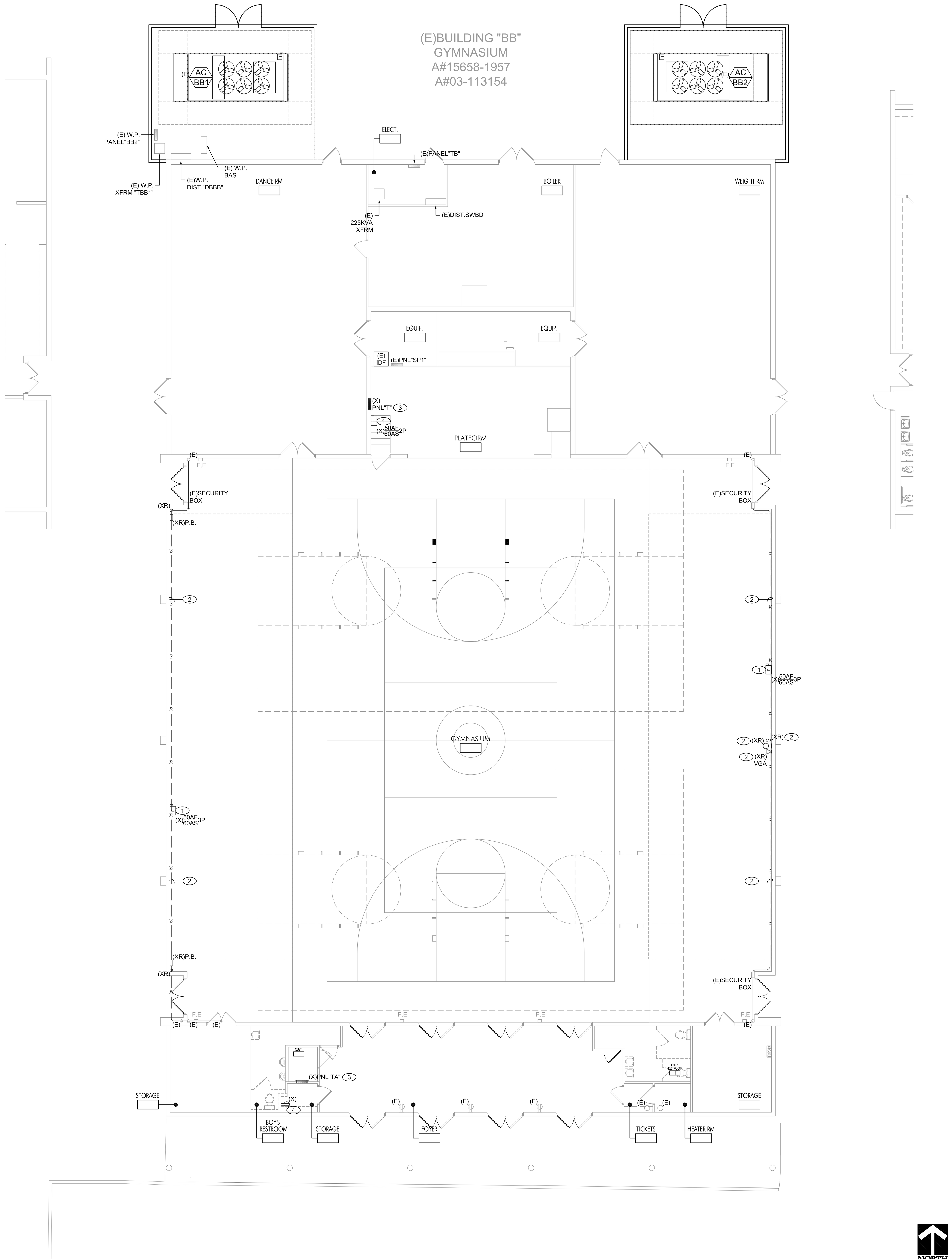
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL SITE PLAN

DATE 07/12/2024
DSA# A# 03-123614
FILE NO. 19-H20

SHEET E1.0



GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

REFERENCE NOTES

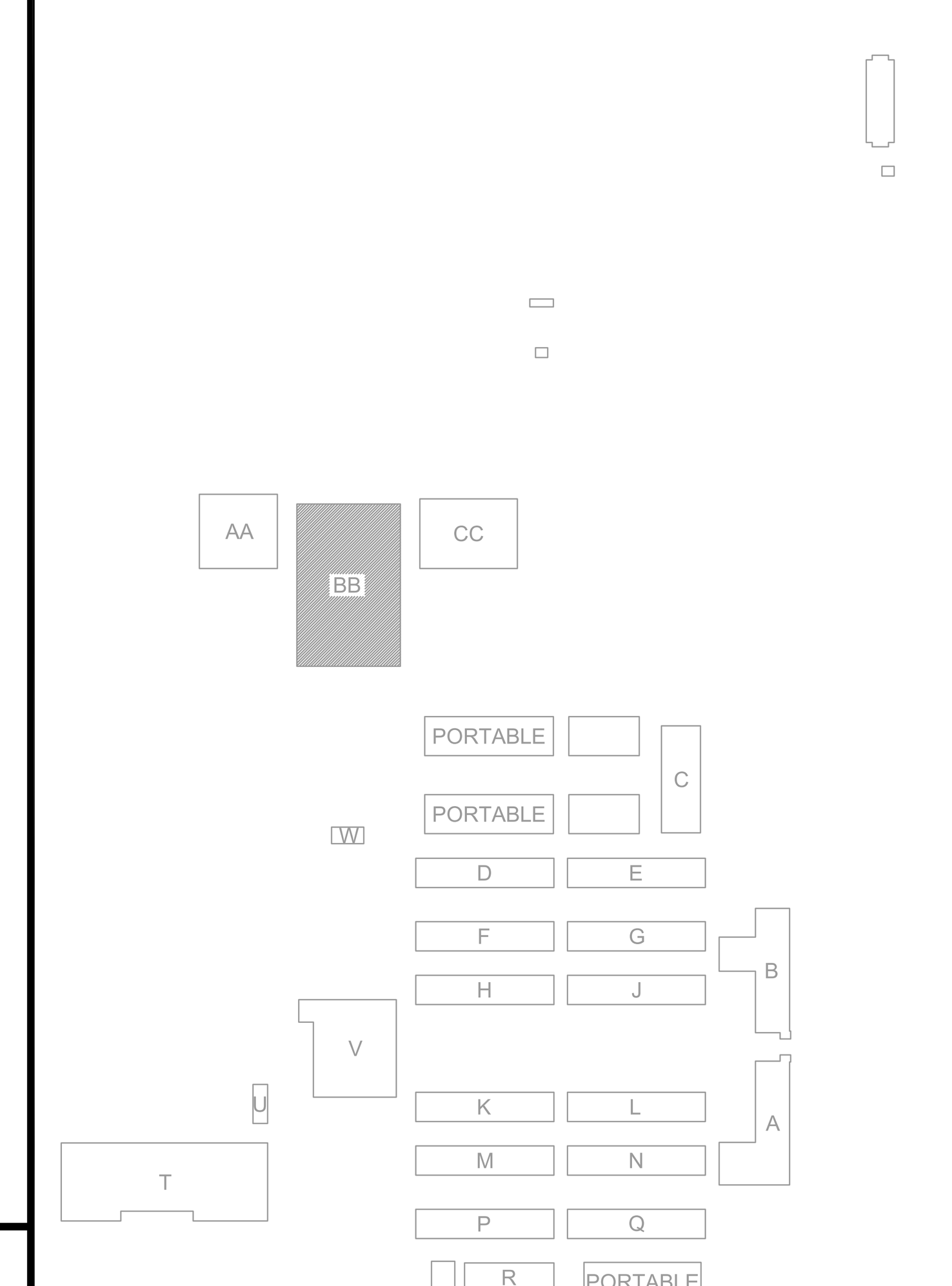
(1) DISCONNECT AND REMOVE EXISTING DISCONNECT SWITCH FOR EXISTING BLEACHER.

(2) DISCONNECT AND RELOCATE EXISTING PULL BOX AND CONDUIT WITH CABLE/WIRING (POWER/FIRE ALARM/SECURITY) BEHIND BLEACHER AS REQUIRED TO ACCOMMODATE NEW BLEACHER, FIELD VERIFY. EXTEND CONDUIT AND CABLE/WIRING AS REQUIRED. NO SPLICING ALLOWED FOR FIRE ALARM AND SECURITY. ALL CABLING SHALL TERMINATE FROM DEVICE/TERMINAL CABINET TO DEVICE.

(3) REPLACE EXISTING ELECTRICAL PANEL WITH NEW ELECTRICAL PANEL (FLUSH MOUNTED, SQ-D NQ M.L.O & QO (BOLT ON), SEE PANEL SCHEDULE). RECONNECT EXISTING FEEDER AND BRANCH CIRCUIT WIRING TO NEW PANEL. EXTEND WIRING AS REQUIRED TO RECONNECT ALL EXISTING CIRCUITS. ALL BRANCH BREAKERS SHALL BE MATCHED WITH EXISTING TYPE/STYLE/AIC RATING. ALL UNUSED BRANCH BREAKERS SHALL BE LABELED AS "SPARE". ALL EXISTING LOADS SHALL BE IDENTIFIED AND UPDATE PANEL DIRECTORY CARDS.

(4) DISCONNECT AND REMOVE EXISTING OUTLET, SALVAGE EXISTING BRANCH CIRCUIT WIRING , AND RECONNECT TO NEW OUTLET AS INDICATED. EXTEND CONDUIT & WIRING AS REQUIRED. PROVIDE NEW DECORA STYLE DUPLEX OUTLET WITH STAINLESS STEEL COVER PLATE.

KEY PLAN



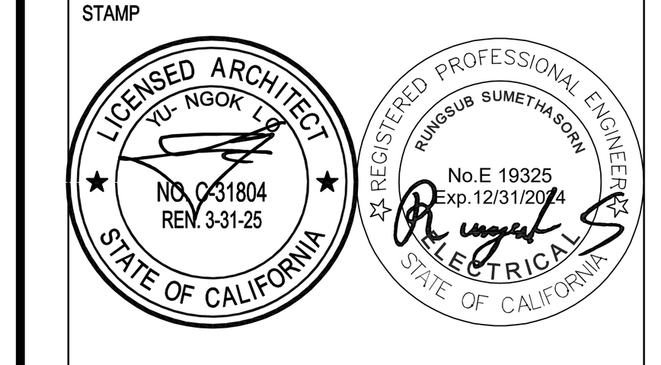
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP



BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL GYM BUILDING "BB" DEMOLITION FLOOR PLAN

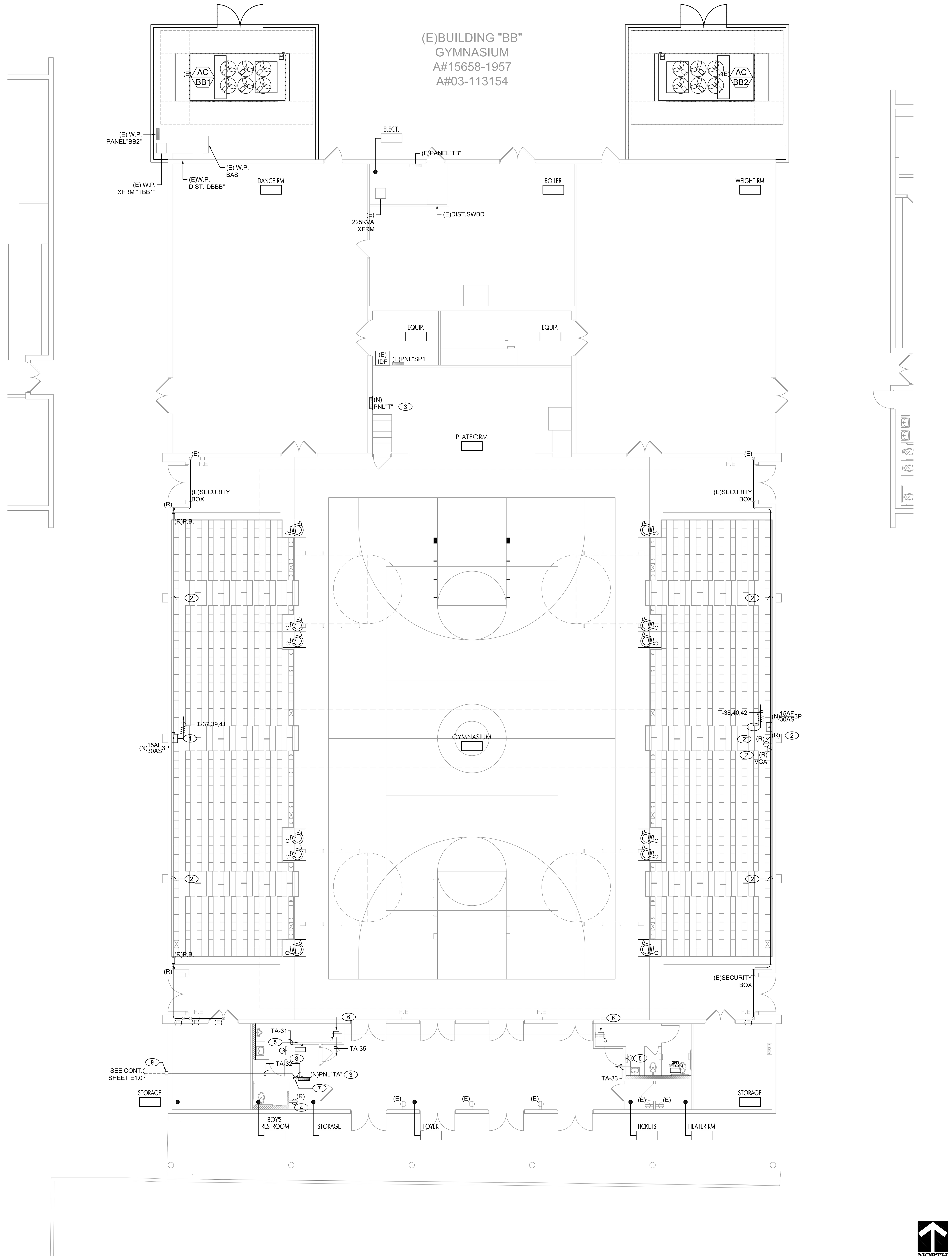
DATE 07/12/2024
DSA # A# 03-123614
FILE NO. 19-H20

SHEET E1.1

ELECTRICAL GYM BUILDING "BB" DEMOLITION FLOOR PLAN

SCALE 1/8" = 1'-0"

1



DATE:	27-Aug-24	PANEL VOLTAGE:	120/208V	CIRCUIT CODE:	1=(CONTINUOUS)
LOCATION	BLDG. BB - PLATFORM	PHASE & WIRE:	3PH, 4W		2=(NON-CONTINUOUS)
PANEL:	Replace with new T	COPPER BUS:	225A		3=(RECEPTACLES)
AIC RATING:	12KAIC	MAINS CB:	MLO		

CKT		CB		LOAD DESIGNATION				LOAD	PHASES			LOAD	LOAD DESIGNATION				CB		CKT	
NO.	CODE	TRIP	POLE	DESCRIPTION	MISC	REC	LITE	VA	A	B	C	VA	LITE	REC	MISC	DESCRIPTION	POLE	TRIP	CODE	NO.
1	1	20	1	(E) LIGHTING GYM			2	344	688			344	2			(E) LIGHTING GYM	1	20	1	2
3	1	20	1	(E) LIGHTING GYM			2	344		688		344	2			(E) LIGHTING GYM	1	20	1	4
5	1	20	1	(E) LIGHTING GYM			2	344			688	344	2			(E) LIGHTING GYM	1	20	1	6
7	1	20	1	(E) LIGHTING GYM			2	344	688			344	2			(E) LIGHTING GYM	1	20	1	8
9	1	20	1	(E) LIGHTING GYM			2	344		688		344	2			(E) LIGHTING GYM	1	20	1	10
11	1	20	1	(E) LIGHTING GYM			2	344			688	344	2			(E) LIGHTING GYM	1	20	1	12
13	1	20	1	(E) LIGHTING GYM			2	344	344							SPARE	1	20		14
15	1	20	1	(E) LIGHTING GYM			2	344		344						SPARE	1	20		16
17	1	20	1	(E) LIGHTING GYM			2	344			344					SPARE	1	20		18
19	1	20	1	(E) LIGHTING GYM			2	344	794			450	4			(E) EXIT SIGN, EXT. LIGHT	1	20	1	20
21	1	20	1	(E) LIGHTING GYM			2	344		344		600	2			(E) LIGHTING GYM	1	20	1	22
23	1	20	1	(E) LIGHTING GYM			2	344			344	600	2			(E) LIGHTING GYM	1	20	1	24
25	1	20	1	(E) LIGHTING GYM			2	344	344			600	2			(E) LIGHTING GYM	1	20	1	26
27	1	20	1	(E) LIGHTING PLATFORM			4	64		964		600		6		(E) RECPT GYM	1	20	3	28
29	1	20	1	(E) LIGHTING PLATFORM			4	64			1144	1080		6		(E) RECPT PLATFORM	1	20	3	30
31		20	1	SPARE					0							SPARE	1	20		32
33	1	60	2	(E) PANEL "SP1"				1000		2000		1000			1	(E) WHEEL CHAIR LIFT	1	20	2	34
35	1	1	1	-				1000			1000						1	20		36
37	2	15	1	WEST BLEACHER	4			609.7	1219.4			609.7			4	EAST BLEACHER	1	15	2	38
39	2	1	1	-	4			609.7		1219.4		609.7			4	-	1	1	2	40
41	2	1	1	-	4			609.7			1219.4	609.7			4	-	1	1	2	42
								TOTAL	4677.4	6847.4	6027.4	CONNECTED KVA				17.6				

NOTE: REPLACE EXISTING ELECTRICAL PANEL WITH NEW ELECTRICAL PANEL (FLUSH MOUNTED). RECONNECT EXISTING FEEDER AND BRANCH CIRCUIT WIRING TO NEW PANEL. EXTEND WIRING AS REQUIRED TO RECONNECT ALL EXISTING CIRCUITS. ALL BRANCH BREAKERS SHALL BE MATCHED WITH EXISTING AIC RATING. ALL UNUSED BRANCH BREAKERS SHALL BE LABELED AS "SPARE". ALL EXISTING LOADS SHALL BE IDENTIFIED AND UPDATE PANEL DIRECTORY CARDS.
REPLACE ALL EXISTING CONTACTOR WITH NEW CONTACTOR AND CABINET.
** PROVIDE LOCK ON DEVICE TO CIRCUIT BREAKER HANDLE, WITH RED MARKING, ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, IDENTIFIED AS "FIRE ALARM CIRCUIT", AND LOCATION OF CIRCUIT BREAKER PERMANENTLY IDENTIFIED AT FIRE ALARM CONTROL UNIT IN COMPLIANCE WITH 2022 CFC/CBC 907, NFPA 72 10.6.5.2 AND 2022 CEC 760.

FEED FROM (E)DIST.SWBD, BLDG "BB" GYM

CONN.KVA (CODE 1)	10.9
CONN.KVA (CODE 2)	4.7
CONN.KVA (CODE 3)	2.0
FEEDER DEMAND KVA	20.3
FEEDER DEMAND AMPS	56.3

DATE:	27-Aug-24	PANEL VOLTAGE:	120/208V	CIRCUIT CODE:	1=(CONTINUOUS)
LOCATION	BLDG. BB - CUSTODIAN	PHASE & WIRE:	3PH, 4W		2=(NON-CONTINUOUS)
PANEL:	Replace with new TA	COPPER BUS:	225A		3=(RECEPTACLES)
AIC RATING:	12KAIC	MAINS CB:	MLO		

CKT		CB		LOAD DESIGNATION				LOAD	PHASES			LOAD	LOAD DESIGNATION				CB		CKT	
NO.	CODE	TRIP	POLE	DESCRIPTION	MISC	REC	LITE	VA	A	B	C	VA	LITE	REC	MISC	DESCRIPTION	POLE	TRIP	CODE	NO.
1	1	20	1	(E) EXIT SIGN			10	250	478			228	6			(E) LIGHTING FOYER	1	20	1	2
3	1	20	1	(E) LIGHTING & EF GR	1		10	415		643		228	6			(E) LIGHTING FOYER	1	20	1	4
5	1	20	1	(E) LIGHTING & EF BR	1		10	387			750	363	6			(E) EXT. LIGHT	1	20	1	6
7	3	20	1	(E) RECPT GYM		6		1080	2080			1000			1	(E) BASKETBALL	1	20	2	8
9	2	20	1	(E)SUPPLY FAN HEATER 1-1/3HP	1			700		1700		1000			1	(E) BASKETBALL	1	20	2	10
11		20	1	SPARE							1000	1000			1	(E) BASKETBALL	1	20	2	12
13	2	20	1	(E) WATHER HEATER	1			1500	1500							SPARE	1	20		14
15	2	20	2	(E)DISCONNECT FC	1			1248		1248						SPARE	1	20		16
17	2	-	-	-				1248			1248					SPARE	1	20		18
19	2	20	1	(E) BASKETBALL	1			1000	1000							SPARE	1	20		20
21	2	20	1	(E) BASKETBALL	1			1000		1500		500			1	**(E) FCPS	1	20	1	22
23	2	20	1	(E) BASKETBALL	1			1000			1000					SPARE	1	20		24
25	3	20	1	(E) RECPT TRAINER RM		6		1080	1620			540		3		(E) RECEPT HALLWAY	1	20	3	26
27		20	1	SPARE						2300		2300			1	(E)TRAINER WATER HEATER	2	30	2	28
29	1	20	1	(E) EMERGENCY LIGHT			10	250			2550	2300				-	-	-	2	30
31	2	20	1	HAND DRYER BR	1			1725	1793			68	1		1	EXTERIOR POLE LIGHT & TC	1	20	1	32
33	2	20	1	HAND DRYER GR	1			1725		1725						SPARE	1	20		34
35	3	20	1	GFI RECEPT RESTROOM		2		360			360					SPARE	1	20		36
37		20	1	SPARE					0							SPARE	1	20		38
39		20	1	SPARE						0						SPARE	1	20		40
41		20	1	SPARE							0					SPARE	1	20		42
								TOTAL	8471	9116	6908	CONNECTED KVA				24.5				

NOTE: REPLACE EXISTING ELECTRICAL PANEL WITH NEW ELECTRICAL PANEL (FLUSH MOUNTED). RECONNECT EXISTING FEEDER AND BRANCH CIRCUIT WIRING TO NEW PANEL. EXTEND WIRING AS REQUIRED TO RECONNECT ALL EXISTING CIRCUITS. ALL BRANCH BREAKERS SHALL BE MATCHED WITH EXISTING AIC RATING. ALL UNUSED BRANCH BREAKERS SHALL BE LABELED AS "SPARE". ALL EXISTING LOADS SHALL BE IDENTIFIED AND UPDATE PANEL DIRECTORY CARDS.
REPLACE ALL EXISTING CONTACTOR WITH NEW CONTACTOR AND CABINET.
** PROVIDE LOCK ON DEVICE TO CIRCUIT BREAKER HANDLE, WITH RED MARKING, ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, IDENTIFIED AS "FIRE ALARM CIRCUIT", AND LOCATION OF CIRCUIT BREAKER PERMANENTLY IDENTIFIED AT FIRE ALARM CONTROL UNIT IN COMPLIANCE WITH 2022 CFC/CBC 907, NFPA 72 10.6.5.2 AND 2022 CEC 760.

FEED FROM (E)DIST.SWBD, BLDG "BB" GYM

CONN.KVA (CODE 1)	2.7
CONN.KVA (CODE 2)	18.7
CONN.KVA (CODE 3)	3.1
FEEDER DEMAND KVA	25.2
FEEDER DEMAND AMPS	69.9

GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

REFERENCE NOTES

(1) PROVIDE DISCONNECT SWITCH (+60"AFF) FOR NEW BLEACHER. REFER TO BLEACHER DRAWINGS (PC DRAWING) AND COORDINATE WITH BLEACHER CONTRACTOR FOR EXACT LOCATION AND CONNECT ALL WIRING TO NEW BLEACHER.

(2) DISCONNECT AND RELOCATE EXISTING PULL BOX AND CONDUIT WITH CABLE/WIRING (POWER/FIRE ALARM/SECURITY) BEHIND BLEACHER AS REQUIRED TO ACCOMMODATE NEW BLEACHER, FIELD VERIFY. EXTEND CONDUIT AND CABLE/WIRING AS REQUIRED. NO SPLICING ALLOWED FOR FIRE ALARM AND SECURITY. ALL CABLING SHALL TERMINATE FROM DEVICE/TERMINAL CABINET TO DEVICE.

(3) REPLACE EXISTING ELECTRICAL PANEL WITH NEW ELECTRICAL PANEL (FLUSH MOUNTED, SQ-D NQ M.L.O & QO (BOLT ON), SEE PANEL SCHEDULE). RECONNECT EXISTING FEEDER AND BRANCH CIRCUIT WIRING TO NEW PANEL. EXTEND WIRING AS REQUIRED TO RECONNECT ALL EXISTING CIRCUITS. ALL BRANCH BREAKERS SHALL BE MATCHED WITH EXISTING TYPE/STYLE/AIC RATING. ALL UNUSED BRANCH BREAKERS SHALL BE LABELED AS "SPARE". ALL EXISTING LOADS SHALL BE IDENTIFIED AND UPDATE PANEL DIRECTORY CARDS.

(4) DISCONNECT AND REMOVE EXISTING OUTLET, SALVAGE EXISTING BRANCH CIRCUIT WIRING , AND RECONNECT TO NEW OUTLET AS INDICATED. EXTEND CONDUIT & WIRING AS REQUIRED. PROVIDE NEW DECORA STYLE DUPLEX OUTLET WITH STAINLESS STEEL COVER PLATE.

(5) PROVIDE NEW J-BOX WITH 20A, 120V FOR HAND DRYER, +42"AFF. PROVIDE NEW DEDICATED 20A SINGLE-POLE CIRCUIT BREAKER AS INDICATED. CIRCUIT BREAKER SHALL MATCH BY TYPE/STYLE/AIC RATING.

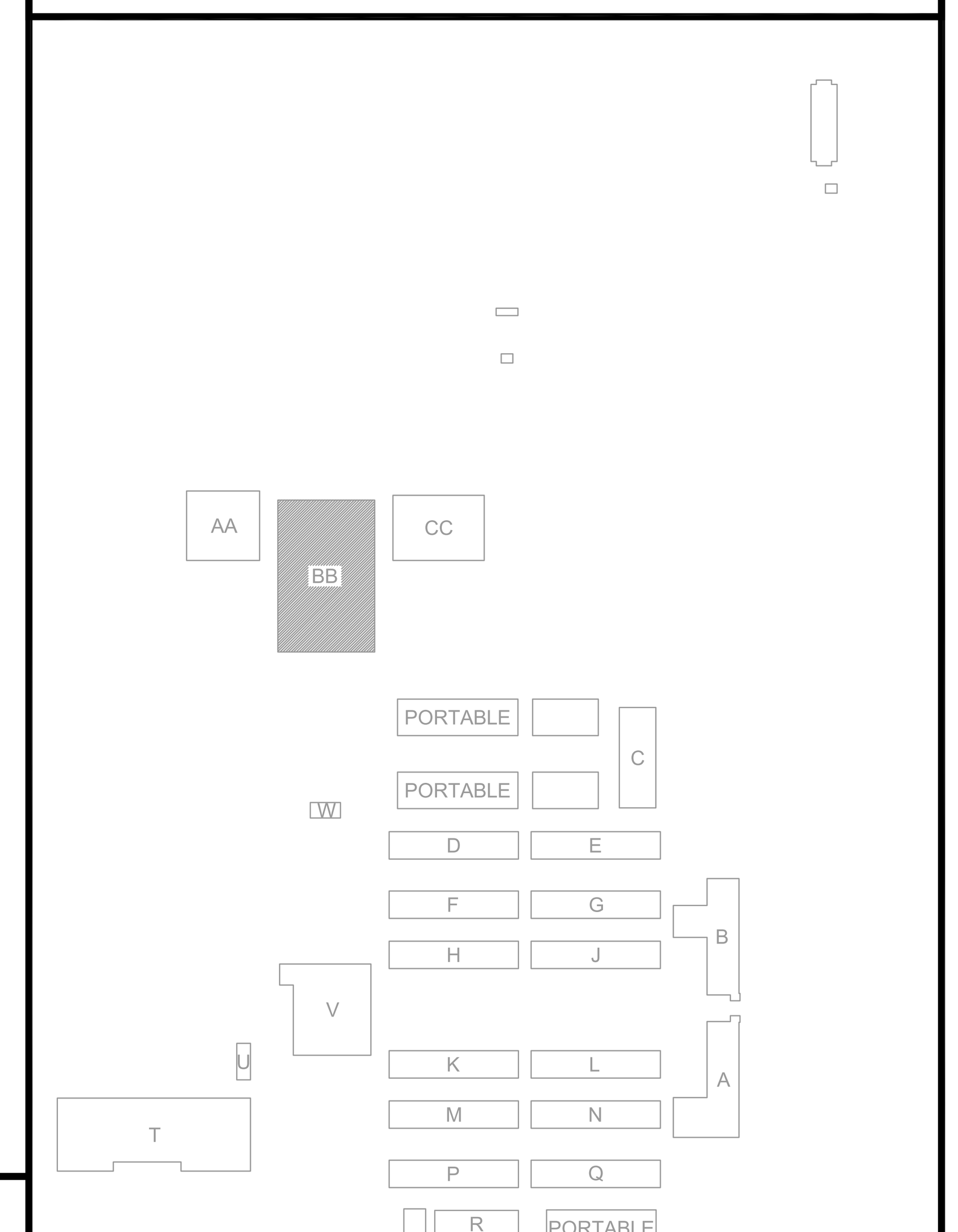
(6) PROVIDE NEW DECORA STYLE DUPLEX OUTLET WITH STAINLESS STEEL COVER PLATE. PROVIDE METAL LOCKABLE OUTLET COVER.

(7) PROVIDE (N)TIME CLOCK, INTERMATIC #ET2825CR, FOR CONTROL OF NEW LIGHTING AT SAFE DISPERSAL AREA. POWERED FROM (N)LIGHTING CIRCUIT.

(8) NEW CIRCUIT FOR EXTERIOR LIGHTING TO BE FED VIA (N)TIME CLOCK.

(9) PROVIDE LBs/PULL BOXES(NEMA-3R) FOR SURFACE MOUNT GRC CONDUIT AT WALL AND PROVIDE UL LISTED CAULKING.

KEY PLAN



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP
LICENSED ARCHITECT YU- NGOK LO NO. C-31804 REN. 3-31-25 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER RUNGSUB SUMETHASORN No.E 19325 Exp.12/31/2024 ELECTRICAL STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

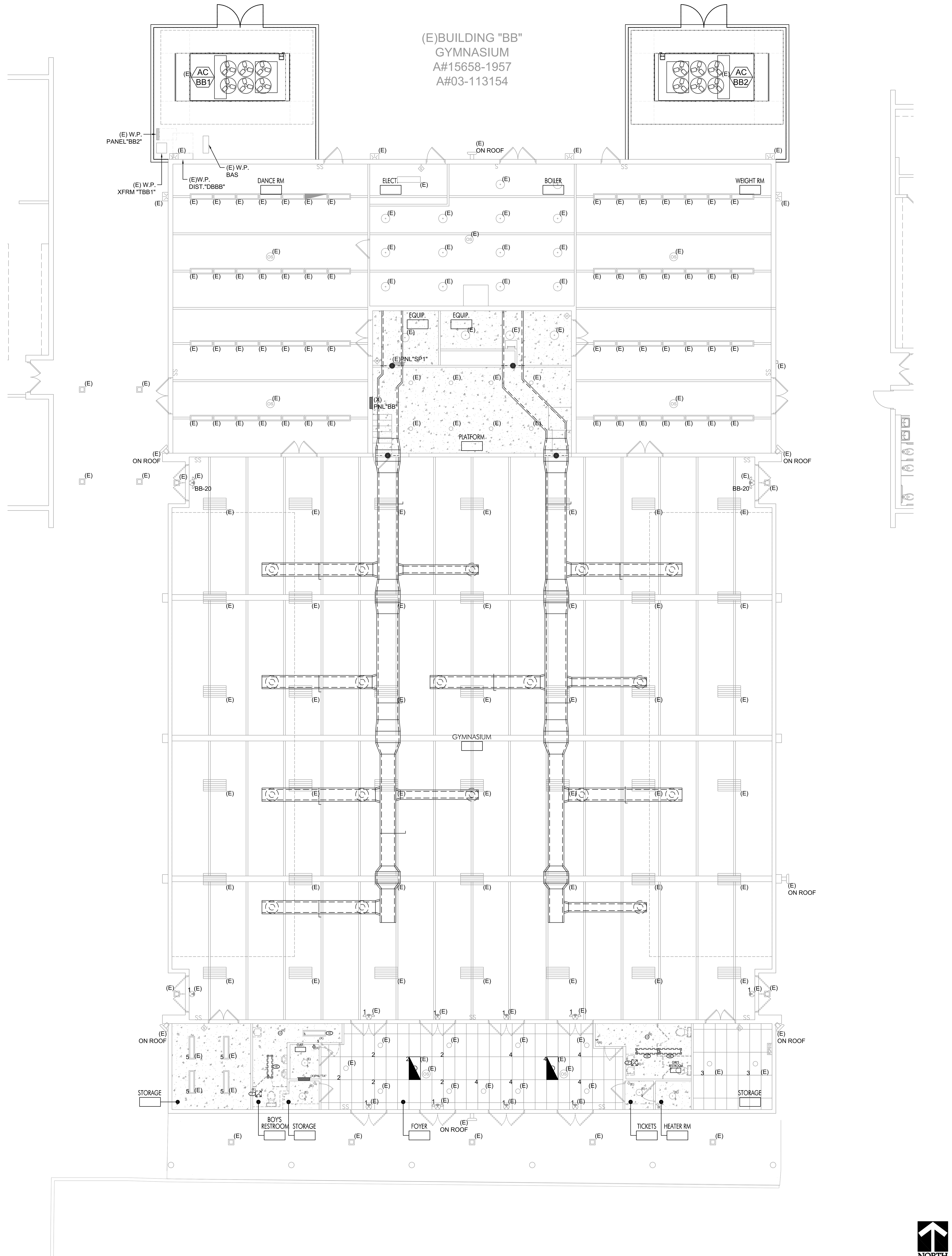
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL GYM BUILDING "BB" FLOOR PLAN

DATE 07/12/2024
DSA A# A# 03-123614
FILE NO. 19-H20
SHEET E1.2

ELECTRICAL GYM BUILDING "BB" FLOOR PLAN | SCALE 1/8" = 1'-0" | 1



GENERAL NOTES

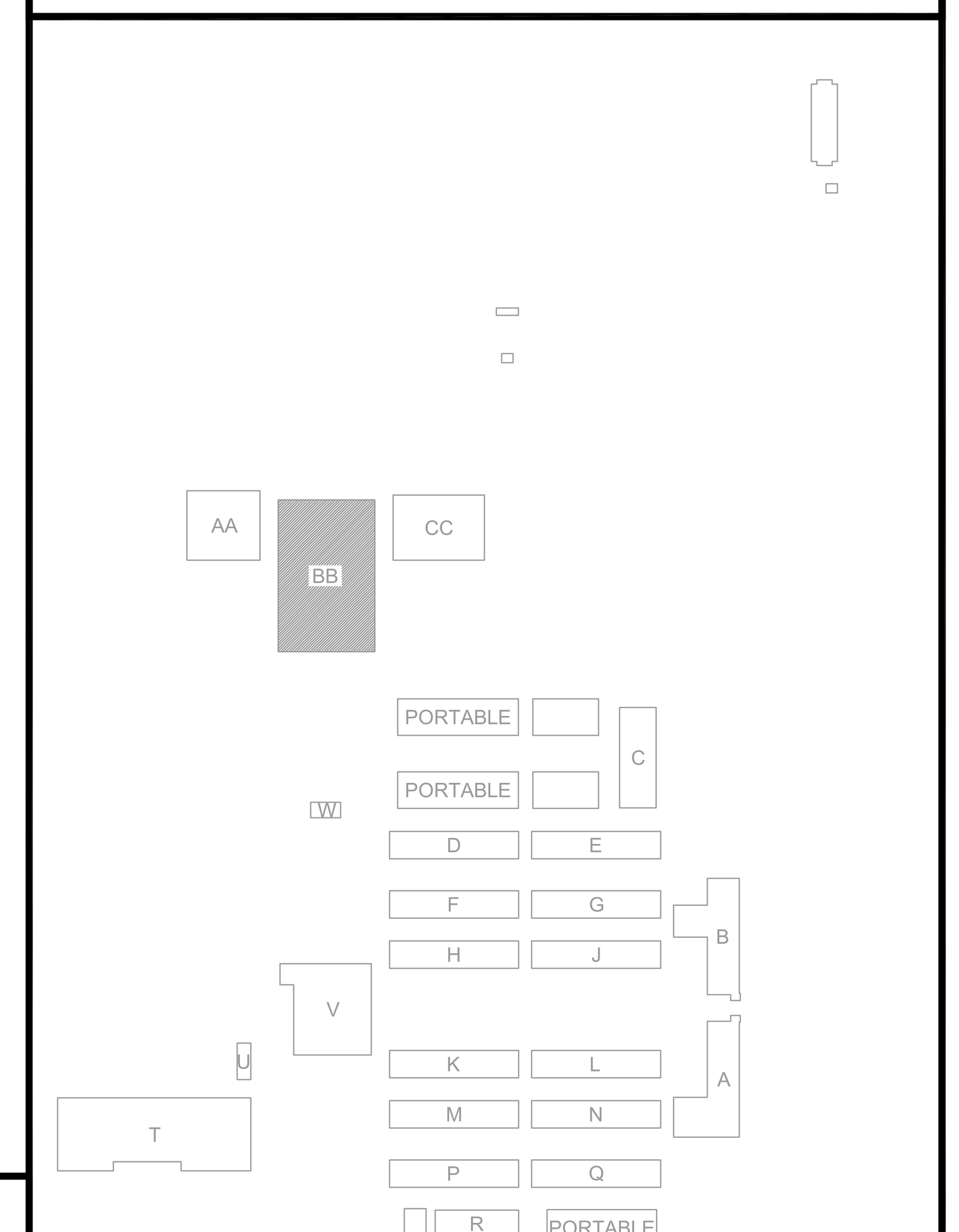
1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

REFERENCE NOTES

(1E) DISCONNECT AND RELOCATED EXISTING LIGHT FIXTURE, SALVAGE EXISTING BRANCH CIRCUIT WIRING , AND RECONNECT TO EXISTING LIGHTING AS INDICATED. LOCATE EXISTING LIGHTING FIXTURE 12" AWAY FROM ANY EXISTING FIRE DEVICE/LIGHTING FIXTURE OCCUPANCY SENSOR LOCATION. RECONNECT TO EXISTING LIGHTING SWITCH/OCCUPANCY SENOR FOR LIGHTING CONTROLS. EXTEND CONDUIT & WIRING AS REQUIRED.

(2) EXISTING EXHAUST FAN TO REMAIN, TO BE CONTROLLED BY LIGHT SWITCH/OCCUPANCY SENSOR.

KEY PLAN



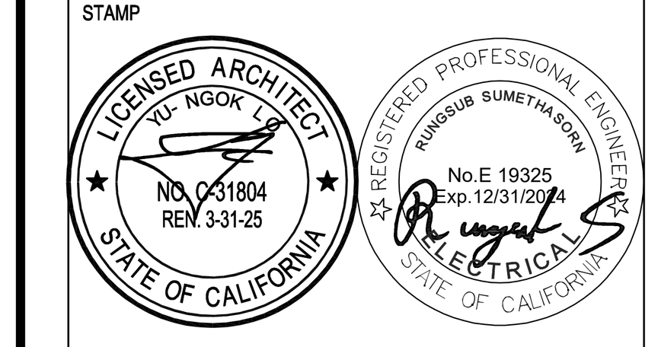
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP



BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

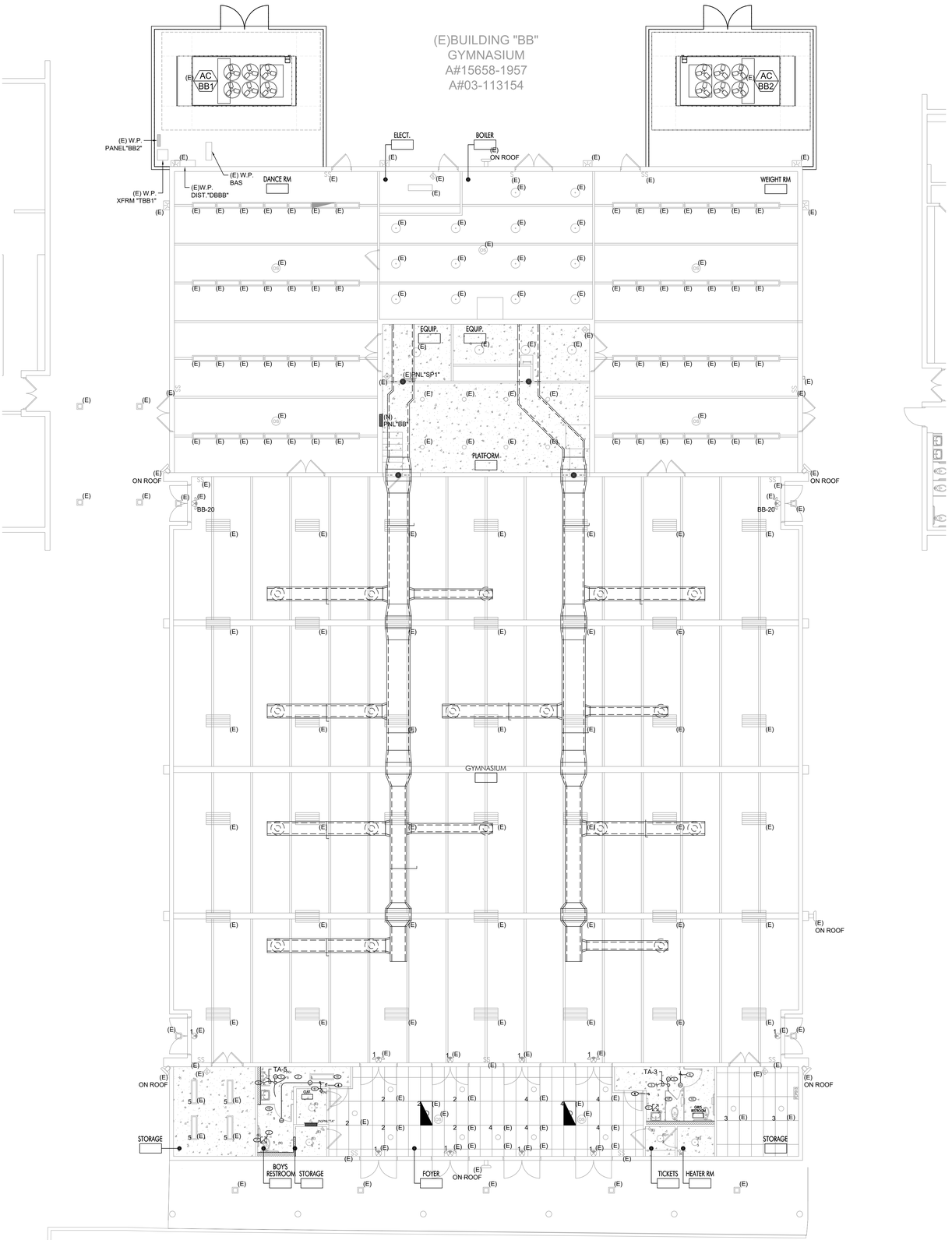
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL GYM BUILDING "BB" DEMOLITION LIGHTING PLAN

DATE 07/12/2024
DSA # A# 03-123614
FILE NO. 19-H20
SHEET E2.1

ELECTRICAL GYM BUILDING "BB" DEMOLITION LIGHTING PLAN | SCALE 1/8" = 1'-0" | 1



GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

VAPE SENSORS

ALL VAPE SENSORS SHALL BE IP VIDEO CORPORATION'S HALO SMART SENSOR V2C FOR K-12 EDUCATION COMPLETE WITH FIRMWARE, SOFTWARE, INTEGRATIONS AND 3-YEAR WARRANTY, CONNECTED WITH CAT 6 CABLE AND PROGRAMMED TO DISTRICT IDF. REFER TO MANUFACTURER'S INSTALLATION AND PLACEMENT GUIDE. COMPLY WITH DISTRICT STANDARD SPECIFICATIONS DIVISION 27

HALO VAPE SENSORS: PROVIDED & INSTALLED BY CONTRACTOR WITH BACK BOX (CEILING FLUSH - WHERE CEILING IS REPLACED WITH NEW & SURFACE MOUNTED WHERE EXISTING CEILING IS REUSED).

PROVIDE 1" CONDUIT TO IDF WITH (1) CAT 6 CABLE TO EACH SENSOR PER PUSD ITS STANDARDS
PROVIDE NEW LEVITON CAT 6 KEYSTONES (ORANGE COLOR) FOR ALL NEW VAPE SENSOR DEVICES TO MODULAR PATCH PANELS.
PROVIDE ADDITIONAL SLEEVES & NEW CONDUITS FOR ALL NEW VAPE SENSORS FROM SENSORS TO IDF (EACH VAPE SENSOR RECEIVES CAT 6 CABLE TO IDF). CONTRACTORS ARE NOT ALLOWED TO USE EXISTING CONDUITS OR CONDUIT PATHWAYS UNLESS OTHERWISE NOTED BELOW.

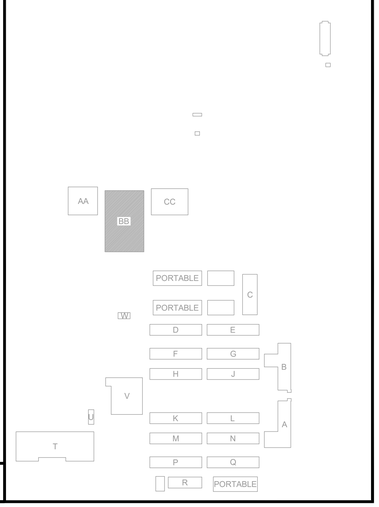
DATA CABLE SHALL BE TESTED AND CERTIFIED.

GYM BUILDING "BB" (IDF)
THERE ARE UNUSED PORTS ON THE PATCH PANEL FOR THE VAPE SENSORS.
USE EXISTING EMPTY SWITCH PORTS FOR VAPE SENSORS.

REFERENCE NOTES

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE, SALVAGE EXISTING BRANCH CIRCUIT WIRING , AND RECONNECT TO NEW LIGHTING AS INDICATED. LOCATE NEW LIGHTING FIXTURE 12" AWAY FROM ANY EXISTING FIRE DEVICE/LIGHTING FIXTURE OCCUPANCY SENSOR LOCATION. RECONNECT TO EXISTING OCCUPANCY SENOR FOR LIGHTING CONTROLS. EXTEND CONDUIT & WIRING AS REQUIRED.
1E. DISCONNECT AND RELOCATED EXISTING LIGHT FIXTURE, SALVAGE EXISTING BRANCH CIRCUIT WIRING , AND RECONNECT TO EXISTING LIGHTING AS INDICATED. LOCATE EXISTING LIGHTING FIXTURE 12" AWAY FROM ANY EXISTING FIRE DEVICE/LIGHTING FIXTURE OCCUPANCY SENSOR LOCATION. RECONNECT TO EXISTING LIGHTING SWITCH/OCCUPANCY SENOR FOR LIGHTING CONTROLS. EXTEND CONDUIT & WIRING AS REQUIRED.
2. PROVIDE NEW 1x4 LIGHT FIXTURE, KENALL #MLRS12-48-F-MW-PP-45L40K-DCC-1-DV. CONNECT EXISTING LIGHTING CIRCUIT TO NEW LIGHTING AS INDICATED. LOCATE NEW LIGHTING FIXTURE 12" AWAY FROM ANY EXISTING FIRE DEVICE/LIGHTING FIXTURE OCCUPANCY SENSOR LOCATION. RECONNECT TO EXISTING OCCUPANCY SENOR FOR LIGHTING CONTROLS. EXTEND CONDUIT & WIRING AS REQUIRED.
3. CONNECT NEW LIGHT FIXTURES TO EXISTING BRANCH CIRCUIT SALVAGED FROM DEMOLITION. EXTEND CONDUIT, WIRING, AND FIXTURE FEEDS AS REQUIRED.
4. PROVIDE NEW KEYED SWITCH (NO DIMMING) WITH STAINLESS STEEL COVER PLATE .
5. PROVIDE NEW OCCUPANCY SENSOR,SENSOR SWITCH #CM-PDT-9, WITH POWER PACK (LOCATED ADJACENT TO SENSOR). INTERCEPT EXISTING LIGHTING CIRCUIT AND CONNECT OCCUPANCY SENSOR FOR 7-24 AUTOMATIC SHUT OFF REQUIREMENT. PROVIDE WIREMOLD AT HARD LID CEILING, AS REQUIRED.
6. PROVIDE RECESSED 5S JUNCTION BOX AND NEW 1" CONDUIT WITH CAT6 CABLE TO EXISTING IDF (CONTRACTORS ARE NOT ALLOWED TO USE EXISTING CONDUITS OR CONDUIT PATHWAYS) FOR HALO SMART SENSOR (FLUSH MOUNTED WHERE CEILING IS APPLICABLE OR NEW CEILING. SURFACE MOUNTED WHERE EXISTING CEILING IS NOT ABLE TO FLUSH MOUNTED), REQUIRED 5 YEARS WARRANTY. ALL WORK SHALL COMPLY WITH SPECIFICATIONS DIVISION 27 AND PUSD ITS STANDARDS.
7. EXISTING EXHAUST FAN TO REMAIN, TO BE CONTROLLED BY LIGHT SWITCH/OCCUPANCY SENSOR.

KEY PLAN



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC Engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP

LICENSED ARCHITECT
NO. C31804
REN 8-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No.E 19326
Exp.12/31/2025
ELECTRICAL
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

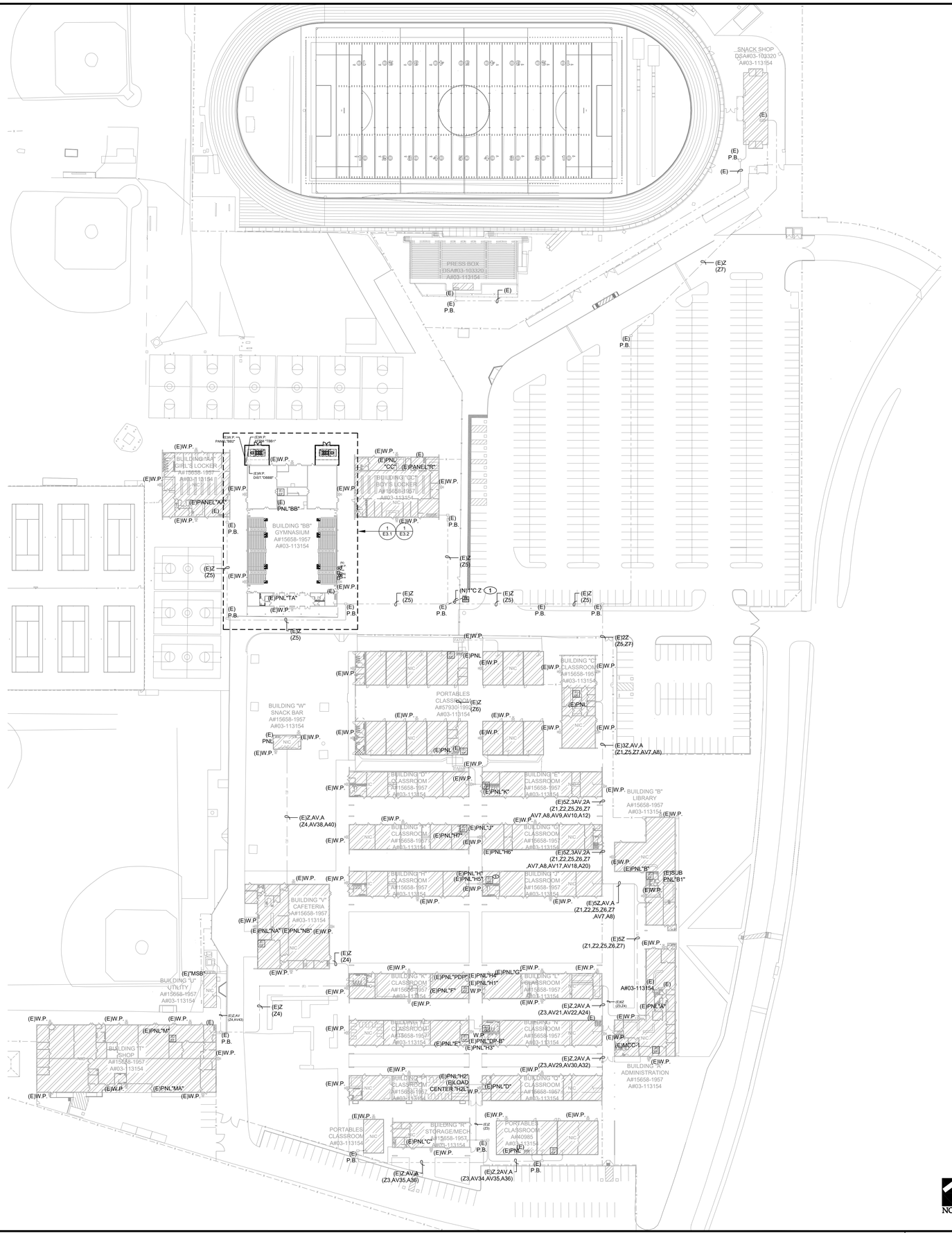
POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL GYM BUILDING "BB" LIGHTING PLAN

DATE: 07/12/2024
DSA A#: A# 03-123614
FILE NO. 19-H20
SHEET: E2.2

ELECTRICAL GYM BUILDING "BB" LIGHTING PLAN | SCALE 1/8" = 1'-0" | 1



FIRE ALARM SITE PLAN

1

SCALE
1" = 50'-0"

GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
    - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
    - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
    - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

REFERENCE NOTES

① PROVIDE 1" PVC (SCH40) UNDERGROUND CONDUIT WITH FIRE ALARM CABLE AS SHOWN. SAW CUT, TRENCH FOR NEW UNDERGROUND CONDUITS (SEE DETAIL 8/E4.1). PATCH EXISTING SURFACES TO MATCH ADJACENT SURFACES, AND AVOID EXISTING UTILITIES AND THE EQUIPMENT.

BUILDING SITE PLAN SYMBOLS LIST

☐	EXISTING BUILDING AS PART OF THIS DSA APPLICATION
▨ NIC	EXISTING BUILDING NOT PART OF THIS DSA APPLICATION

VICINITY MAP

KEY PLAN

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-
discipline
collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP

LICENSED ARCHITECT
YU- NGOK LO
NO. C-31804
REN. 3-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
RUNGSUB SUMETHASORN
No.E 19325
Exp.12/31/2024
ELECTRICAL
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

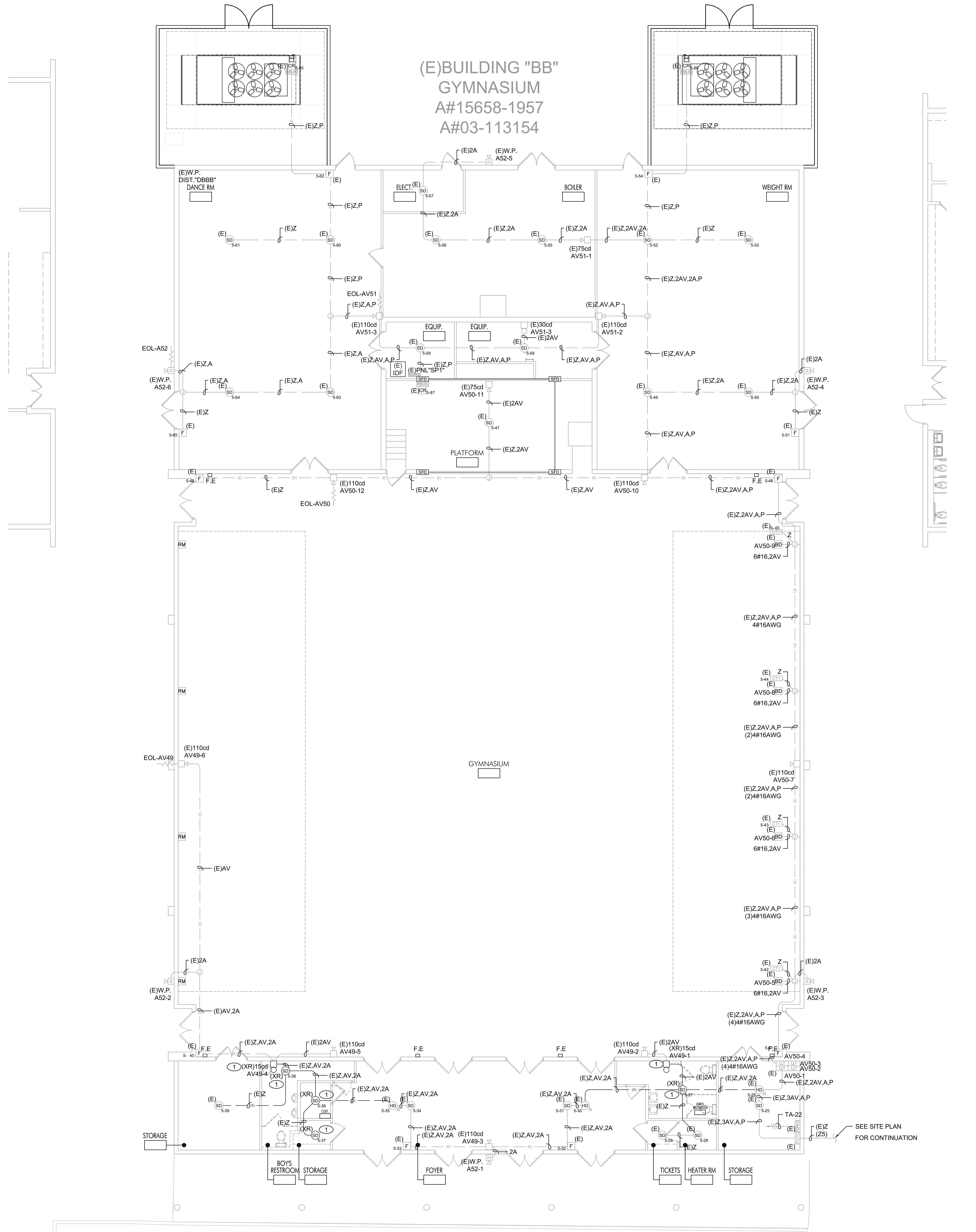
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED
SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE ALARM SITE PLAN

DATE	07/12/2024
DSA A#	A# 03-123614 FILE NO. 19-H20
SHEET	E3.0



FIRE ALARM GYM BUILDING "BB" DEMOLITION FLOOR PLAN

SCALE
1/8" = 1'-0"

1

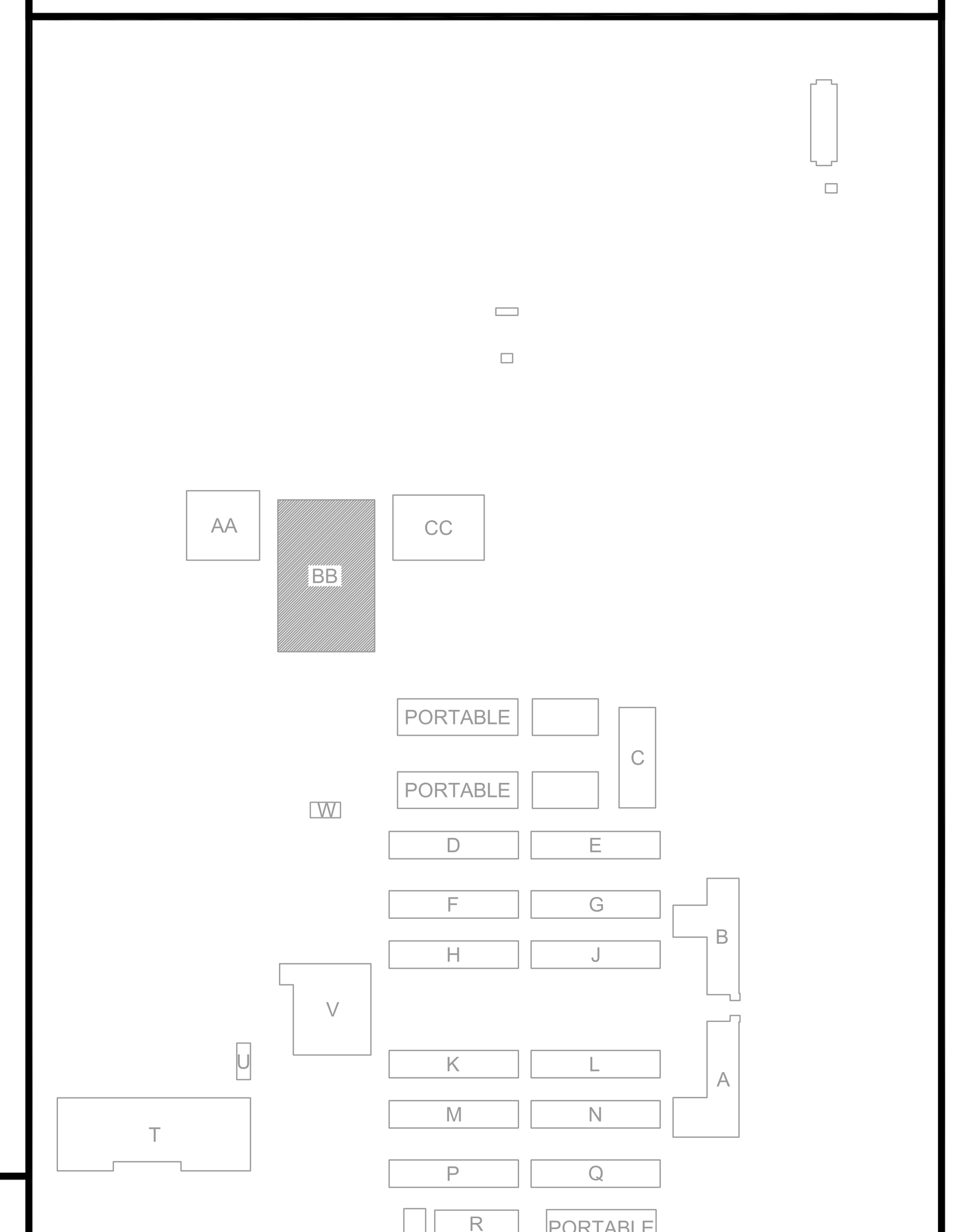
GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

REFERENCE NOTES

(1) DISCONNECT AND SALVAGE EXISTING FIRE ALARM SYSTEM DEVICES/WIRING. RELOCATED TO NEW SURFACE AND RECONNECT AS INDICATED. EXTEND CONDUIT & WIRING AS REQUIRED. EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM DSA APPROVED RECORD DRAWINGS (A#03-113154).

KEY PLAN



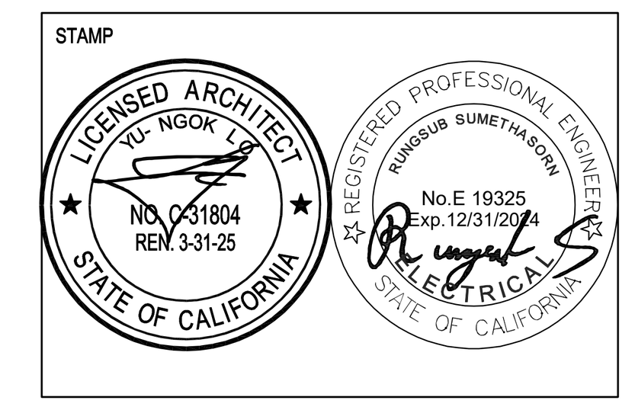
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP



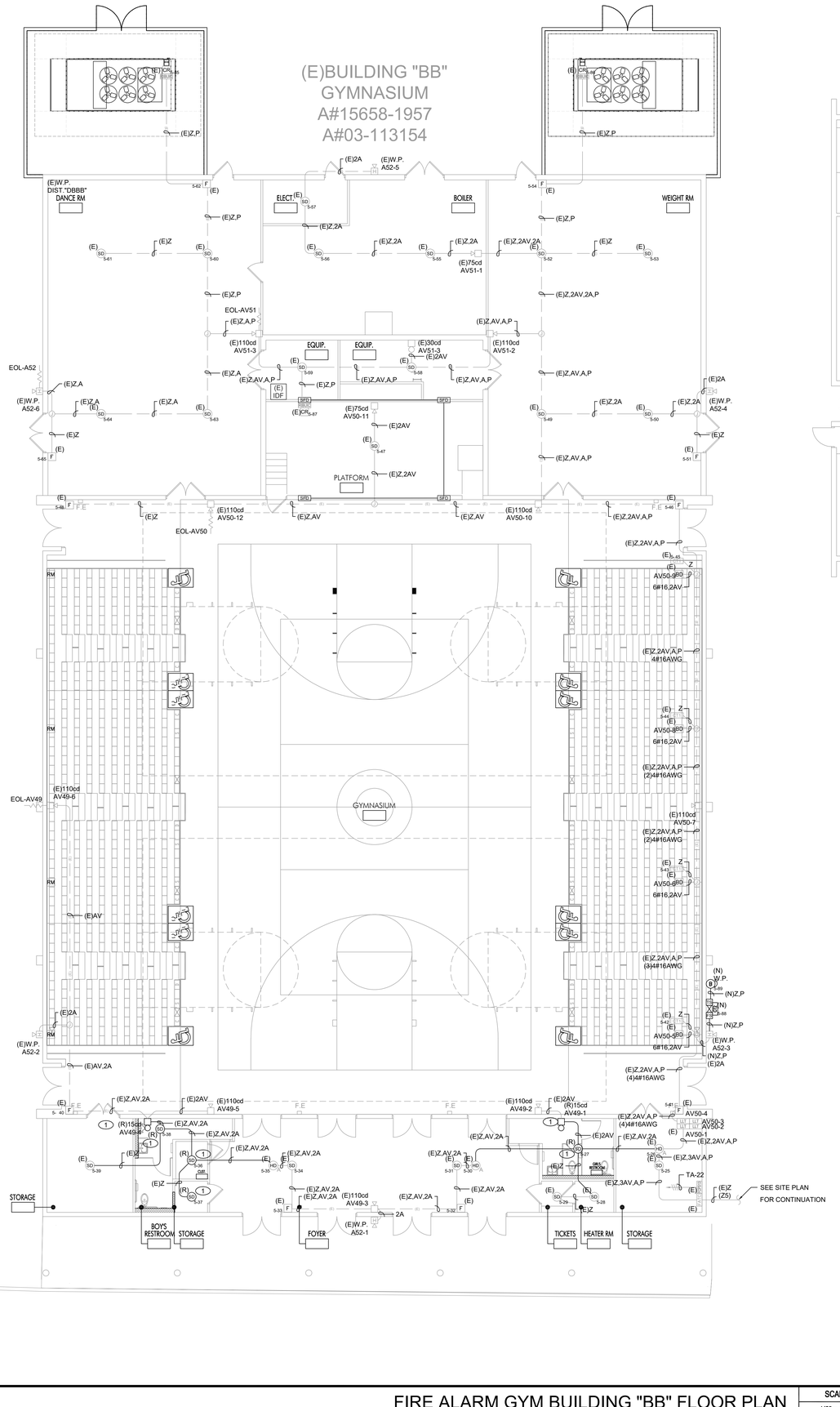
BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE ALARM GYM BUILDING "BB" DEMOLITION FLOOR PLAN

DATE 07/12/2024
DSA # A# 03-123614
FILE NO. 19-H20
SHEET E3.1



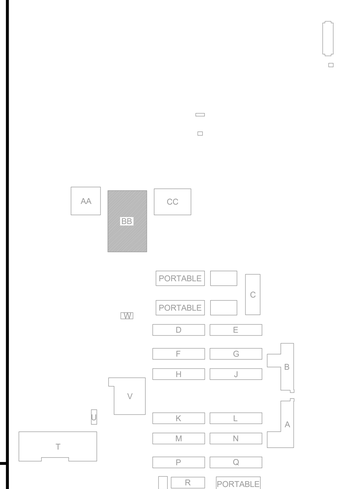
GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED. ALL FIRE WATCH REQUIRED MUST BE PROVIDED BY CONTRACTOR AND TO BE COORDINATED WITH DISTRICT & IOR DURING CONSTRUCTION.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 28 31 00B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
3. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
4. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%). OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.
5. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE EXCAVATING FOR NEW UNDERGROUND UTILITIES. FIELD VERIFY AND COORDINATE PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO OPERATION OF FACILITIES AT NO ADDITIONAL COST TO THE OWNER. IT MAY BE NECESSARY TO RUN NEW UTILITIES UNDER/OVER EXISTING UTILITIES (CROSSOVER).

REFERENCE NOTES

1. DISCONNECT AND SALVAGE EXISTING FIRE ALARM SYSTEM DEVICES/WIRING. RELOCATED TO NEW SURFACE AND RECONNECT AS INDICATED. EXTEND CONDUIT & WIRING AS REQUIRED. EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM DSA APPROVED RECORD DRAWINGS (A#03-113154).

KEY PLAN



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC Engineers, INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP
LICENSED ARCHITECT
NO. C31804
REN. 8-31-25
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
No.E 19325
Exp.12/31/25
ELECTRICAL
STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

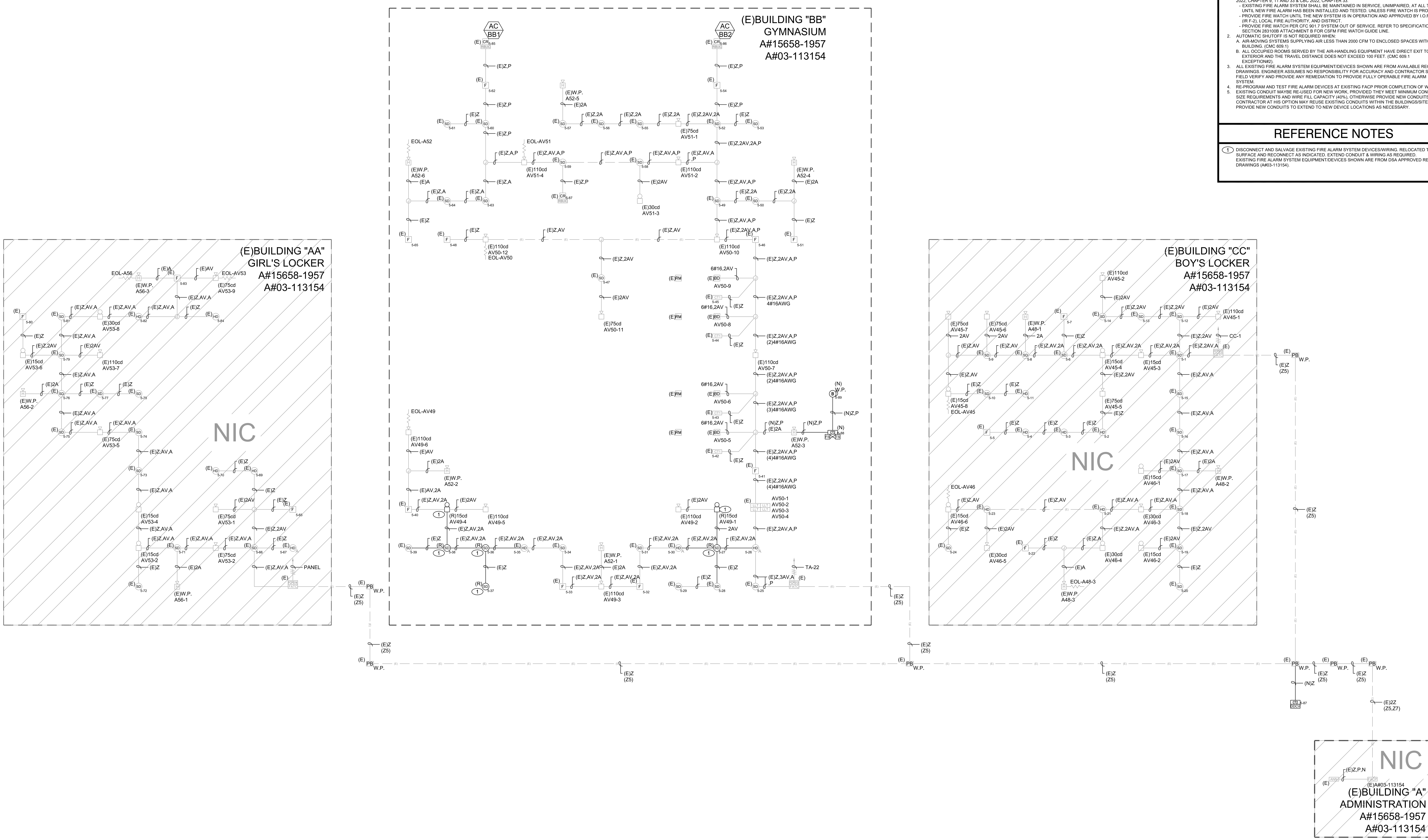
POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE ALARM GYM BUILDING "BB" FLOOR PLAN

DATE 07/12/2024
DSA A# A# 03-123614
FILE NO. 19-H20
SHEET E3.2

FIRE ALARM GYM BUILDING "BB" FLOOR PLAN | SCALE 1/8" = 1'-0" | 1



GENERAL NOTES

1. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE WITH CFC 2022, CHAPTER 9, 11 AND 33 & CBC 2022, CHAPTER 33.
   - EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED IN SERVICE, UNIMPAIRED, AT ALL TIMES UNTIL NEW FIRE ALARM HAS BEEN INSTALLED AND TESTED. UNLESS FIRE WATCH IS PROVIDED.
   - PROVIDE FIRE WATCH UNTIL THE NEW SYSTEM IS IN OPERATION AND APPROVED BY I.O.R., DSA (IR F-2), LOCAL FIRE AUTHORITY, AND DISTRICT.
   - PROVIDE FIRE WATCH PER CFC 901.7 SYSTEM OUT OF SERVICE. REFER TO SPECIFICATION SECTION 283100B ATTACHMENT B FOR CSFM FIRE WATCH GUIDE LINE.
2. AUTOMATIC SHUTOFF IS NOT REQUIRED WHEN:
   A. AIR-MOVING SYSTEMS SUPPLYING AIR LESS THAN 2000 CFM TO ENCLOSED SPACES WITHIN BUILDING. (CMC 609.1)
   B. ALL OCCUPIED ROOMS SERVED BY THE AIR-HANDLING EQUIPMENT HAVE DIRECT EXIT TO THE EXTERIOR AND THE TRAVEL DISTANCE DOES NOT EXCEED 100 FEET. (CMC 609.1 EXCEPTION#2).
3. ALL EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM AVAILABLE RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY AND CONTRACTOR SHALL FIELD VERIFY AND PROVIDE ANY REMEDIATION TO PROVIDE FULLY OPERABLE FIRE ALARM SYSTEM.
4. RE-PROGRAM AND TEST FIRE ALARM DEVICES AT EXISTING FACP PRIOR COMPLETION OF WORK.
5. EXISTING CONDUIT MAYBE RE-USED FOR NEW WORK, PROVIDED THEY MEET MINIMUM CONDUIT SIZE REQUIREMENTS AND WIRE FILL CAPACITY (40%), OTHERWISE PROVIDE NEW CONDUITS. CONTRACTOR AT HIS OPTION MAY REUSE EXISTING CONDUITS WITHIN THE BUILDINGS/SITE AND PROVIDE NEW CONDUITS TO EXTEND TO NEW DEVICE LOCATIONS AS NECESSARY.

REFERENCE NOTES

(1) DISCONNECT AND SALVAGE EXISTING FIRE ALARM SYSTEM DEVICES/WIRING. RELOCATED TO NEW SURFACE AND RECONNECT AS INDICATED. EXTEND CONDUIT & WIRING AS REQUIRED. EXISTING FIRE ALARM SYSTEM EQUIPMENT/DEVICES SHOWN ARE FROM DSA APPROVED RECORD DRAWINGS (A#03-113154).

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6443

STAMP

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE ALARM RISER DIAGRAM

DATE 07/12/2024
DSA # A# 03-123614
FILE NO. 19-H20
SHEET E3.3

FIRE ALARM RISER DIAGRAM
SCALE N.T.S.
1

FCPS#	BLDG	CON.	CIRCUIT	DISTANCE (FT)	NUMBER OF DEVICES: Strobe 15cd	Horn-Strobe 15cd	Horn-Strobe 30cd	Horn-Strobe 75cd	Horn-Strobe 110cd	Horn W.P.	INDIVIDUAL CURRENT: Strobe 15cd 0.059	Horn-Strobe 15cd 0.081	Horn-Strobe 30cd 0.094	Horn-Strobe 75cd 0.161	Horn-Strobe 110cd 0.203	Horn W.P. 0.040	TOTAL CURRENT	WIRE SIZE	VOLTAGE DROP %	MAX. DISTANCE (FT)
FCPS-13	BB	(E)	AV49	250	2	0	0	0	4	0	0.118	0.000	0.000	0.000	0.812	0.000	0.930	12	4.51	1195
			AV50	250	0	0	0	1	3	0	0.000	0.000	0.000	0.161	0.609	0.000	0.770	12	3.74	1443
			AV51	250	0	0	1	1	2	0	0.000	0.000	0.094	0.161	0.406	0.000	0.661	12	3.21	1681
			A52	850	0	0	0	0	0	6	0.000	0.000	0.000	0.000	0.000	0.240	0.240	12	3.96	4630

VOLTAGE DROP PERCENTAGE FORMULA

$V_{terminal}$ = 20.4 VOLTS
I_{load} = TOTAL CURRENT DRAW IN AMPERES OF THE CONNECTED APPLIANCES
L = MAX. DISTANCE FROM THE CONTROL UNIT TO THE LAST APPLICATION (IN FEET)
FROM TABLE 8 OF CHAPTER 9 IN NFPA 70, 2022 EDITION.
STRANDED, UNCOATED COPPER CONDUSTORS AT 75°C
THE RESISTANCE PER FOOT (R) FOR 12 AWG IS 0.00198 Ohm/ft
THE RESISTANCE PER FOOT (R) FOR 14 AWG IS 0.00314 Ohm/ft
VOLTAGE DROP PERCENTAGE = $\frac{2 \times L \times I_{load} \times R \times 100}{20.4}$ %

MAX. DISTANCE FROM THE CONTROL UNIT TO THE LAST APPLICATION FORMULA

V_{load} = 16 VOLTS MINIMUM OPERATING VOLTAGE OF APPLIANCE
$V_{terminal}$ = 20.4 VOLTS
I_{load} = TOTAL CURRENT DRAW IN AMPERES OF THE CONNECTED APPLIANCES
L = MAX. DISTANCE FROM THE CONTROL UNIT TO THE LAST APPLICATION (IN FEET)
FROM TABLE 8 OF CHAPTER 9 IN NFPA 70, 2022 EDITION.
STRANDED, UNCOATED COPPER CONDUSTORS AT 75°C
THE RESISTANCE PER FOOT (R) FOR 12 AWG IS 0.00198 Ohm/ft
THE RESISTANCE PER FOOT (R) FOR 14 AWG IS 0.00314 Ohm/ft
$L = \frac{V_{terminal} - V_{load}}{2 \times R \times I_{load}}$ FT

Fire Alarm Battery Calculations: FACP (BUILDING "A", Existing A#03-113154)

DEVICE	MODEL#	CON.	QUANTITY	SUPERVISORY CURRENT EACH UNIT	SUPERVISORY CURRENT SUBTOTAL	ALARM CURRENT EACH UNIT	ALARM CURRENT SUBTOTAL
Fire Alarm Control Panel	EST3	(E)	1		0.000		0.000
Central Processing Unit Module	3-CPU3	(E)	1	0.145000	0.145000	0.155000	0.155000
Network Communication Card	3-RS485B	(E)	1	0.098000	0.098000	0.098000	0.098000
Communication Card	3-RS232	(E)	1	0.058000	0.058000	0.058000	0.058000
Booster Power Supply 120V	3-BPS/M	(E)	1	0.050000	0.050000	0.050000	0.050000
Liquid Crystal Display Module	3-LCD	(E)	1	0.053000	0.053000	0.053000	0.053000
12 switches with 12 Red LED Display/Control Module	3-12SR	(E)	1	0.002000	0.002000	0.002000	0.002000
Single Signature Driver Controller Module	3-SSDC1 *	(E)	4	0.144000	0.576000	0.204000	0.816000
Dual Signature Driver Controller Module	3-SDDC1 *	(E)	1	0.264000	0.264000	0.336000	0.336000
Modem Communicator	3-MODCOM	(E)	1	0.060000	0.060000	0.095000	0.095000
MNEC Serial Communications/LAN interface	MN-COM1S	(E)	1	0.060000	0.060000	0.060000	0.060000
Single Input Signal Module	SIGA-CC1***	(E)	0	0.000223	0.000000	0.000100	0.000000
Synchronization Output Module	SIGA-CC1S	(E)	16	0.000223	0.003568	0.000100	0.001600
Remote LCD Command Module Annunciator	3-LCDANN	(E)	1	0.170000	0.170000	0.192000	0.192000
Double Action (One Stage) Fire Alarm Station	SIGA-278	(E)	10	0.000250	0.002500	0.000400	0.004000
Intelligent Photoelectric Detector	SIGA-PS	(E)	24	0.000045	0.001080	0.000045	0.001080
Intelligent Fixed Temp./Rate-of-Rise Heat Detector	SIGA-HRS	(E)	0	0.000045	0.000000	0.000045	0.000000
Heat Detector, Fixed Temperature with SIGA-CT1	284B-PL	(E)	3	0.000250	0.000750	0.000400	0.001200
Single Input Module	SIGA-CT1	(E)	4	0.000250	0.001000	0.000400	0.001600
Dual Input Module	SIGA-CT2	(N)	2	0.000396	0.000792	0.000680	0.001360
Control Relay Module	SIGA-CR	(E)	3	0.000100	0.000300	0.000100	0.000300
				SUB TOTAL	1.545990		1.926140

* CURRENT DRAW INCLUDED WITH DEVICE ADDRESSES USED

STANDBY TIME = 24 HRS X SUPERVISORY CURRENT	37.104 A
ALARM TIME = 5 MINUTES (0.0833HRS)	0.160 A
ADDITIONAL SPARE CAPACITY @ 25% OF TOTAL CURRENT	9.316 A
TOTAL BATTERY REQUIRED(Ah)	46.580 A
BATTERIES SUPPLIED 60 Ah	

Fire Alarm Battery Calculations: FCPS-13 (BUILDING "BB", Existing A#03-113154)

DEVICE	MODEL#	CON.	QUANTITY	SUPERVISORY CURRENT EACH UNIT	SUPERVISORY CURRENT SUBTOTAL	ALARM CURRENT EACH UNIT	ALARM CURRENT SUBTOTAL
Remote Booster Power Supply	BPS6A	(E)	1	0.070	0.070	0.195	0.195
15 cd Wall Strobe	G1R-VM	(E)	2	0.000	0.000	0.059	0.118
15 cd Wall Horn-Strobe	G1-HDVM	(E)	0	0.000	0.000	0.081	0.000
30 cd Wall Horn-Strobe	G1-HDVM	(E)	1	0.000	0.000	0.094	0.094
75 cd Wall Horn-Strobe	G1-HDVM	(E)	2	0.000	0.000	0.161	0.322
110 cd Wall Horn-Strobe	G1-HDVM	(E)	9	0.000	0.000	0.203	1.827
15 cd Ceiling Horn-Strobe	GC-HDVM	(E)	0	0.000	0.000	0.076	0.000
Weatherproof Exterior Horn	757-1A-T	(E)	6	0.000	0.000	0.040	0.240
Relay 10 Amp SPDT with 10-30 Vac/Dc/120 Vac Coil	RIBU1C	(E)	3	0.018	0.054	0.018	0.054
10" 24V Fire Alarm Bell, Red	439D-10-AWR	(N)	1	0.000	0.000	0.085	0.085
				SUB TOTAL	0.070		2.881

* CURRENT DRAW INCLUDED WITH DEVICE ADDRESSES USED

STANDBY TIME = 24 HRS X SUPERVISORY CURRENT	1.680 A
ALARM TIME = 5 MINUTES (0.0833HRS)	0.240 A
ADDITIONAL SPARE CAPACITY @ 25% OF TOTAL CURRENT	0.480 A
TOTAL BATTERY REQUIRED(Ah)	2.400 A
BATTERIES SUPPLIED 7 Ah	

FIRE ALARM EQUIPMENT SCHEDULE

SYMBOL	CON.	QTY.	MODEL	MANUFACTURER	DESCRIPTION	CSFM #	INSTALLATION/MOUNTING
FACP (A#03-113154)	(E)	1	EST3	EST	Fire Alarm Control Panel	7165-1657:0186	Wallbox provided
	(E)	1	3-CPU3	EST	Central Processing Unit Module	7165-1657:0186	Mount on 2-Left most LRM spaces
	(E)	1	3-RS485B	EST	Network Communication Card	7165-1657:0186	Back of 3-CPU3
	(E)	1	3-RS232	EST	Communication Card	7165-1657:0186	Back of 3-CPU3
	(E)	1	3-PPS/M	EST	Primary Power Supply 120V	7165-1657:0186	Mount on 1 LRM space
	(E)	1	3-BPS/M	EST	Booster Power Supply 120V	7165-1657:0186	Mount on 1 LRM space
	(E)	1	3-LCD	EST	Liquid Crystal Display Module	7165-1657:0186	Mount on 4 LRM space
	(E)	1	3-12SR	EST	12 switches with 12 Red LED Display/Control Module	7165-1657:0186	Mount on 1 LRM space
	(E)	4	3-SSDC1 *	EST	Single Signature Driver Controller Module	7165-1657:0186	Mount on 1 LRM space
	(E)	1	3-SDDC1 *	EST	Dual Signature Driver Controller Module	7165-1657:0186	Mount on 1 LRM space
	(E)	1	3-MODCOM	EST	Modem Communicator	7165-1657:0186	Mount on 1 LRM space
	(E)	1	MN-COM1S	EST	MNEC Serial Communications/LAN interface	7165-1657:0186	Mount on MN-BRKT1
	(E)	1	MN-BRKT2	EST	Mounting Bracket	7165-1657:0186	Take 1 chassis space in wallbox
	(E)	16	SIGA-CC1S	EST	Synchronization Output Module	7300-1657:0121	Inside Cabinet
	(E)	1	3-CAB21B(R)	EST	Red Cabinet with 3 chassis	7165-1657:0186	Wall Mounted
	(E)	1	3-CAB21D(R)	EST	Red Door Cabinet with 3 chassis	7165-1657:0186	Wall Mounted
	(E)	1	3-CHAS7	EST	Chassis with 7 Local Rail Modules	7165-1657:0186	Take 1 chassis space in wallbox
	(E)	13	3-FP	EST	Blank Filler Plate	7165-1657:0186	Mount on 1 LRM space
	(E)	2	12V50A	EST	12V 50Ah Seal Lead Acid Battery	N/A	Mount in Battery Cabinet
	(E)	1	3-RCC7R	EST	Red Wallbox and Door	7165-1657:0186	Wall mounted
	(E)	1	3-BATS	EST	Battery Shelf	7165-1657:0186	Take 1 chassis space in wallbox
FCPS	(E)	1	BPS6A	EST	Remote Booster Power Supply with SIGA-CT1	7300-1657:0229	Wall mounted
	(E)	1	SIGA-CC1S	EST	Synchronization Output Module	7300-1657:0121	Inside BPS6A
	(E)	2	12V7A	EST	12V 7Ah Seal Lead Acid Battery	N/A	Mount in Cabinet
F	(E)	10	SIGA-278	EST	Double Action (One Stage) Fire Alarm Station	7150-1657:0129	Single gang box
SD	(E)	24	SIGA-PS	EST	Intelligent Photoelectric Detector	7272-1657:0126	Mount to SIGA-SB
	(E)	24	SIGA-SB	EST	Detector Mounting Base - Standard	7300-1657:0120	Single gang box
HD	(E)	0	SIGA-HRS	EST	Intelligent Fixed Temp./Rate-of-Rise Heat Detector	7270-1657:0125	Mount to SIGA-SB
	(E)	0	SIGA-SB	EST	Detector Mounting Base - Standard	7300-1657:0120	Single gang box
HD A	(E)	3	284B-PL	EST	Heat Detector, Fixed Temperature with SIGA-CT1	7270-1657:0109	Mount to 280A-PL (included)
BD RM LLT	(E)	4	EC-50R	EST	REFLECTIVE BEAM DETECTOR	7260-1657:0233	Wall Mounted
	(E)	4	EC-LLT	EST	REMOTE TEST STATION	7300-1657:0234	Wall Mounted
	(E)	5	G1R-VM	EST	Genesis Wall Strobe, Red Finish (selectable 15,30,75, or 110 cd)	7125-1657:0218	Wall Mounted
	(E)	18	G1-HDVM	EST	Genesis Wall Horn Strobe, Red Finish (selectable 15,30,75, or 110 cd)	7125-1657:0202	Wall Mounted
H	(E)	9	757-1A-T	EST	Temporal Horn, Red	7135-1657:0188	Mount to 757A-WP
	(E)	9	757A-WB	EST	Weatherproof Box, Red, Surface	7300-1657:0191	Wall Mounted
CT1	(E)	4	SIGA-CT1	EST	Single Input Module	7300-1657:0121	Single gang box with SIGA-MP1 mounting plate
CT2	(N)	2	SIGA-CT2	EST	Dual Input Module	7300-1657:0121	Single gang box with SIGA-MP1 mounting plate
CR	(E)	3	SIGA-CR	EST	Control Relay Module	7300-1657:0121	Single gang box with SIGA-MP1 mounting plate
RIBUIC	(E)	3	RIBU1C	Functional Devices, Inc.	Relay 10 Amp SPDT with 10-30 Vac/Dc/120 Vac Coil	7300-1555:0100	Single gang box
B	(N)	1	439D-10-AWR	EST	10" 24V Fire Alarm Bell, Red	7136-1657:0150	Wall Mounted with weatherproof backbox 449
	(N)	1	SIGA-CC1	EST	Single Input Signal Module	7300-1657:0121	Single gang box with SIGA-MP1 mounting plate
PIV	(N)	1	N/A	N/A	Double Detector Check Valve (DDCV)	N/A	
FS	(N)	1	N/A	N/A	Sprinkler Flow Switch	N/A	
TS	(N)	1	N/A	N/A	Sprinkler Tamper Switch	N/A	

* Provide additional signature driver controller single/dual to accommodate # of addressable devices as indicated on the drawings. maximum of 125 detectors & 125 modules per loop.

Sequence of Operation / System Response (Initiating Device)	MANUAL PULL STATION	AREA SMOKE DETECTOR	AREA HEAT DETECTOR	SPRINKLER WATER FLOW SWITCH	SPRINKLER VALVE TAMPER SWITCH	SPRINKLER DOUBLE DETECTOR CHECK VALVE (DDCV)	SHORT CIRCUIT	BATTERY FAILURE	GROUND FAULT	120VAC POWER FAILURE
ANNUNCIATE AT FIRE CONTROL PANEL (ALARM OR TROUBLE)	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO
ANNUNCIATE AT REMOTE FIRE ALARM ANNUNCIATOR (ALARM OR TROUBLE)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACTIVATE RELAY FOR MONITORING (ALARM OR TROUBLE)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACTIVATE VISUAL ALARM THROUGHOUT BUILDING	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
ACTIVATE AUDIBLE ALARM (3-pulse, temporal pattern) THROUGHOUT BUILDING	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
SOUND SPRINKLER BELL	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO
SHUT DOWN ALL AIR HANDLING (HVAC) THROUGHOUT BUILDING	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO
OFF-SITE REPORTING	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

THE FIRE ALARM SIGNALS WILL OPERATE ACCORDING TO NFPA 72 REQUIREMENTS. IF THE FIRE ALARM SYSTEM IS ACTIVATED AND VOICE EVACUATION MESSAGE IS SIMULTANEOUSLY ACTIVATED, THE FIRE ALARM SIGNAL WILL BE EXTINGUISHED, AND VOICE EVACUATION MESSAGE WILL BE ACTIVATED. THE FIRE ALARM SIGNALS WILL BE REINSTATED ONCE THE VOICE EVACUATION MESSAGE ARE COMPLETED.

CABLE INSTALLED IN CONDUIT

Symbol	Circuit Type	Cable Desc.	Paige # Conduit	Jacket Color	Jacket Stripe	Notes
Z	Signature Analog Addressable Loop	#16 TWP	162MRN	Red	Yellow	Loop Controller (3-SSDC) to signature devices
V	Notification Appliance Circuit (NAC) 24vdc	#12/14 TWP	122MRN/142MRN	Red	Orange	Output circuits on 3-IDC8/4 and modules (CC1, CC1S, CC2)
S	Speaker Circuit	#18 TWP	182MRN	Red	Blue	
P	24V DC Power Distribution	#14 TWP	142MRN	Red	Grey	4 wire detector/Relay/Annc./Door Holder
N	RS-485 Communications Network	#16 TWP	4731A	Black	n/a	5000' max between any three panels

Note: All Fire Alarm cables installed in conduits outdoor and under ground shall be West Penn "Aqua Seal" (AQC) rated or equal. Transition from AQC rated cables to Non-AQC rated cables within building interiors shall be terminated at Fire Alarm Terminal Cabinets (FATC). Where no existing FATC is shown on drawings, provide new FATC 12"x8"x4" NEMA 1 screw cover box with terminal strips for termination. Locate FATC within building at the point of entry to building or as directed by district.
No wiring splices are permitted, all cables shall be terminated at devices terminal or at FATC.
Provide conduit duct sealant water block Foam-Based duct sealling system at all conduit openings (both ends) at each underground pull boxes (existing/new)

Table C1. Maximum Number of Conductors in Electrical Metallic Tubing (EMT) (Based on Table 1, Chapter 9)

Conductor Size AWG	3/4" Conduit: Maximum Number of Conductors	3/4" Conduit: Maximum Weight (lbs/ft)	1" Conduit: Maximum Number of Conductors	1" Conduit: Maximum Weight (lbs/ft)
14 and smaller	22	0.802	35	1.210
12	16	0.834	26	1.274

Note: This table is for concentric THHN stranded conductors only. For cables with compact conductors, the dimensions in table 5A shall be used.

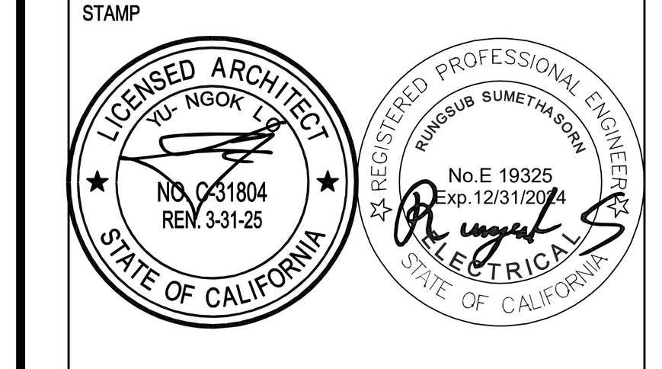
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative MDC engineers, INC
Consulting Engineers

STAMP



BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

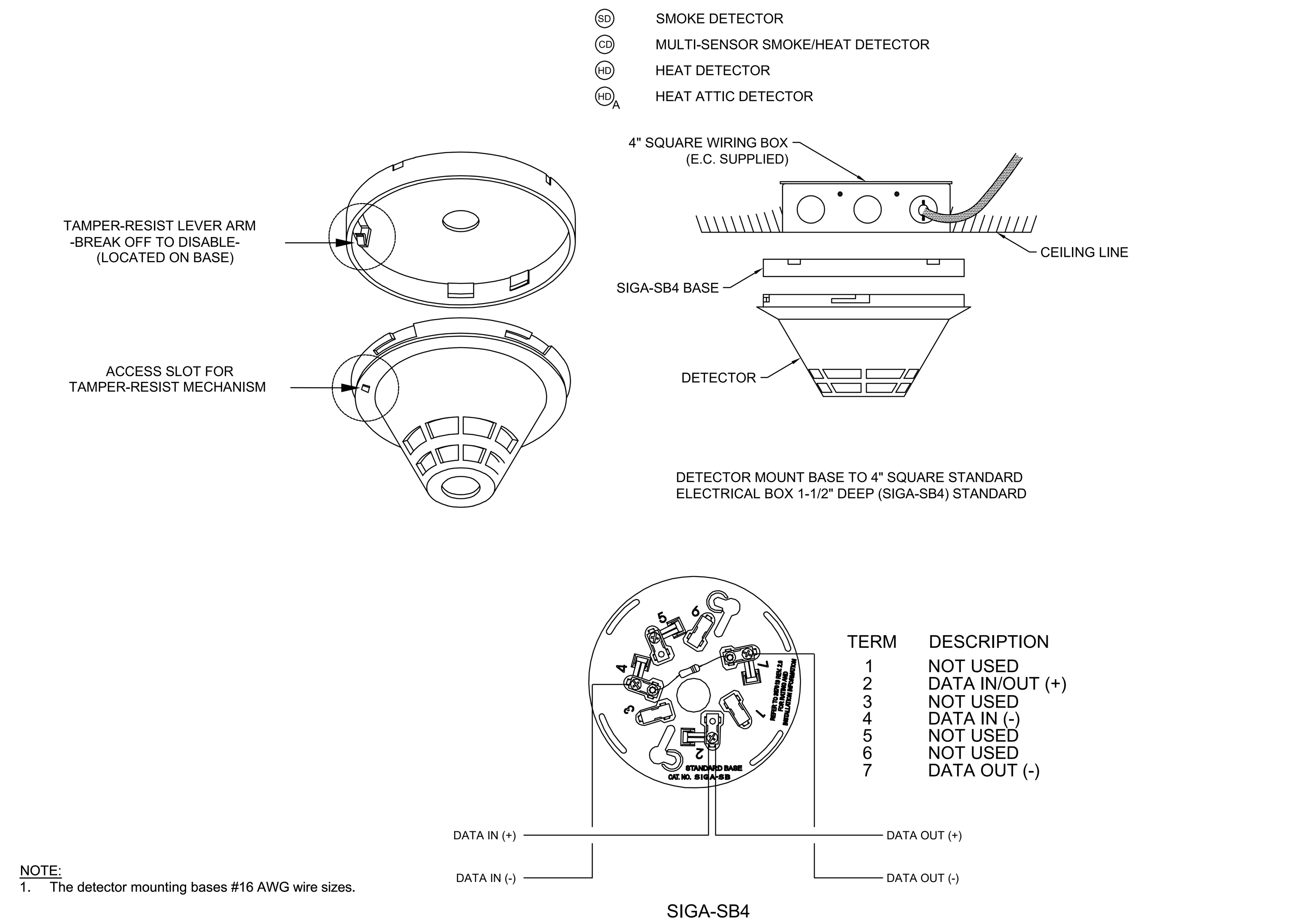
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE ALARM CALCULATIONS

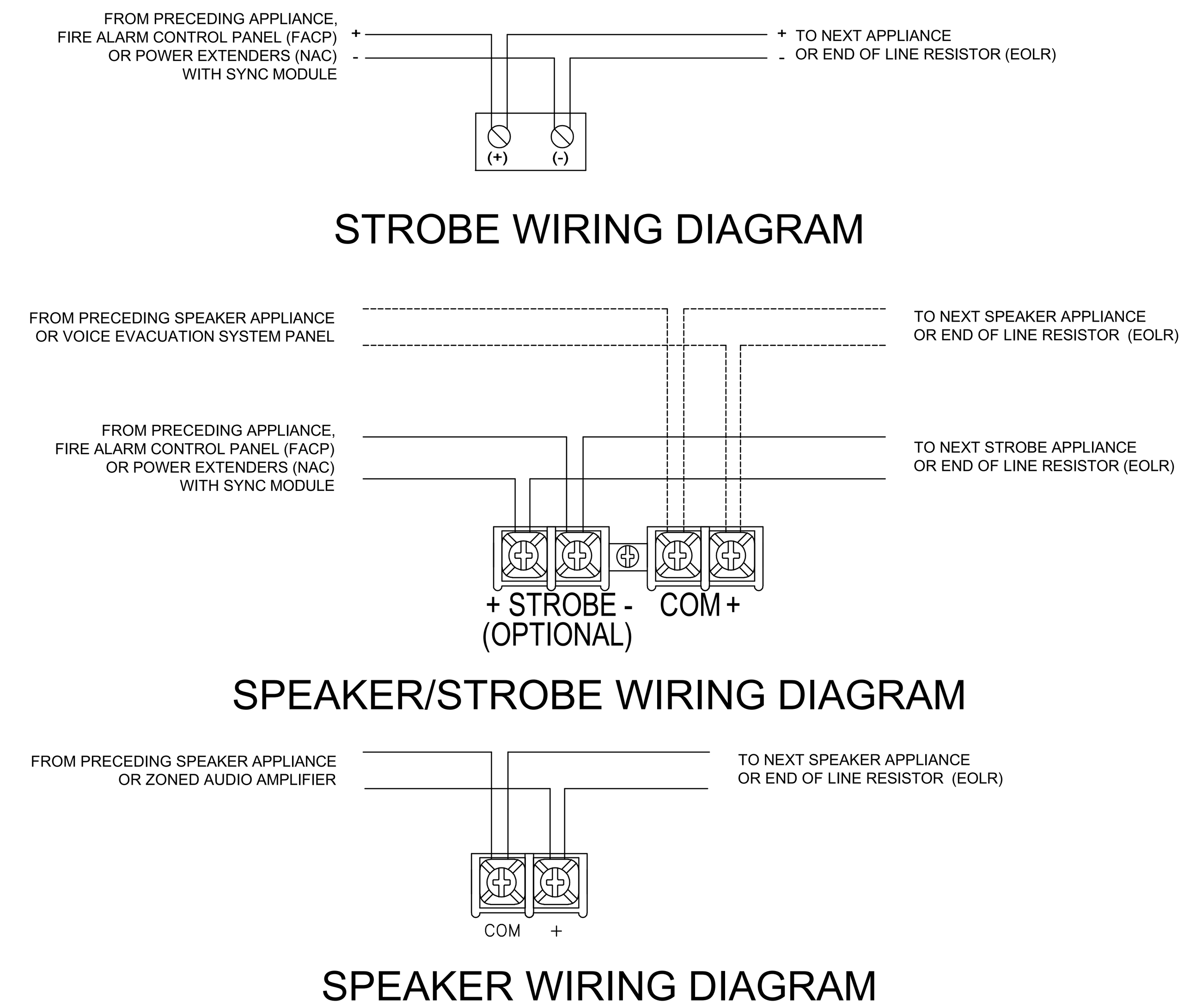
DATE	07/12/2024
DSA#	A# 03-123614 FILE NO. 19-H20
SHEET	E3.4



NOTE:
1. The detector mounting bases #16 AWG wire sizes.

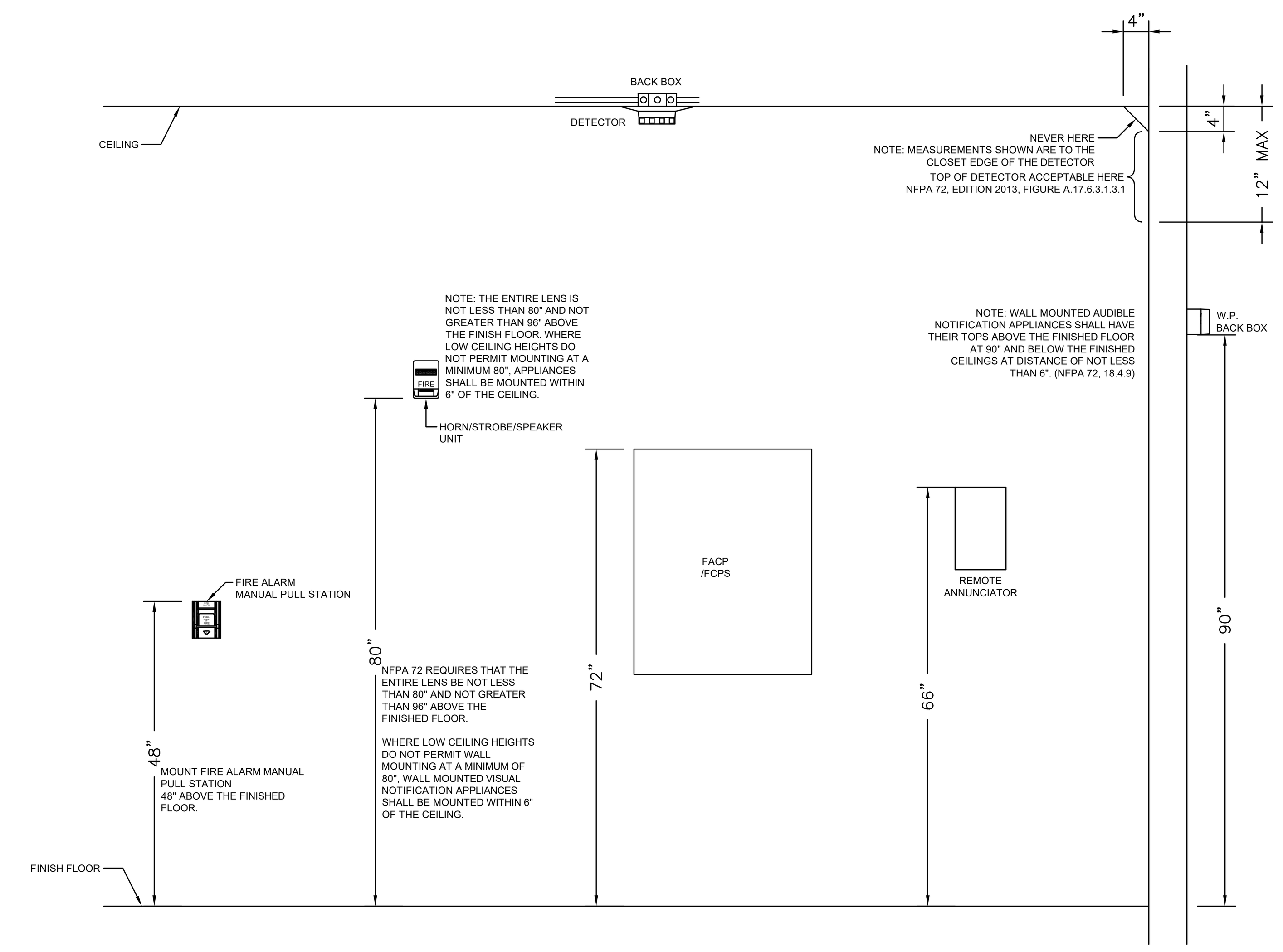
SMOKE/HEAT DETECTOR DETAIL

SCALE N.T.S. 1



SPEAKER/STROBE WIRING DIAGRAM

SCALE N.T.S. 2

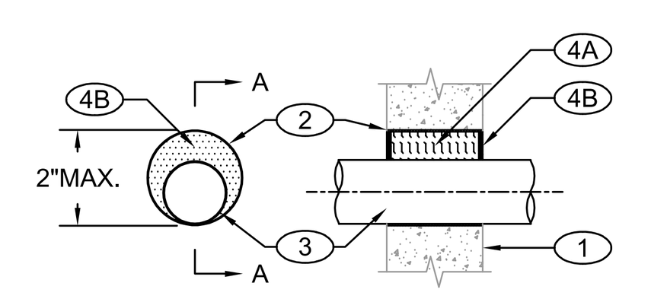


DEVICE ELEVATIONS

SCALE N.T.S. 3

SYSTEM NO. C-AJ-1421
ANSI/UL1479 (ASTM E814)

F RATING - 2 OR 3 HR
T RATING - 0 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ.FT.
L RATING AT 400F - LESS THAN 1 CFM/SQ.FT.



1. EXISTING CONCRETE FLOOR OR WALL.
   SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. CORE HOLE MAX 2 IN. DIAM, CONTRACTOR SHOULD SUBMIT PLANS TO SHOW HOLE LOCATION AND SHALL BE APPROVED BY STRUCTURE ENGINEER AND DSA PRIOR TO CORE DRILL.
3. THROUGH-PENETRANT- ONE METALLIC PIPE OR CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRE-STOP SYSTEM. THE ANNULAR SPACE
   BETWEEN PIPE, TUBE OR CONDUIT AND PERIPHERY OF OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2 IN. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
   A. STEEL PIPE- NOM 2 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   B. IRON PIPE-NOM 2 IN.DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   C. COPPER PIPE -NOM 2 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
   D. COPPER TUBING -NOM 2 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   E. CONDUIT -NOM 2 IN. DIAM (OR SMALLER) STEEL CONDUIT.
   F. CONDUIT- NOM 2 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING (EMT).
4. FIRE-STOP SYSTEM -THE FIRE-STOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
   A. PACKING MATERIAL -MIN 2 IN. THICKNESS OF MIN 4 PCT (64 KG/M') MINERAL WOOL BAIT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
   B. FILL, VOID OR CAVITY MATERIAL* - SEALANT- MIN 1/4 IN. (6 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL. FOR 3 HR RATED ASSEMBLIES, A MIN 114 IN. DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE AT THE POINT CONTACT LOCATION ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -CFS-S SIL GG, CFS-S SIL SL OR FS-ONE SEALANT OR CP604 SELF-LEVELING FIRE-STOP SEALANT. CP604 AND CFS-S SIL SL SHALL BE USED IN FLOOR APPLICATIONS ONLY.
      WHEN CP604, CFS-S SIL GG OR CFS-S SIL SL (FLOORS ONLY) IS USED, F RATING IS 2 HR.
5. SUBMIT PLANS OR WALL ELEVATIONS WITH CORES FOR STRUCTURE ENGINEER REVIEW AND DSA APPROVAL SHOWING THE LOCATION OF EXISTING FLOOR/WALL OPENING AND ANY REQUIREMENT/NON-STRUCTURE COMPONENT ATTACHED EACH SIDE. FLOOR/WALL STRENGTHENING AROUND OPENING MAY BE REQUIRED SUBJECT TO STRUCTURE ENGINEER REVIEW AND DSA APPROVAL.

'BEARING THE UL CLASSIFICATION MARK

HOLES IN WALL AND FLOOR SHALL BE DONE BY CORE DRILLING ONLY. DO NOT DAMAGE REINFORCING STEEL BAR IN WALL. LOCATE BY NON-DESTRUCTIVE MEANS PRIOR TO CORING.

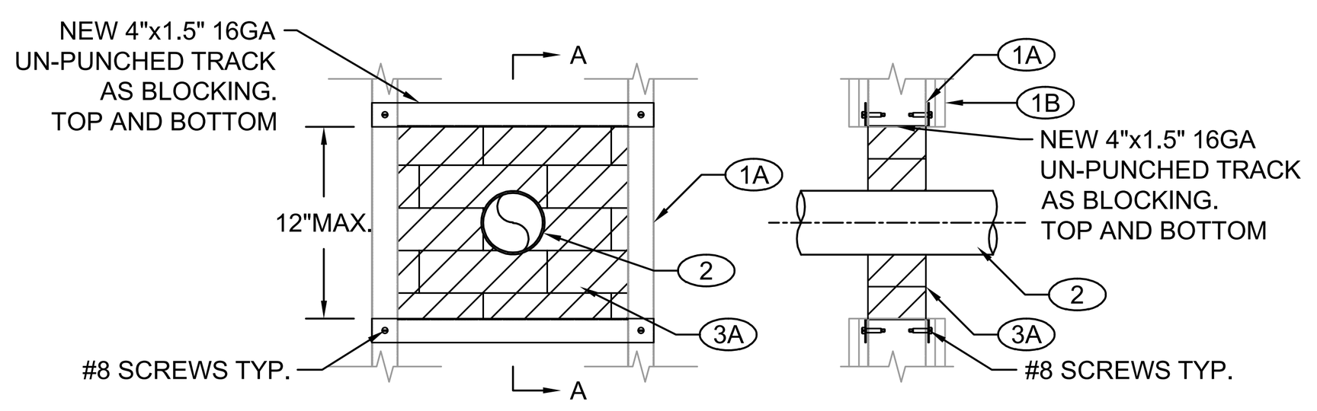
ALL WALL AND FLOOR PENETRATIONS MADE UNDER THIS PROJECT SHALL BE SEALED PER THE APPLICABLE DETAIL WETHER THE WALL OR FLOOR IS KNOWN TO BE FIRE RATED OR NOT

CONCRETE/MASONRY WALL/FLOOR PENETRATION DETAIL

SCALE N.T.S. 4

SYSTEM NO.W-L-1497

F RATINGS - 1 AND 2 HR (SEE ITEMS 1)
T RATINGS - 1/4 HR
L RATING AT AMBIENT - LESS THAN 5 CFM/SQ FT
L RATING AT 400 F - LESS THAN 2 CFM/SQ FT



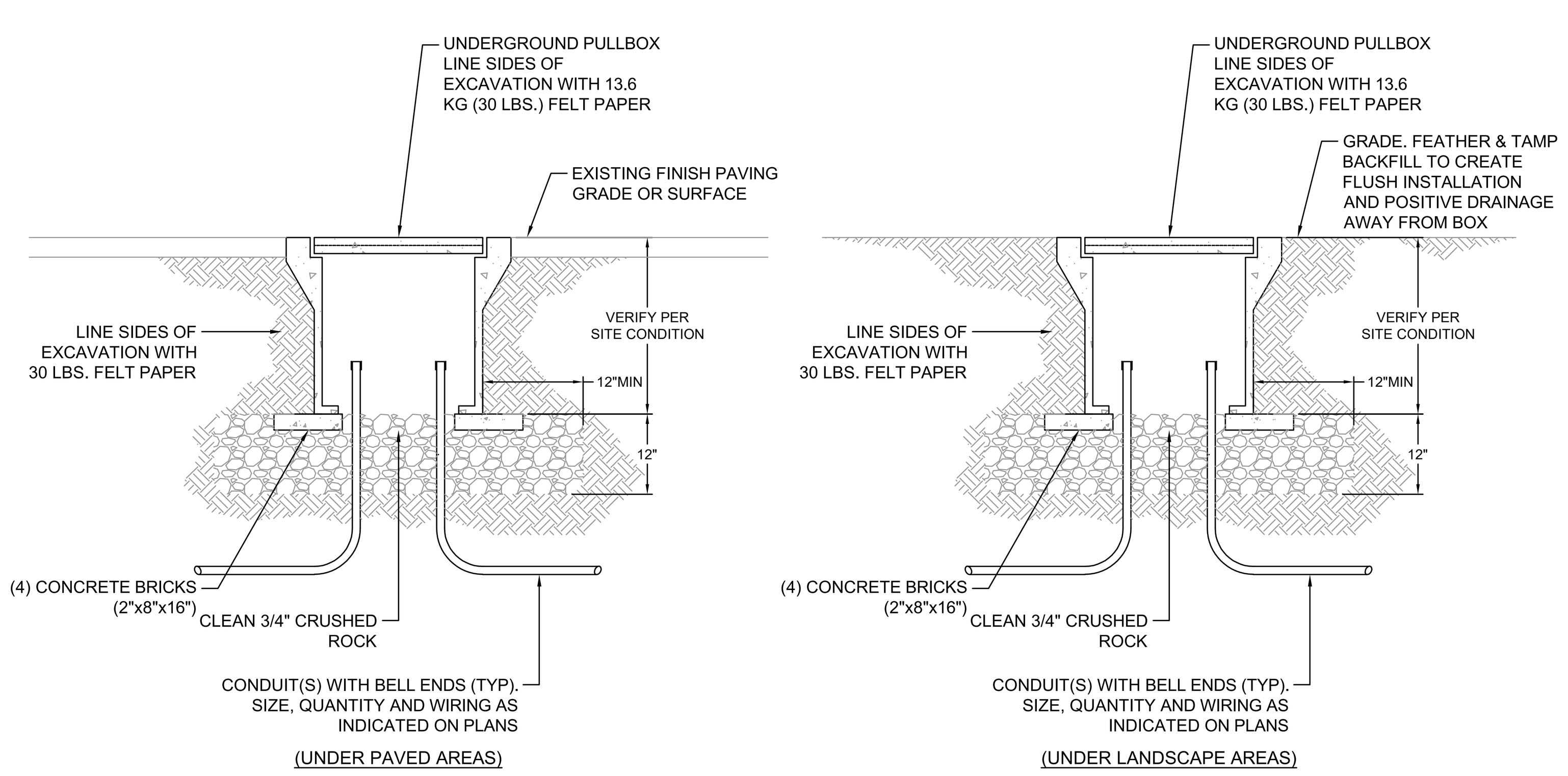
1. WALL ASSEMBLY - THE 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300, U400, V400 OR W400 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES
   A. STUDS - WALL FRAMING SHALL CONSIST OF CHANNEL SHAPED STEEL STUDS. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE, SPACED MAX 16 IN. (400 MM) OC.
   B. GYPSUM BOARD* - NOM 5/8 IN. (16 MM) THICK, 4 FT. (1219 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX AREA OF OPENING IS 144IN2 (929 CM2) WITH MAX DIMENSION OF 12 IN. (305 MM). THE HOURLY F RATING OF THE FIRE-STOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.
2. EMT TUBE - NOM 2 IN. DIAM (OR SMALLER) 0.125 IN. THICK (OR HEAVIER) EMT TUBE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEMS. ONE TUBE TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRE-STOP SYSTEM. THE ANNULAR SPACE SHALL BE MIN 2 IN. TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. DI-ELECTRIC SEPARATION REQUIRED BETWEEN ALUMINUM AND STEEL.
3. FIRE-STOP SYSTEM - THE FIRE-STOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
   A. FILL, VOID OR CAVITY MATERIAL* - FIRE BLOCKS INSTALLED WITH MIN. 2 IN. DIMENSION PASSING THROUGH AND CENTERED WITHIN THE OPENING. BLOCKS TO BE FIRMLY PACKED AND COMPLETELY FILL THE ENTIRE OPENING AROUND THE PENETRANT.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CFS-BL FIRE-STOP BLOCK
   B. FILL, VOID OR CAVITY MATERIAL* - FILL MATERIAL TO BE FORCED INTO ANY VOIDS/OPENINGS BETWEEN BLOCKS, AROUND PENETRANTS, AND BETWEEN BLOCKS AND PERIPHERY OF OPENING TO THE MAXIMUM EXTENT POSSIBLE ON BOTH SURFACES OF WALL.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - FS-ONE SEALANT, CP618 FIRE-STOP PUTTY STICK OR CP 620 FIRE FOAM (NOTE: L RATINGSAPPLYONLYWHENFS-ONESEALANTISUSED.)
4. SUBMIT PLANS OR WALL ELEVATIONS WITH CORES FOR STRUCTURE ENGINEER REVIEW AND DSA APPROVAL SHOWING THE LOCATION OF EXISTING FLOOR/WALL OPENING AND ANY REQUIREMENT/NON-STRUCTURE COMPONENT ATTACHED EACH SIDE. FLOOR/WALL STRENGTHENING AROUND OPENING MAY BE REQUIRED SUBJECT TO STRUCTURE ENGINEER REVIEW AND DSA APPROVAL.

*BEARING THE UL CLASSIFICATION MARK

ALL WALL AND FLOOR PENETRATIONS MADE UNDER THIS PROJECT SHALL BE SEALED PER THE APPLICABLE DETAIL WETHER THE WALL OR FLOOR IS KNOWN TO BE FIRE RATED OR NOT

GYPSUM WALL PENNETRATION DETAIL

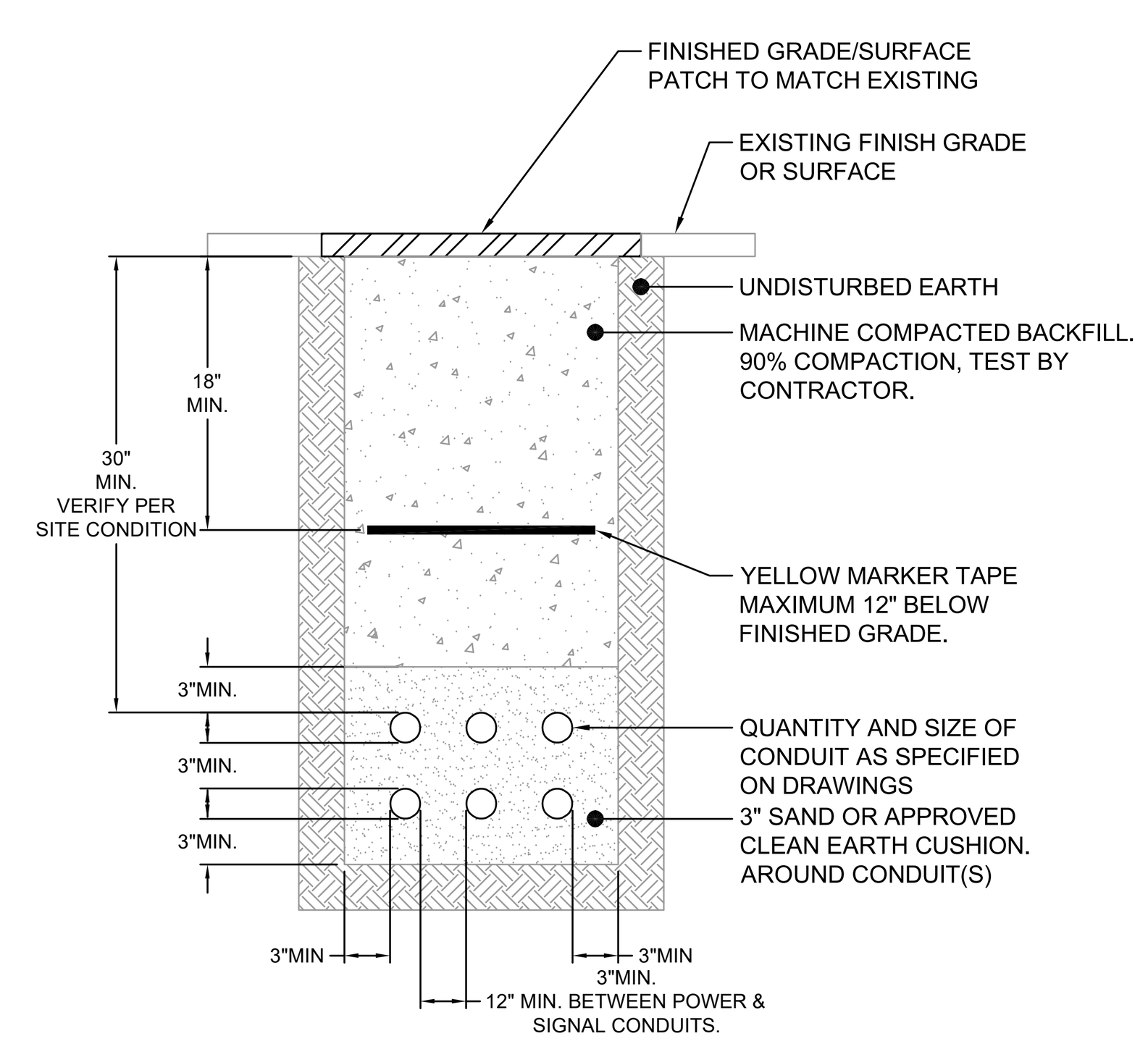
SCALE N.T.S. 5



NOTES:
1. SIZE AS REQUIRED. PROVIDE EXTRA DEPTH BY STACKING WHERE REQUIRED.

MEDIUM DUTY UNDERGROUND PULL BOX DETAIL

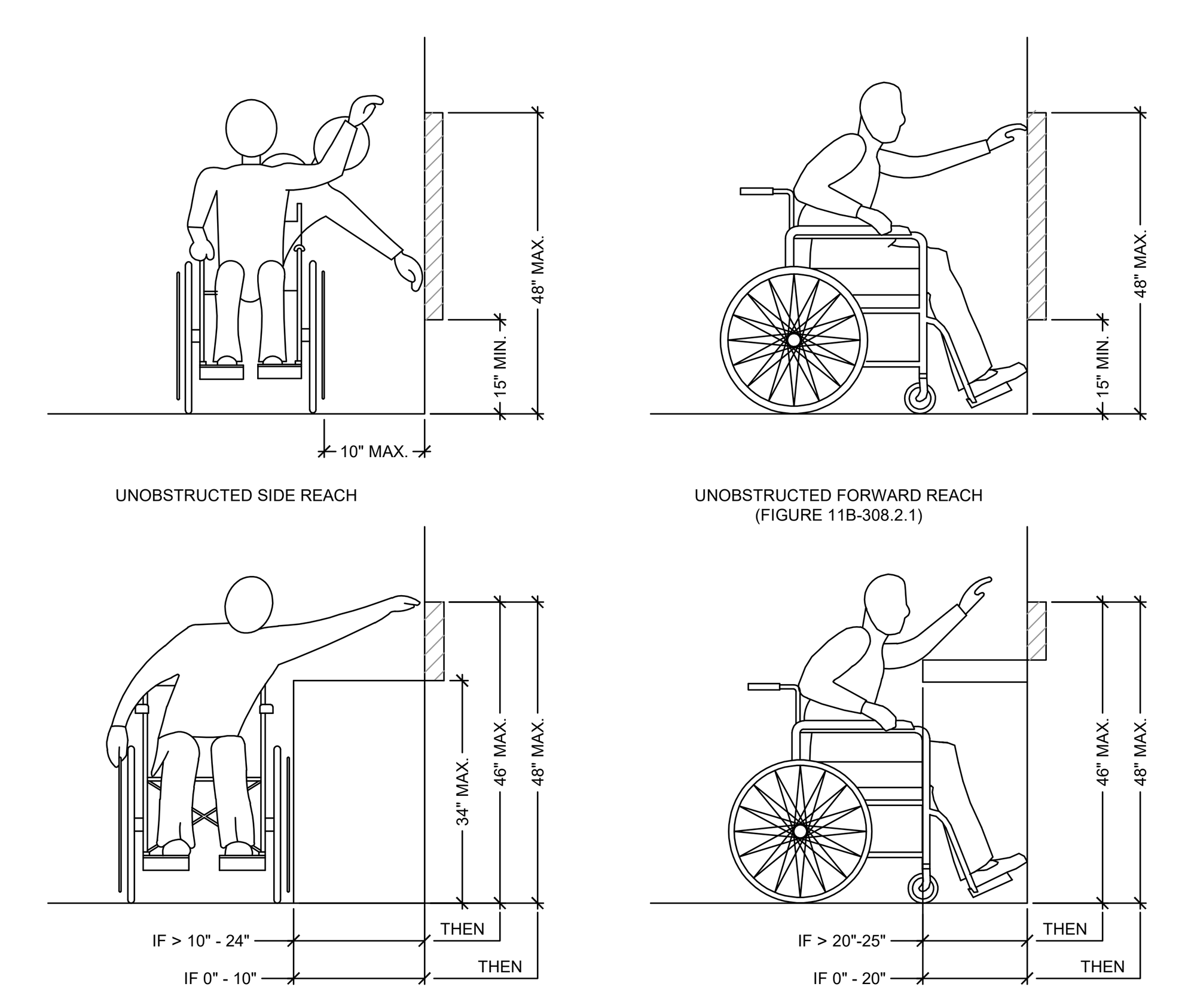
SCALE N.T.S. 7



NOTES:
1. SAW CUT AND PATCH (E) CONCRETE/ASPHALT TO MATCH ADJACENT SURFACES.
2. ALL UNDERGROUND CONDUITS SHALL BE PVC SCH40 WITH GRC RISER.

UNDERGROUND CONDUIT DUCT BANK DETAIL

SCALE N.T.S. 8



NOTE:
1. CBC2022, 11B-308.1.1 ELECTRICAL SWITCHES: CONTROLS AND 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 COMPLY WITH SECTION 11B-308 EXCEPT 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.
2. CBC2022, 11B-308.1.2 ELECTRICAL RECEPTACLE OUTLETS: ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL COMPLY WITH SECTION 11B-308 EXCEPT 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.
3. CBC2022, 11B-309.4 OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM.
4. OPERABLE PARTS CANNOT BE LOCATED WHERE A PERSON USING A WHEELCHAIR WOULD BE FORCED TO REACH OVER AN OBSTRUCTION.
5. FIRE ALARM INITIATING DEVICE MUST BE LOCATED ON PATH OF TRAVEL.
6. PROVIDE FRONT AND PARALLEL APPROACH AT NEWLY INSTALLED FIRE ALARM INITIATING DEVICE.

MOUNTING HEIGHT OVER OBSTRUCTION

SCALE N.T.S. 9

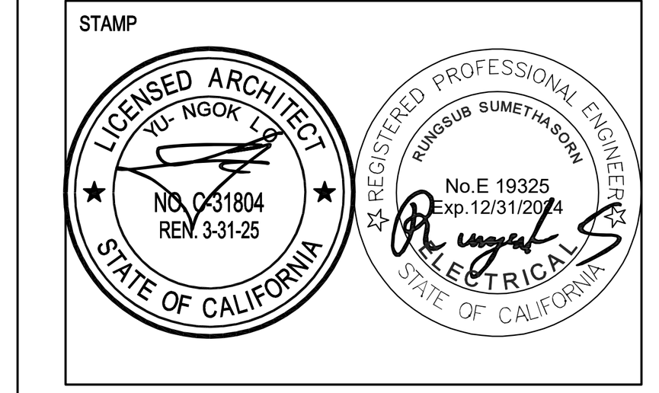
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205 Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP



BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

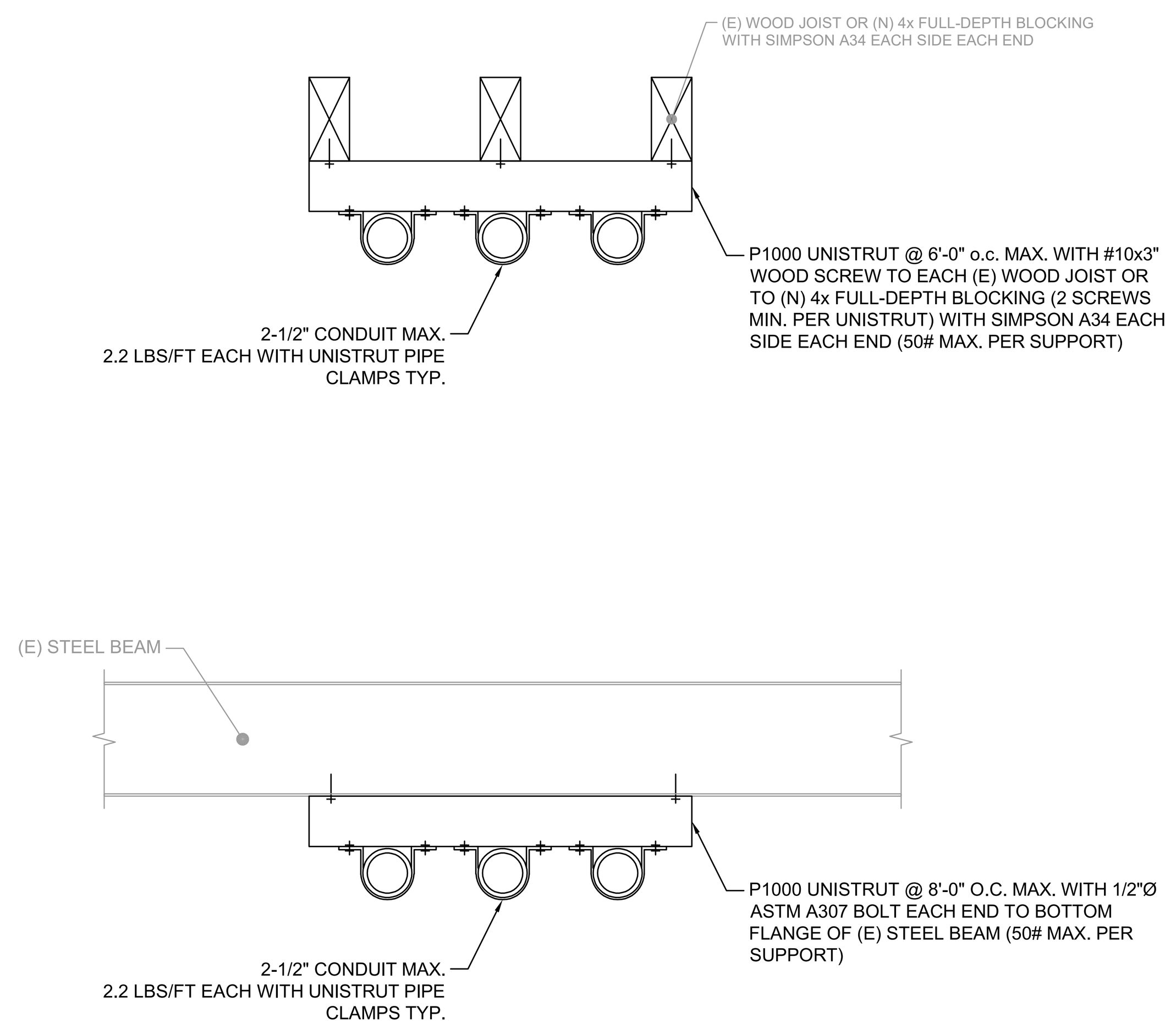
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

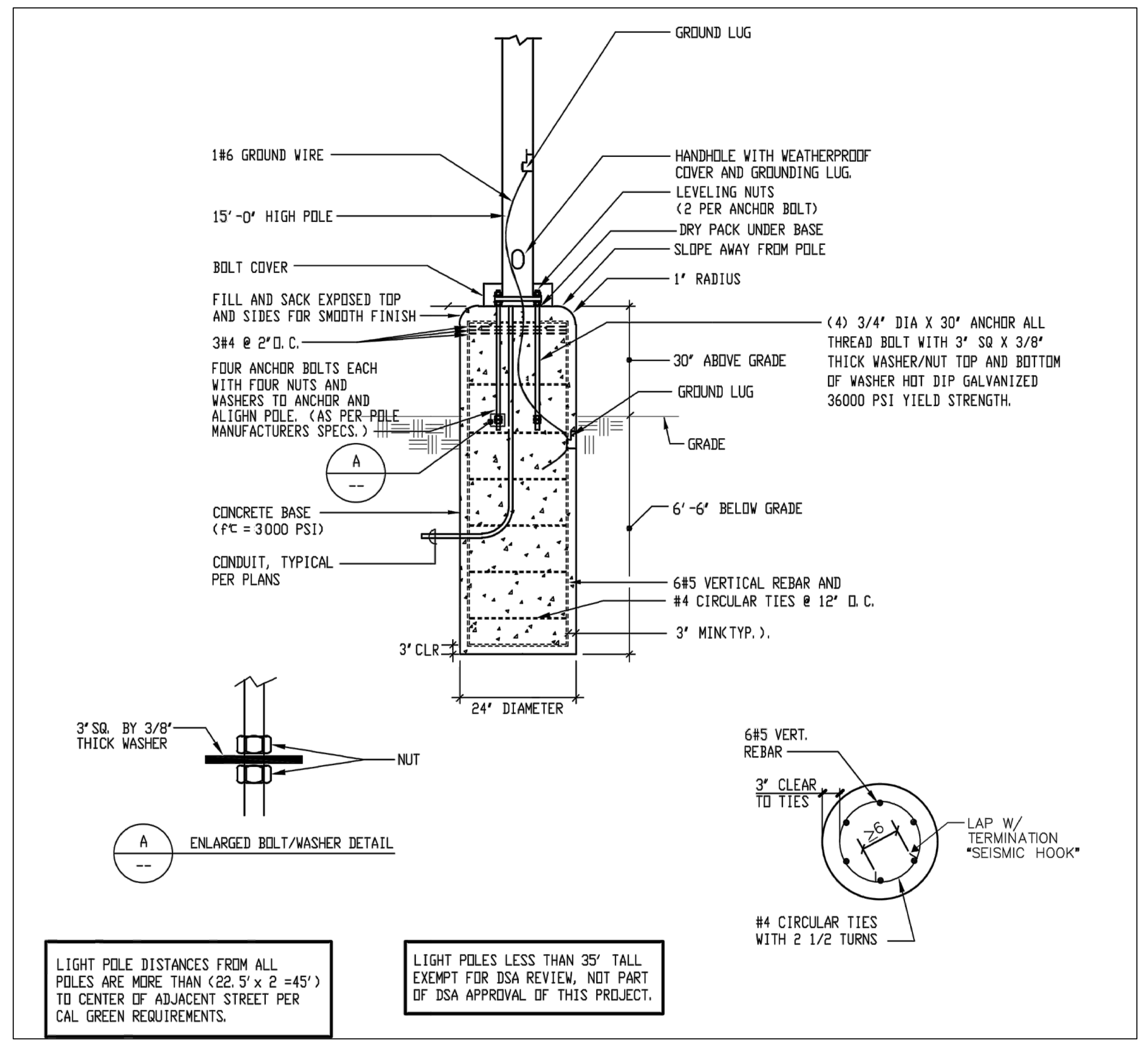
ELECTRICAL DETAILS

DATE 07/12/2024
DSA# A# 03-123614
FILE NO. 19-H20

SHEET E4.1



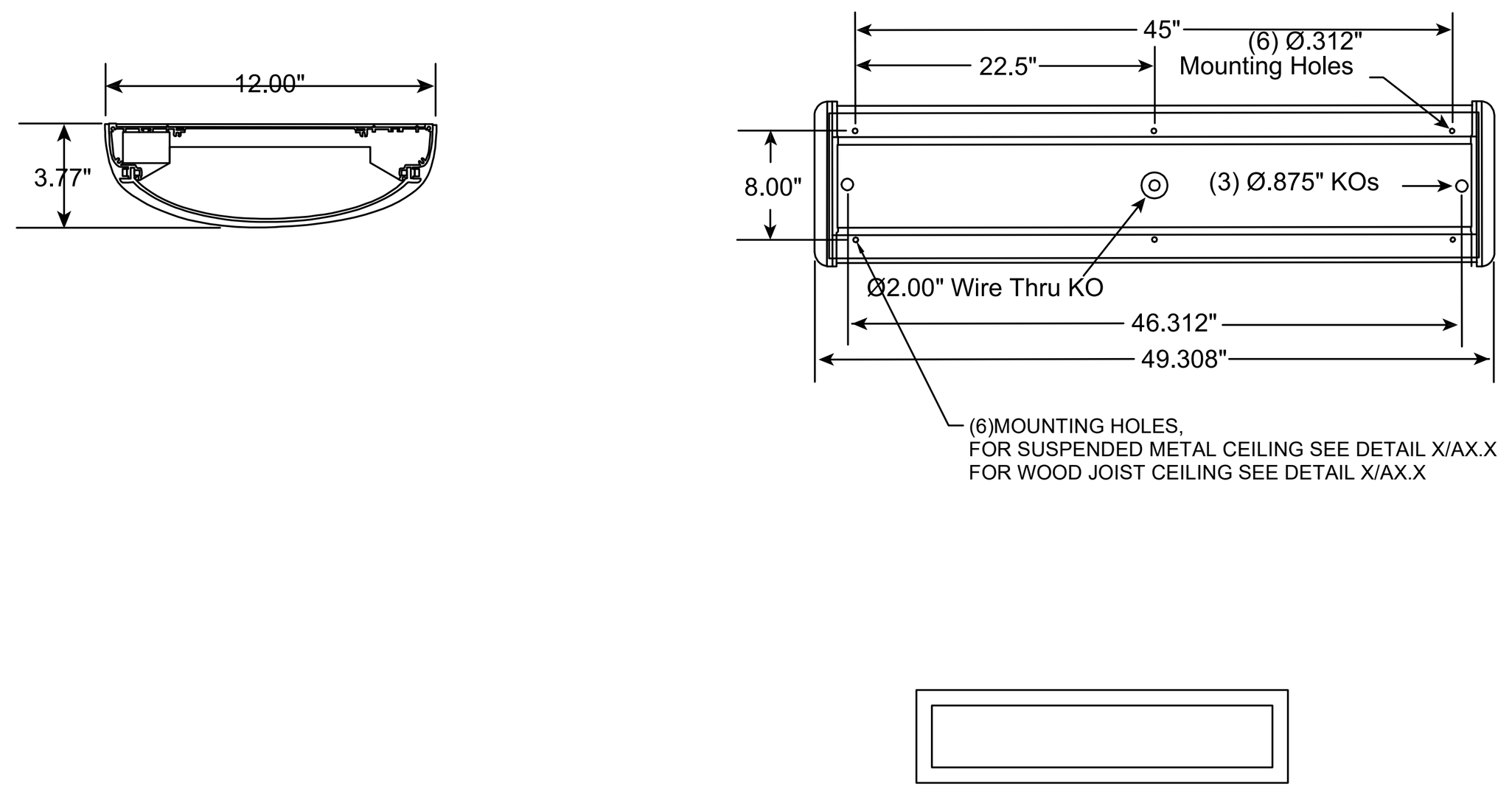
ELECTRICAL CONDUIT SUPPORT DETAILS
SCALE N.T.S. — 1



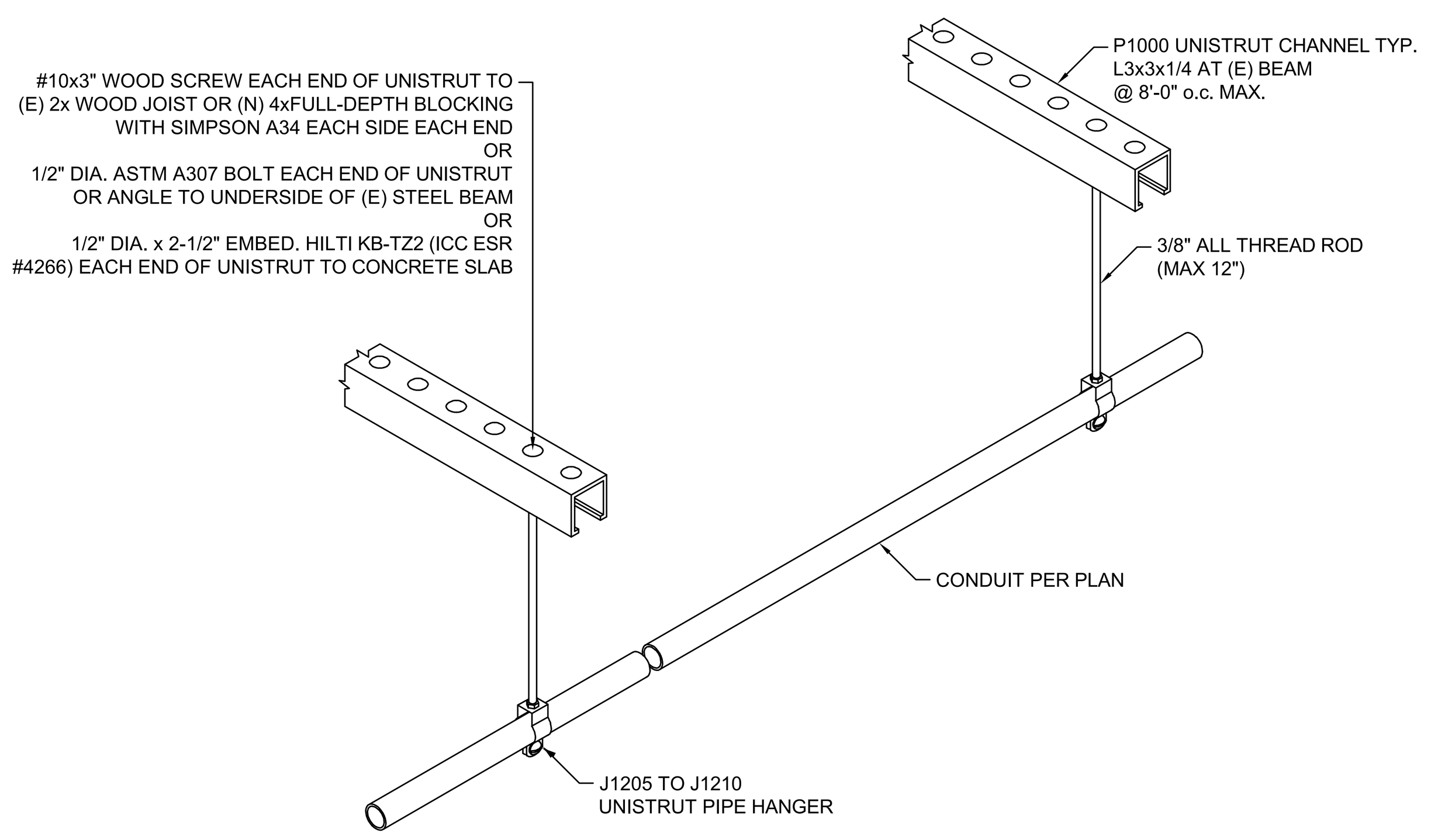
LIGHT POLE AND BASE DETAIL
SCALE N.T.S. — 4

CROSS SECTION/DETAILS

CORNER MOUNT BRACKET



SURFACE CEILING MOUNTED DETAILS
SCALE N.T.S. — 7



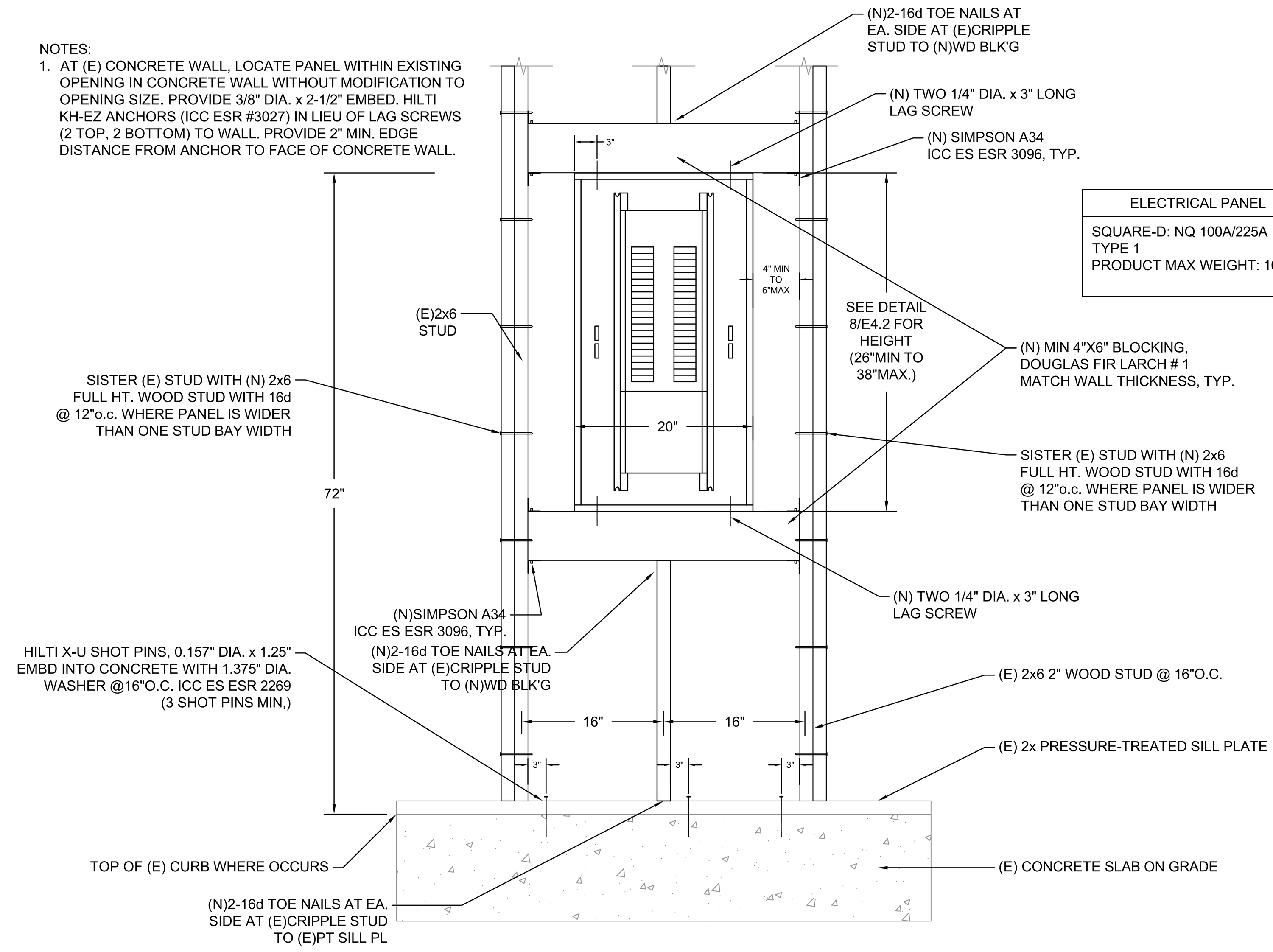
USE TABLE 358.30, 2022 NEC FOR EMT CONDUIT SECURING AND SUPPORTING

NOTE:
1. THIS SYSTEM IS DESIGNED FOR SINGLE CONDUITS 3/4"C AND 1"C
2. PROVIDE 12" SEPARATION FROM EXISTING ANCHOR(S), IF ANY.

CEILING SINGLE CONDUIT HANGER DETAIL
SCALE N.T.S. — 2

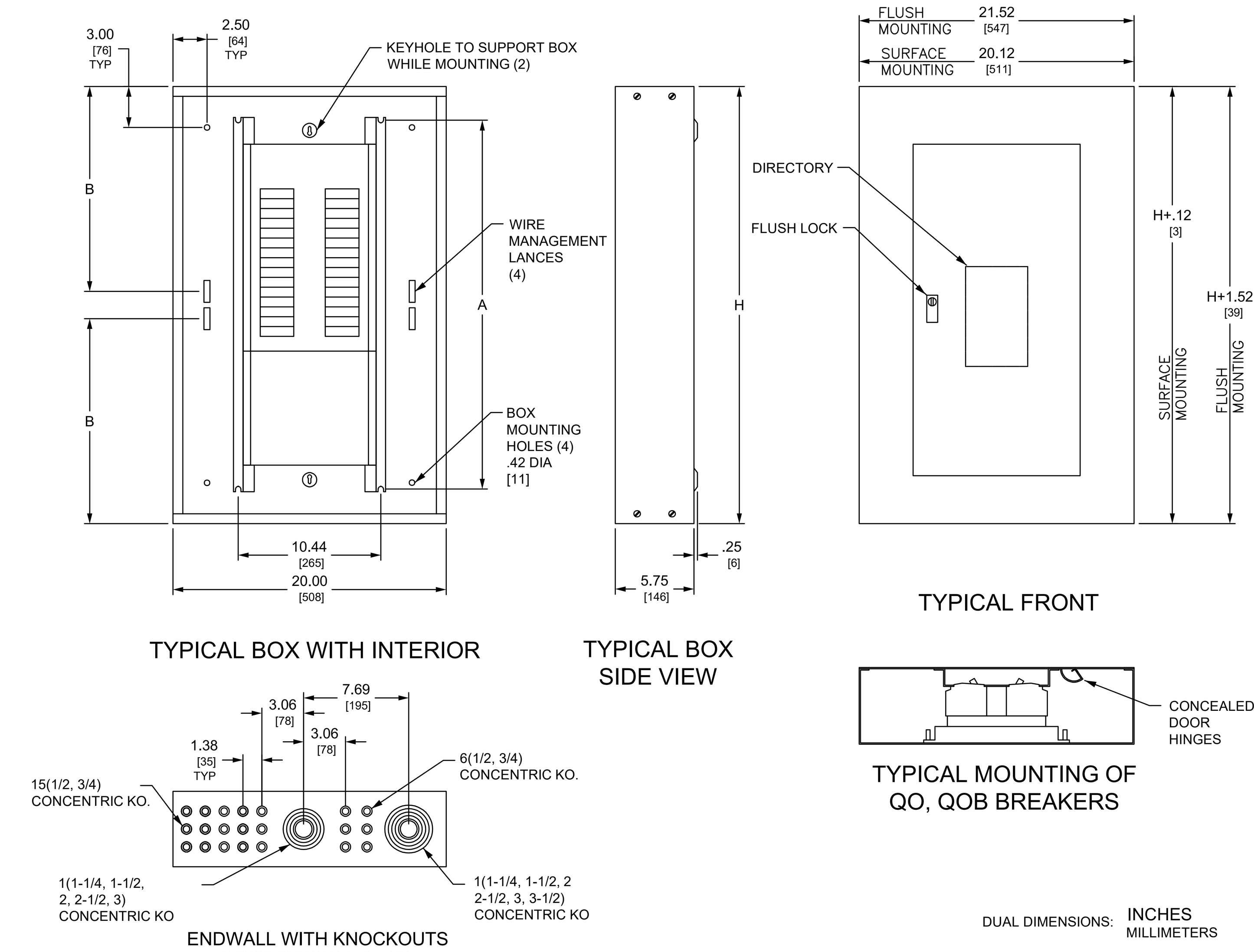
NOTES:
1. AT (E) CONCRETE WALL, LOCATE PANEL WITHIN EXISTING OPENING IN CONCRETE WALL WITHOUT MODIFICATION TO OPENING SIZE. PROVIDE 3/8" DIA. x 2-1/2" EMBED. HILTI KH-EZ ANCHORS (ICC ESR #3027) IN LIEU OF LAG SCREWS (2 TOP, 2 BOTTOM) TO WALL. PROVIDE 2" MIN. EDGE DISTANCE FROM ANCHOR TO FACE OF CONCRETE WALL.

ELECTRICAL PANEL
SQUARE-D: NQ 100A/225A TYPE 1 PRODUCT MAX WEIGHT: 100 Lbs



FLUSH MOUNTED ELECTRICAL PANEL ON (E)WOOD STUD WALL DETAIL
SCALE N.T.S. — 5

ELECTRICAL PANEL
SQUARE-D: NQ 100A/225A TYPE 1 PRODUCT MAX WEIGHT: 100 Lbs



TYPICAL BOX WITH INTERIOR

TYPICAL BOX SIDE VIEW

TYPICAL FRONT

TYPICAL MOUNTING OF QO, QOB BREAKERS

ENDWALL WITH KNOCKOUTS
(OTHER ENDWALL IS BLANK)

DUAL DIMENSIONS: INCHES / MILLIMETERS

MAXIMUM MAIN LUGS AMPERE RATING	MAXIMUM NUMBER OF CIRCUITS	H		A		B	
		IN	MM	IN	MM	IN	MM
100A	18 30	26.00 32.00	660 813	21.00 27.00	533 686	11.00 15.00	279 381
225A	30 42 & 54 . .	32.00 38.00 . .	813 965 . .	27.00 33.00 . .	686 838 . .	15.00 15.00 . .	381 381 . .
100A WITH SUB FEED LUGS OR FEED THRU LUGS	18 30	26.00 32.00	660 813	21.00 27.00	533 686	15.00 15.00	381 381
225A WITH SUB FEED LUGS	30 42 & 54 72 84	38.00 44.00 50.00 56.00	965 1118 1270 1422	33.00 39.00 45.00 51.00	838 991 1143 1295	15.00 15.00 15.00 15.00	381 381 381 381
225A WITH FEED THRU LUGS	30 & 42 54 72 84	38.00 44.00 50.00 56.00	965 1118 1270 1422	33.00 39.00 45.00 51.00	838 991 1143 1295	15.00 15.00 15.00 15.00	381 381 381 381
225A WITH SUB FEED BREAKER	30 42 & 54 72 84	50.00 56.00 62.00 68.00	1270 1422 1575 1727	45.00 51.00 57.00 63.00	1143 1295 1448 1600	15.00 15.00 15.00 15.00	381 381 381 381

FOR TYPE 3R APPLICATIONS USE IN CONJUNCTION WITH PBA711

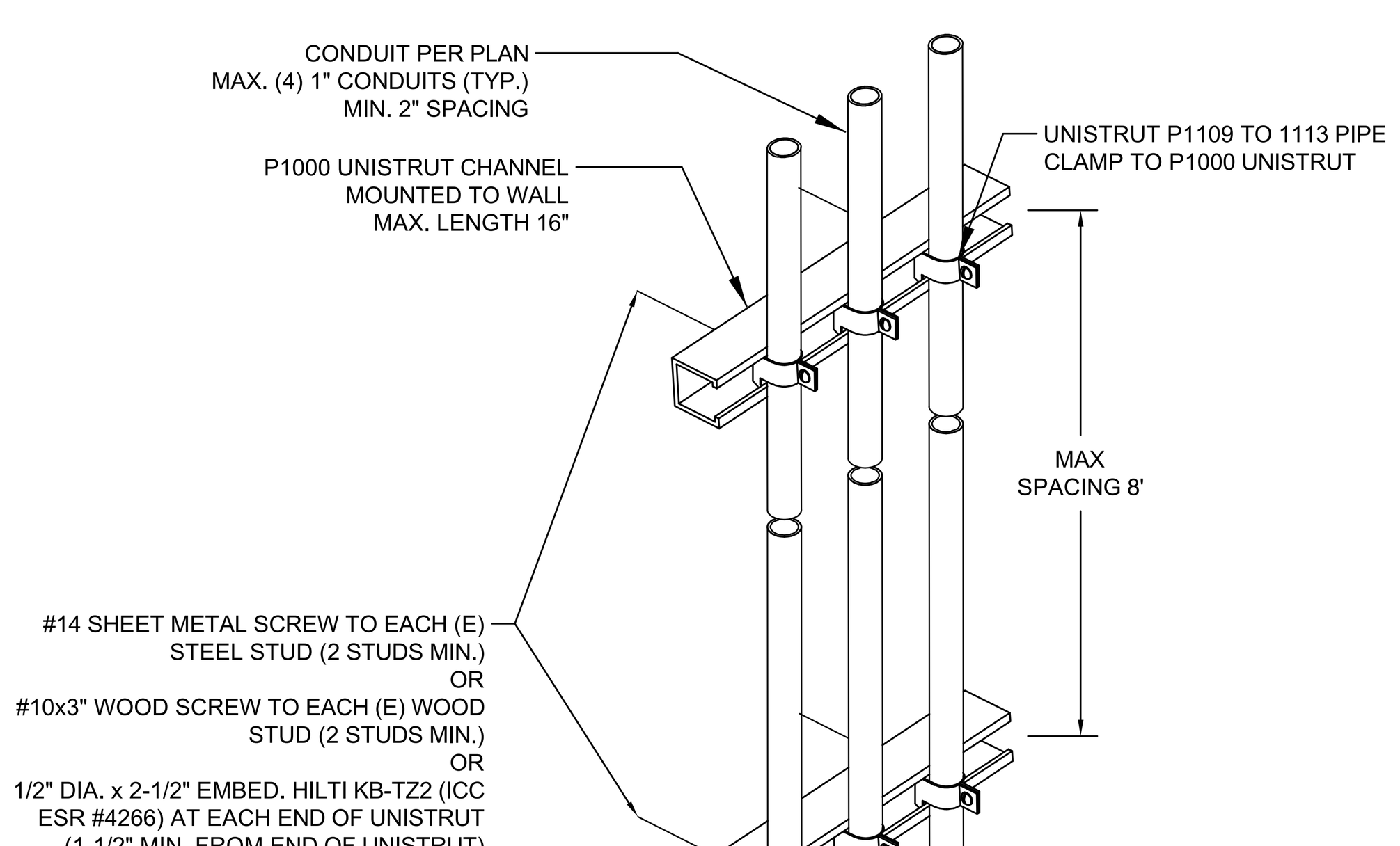
NQ PANELBOARDS MEET THE APPLICABLE REQUIREMENTS OF UL LISTED.

BOX: CODE GAUGE GALVANIZED STEEL. ONE ENDWALL IS BLANK, THE OTHER HAS KNOCKOUTS.

FRONT: MONO-FLAT CONSTRUCTION WITH CONCEALED TRIM SCREWS AND DOOR HINGES. ANSI 49 GRAY BAKED ENAMEL FINISH ELECTRODEPOSITED OVER CLEANED PHOSPHATIZED STEEL.

LOCK: FLUSH LOCK WITH BRUSHED STAINLESS STEEL ESCUTCHEON. NSR-251 KEY.

ELECTRICAL PANEL DETAIL
SCALE N.T.S. — 8



USE TABLE 358.30, 2022 NEC FOR EMT CONDUIT SECURING AND SUPPORTING

NOTES:
1. PROVIDE MINIMUM (2) UNISTRUT SUPPORT AT BETWEEN FLOOR TO CEILING.
2. CONDUIT SHALL BE SECURELY FASTENED IN PLACE AT LEAST EVERY 8 FEET, AND 3 FEET OF EACH TERMINATION POINTS (PULL BOX, J-BOX, ETC.).
3. PROVIDE 12" SEPARATION FROM EXISTING ANCHOR(S), IF ANY.
4. SHEET METAL SCREWS SHALL BE SUFFICIENT LENGTH TO PENETRATE STUDS BY 3 THREADS MIN.
5. PROVIDE GALVANIZED OR STAINLESS STEEL FASTENERS AT EXTERIOR LOCATIONS.

VERTICAL CONDUIT RISER SUPPORT DETAIL
SCALE N.T.S. — 3

NOT USED
SCALE N.T.S. — 6

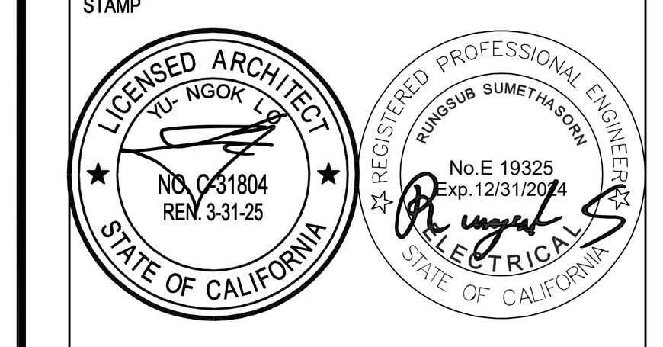
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE

Ynl Architects
architecture | interior

multi-discipline collaborative
MDC engineers,INC
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463

STAMP



BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL DETAILS

DATE 07/12/2024
DSA A# 03-123614
FILE NO. 19-H20

SHEET
E4.2

FLOW TEST DATA

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

FORM 196
Rev. 09/20

Fire Prevention Engineering
5823 Rickenbacker Road
Los Angeles, CA 90040
Telephone (323) 890-4125 Fax (323) 890-4129

Information on Fire Flow Availability for Building Permit

For All Buildings Other Than One and Two Family Dwellings (R-3), Townhomes, and Accessory Dwelling Unit's

INSTRUCTIONS:

Complete parts I & II:

Verifying fire flow, fire hydrant location and fire hydrant size.

PROJECT INFORMATION
(To be completed by applicant)

PART I

Building Address: 1151 Fairplex Dr
City or Area: Pomona APN:
Nearest Cross Street: Murchison Ave
Distance of Nearest Cross Street to Property Line:
Applicant: Pomona USD Telephone: ( ) 909-397-4800
Address: 800 S Garey Ave
City: Pomona
Occupancy (Use of Building): B / F-1 / S-1 Fire Sprinklered: Yes ☒ No ☐
Type of Construction: III - B
Square Footage: Number of Stories: 1

Applicant's Signature Date: 01/05/2024

PART II **INFORMATION ON FIRE FLOW AVAILABILITY**
(Part II to be completed by Water Purveyor)

Location of hydrant 1151 Fairplex Dr
Hydrant Number
Distance from Nearest Property Line Size of Hydrant 6" Size of Water main 8"
Static PSI 80 Residual PSI 56 Orifice size 2.5 Pitot 44
Fire Flow at 20 PSI 1786 Duration 120 min ☒ Flow Test Date / Time 11:27 am ☐ Hydraulic model

Location of hydrant
Hydrant Number
Distance from Nearest Property Line Size of Hydrant Size of Water main
Static PSI Residual PSI Orifice size Pitot
Fire Flow at 20 PSI Duration ☐ Flow Test Date / Time ☐ Hydraulic model

☐ (Check box if Simultaneous/ Dual flow test was performed) Combined flow at 20 psi

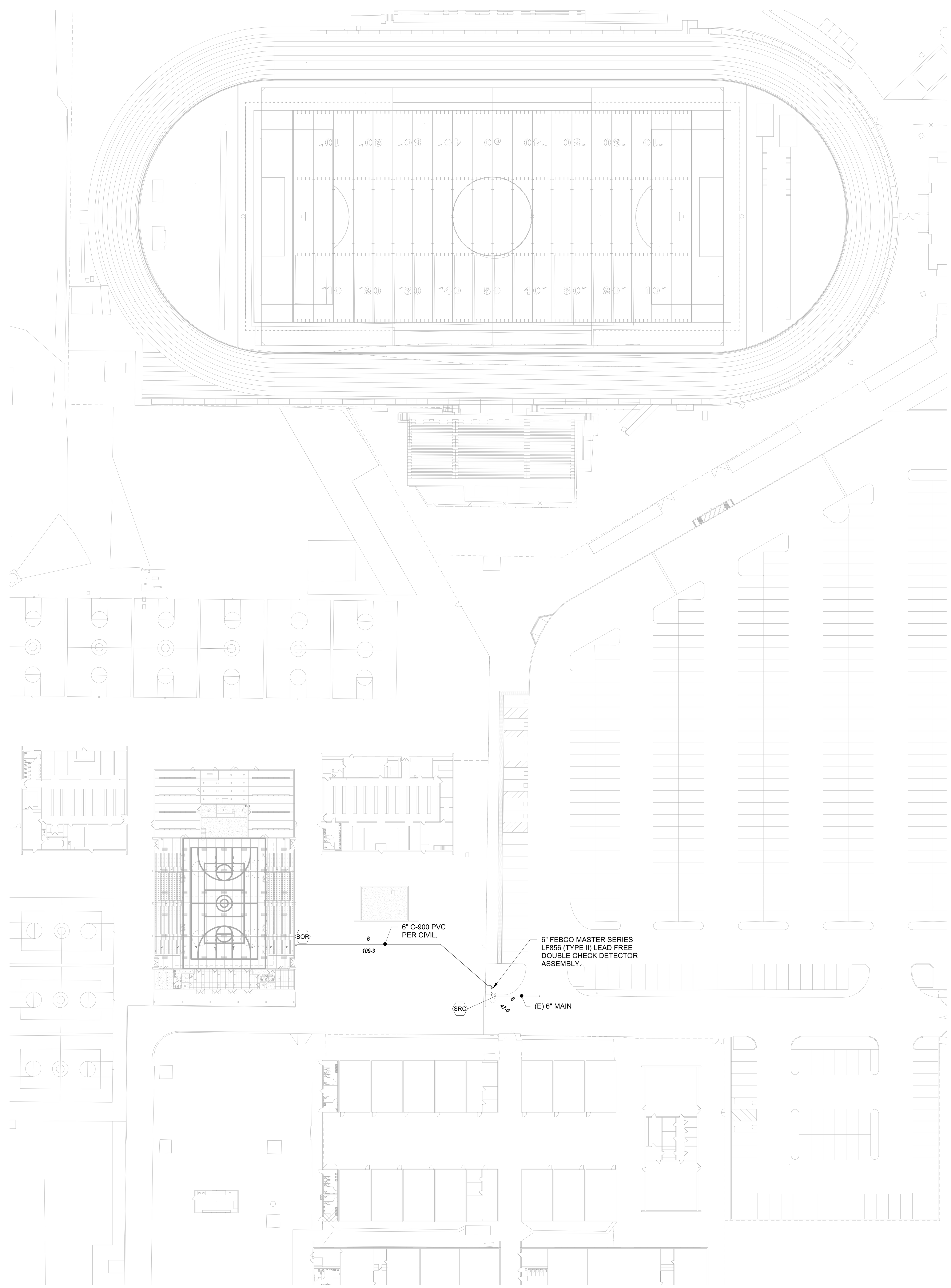
Location of hydrant
Hydrant Number
Distance from Nearest Property Line Size of Hydrant Size of Water main
Static PSI Residual PSI Orifice size Pitot
Fire Flow at 20 PSI Duration ☐ Flow Test Date / Time ☐ Hydraulic model

☐ (Check box if Simultaneous/ Triple flow test was performed) Combined flow at 20 psi

Pomona Water Department
Water Purveyor Signature
909-620-2241
Phone Number Date Title

This Information is Considered Valid for Twenty Four Months

Fire Department approval of building plans shall be required prior to the issuance of a Building Permit by the jurisdictional Building Department. Any deficiencies in water systems will need to be resolved by the Fire Prevention Division only prior to this department's approval of building plans.



FIRE SPRINKLER SITE PLAN | SCALE 1" = 40'-0" | 1

GENERAL NOTES

DEVIATIONS FROM APPROVED PLANS SHALL REQUIRE PERMISSION OF THE DIVISION OF STATE ARCHITECT (NFPA 23.1.2).

MATERIALS:
SCH 40 1"Ø to 2"Ø - THREADED - CI SCR FITTINGS
SCH 10 2½"Ø to 4"Ø - GROOVED WELDED OUTLET AND GROOVED FITTING

INSTALLATION NOTES:
1. DESIGN, FABRICATE AND INSTALL SYSTEM ACCORDING TO NFPA 13 2016 EDITION AND DSA REQUIREMENTS.
2. ALL MATERIAL SHALL BE UL LISTED OR FM APPROVED.

APPLICABLE STANDARDS
TITLE 19, STATE FIRE MARSHAL - PUBLIC SAFETY
TITLE 24, CALIFORNIA BUILDING AND FIRE CODE (PARTS 1-9 INCLUSIVE)
NFPA 13, STANDARD FOR THE INSTALLATION OF FIRE SPRINKLERS, 2019 EDITION
SEE CBC CHAPTER 35 FOR REFERENCED STANDARDS AND AMENDMENTS
NFPA 24, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS
NFPA 20, INSTALLATION STATIONARY FIRE PUMPS FOR FIRE PROTECTION
NFPA 25, INSPECTION TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS 2013 CA ED.

OVERHEAD FIRE SPRINKLER SYSTEM GENERAL NOTES
1. UNDERGROUND PIPING SIZE IS NOT THE RESPONSIBILITY OF DSA AND THE DESIGNERS TAKE FULL RESPONSIBILITY FOR UNDERSIZED PIPING.
2. THE DESIGNER SHALL INDICATE ON THE PLANS ANY INTERIOR OR EXTERIOR PIPING SUBJECT TO FREEZING (WHERE WATER TEMPERATURE CANNOT BE MAINTAINED ABOVE 40 D FAHRENHEIT) AND PROVIDE PROTECTION PER NFPA 13.8.16.4.1
3. 2019 NFPA 13 SEE 10.10.2.1.1. UNDERGROUND PIPING, FROM WATER SUPPLY TO THE SYSTEM RISERS SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO DOWNSTREAM FIRE PROTECTION SYSTEM PIPING. (WITNESSED BY P.I. OR IOR).
4. PROVIDE FLOW TEST DATA AND INDICATE THE LOCATIONS AND HEIGHT ELEVATIONS OF THE TEST AND RESIDUAL FLOW HYDRANTS. DATA MUST BE NO MORE THAN 6 MONTHS OLD AND PROVIDE INFORMATION ABOUT AVAILABLE WATER AT THE SITE. INFORMATION MAY COME FROM LOCAL WATER PURVEYOR, UTILITIES COMPANY OR LOCAL FIRE DEPARTMENT. THIS INFORMATION SHALL BE ACCOMPANIED WITH A WET SIGNATURE AND A SIGNED DATE OF TEST.
5. ARCHITECT OF RECORD AND MECHANICAL ENGINEER SHALL AFFIX THEIR SEAL AND STAMP & SIGN AND SUBMIT ALL DRAWINGS, OR PROVIDE DOCUMENTATION PER DSA IR-A-18.
6. 2019 NFPA 13 FIG. 10.10.1: A COPY OF THE COMPLETED AND SIGNED "CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING" SHALL BE INCLUDED IN THE SUBMITTAL.
7. 2019 NFPA 13 SECTION 10.10.2.2. ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI, OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR 2 HOURS. IOR SHALL WITNESS AND CONFIRM.
8. 2019 NFPA 13 SEE SECTION 6.2.9: PROVIDE SPARE SPRINKLER HEAD CABINET, SPRINKLER WRENCH, AND NO FEWER THAN 6 SPARE SPRINKLERS. (12 SPARE SPRINKLER HEADS FOR SYSTEMS 100 TO 1,000 SPRINKLERS).
9. 2019 NFPA 13 SECTION 9.3.6.3: THE END OF THE SPRINKLER SHALL BE RESTRAINED FROM EXCESSIVE VERTICAL AND LATERAL MOVEMENT.
10. 2022 CBC 903.4.2 AND NFPA 13 8.17.4.2.1-8.17.4.2.4. THE INSPECTORS TEST VALVE LOCATION SHALL BE INSTALLED ANYWHERE DOWNSTREAM OF THE WATER FLOW ALARM WITH A PIPE SIZE NO LESS THAN 1", WITH A SMOOTH BORE, CORROSION-RESISTANT ORIFICE, GIVING FLOW TO THE EQUIVALENT TO ONE SPRINKLER OF A TYPE HAVING THE SMALLEST ORIFICE INSTALLED WITHIN THE SYSTEM. THE DISCHARGE SHALL BE TO THE MAIN DRAIN.
11. 2013-CA NFPA 25, SECTION 5.3.3.6: THE SPRINKLER FLOW SWITCH SHALL BE TESTED TO CONFIRM THAT WHEN THE INSPECTOR'S TEST VALVE IS ACTIVATED AN ALARM WILL SOUND NO MORE THAN 90 SECONDS AFTER INITIAL FLOW. IOR SHALL WITNESS AND CONFIRM COMPLIANCE.
12. 2022 CBC 903.4.1: CONNECTIONS TO PROTECTED PREMISES AND SUPERVISING STATION FIRE ALARM SYSTEMS SHALL BE TESTED TO VERIFY PROPER IDENTIFICATION AND TRANSMISSION OF ALARMS FROM AUTOMATIC FIRE EXTINGUISHING SYSTEMS.
13. 2019 NFPA 13 SECTION 7.7.1.5: SIGNAGE SHALL BE PROVIDED AS REQUIRED.
14. 2022 CBC SECTION 903.4.1.: ALL VALVES CONTROLLING WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEMS, PUMPS, TANKS, WATER LEVELS AND TEMPERATURES, CRITICAL AIR PRESSURES AND WATER FLOW SWITCHES ON ALL SPRINKLER SYSTEMS SHALL BE SUPERVISED.
15. 2019 NFPA 13 SECTION 25.5* A REPLACEMENT OF THE HYDRAULIC DESIGN PLACARD SHALL BE ATTACHED TO EACH RISER. REFERENCE RISER DETAIL TO SEE TYPE OF CALCULATION PLATE.
16. 2019 NFPA 13 SECTION 6.9 AND 2019 CBC 903.4.2: FLOW SWITCH SHALL BE CONNECTED TO A 10" OUTSIDE ALARM BELL AT EACH RISER. APPROVED IDENTIFICATION SIGNS SHALL BE PROVIDED TO OUTSIDE ALARM BELL "SPRINKLER FIRE ALARM - WHEN BELL RINGS CALL 911 / FIRE DEPARTMENT."
17. TITLE 19 ARTICLE 906(A): A LABEL OF SELF-ADHESIVE TYPE SHALL BE PLACED ON THE FIRE DEPARTMENT CONNECTION OR ON THE RISER FOR FIRE SPRINKLER SYSTEM WITH THE DATE OF SERVICE AND/OR DATE OF INSTALLATION WAS PERFORMED AND LICENSE NUMBER OF PERSON PERFORMING WORK.
18. 2019 NFPA 13 FIGURE 25.1: SPRINKLER CONTRACTOR SHALL COMPLETE AND SIGN CONTRACTOR'S MATERIAL TEST CERTIFICATE FOR THE ABOVEGROUND PIPING. THIS FORM SHALL BE GIVEN TO THE IOR WHO WILL FORWARD TO DSA FOR FILING IN PROJECT RECORDS.
19. CFC 901.2.1 - REQUEST FOR FINAL APPROVAL OF INSTALLATION SHALL INCLUDE WRITTEN STATEMENT OF COMPLIANCE FROM INSTALLING CONTRACTOR.
20. CFC 901.5.1 - OCCUPANCY IS PROHIBITED UNTIL FIRE SPRINKLER SYSTEM HAS BEEN TESTED AND APPROVED.
21. CFC 905.6.2 - RECORD (AS-BUILT) DRAWINGS SHALL BE MAINTAINED ON THE PREMISES FOR A MINIMUM OF THREE YEARS. (TITLE 19 SECTION 904.1(B) INSPECTION; 904.1(C) TESTING AND MAINTENANCE FIVE YEARS). THE FOLLOWING SPRINKLER SYSTEM DESIGN PROVISIONS TO BE REFERENCED ON DRAWINGS AND SPECIFICATIONS: ORDINARY I DENSITY SHALL APPLY TO: STORAGE, JANITOR, ELECTRICAL, DATA, TELEPHONE, KITCHEN, AND LIBRARY. ORDINARY II DENSITY SHALL APPLY TO: SCIENCE LABORATORIES, STAGES, MECHANICAL VOCATIONAL SHOPS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE
	DSA SUBMITTAL	09/19/23
	DSA BACK CHECK	02/23/24

Ynl Architects
architecture | interior

PDS
Pocock Design Solutions Inc.

STAMP

LICENSED ARCHITECT — NO. C 31804 — REN 3-31-25 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — MECHANICAL — STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

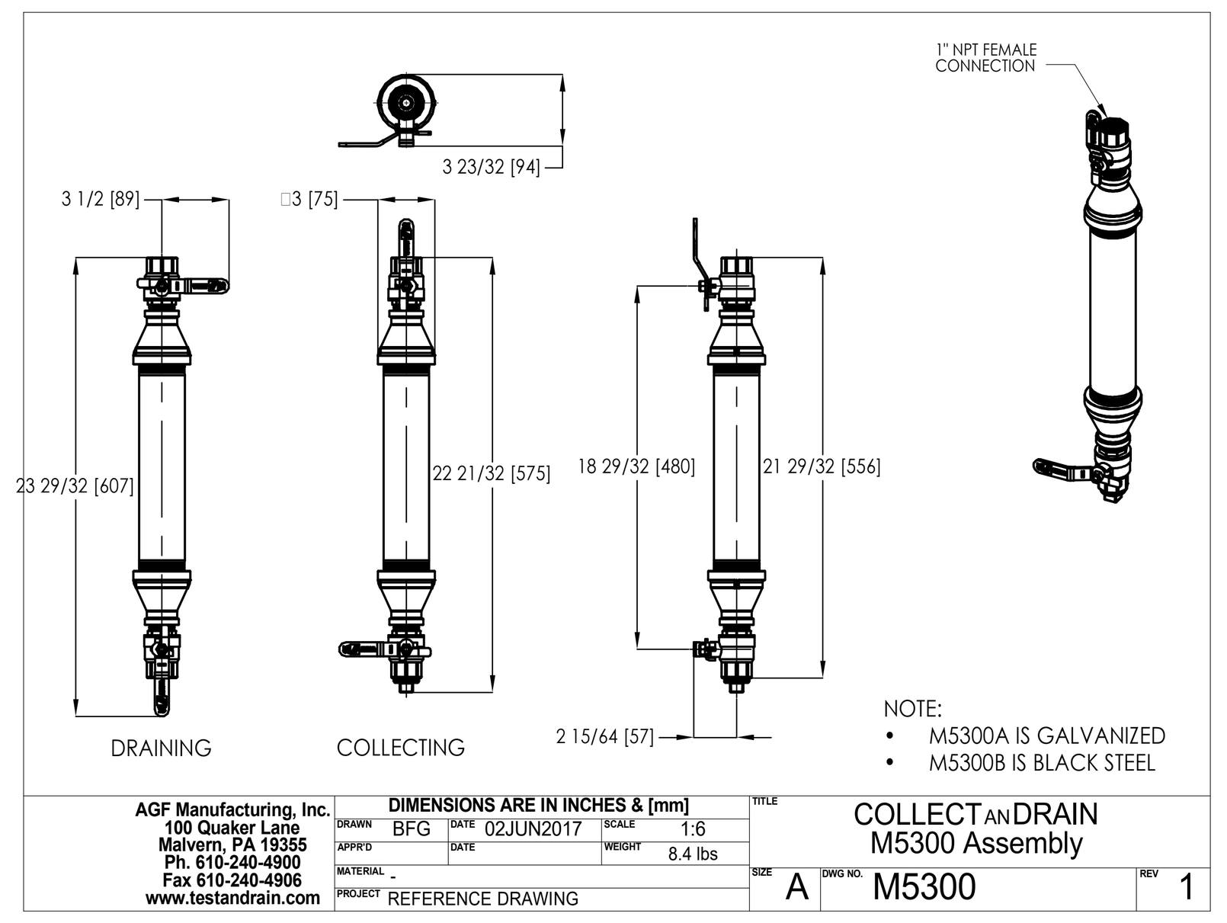
GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE SPRINKLER SITE PLAN AND GENERAL NOTES

DATE: 02/23/2024
DSA AN: A# 03-123614
FILE NO. 19-H20

SHEET: FP0.1

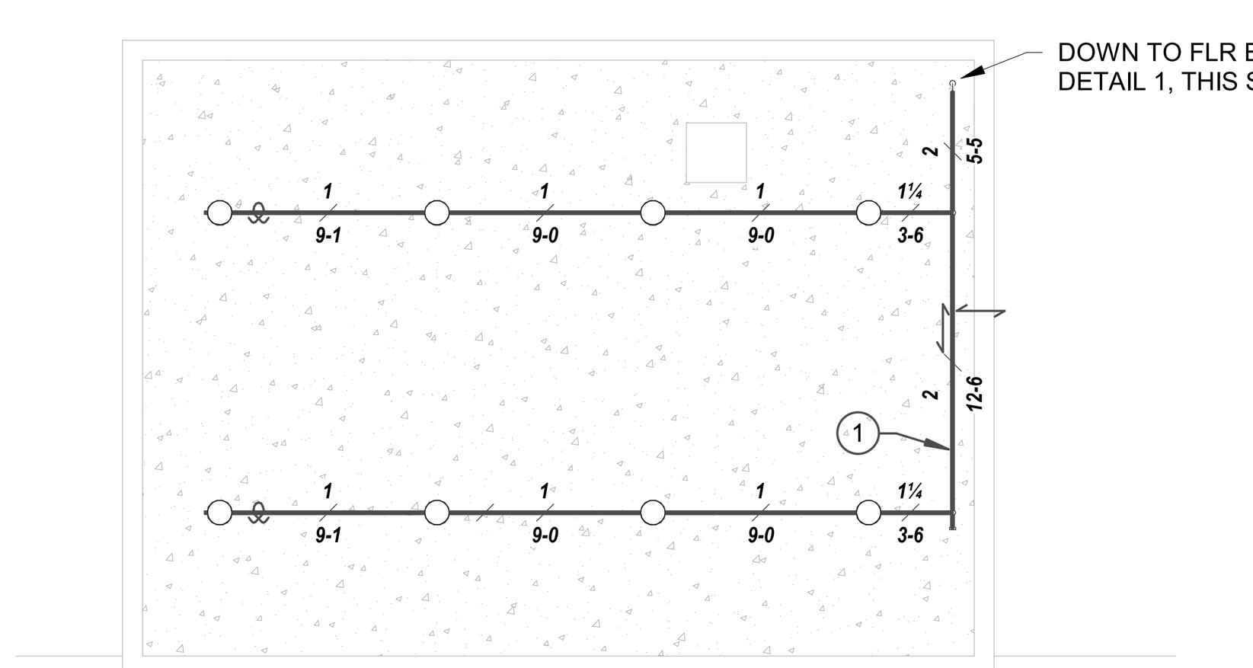


NOTE:
DRAIN SHALL BE PRE-ASSEMBLED AND LABELED.

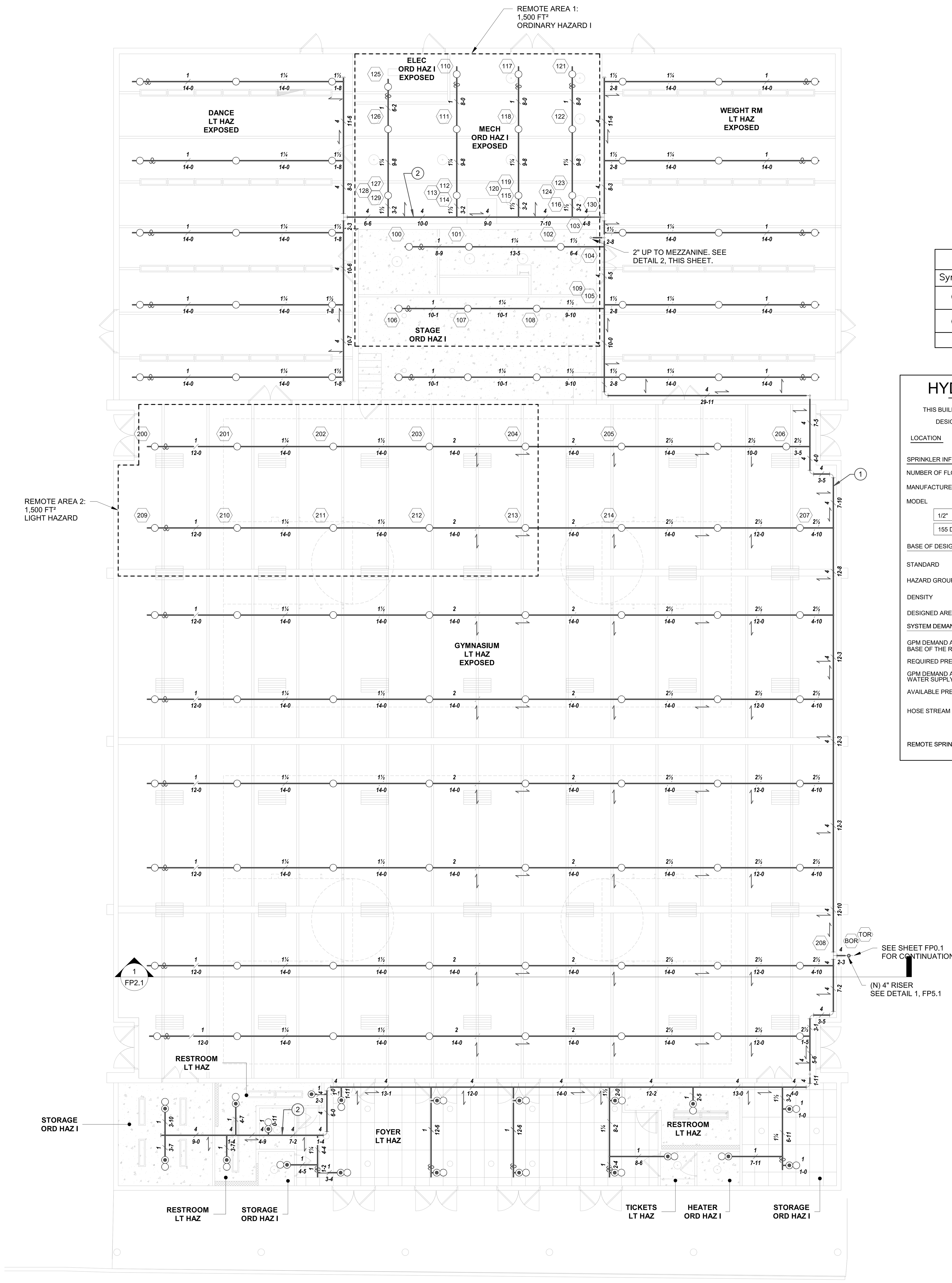
TYP. AUXILIARY DRAIN	SCALE NONE	3

Sprinkler Head Schedule

Symbol	Count	Thread	K–Factor	Description	Coverage
○	8	1/2"	5.6	TY3151 1/2 QUICK RESPONSE 155 DEGREE BRASS UPRIGHT	130 SF
8 = Total Number of Heads This Floor					



FIRE SPRINKLER MEZZANINE FLOOR PLAN	SCALE 1/8" = 1'-0"	2



FIRE SPRINKLER FLOOR PLAN	SCALE 1/8" = 1'-0"	1

MAXIMUM DISTANCE BETWEEN HANGERS

NOMINAL PIPE SIZE (in.)	1"–1–1/4"	1–1/2" – 6"
STEEL PIPE EXCEPT THREADED LIGHTWALL	12–0	15–0

SYMBOLS

RISER NIPPLE TO TEE	PIPE DIAMETER / PIPE LENGTH
RISER NIPPLE TO 90	RISER NIPPLE TO 90 SIDE OUTLET @ MAIN
1" DN. TO ARM OVER TO DROP	1" DN. TO ARM OVER TO DROP
1" DN. TO ARM OVER TO DROP	1" DN. TO ARM OVER TO DROP
WET PIPE RISER	PIPE DIAMETER
FIRE HYDRANT	END OF LINE RESTRAINT
PIV	HANGER
TAMPER SWITCH	HYDRAULIC NODE
FLOW SWITCH	1" PLUG OR DRAIN
PIPE BRACE	

Sprinkler Head Schedule

Symbol	Count	Thread	K–Factor	Description	Coverage
◉	20	1/2"	5.6	TY3531 1/2 QUICK RESPONSE 155 DEGREE CONCEALED PENDENT	130 SF
○	134	1/2"	5.6	TY3151 1/2 QUICK RESPONSE 155 DEGREE BRASS UPRIGHT	130 SF
154 = Total Number of Heads This Floor					

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION	AREA 1 - STAGE/MECHANICAL
SPRINKLER INFORMATION	
NUMBER OF FLOWING HEADS	18
MANUFACTURE	TYCO
MODEL	3131
1/2"	5.6 K-FACTOR
155 DEGREE	
BASE OF DESIGN	
STANDARD	NFPA 13 2019 ED.
HAZARD GROUP	ORDINARY HAZARD I
DENSITY	0.15
DESIGNED AREA OF DISCHARGE	1,500
SYSTEM DEMAND	
GPM DEMAND AT THE BASE OF THE RISER	369.85 GPM
REQUIRED PRESSURE	42.215 PSI
GPM DEMAND AT THE WATER SUPPLY SOURCE	619.85 GPM
AVAILABLE PRESSURE	68.95 PSI
HOSE STREAM ALLOWANCE	250 GPM
REMOTE SPRINKLER FLOW	19.5 GPM @ 12.12 PSI

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION	AREA 2 - GYMNASIUM
SPRINKLER INFORMATION	
NUMBER OF FLOWING HEADS	10
MANUFACTURE	TYCO
MODEL	3131
1/2"	5.6 K-FACTOR
155 DEGREE	
BASE OF DESIGN	
STANDARD	NFPA 13 2019 ED.
HAZARD GROUP	LIGHT HAZARD
DENSITY	0.10
DESIGNED AREA OF DISCHARGE	1,500
SYSTEM DEMAND	
GPM DEMAND AT THE BASE OF THE RISER	251.51 GPM
REQUIRED PRESSURE	49.87 PSI
GPM DEMAND AT THE WATER SUPPLY SOURCE	501.51 GPM
AVAILABLE PRESSURE	69.94 PSI
HOSE STREAM ALLOWANCE	250 GPM
REMOTE SPRINKLER FLOW	22.5 GPM @ 16.14 PSI

CONSTRUCTION NOTES:

1. NEW DUCTWORK SHALL NOT OBSTRUCT THE FUNCTION AND SPRAY PATTERN OF THE FIRE SPRINKLER SYSTEM. CONTRACTOR SHALL MAINTAIN CLEARANCE REQUIREMENTS AS DEFINED IN 2019 NFPA 13, CHAPTER 8. OBSTRUCTED CONDITIONS SHALL BE CORRECTED VIA A DSA CCD APPROVAL PROCESS.
2. INSTALLATION OF THE SPRINKLER SYSTEM SHALL NOT BE STARTED UNTIL DRAWINGS, SPECIFICATIONS, CALCULATIONS, ETC. HAVE BEEN APPROVED BY DSA.
3. EDUCATIONAL OCCUPANCY AFSS DESIGN CRITERIA:

   LIGHT HAZARD: CLASSROOMS, OFFICES, *AUDITORIUMS, LIBRARY READING AREAS WITHOUT HIGH STACKS

   ORDINARY HAZARD GROUP 1: KITCHENS, MULTI-PURPOSE ROOMS, LARGE STORAGE AREAS, STAGES (AS DEFINED IN 2016 CBC 410.2)

   ORDINARY HAZARD GROUP 2: SCIENCE LABS, VOCATIONAL SHOPS, STAGES 1,000 FT² IN AREA OR >50 FT IN HEIGHT, LIBRARY READING AREAS WITH HIGH STACKS

   NFPA 13, A5.1, A5.3.1, A5.3.2 *IF ALSO FUNCTIONS AS MULTI-PURPOSE ROOM, USE ORDINARY HAZARD GROUP I.
4. CONTRACTOR SHALL OPEN EXISTING CEILINGS AS NECESSARY TO INSTALL NEW PIPING. ALL EXISTING CEILING FRAMING TO REMAIN. CONTRACTOR SHALL PATCH, REPAIR, AND PAINT CEILINGS AFTER INSTALLATION.
5. BRACING SHALL BE PROVIDED AT THE FOLLOWING MAXIMUM SPACING.
   LATERAL: 20 FT
   LONGITUDINAL: 30 FT

KEY NOTES:

(1) AUTOMATIC AIR VENT PER DETAIL 9, FP5.1.

(2) AUXILIARY DRAIN CAPPED BELOW CEILING PER DETAIL 3, THIS SHEET.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE
	DSA SUBMITTAL	09/19/23
	DSA BACK CHECK	02/23/24

Ynl Architects
architecture | interior

PDS
Pocock Design Solutions Inc.

STAMP

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

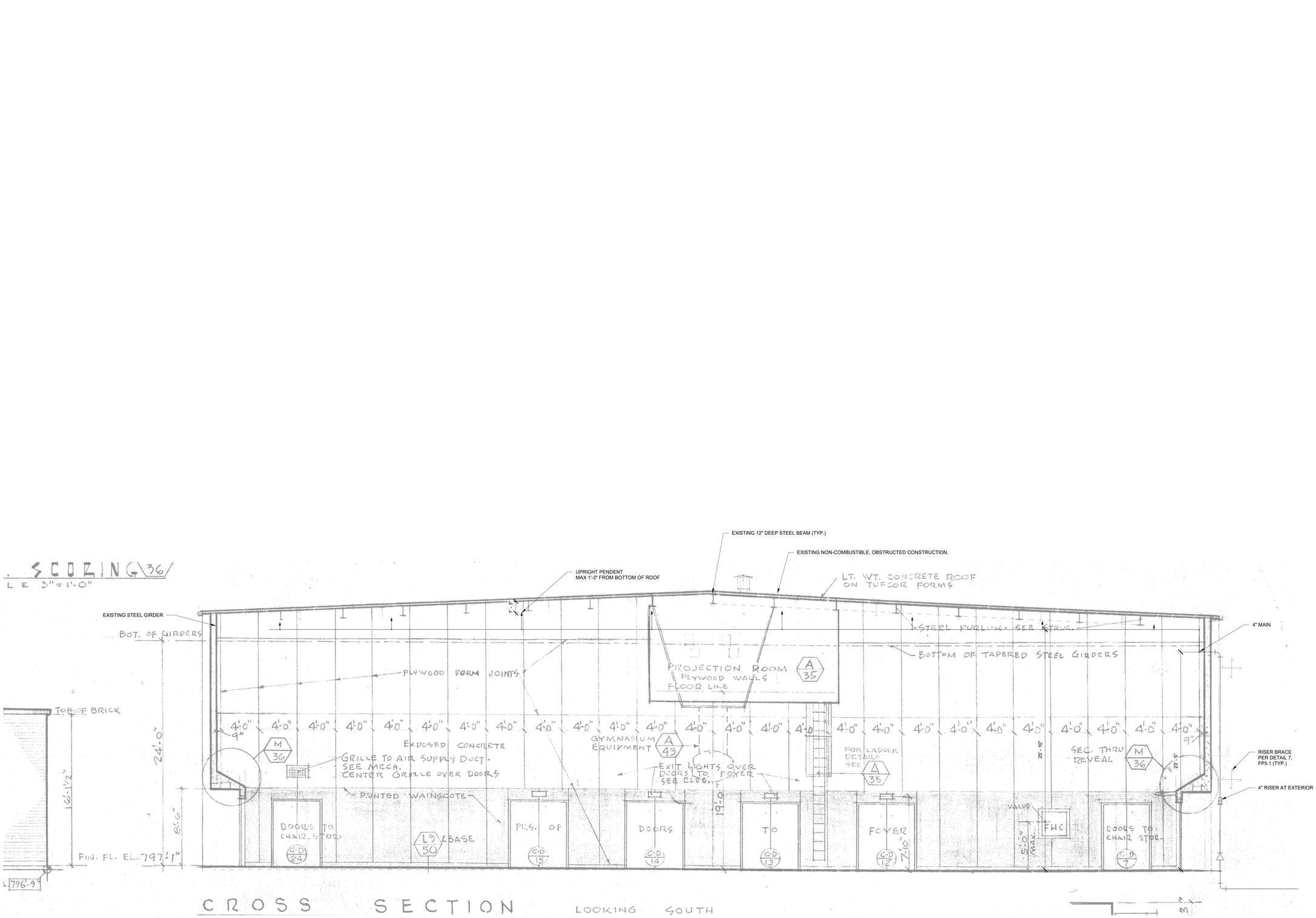
POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE SPRINKLER FLOOR PLAN

DATE 02/23/2024

DSA A# 03-123614
FILE NO. 19-H20

SHEET FP1.1



FIRE SPRINKLER SECTION VIEW

SCALE
1/4" = 1'-0"

1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE
	DSA SUBMITTAL	09/19/23
	DSA BACK CHECK	02/23/24

Ynl Architects
architecture | interior

STAMP

LICENSED ARCHITECT
YU- NGOK LO
NO. C-31804
REN. 3-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
ANDREW R. GOSSMAN
No. M35839
Exp. 3/31/26
MECHANICAL
STATE OF CALIFORNIA

Andrew Gossman

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED
SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

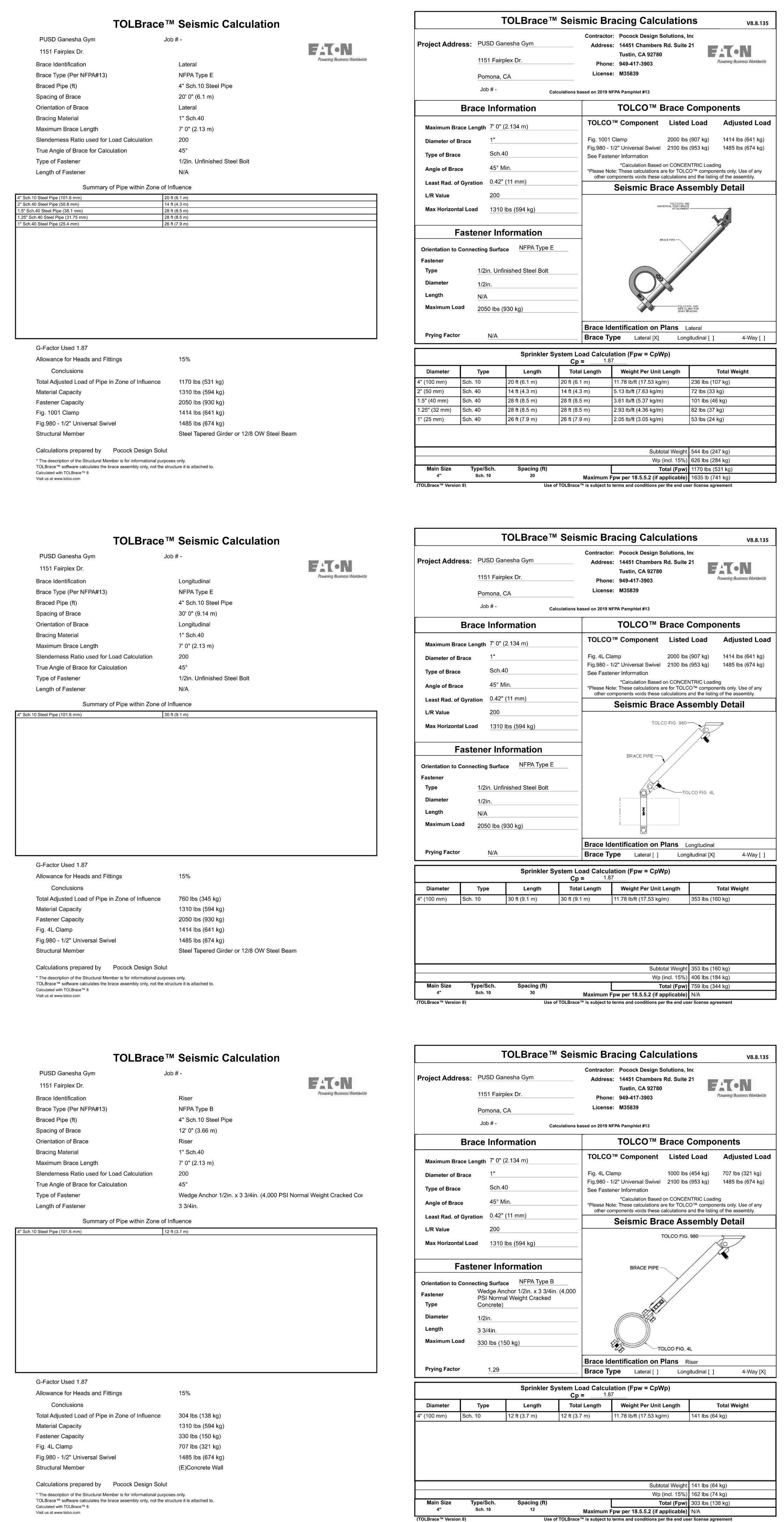
FIRE SPRINKLER SECTIONAL VIEWS

DATE
02/23/2024

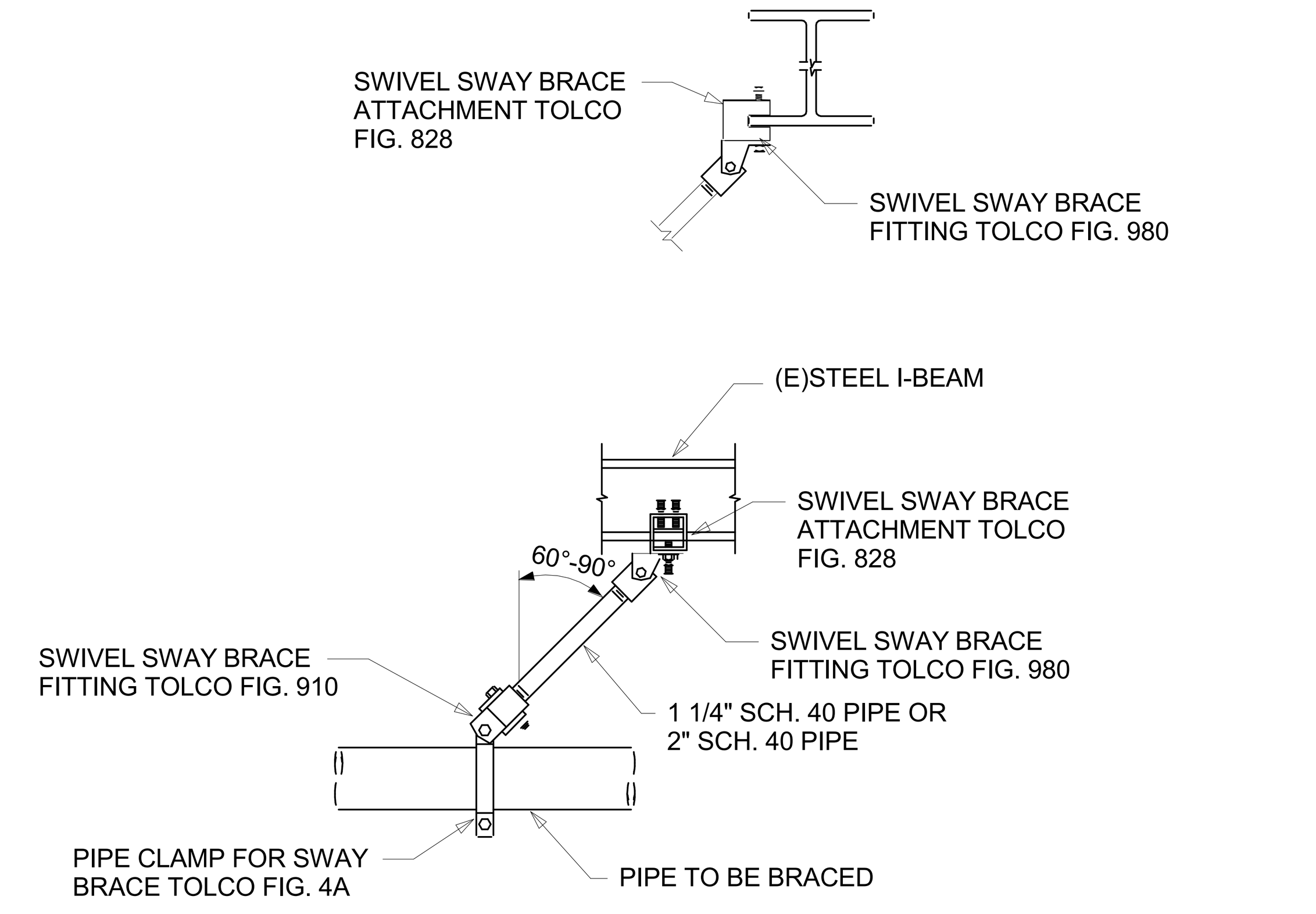
DSA A#
A# 03-123614
FILE NO. 19-H20

SHEET
FS2.1

8 — TYP. BRACING DETAILS (SCALE: NONE)



6 — TYP. LONGITUDINAL BRACE ATTACHMENT TO STEEL (SCALE: NONE)



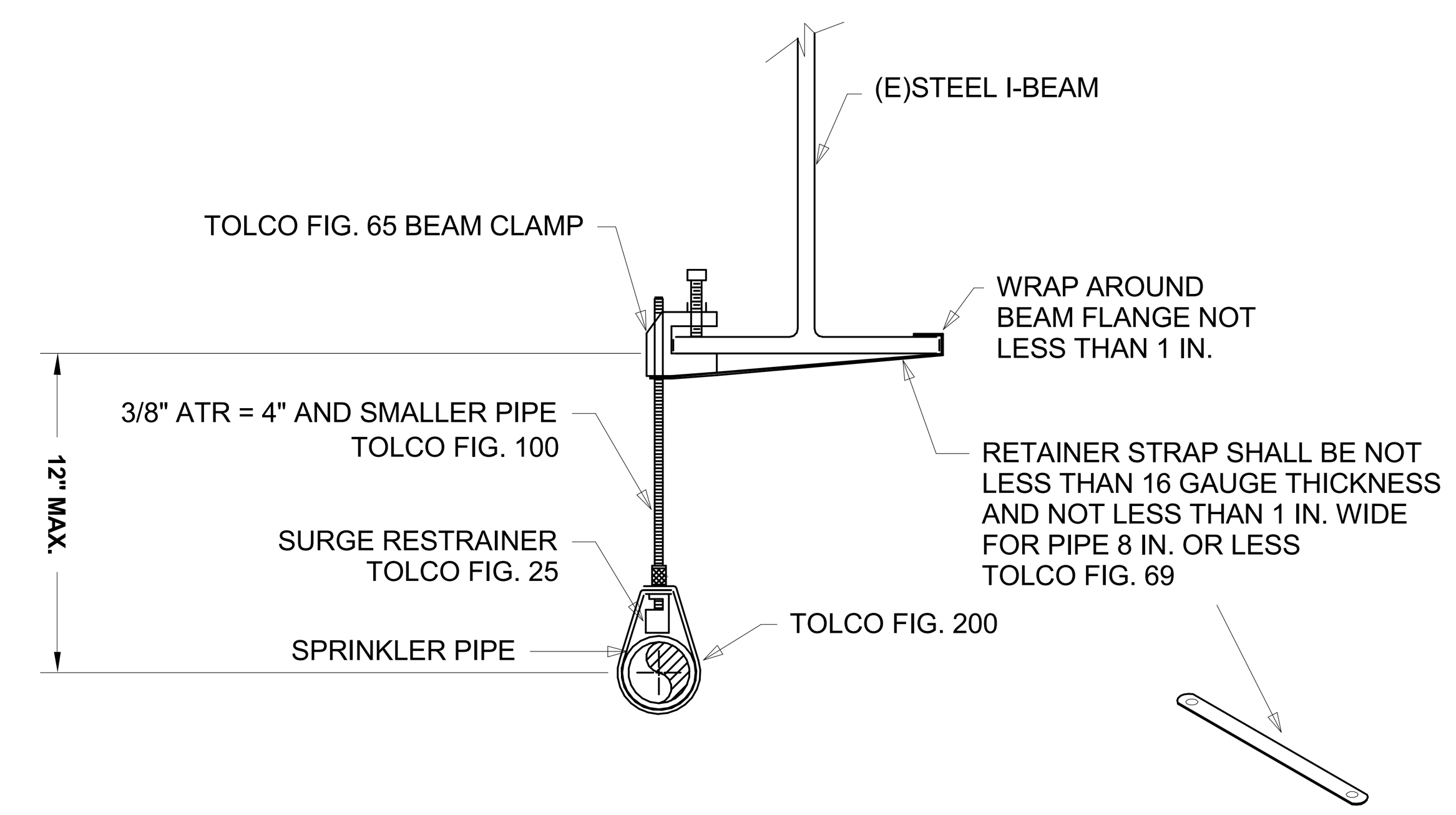
NOTE:
ALL BRACING SHALL BE PER OPM 0052-13
MAXIMUM SPACING SHALL BE 30' ON CENTER

SYMBOL = PIPE

3 — TYP. VERTICAL PIPE SUPPORT DETAIL (SCALE: NONE)

MAXIMUM DISTANCE BETWEEN HANGERS		
NOMINAL PIPE SIZE (in.)	1"-1-1/4"	1-1/2" - 6"
STEEL PIPE EXCEPT THREADED LIGHTWALL	12-0	15-0

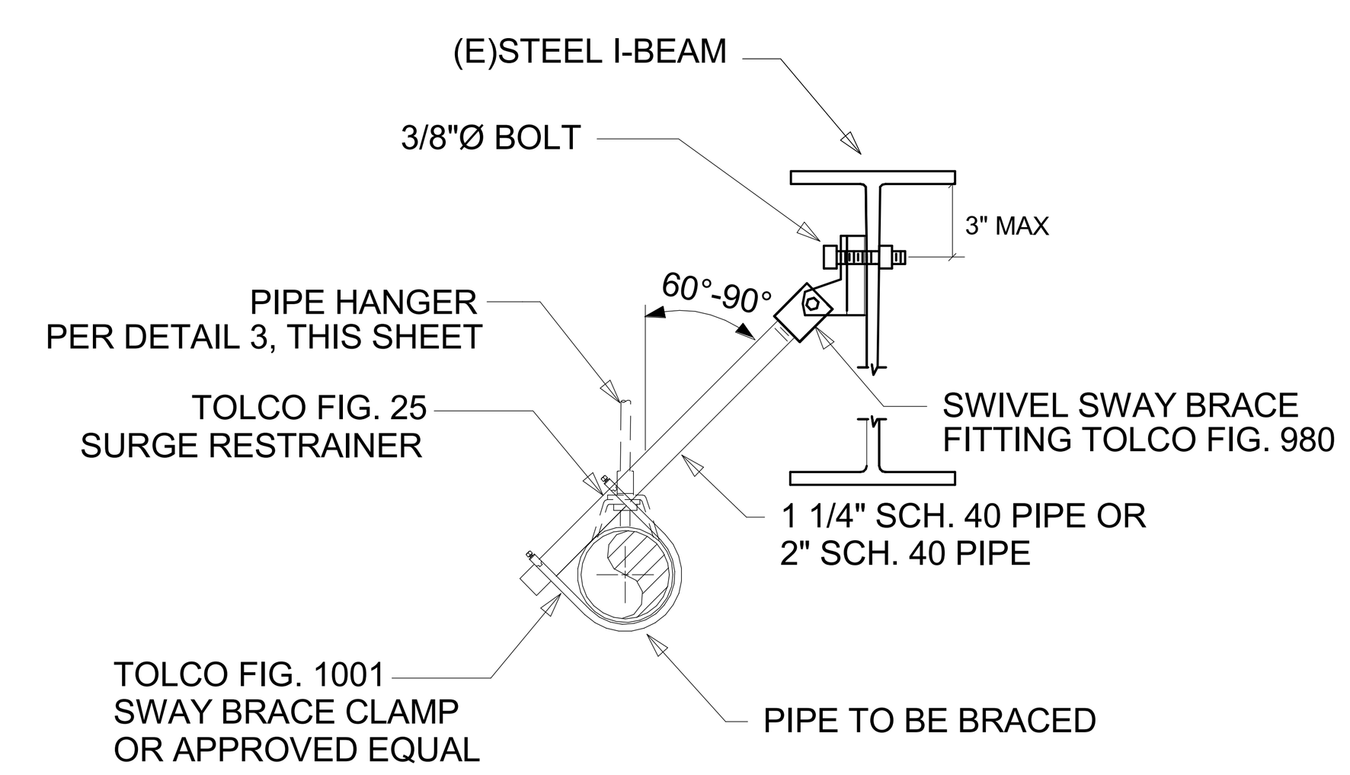
HANGER ROD SIZES	
PIPE SIZE	DIAMETER OF ROD
UP TO INCLUDING 4"	3/8"



NOTE:
HANG TO TOP OR BOTTOM FLANGE OF BEAM
USE SURGE RESTRAINER AT END OF LINE
MAX WEIGHT PER HANGER <=4" PIPE: 177 LBS

SYMBOL =

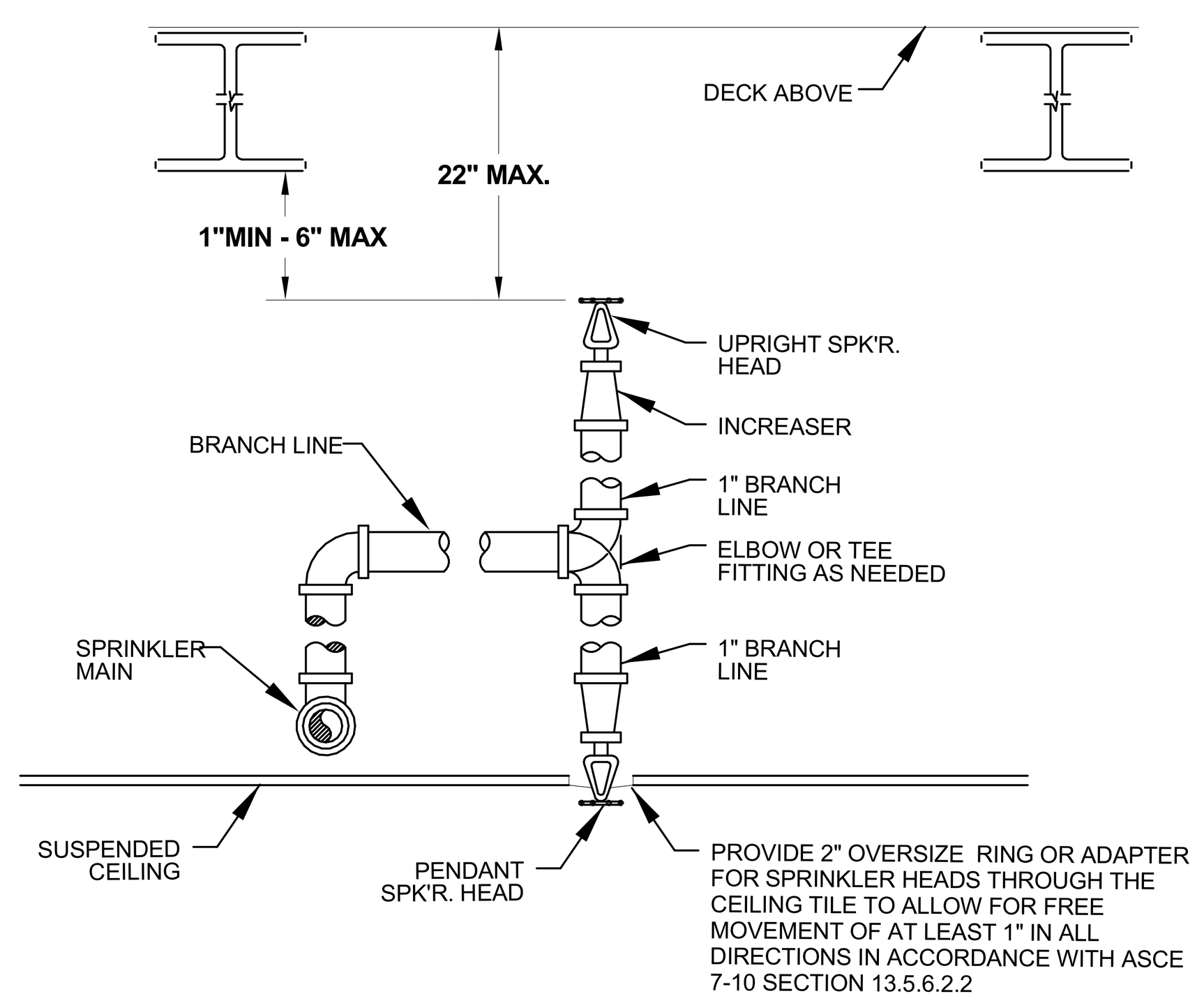
5 — TYP. LATERAL BRACE ATTACHMENT TO STEEL (SCALE: NONE)



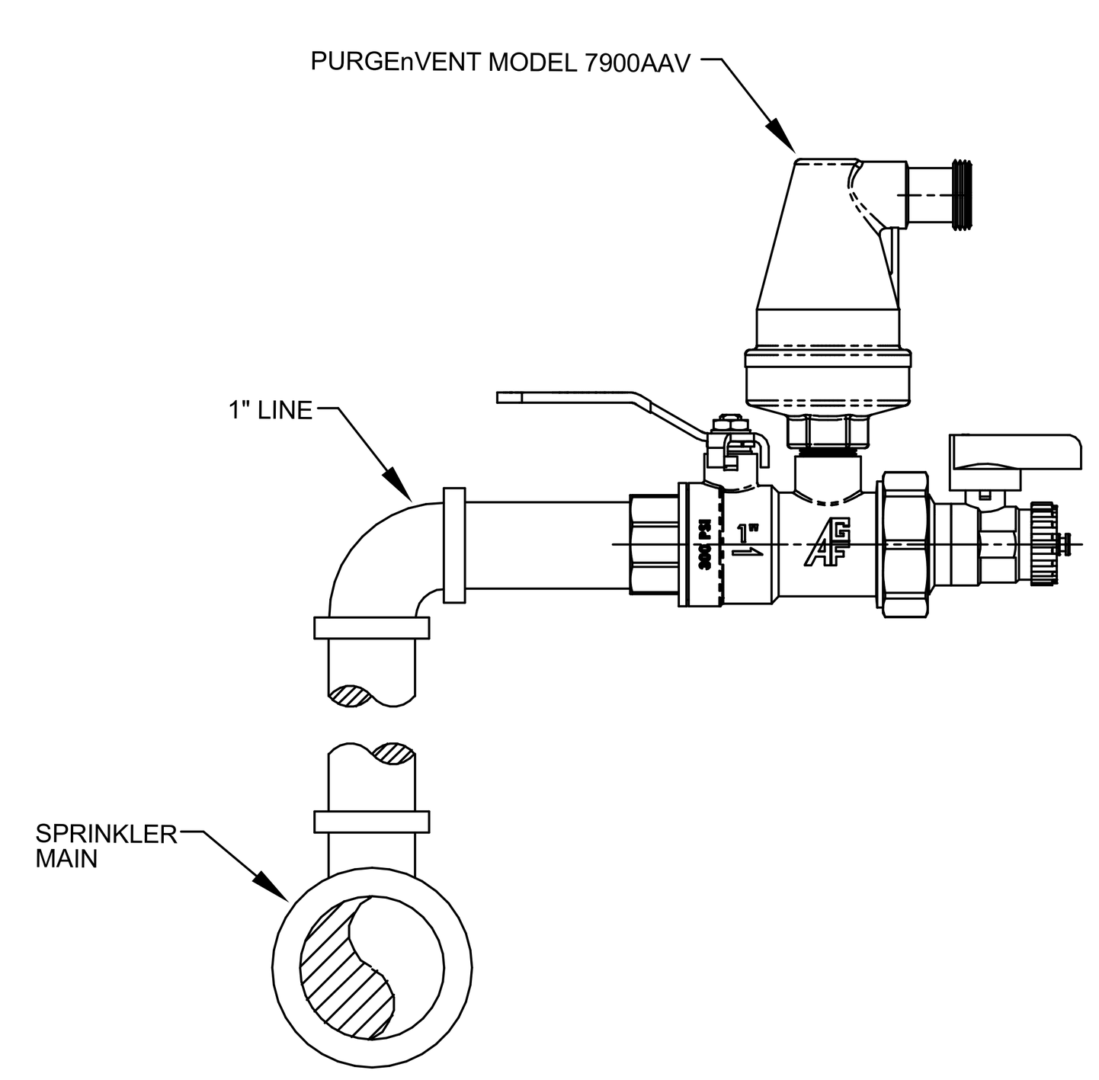
NOTE:
ALL BRACING SHALL BE PER OPM 0052-13
MAXIMUM SPACING SHALL BE 20' ON CENTER

SYMBOL = PIPE

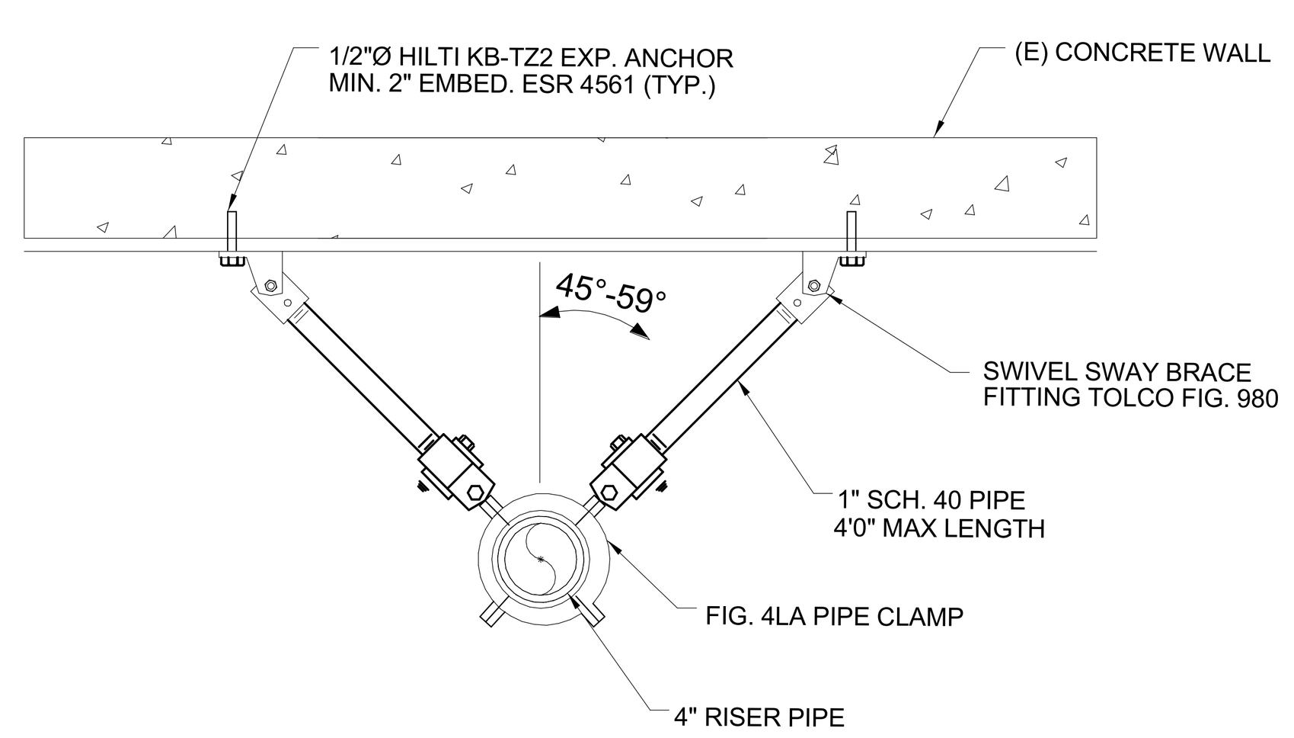
2 — TYPICAL SPRINKLER HEAD DETAIL (SCALE: NONE)



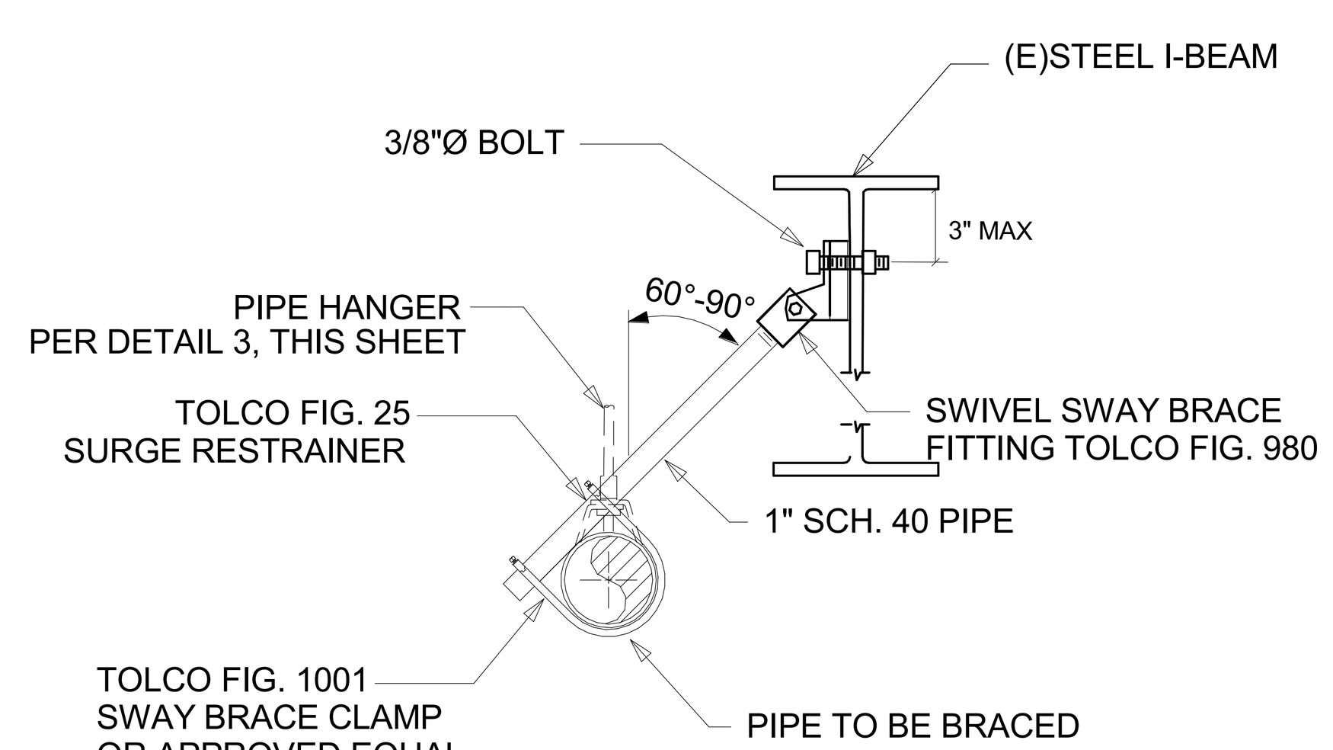
9 — TYP. AUTOMATIC AIR VENT DETAIL (SCALE: NONE)



7 — RISER ANCHORAGE DETAIL (SCALE: NONE)



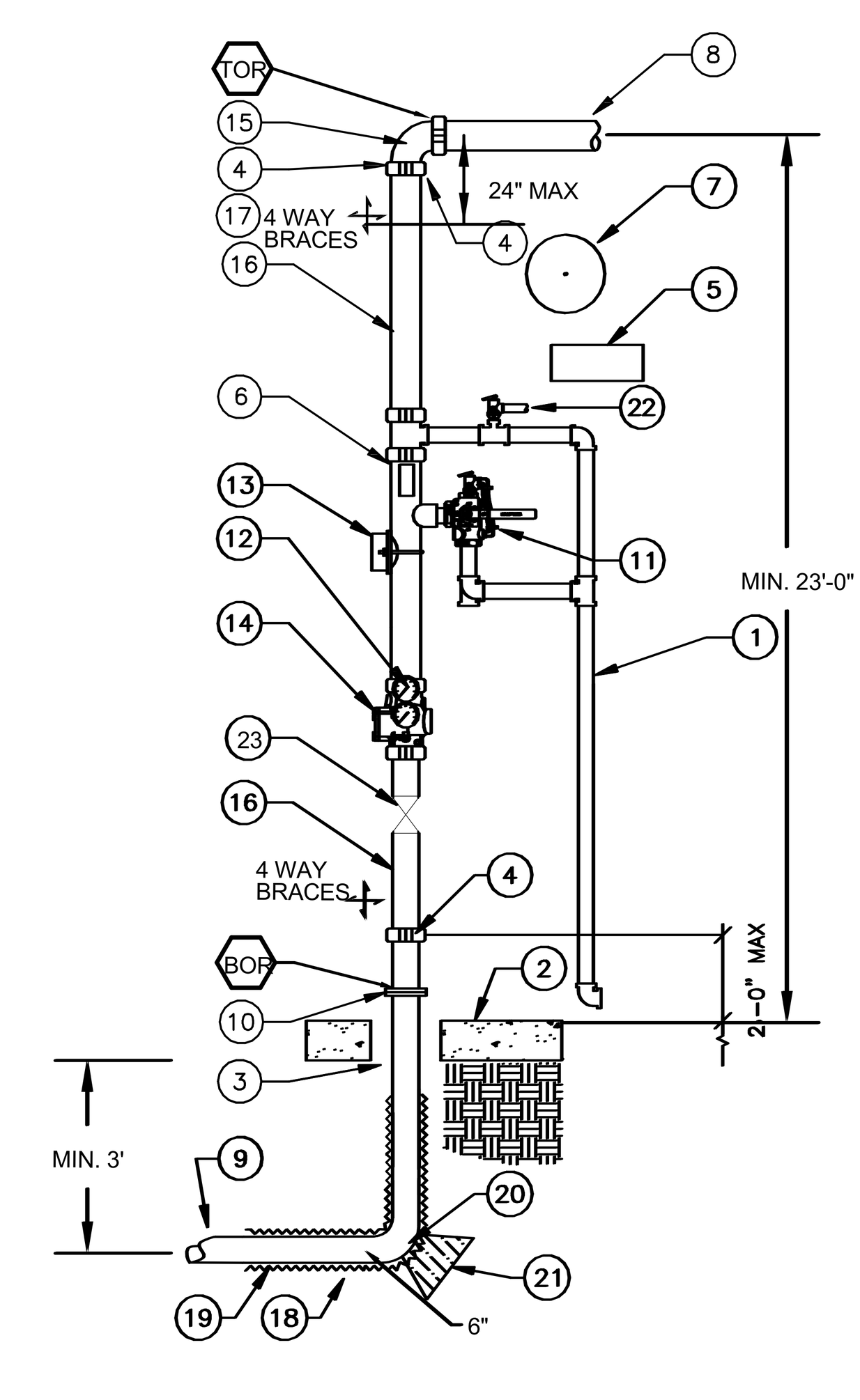
4 — TYP. BRANCHLINE RESTRAINT DETAIL (SCALE: NONE)



SYMBOL =

1 — TYPICAL 4" RISER DETAIL (SCALE: NONE)

1. 2" MAIN DRAIN
2. FINISHED FLOOR
3. 2" ANNULAR CLEARANCE
4. FLEXIBLE COUPLING
5. SPARE HEAD BOX
6. HYDRAULIC CALC PLATE AND GENERAL INFORMATION SIGN
7. 10" ELECTRIC BELL - MOUNTED ON EXTERIOR WALL - 24V DC
8. SUPPLY TO OVERHEAD FIRE SPRINKLER SYSTEM
9. FROM UNDERGROUND FIRE LINE - 4" C900 PVC PIPE TO 5'-0" OUTSIDE BUILDING FACE.
10. FLANGE 6" ABOVE FINISHED FLOOR
11. AGF TEST anDRAIN 3011A - INSPECTOR'S TEST AND DRAIN ASSEMBLY
12. 300# GUAGE (2)
13. FLOW SWITCH - WIRED TO FIRE ALARM CONTROL PANEL
14. RISER CHECK VALVE
15. GROOVED 90° ELL
16. 4" FIRE SPRINKLER RISER
17. 4-WAY BRACING TO WALL STRUCTURE
18. RETAINER GLAND
19. POLYETHYLENE ENCASEMENT
20. 6" SS AMES IN BUILDING RISER 90° ELL
21. THRUST BLOCK - SEE CIVIL PLANS FOR THRUST BLOCK DETAIL.
22. PRESSURE RELIEF VALVE
23. BUTTERFLY VALVE W/TAMPER SWITCH.



SYMBOL =

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REV	DESCRIPTION	DATE
	DSA SUBMITTAL	09/19/23
	DSA BACK CHECK	02/23/24

Ynl Architects
architecture | interior

PDS
Pocock Design Solutions Inc.

STAMP
LICENSED ARCHITECT — NO. C-31804 — REN. 3-31-25 — STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER — MECHANICAL — STATE OF CALIFORNIA

BLEACHER AND GYMNASIUM FLOORING REPLACEMENT AT GANESHA H.S.

GANESHA HIGH SCHOOL
1151 FAIRPLEX DR.
POMONA, CA 91768

POMONA UNIFIED SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

FIRE SPRINKLER DETAILS

DATE: 02/23/2024
DSA #: A# 03-123614
FILE NO. 19-H20

SHEET: FP3.1

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

GENERAL NOTES:
ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR

A 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 CCR

TITLE 24 CODES:
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) .....TITLE 24, PART 1
2022 CALIFORNIA BUILDING CODE (CBC), ...TITLE 24, PART 2 (PARTS 8 & 10 INCLUDED)
2022 CALIFORNIA ELECTRICAL CODE .....TITLE 24, PART 3
2022 CALIFORNIA MECHANICAL CODE (CMC) .....TITLE 24, PART 4
2022 CALIFORNIA PLUMBING CODE (CPC) .....TITLE 24, PART 5
2022 CALIFORNIA ENERGY CODE .....TITLE 24, PART 6
2022 CALIFORNIA FIRE CODE (CFC) .....TITLE 24, PART 9
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC) .....TITLE 24, PART 10
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE .....TITLE 24, PART 11
2022 CALIFORNIA REFERENCED STANDARDS CODE .....TITLE 24, PART 12
PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS .....TITLE 19

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS
2022 CBC, CHAPTER 35
2022 CFC, CHAPTER 80
REFERENCE STANDARDS
NFPA 13-2022
NFPA 72-2022
ICC 300-2017

SEISMIC DESIGN ASSUMPTIONS AND LIMITATIONS:
AN S_{DS} OF 1.74 WAS USED IN ALL STRUCTURAL CALCULATIONS FOR THIS PC
FOR BLEACHERS. THE SITE SPECIFIC S_{DS} MUST BE LESS THAN OR EQUAL TO 1.74.
- SEISMIC DESIGN CATEGORY D OR E
- SITE CLASS D-DEFAULT
- RISK CATEGORY III (CBC TABLE 1604A.5)
- NON-BUILDING STRUCTURE THAT IS NOT SIMILAR TO A BUILDING
- THE WEIGHT OF THE SEATING IS LESS THAN 25% OF THE COMBINED EFFECTIVE SEISMIC WEIGHT OF THE SEATING AND THE BUILDING STRUCTURE (Ref. ASCE 7-16 13.1.1)

SEISMIC DESIGN:
DESIGN OF SEATING STRUCTURE:
TRANSVERSE DIRECTION (PERPENDICULAR TO SEATING): ASCE 7-16 EQ 13.3-1
Ip=1.0 Ap=1.0 Rp=2.5 (z/h)=0.80
LONGITUDINAL DIRECTION (PARALLEL TO SEATING): ASCE 7-16 CHAPTER 15 AND EQ 12.8-1
Ie=1.25 R=1.25

PRODUCTS APPROVED UNDER THIS PC

BLEACHER TYPE	WALL ATTACHED
RISES (TIER HEIGHTS)	10.25" AND 11.50"
SPANS (ROW SPACING)	22", 24", AND 26"
SECTION LENGTH	26'-0" MAXIMUM
ROWS (TIERS)	29 MAXIMUM (10.25" RISE) 26 MAXIMUM (11.50" RISE)

ACCESSORIES
SELF-STORING END RAILS, SELF-STORING AISLE RAILS,
QUARTER TURN AISLE RAILS, INTERMEDIATE AISLE STEPS,
END CURTAINS, FIXED & RECOVERABLE WHEELCHAIR NOTCHES

THIS APPROVAL IS BASED ON SECOND-ORDER 3D ANALYSIS PER AISI S100-16 AND COMPONENT TESTING.

STRUCTURAL TESTS AND INSPECTIONS
SHOP WELDING INSPECTION: INSPECTION SHALL BE PERFORMED BY INTERKAL, A CERTIFICATE OF COMPLIANCE - ACCEPTED BLEACHER/GRANDSTAND FABRICATOR (DSA-130) SHALL BE ISSUED
FOR JOB SPECIFIC USE, CHECK BOXES THAT APPLY. ☐ POST INSTALLED ANCHOR IN MASONRY, SPECIAL INSPECTION PER ESR-1056 SECTION 4.3 IS REQUIRED FOR DETAILS: ☐ 7 T4.03 ☐ 7 T4.04 ☐ 7 T4.05 ☐ 5M T4.10 ☑ POST INSTALLED ANCHOR IN CONCRETE, SPECIAL INSPECTION PER ESR-2713 SECTION 4.4 IS REQUIRED FOR DETAILS: ☐ 7 T4.01 ☐ 7 T4.02 ☐ 5C T4.10 ☐ POST INSTALLED ANCHOR IN CONCRETE, SPECIAL INSPECTION PER ESR-3037 SECTION 4.4 IS REQUIRED FOR DETAILS: ☐ 1 T4.21
FOR JOB SPECIFIC DETAILS

SITE SPECIFIC DESIGN INFORMATION (TO BE FILLED IN FOR EACH SITE SPECIFIC APPLICATION):

S_S = 1.726

S_{DS} = 1.381

INDEX OF PC DRAWINGS & OPTIONS

FOR JOB SPECIFIC USE, CHECK ALL BOXES THAT APPLY[1]

# OF ROWS[2]	11 ROWS	SPAN[2] ☐ 22"	☑ 24"	☐ 26"	RISE[2] ☑ 10.25"	☐ 11.50"	
☑ POWER OPERATION		☑ GUARD RAIL		☐ END CURTAIN		☑ BARRIER CURTAIN	
SEATING OPTIONS						AISLE RAIL OPTIONS	
☑ ESM ☑ 10"	☐ 12"	☐ CSM ☐ 10"	☐ 12"	☐ WOOD ☐ 8"	☐ 10"	☑ SELF-STORING	
☐ POLARIS (P1) ☐ 18"	☐ 19"	☐ 20"	☐ 21"	☐ 22"	☐ 23"	☐ QUARTER-TURN	

BLEACHER DECK & STEP OPTIONS

DECK	2" ABRASIVE TAPE	STEP	PVC AISLE CAP	BLACK OPTION
☐ GRAY	BLACK	GALVANIZED	GRAY WITH 2" BLACK STRIPE	
☐ CLEAR				
☑ BLACK	GRAY	☐ GALVANIZED	ALL BLACK	☐ B1 ☐ B2
		☑ BLACK	BLACK WITH 2" GRAY STRIPE	☐ B3 ☑ B4

OPTIONS	NUMBER	SHEET TITLE	
COVER	T0.00	■ TITLE SHEET	
GENERAL	T0.01	■ SPECIFICATIONS & STRUCTURAL SECTION	
	T0.02	■ EXAMPLE DSA-103 & DSA-130	
SITE SPECIFIC DRAWINGS[4]	T1.01	SITE SPECIFIC - BANK #1 PLAN VIEW	
	T1.02	SITE SPECIFIC - BANK #2 PLAN VIEW	
	T2.01	SITE SPECIFIC - BANK #1 & #2 SIDE ELEVATIONS	
WALL AND FLOOR ATTACHMENTS	T4.01	☑ UPPER WALL ATTACHMENT - CONCRETE	
	T4.02	☐ UPPER WALL ATTACHMENT - FURRED CONCRETE[3]	
	T4.03	☐ UPPER WALL ATTACHMENT - MASONRY[3]	
	T4.04	☐ UPPER WALL ATTACHMENT - HEAVY DUTY - MASONRY	
	T4.05	☐ UPPER WALL ATTACHMENT - FURRED MASONRY[3]	
	T4.06	☐ UPPER WALL ATTACHMENT - WOOD BACKING SDWS	
	T4.07	☐ UPPER WALL ATTACHMENT - WOOD BACKING LAG	
	T4.08	☐ UPPER WALL ATTACHMENT - METAL STUD	
	T4.09	☐ UPPER WALL ATTACHMENT - STRUCTURAL STEEL	
	T4.10	■ TYPICAL LAST ROW DETAILS	☑ CONCRETE ☐ MASONRY ☐ STEEL STUD ☐ WOOD STUD
	T4.20	☑ LOWER WALL ATTACHMENT[3]	
	T4.21	☐ FLOOR ATTACHMENT - CONCRETE FLOOR	
	T4.22	☐ FLOOR ATTACHMENT - WOOD FLOOR OVER CONCRETE	
AISLE PLAN & ELEVATIONS	T5.10	☑ 10.25" RISE WITH SELF STORING AISLE RAILS PLAN VIEW AND SIDE ELEVATIONS	
	T5.20	☐ 10.25" RISE WITH QUARTER TURN AISLE RAILS PLAN VIEW AND SIDE ELEVATIONS	
	T5.30	☐ 11.50" RISE WITH SELF STORING AISLE RAILS PLAN VIEW AND SIDE ELEVATIONS	
	T5.40	☐ 11.50" RISE WITH QUARTER TURN AISLE RAILS PLAN VIEW AND SIDE ELEVATIONS	
STRUCTURAL FRAMING	T6.10	☑ 10.25" RISE FRAMING PLAN & REAR ELEVATION	
	T6.20	☐ 11.50" RISE FRAMING PLAN & REAR ELEVATION	
	T6.30	■ TYPICAL FRAME ASSEMBLY	
	T6.31	■ TYPICAL FRAME ASSEMBLY CONTINUED / RISER & NOSE BEAM SPLICES	
STRUCTURAL PARTS	T7.01	■ LOW ROW - HORSE WELDMENT & COMBO BRACKET	
	T7.02	■ LOW ROW - SWAY BRACE DETAILS	
	T7.10	☐ HIGH ROW - HORSE WELDMENT	
	T7.11	☐ HIGH ROW - SWAY BRACE DETAILS	
	T7.12	☐ HIGH ROW - SWAY BRACE DETAILS CONTINUED	
	T7.20	■ FRONT ROW OUTRIGGER	
AISLE & GUARD DETAILS	T8.10	☑ SELF-STORING AISLE RAILS & INTERMEDIATE STEP	
	T8.20	☐ QUARTER TURN AISLE RAILS & INTERMEDIATE STEP	
	T8.30	☑ SELF-STORING END RAIL/CURTAIN DETAILS	
	T8.31	☑ SELF-STORING END RAIL DETAILS CONTINUED	
ACCESSIBILITY & SEATING OPTIONS	T9.10	☑ WHEELCHAIR NOTCH - 1 ROW PERMANENT	
	T9.20	☑ SEATING OPTIONS - PLASTIC	
	T9.30	☐ SEATING OPTIONS - WOOD	
TOTAL SHEETS		21 TOTAL (3 SITE SPECIFIC SHEETS, 18 PC SHEETS)	37 SHEETS SUBMITTED FOR PRE-CHECK APPROVAL

TABLE NOTES:
1. A SOLID CHECK BOX INDICATES THE OPTIONS ARE PRESENT IN EVERY APPLICATION OF THIS PRE-CHECK. A CHECK MARK INDICATES THE OPTIONS ARE PRESENT IN THE SITE SPECIFIC APPLICATION.
2. SPAN AND RISE DIMENSIONS AFFECT DETAILS ACROSS ALL SHEETS IN THIS PRE-CHECK.
3. DETAIL IS LIMITED TO 15 ROWS FOR 10.25" RISE OR 13 ROWS FOR 11.50" RISE.
4. THESE LINES ARE PLACE HOLDERS FOR SITE SPECIFIC SHEETS WHICH WILL BE FILLED IN FOR EACH SITE SPECIFIC APPLICATION. DRAWING NUMBERS T1, T2, AND T3 ARE RESERVED FOR SITE SPECIFIC DRAWINGS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STIGER
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
	REVISIONS	

NAME: SCOPELAND DATE: 9-19-23 SCALE: N/A

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: TITLE SHEET

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T0.00

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

DESIGN LOADS *		ICC 300-17 STANDARD REFERENCES
UNIFORM LIVE LOAD	100 psf	SECTION 303.2
SEATBOARD/FOOTBOARD LOAD	120 plf	TABLE 303.2
STAIR TREAD LOAD CONCENTRATED	300 lbs ON 4 SQ.IN.	TABLE 303.2
SWAY PARALLEL TO SEATS	24 plf	SECTION 303.4.1
SWAY PERPENDICULAR TO SEATS	10 plf	SECTION 303.4.2
HANDRAIL & GUARD UNIFORM	50 plf ANY DIRECTION	TABLE 303.2
GUARDRAIL INFILL	50 lbs ON 1 SQ. FT.	TABLE 303.2
HANDRAIL & GUARD CONCENTRATED	200 lbs	TABLE 303.2
SEISMIC LOAD	SEE COVER	

* 2022 CALIFORNIA BUILDING CODE 1607A.19 REFERS TO ICC 300-17 FOR DESIGN LOADS.

2022 CBC LOAD COMBINATIONS

ASCE 7-16 SECTION 2.3	ICC 300-17 LOAD COMBINATIONS	SECTION 1605A.4 LOAD COMBINATION
Eq. 1 1.4D	Eq. 3-1 1.2D+1.0L+1.6Z	Eq. 3-5a D+0.4L+Z
Eq. 2 1.2D+1.6L	Eq. 3-2 0.9D+0.4L+1.6Z	
Eq. 6 1.2D+0.5L+1.0E	Eq. 3-3 1.2D+1.6Rr	
Eq. 7 0.9D+1.0E	Eq. 3-4 1.2D+1.6L+1.2Rr	

GENERAL
BLEACHERS SHALL BE CONSTRUCTED OF NONCOMBUSTIBLE STEEL FRAMING WITH COMBUSTIBLE SEATING AND FOOT BOARDS AS ALLOWED BY ICC 300-17 SECTION 302.1 AS REFERENCED FROM 2022 CBC SECTION 1030.1.1. MEMBER DESIGN SHALL BE IN ACCORDANCE WITH THE AISI S100-16 W/S2-20 NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS AS REFERENCED FROM 2022 CBC SECTION 2210A OR APPROVED LOAD TESTING. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3-08 AND 2022 CBC SECTION 2204A.1. ALL PROCEDURES SHALL BE QUALIFIED OR PRE QUALIFIED AND ALL WELDERS AND WELDING OPERATORS SHALL BE QUALIFIED. UNLESS NOTED OTHERWISE ON DRAWINGS, ALL WELDING SHALL BE DONE IN THE SHOP USING THE GMAW PROCESS AND ER70-X ELECTRODES. ALL BOLTED CONNECTIONS ARE "BEARING-TYPE". ALL CONCRETE AND MASONRY ANCHORING SYSTEMS APPLIED SHALL HAVE A CURRENT ICC EVALUATION REPORT (ESR). THE INTERKAL FRICTION POWER SYSTEM IS UL LISTED UNDER FILES E160665. THE FLOOR SHALL BE DESIGNED (BY OTHERS) TO WITHSTAND THREE UNFACTORED LOADS OF 1,000 LBS ON 1.5 SQUARE INCHES EACH, SPACED LINEARLY AT 4' O.C. WHEEL TRAVEL LAYOUTS AND BLEACHER ROLLING WEIGHTS ARE AVAILABLE ON REQUEST. WALL ATTACHMENT FORCES WILL BE PROVIDED ON THE DRAWINGS. WALL DESIGN WILL NOT BE PROVIDED BY INTERKAL.

MATERIALS- CERTIFIED MILL TEST REPORTS SHALL BE RETAINED BY INTERKAL FOR ALL STEEL USED IN CONSTRUCTION OF THE BLEACHER.

DESCRIPTION	USE	ASTM SPEC.	Fy	Fu	%Elong
TS3X2X14GA(.083")	HORSE POST/SWAY BRACE	A500 GRADE C	50	62	15
TS4X2X14GA(.083")	SWAY BRACE	A500 GRADE C	50	62	15
TS4X2X11GA(.120")	HORSE POST/SWAY BRACE	A500 GRADE B	46	58	19
ROLL FORMED .070" GALV.	RISER BEAM	A653 GRADE 50	50	65	12
ROLL FORMED .070" BLK	RISER BEAM	A1011 GRADE 50	50	65	16
ROLL FORMED .075" GALV.	ROLL FORMED SWAY	A653 GRADE 50	50	65	12
ROLL FORMED .094" GALV.	NOSE BEAM	A653 GRADE 50	50	65	12
STAMPED AND FORMED	MISC. U.N.O.	A1011 GRADE 30	30	49	25
STAMPED AND FORMED	MISC. AS NOTED	A1011 GRADE 40	40	55	21
HOT ROLLED	FLATS & BARS	A36	36	58	23
	SHAPES	A36	36	58	21
TUBING	RAILS U.N.O.	A513 (1010)	32	45	15

☐ WOOD SEAT & RISER - SEE SHEET T9.30 AS APPLICABLE.

PLYWOOD FOOTBOARDS - (EVALUATION REPORT ESR-4938):
- ☑ POLYDECK PLASTIC COATED FIVE PLY, 19/32", GROUP 1, EXTERIOR, C-C PLUGGED, SINGLE-FLOOR 20" SPAN RATED PER PS 1.
- ☐ CLEAR COATED FIVE PLY 19/32" PERFORMANCE CATEGORY, A-C, GROUP 1, EXTERIOR PER PS 1.

FASTENERS (CAP SCREWS)	APPLICATION	SPECIFICATION	FINISH	TENSILE STRENGTH
	TYP. U.N.O.	ASTM A449	ZINC	120,000 PSI
	AT SWAY BRACES	ASTM A354 BD	BLACK	150,000 PSI

SPECIAL INSPECTION AS REQUIRED BY THE 2022 CALIFORNIA BUILDING CODE CHAPTER 17A

WELDING ALL WELDS SHALL BE INSPECTED BY AN AWS CERTIFIED WELDING INSPECTOR AS DEFINED IN THE PROVISIONS OF AWS QC1. A CERTIFICATE OF COMPLIANCE (FORM DSA-130) SHALL BE ISSUED.

BOLTING NO SPECIAL INSPECTION IS REQUIRED.

EXPANSION ADHESIVE ANCHORS ALL ANCHORS SHALL HAVE A CURRENT ICC-ES EVALUATION REPORT. SPECIAL INSPECTION SHALL BE PROVIDED DURING ANCHOR INSTALLATION AS REQUIRED BY THE EVALUATION REPORT AND IN ACCORDANCE WITH 2022 CBC SECTION 1704A.

LOAD TESTING APPROVAL UNDER THE 2022 CBC IS BASED ON ANALYSIS USING RISA-3D MODELS. AS A SUPPLEMENT, A REPORT OF LOAD TESTING, 20 ROW INTERKAL MODEL, A 2001 BLEACHER SYSTEM ON JULY 21, 2003 WAS SUBMITTED. THIS TEST WAS DONE IN ACCORDANCE WITH IR 16-5.01.

INTERKAL PC's
2001 CBC PC 02-103619 (BASED ON LOAD TESTING TO 20 ROWS)
2007 CBC PC 02-109351 (BASED ON LOAD TESTING TO 20 ROWS)
2010 CBC PC 02-111862 (BASED ON LOAD TESTING TO 20 ROWS)
2013 CBC PC 02-113530 (BASED ON TESTING & EXTENDED TO 30 ROWS BY ANALYSIS)
2016 CBC PC 02-116364 (BASED ON 3D ANALYSIS UP TO 29 ROWS)
2019 CBC PC 02-117974 (BASED ON 3D ANALYSIS UP TO 29 ROWS)

ACCESSIBILITY MATRIX: QUANTITIES OF FEATURES AS REQUIRED BY 2022 CBC 11B-221 AND 11B-802

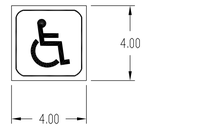
SEATING CAPACITY	W	C	S	D	ALS
4 TO 25	1	1	2	NOTE 3	2
26 TO 50	2	2	2	NOTE 3	2
51 TO 150	4	4	2	NOTE 3	4%
151 TO 300	5	5	1%(Min 2)	NOTE 3	4%
301 TO 500	6	6	1%	NOTE 3	4%
501 TO 5,000	NOTE 1	NOTE 1	1%	NOTE 3	4%
5,001 AND OVER	NOTE 2	NOTE 2	1%	NOTE 3	4%

MATRIX KEY:
W = WHEELCHAIR SPACE
C = COMPANION SEAT
S = SEMI-AMBULATORY SEAT
D = DESIGNATED AISLE SEAT
ALS = ALS RECEIVER

NOTE 1 6, PLUS 1 FOR EACH 100, OR FRACTION THEREOF, BETWEEN 501 THROUGH 5000.
NOTE 2 51, PLUS 1 FOR EACH 200, OR FRACTION THEREOF, OVER 5000.
NOTE 3 AT LEAST 5% OF THE TOTAL NUMBER OF AISLE SEATS.
NOTE 4 25% MINIMUM OF RECEIVERS PROVIDED, BUT NO FEWER THAN 2, SHALL BE HEARING-AID COMPATIBLE IN ACCORDANCE WITH SECTION 11B-706.3.

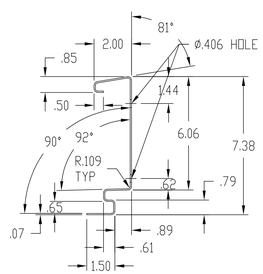
GAUGE	COIL	TUBE
3	.239	
7	.179	
9	.156	
10	.135	
11	.120	.120
12	.105	.109
13	.090	.095
14	.075	.083
16	.060	.065

9 / T0.01 GAUGE THICKNESS CHART



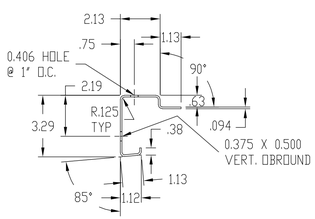
4" ISA SIGNAGE PROVIDED FOR WHEELCHAIR SPACES (11B-221.2), COMPANION SEATS (11B-221.3), DESIGNATED AISLE SEATS (11B-221.4) AND SEMI-AMBULANT SEATS (11B-221.6) SEE SITE SPECIFIC PLAN VIEW FOR LOCATIONS.

1 / T0.01 INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA)
(INTERNATIONAL BLUE SIGN W/WHITE SYMBOL) (PN 183578)
(THE COLOR BLUE SHALL APPROXIMATE FS 15090 IN FEDERAL STANDARD 595C)



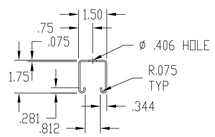
2 / T0.01 7 3/8" STEEL RISER BEAM

ASTM A653	FY	= 50 KSI
GRADE 50	FU	= 65 KSI
CLASS 1	ELONG	= 12%
☐ BLACK OPTION ASTM A1011	FY	= 50 KSI
B4 ONLY SS GRADE 50	FU	= 65 KSI
	ELONG	= 16%



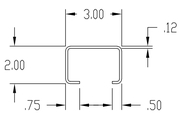
3 / T0.01 NOSE BEAM

ASTM A653	FY	= 50 KSI
GRADE 50	FU	= 65 KSI
CLASS 1	ELONG	= 12%



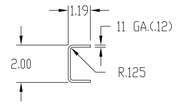
4 / T0.01 ROLL FORMED STEEL SWAY BRACE

ASTM A653	FY	= 50 KSI
GRADE 50	FU	= 65 KSI
CLASS 1	ELONG	= 12%



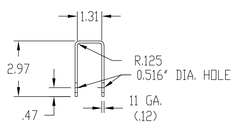
7 / T0.01 HORSE DECK SUPPORT ARM

ASTM A1011	FY	= 40 KSI
GRADE 40	FU	= 55 KSI
	ELONG	= 21%



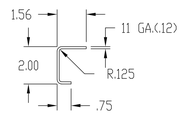
5 / T0.01 TYPICAL STEEL COMBO BRACKET

ASTM A1011	FY	= 40 KSI
GRADE 40	FU	= 55 KSI
	ELONG	= 21%



8 / T0.01 TYPICAL STEEL WHEEL CHANNEL

ASTM A1011	FY	= 40 KSI
GRADE 40	FU	= 55 KSI
	ELONG	= 21%



6 / T0.01 HORSE DECK SUPPORT ARM

ASTM A1011	FY	= 40 KSI
GRADE 40	FU	= 55 KSI
	ELONG	= 21%

NOTE:
FOR STRUCTURAL SECTIONS 2 / T0.01 TO 8 / T0.01
MINIMUM ELONGATIONS LISTED ARE FOR 2" GAGE LENGTH.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STERLING
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023

REV.	REVISION NOTES	INT/DATE
	REVISIONS	
⚠	. .	. .

NAME: SCOPELAND DATE: 9-19-23 SCALE: 1/4" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: SPECIFICATIONS & STRUCTURAL SECTIONS

Interkal
Spectator Seating World Wide
www.interkall.com

SHEET NUMBER: T0.01

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

DSA 130

CERTIFICATE OF COMPLIANCE–ACCEPTED FOLDING AND TELESCOPIC SEATING FABRICATOR

Certification form to be completed by the fabricator's design professional of the folding and telescopic seating at the completion of fabrication. Completed form is to be submitted to the owner, project inspector, the engineer or architect in general responsible charge, and DSA. Note that **DSA-approved** construction documents, referred to below, are those portions of the construction documents, duly approved by DSA, that contain information related to and affecting the Structural Safety, Fire/Life Safety, and Accessibility portions of the project.

(Use this form only for folding and telescopic bleachers fabricated in an accepted fabrication shop per DSA IR 16-5.16)

PROJECT INFORMATION:		
Folding and Telescopic Seating ID:	DSA File #:	-
Project Name/School:	DSA App. #:	-

ATTACHMENTS: (All boxes for attachments must be checked for the submittal to be considered complete.)
☐ Welding inspection reports for shop welds.
☐ Mill certification for seatboards, footboards, and all fastener components.

I attest that, based on my own personal knowledge (as defined in California Code of Regulations, Title 24, Part 1, Sections 4-336 and 4-214) that, as of the date of this document, the work has been performed and the materials have been used for the fabrication of folding and telescopic seating identified above, in every material respect, in compliance with the DSA-approved construction documents. I declare under penalty of perjury that I prepared this document and that all statements checked below are true.

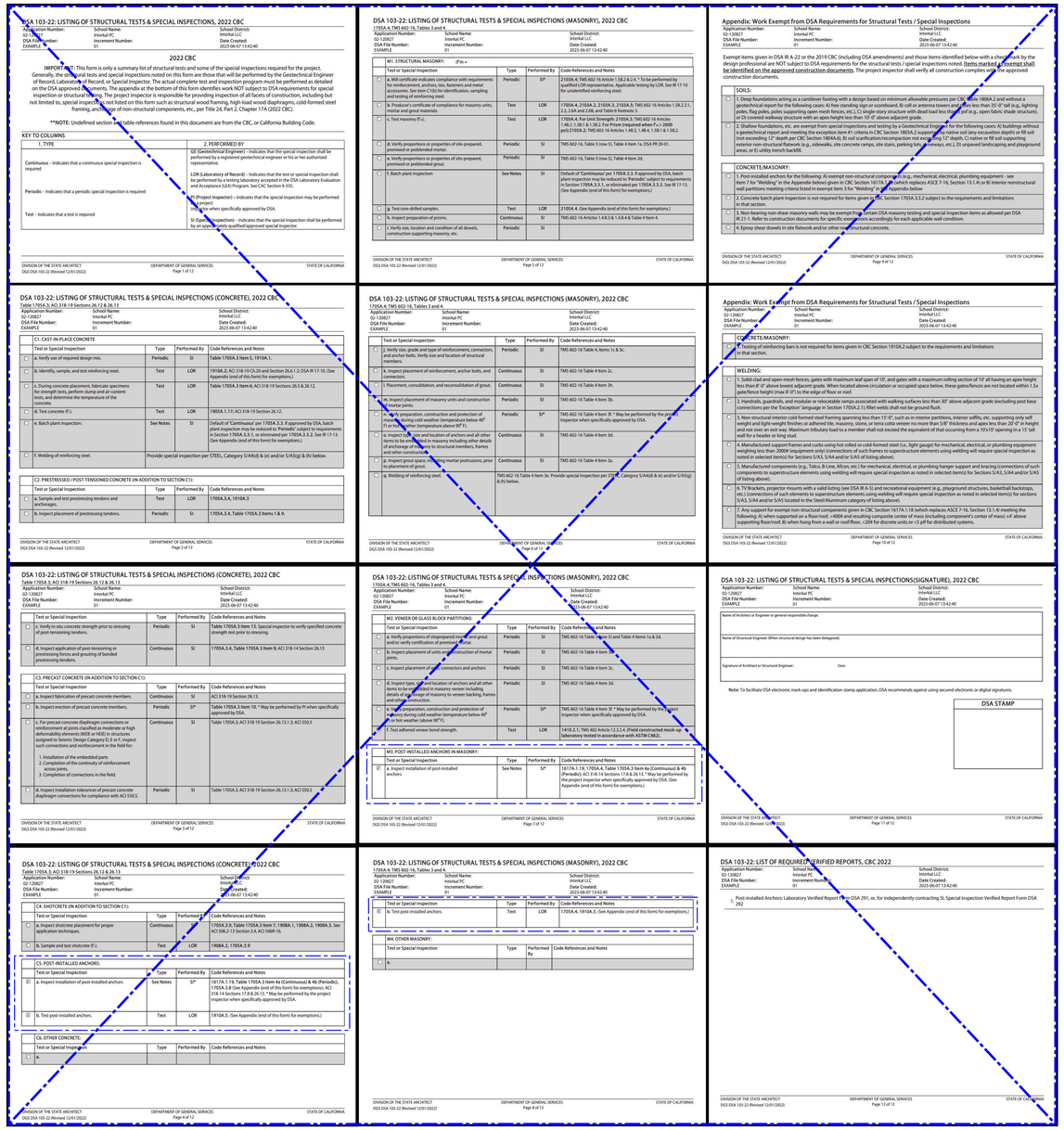
CONSTRUCTION CHANGES AS OF THIS DOCUMENT DATE: (Check applicable box)
☐ No changes to the DSA-approved folding and telescopic seating construction documents.
☐ All changes to the DSA-approved folding and telescopic seating construction documents have been approved by DSA.

Fabricator's Design Professional Signature: _____ Date: _____

Print Full Name: _____ CA Reg./Lic. #: _____

DGS DSA 130 (rev 03/30/17) DEPARTMENT OF GENERAL SERVICES Page 1 of 1
DIVISION OF THE STATE ARCHITECT STATE OF CALIFORNIA

1 T0.02 EXAMPLE DSA 130 FORM



2 T0.02 EXAMPLE DSA 103-22 FORM

NOTE:
1. THE EXAMPLE FORM DSA-103(S) SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSES ONLY. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE FORM DSA-103(S) ARE TO BE CROSSED OUT ON THIS DRAWING.
2. INSPECTION OF POST INSTALLED ANCHORS IN CONCRETE AND/OR MASONRY MAY NOT BE APPLICABLE TO ALL JOBS AS OPTIONS ARE AVAILABLE THAT DO NOT REQUIRE SUCH ANCHORS. SEE SITE SPECIFIC DRAWINGS IN SECTION T4 WHEN FILLING OUT DSA FORM 103-22.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023

REV.	REVISION NOTES	INT/DATE
	REVISIONS	

NAME: SCOPELAND DATE: 06-07-23 SCALE: N/A

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: EXAMPLE DSA-103 & DSA-130

Interkal
Spectator Seating World Wide
www.interkal.com

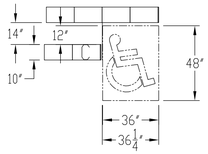
SHEET NUMBER: T0.02

DRAWING LOCATION - P:\PROD_DEV\CALIFORNIA\PC 02-120827 2022 CBC\CAD FILES\T0.02.DWG - PRINTED BY MCOPELAND ON 10-11-23 - 8:12am

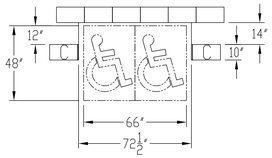
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

N

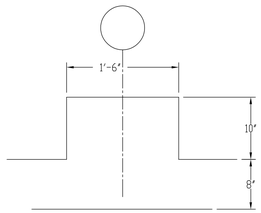
SPECIFY NORTH



2 T1.01 WHEEL CHAIR SPACE
2x SCALE

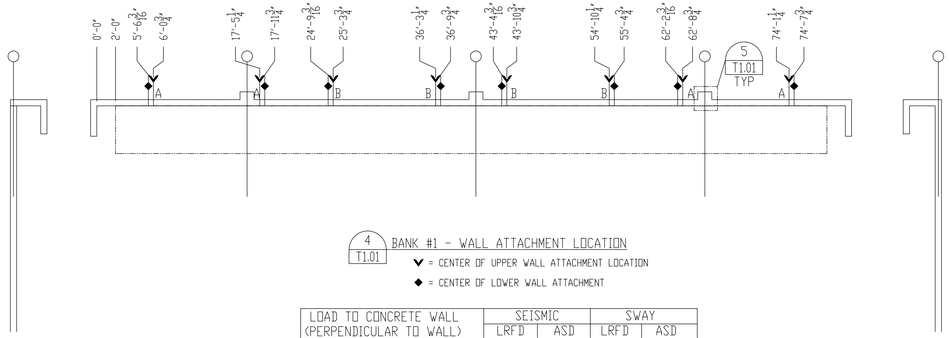


3 T1.01 WHEEL CHAIR SPACE
2x SCALE



VERIFY COLUMN AND WALL ARE CIP

5 T1.01 COLUMN DETAIL
8x SCALE



4 T1.01 BANK #1 - WALL ATTACHMENT LOCATION
▼ = CENTER OF UPPER WALL ATTACHMENT LOCATION
◆ = CENTER OF LOWER WALL ATTACHMENT

LOAD TO CONCRETE WALL (PERPENDICULAR TO WALL)		SEISMIC		SWAY	
		LRFD	ASD	LRFD	ASD
UPPER WALL ATTACHMENT	A	402	282	1003	627
LOWER WALL ATTACHMENT	A	580	406	713	445
UPPER WALL ATTACHMENT	B	402	282	956	598
LOWER WALL ATTACHMENT	B	580	406	679	424

IN ADDITION TO THE SIGNAGE SHOWN ON T9.10 FOR WHEELCHAIR SPACES AND COMPANION SEATS, THE ISA PER DETAIL 1/T0.01 SHALL BE INSTALLED AT EACH SEMI-AMBULANT AND DESIGNATED AISLE SEAT AS LOCATED ON THIS PLAN. THE ISA SHALL BE APPLIED TO THE KICKBOARD BELOOARD BELOW THE CENTER OF THE SEAT SIMILAR TO THE COMPANION SEAT SIGNAGE ON T9.10

ACCESSIBILITY MATRIX - BANK #1					
	WHEELCHAIR SPACES	COMPANION SEATS (C)	SEMI AMBULANT SEATS (S)	DESIGNATED AISLE SEATS (D)	ALS RECEIVER NOT PROVIDED BY INTERKAL
REQUIRED	6	6	5	3	18
PROVIDED	6	6	5	3	N/A

STANDARD INTERKAL POWER REQUIREMENTS:

1. WIRING AND NON-FUSIBLE SAFETY SWITCH(ES) SUITABLE FOR THE LINE VOLTAGE TO BE PROVIDED BY ELECTRICAL CONTRACTOR OR OTHERS WITH BRANCH CIRCUIT PROTECTION TO EACH NOT EXCEEDING 15 AMPS. ALL PLATFORM WIRING FURNISHED BY INTERKAL.
2. BRANCH CIRCUIT PROTECTION DEVICES BY OTHERS TO BE ACCESSIBLE WHEN PLATFORMS ARE CLOSED.
3. VERIFY ELECTRICAL INFORMATION:
   CIRCUIT 3 PHASE, 208-230 VOLTS, 60 HERTZ
   EACH 1/2 HORSE POWER MOTOR DRAWS 2.0-2.2 AMPS. FULL LOAD.
   MOTORS RUN SIMULTANEOUSLY.
4. [S] SAFETY SWITCH(ES) LOCATED APPROXIMATE 5′- 0″ ABOVE FINISHED FLOOR @ F.F. FOR REVERSE FOLD UNITS)
5. [M] FRICTION POWER MOTOR
6. [C] STOP/START REVERSING CONTACTOR (WIRING HARNESS)
7. [P] PENDANT SWITCH RECEPTACLE

THE MATERIAL BEING SUPPLIED WILL BE PER INTERKAL'S STANDARD SPECIFICATIONS AND APPLICATIONS AT TIME OF SHIPMENT.

APPROVED BY:

ARCHITECT OR GENERAL CONTRACTOR TO SKETCH IN AND DIMENSION ANY WALL OBSTRUCTIONS SUCH AS COLUMNS, PIPES, GRILLES, ETC...

ARCHITECT/CONTRACTOR TO SPECIFY:

WALL CONSTRUCTION -------- CONCRETE

WALL THICKNESS ---------- 8″

FINISHED FLOOR MATERIAL --- WOOD FLOATING

FINISHED FLOOR TO BE LEVEL PLUS OR MINUS 1/8″ IN 8′-0″

THE LAYOUT SHOWN IS DRAWN ACCORDING TO INTERKAL'S INTERPRETATION OF (CBC 2022) SHOULD THE APPLICABLE CODE DIFFER FROM THAT STATED, PLEASE INDICATE IN THE SPACE PROVIDED:

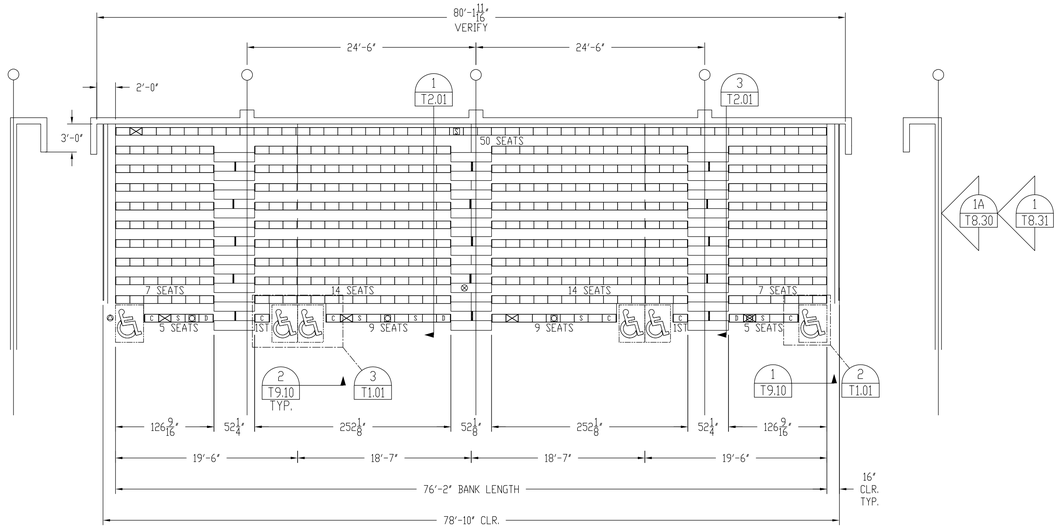
IF NO OTHER CODE IS INDICATED, IT WILL BE ASSUMED THE DISTRIBUTOR / ARCHITECT AGREES WITH THE CODE APPLIED AND ITS INTERPRETATION.

SHOULD THE APPLICABLE CODE DIFFER FROM THAT STATED INTERKAL SHALL NOT BE HELD ACCOUNTABLE FOR ANY DEVIATIONS TO THE LAYOUT SHOWN.

2022 CBC EGRESS CALCULATIONS
(PER SECTION 1030.1.1, ICC 300-17 GOVERNS BLEACHER EGRESS)

BANK #1	ICC 300 CODE REF.	ALLOWED	PROVIDED
NO. OF SEATS BETWEEN AISLES (DUAL ACCESS)	SECTION 407.3	27 SEATS	14 SEATS
NO. OF SEATS BEYOND AN AISLE (SINGLE ACCESS)	SECTION 407.4	13 SEATS	7 SEATS
PATH OF EGRESS TRAVEL	SECTION 407.4.1 EX.3	75 FT	32.11 FT
LENGTH OF DEAD END AISLE	SECTION 405.6	16 ROWS	10 ROWS
AISLE WIDTHS (SECTION 404.5 & 405)	SECTION 405.5		
	TABLE 404.5 (2)		
	RISER HT < 7″		
	HANDRAIL WITHIN 30″		

	ROWS	NO. SEATS			
1) OUTER AISLE (LH)					
	1	8			
	2-10	120			
	11	17			
TOTAL SEATS USING AISLE (DL)		137	0.300(DL) OR 48″	48″	52.25
TOTAL SEATS		145			
2) CENTER AISLE (CR)					
	1	14			
	2-10	126			
	11	16			
TOTAL SEATS USING AISLE (DL)		142	0.300(DL) OR 48″	48″	52.125
TOTAL SEATS		156			
3) OUTER AISLE (RH)					
	1	8			
	2-10	120			
	11	17			
TOTAL SEATS USING AISLE (DL)		137	0.300(DL) OR 48″	48″	52.25
TOTAL SEATS		145			
TOTAL SEATS FOR THE BANK		446			



1 T1.01 BANK #1 - PLAN VIEW

INTERKAL TELESCOPIC SEATING
EXCEL SEAT MODULE NOTCHED
11 ROW SEATING CAPACITY @ 18″ PER PERSON = 446
WHEEL CHAIR CAPACITY @ 36 1/4″ PER PERSON = 6

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. VIRGA
4686
exp. 6/30/26
STRUCTURAL
STATE OF CALIFORNIA
8/15/24

	ACCESSORY LIST
2	11 ROW SELF-STORING END RAILS
2	11 ROW VINYL END CURTAINS ×SPECIFY COLOR×
3	11 ROW FOOT LEVEL AISLES W/SSAR
3	11 ROW INTERMEDIATE STEPS
6	1 ROW x 36 1/4″ PERMANENT NOTCHOUTS
1	BANK FRICTION POWER W/MOTION MONITORS
1	PAIR LIMIT SWITCHES-OPEN/CLOSED
.	10″ ×SPECIFY COLOR× EXCEL SEAT MODULE
.	BLACK OPTION - B4
.	.
QTY	ACCESSORY

REV.	REVISION NOTES	INT/DATE
NAME: SCOPELAND	DATE: 5/22/23	SCALE: 1/8″=1′-0″

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: SITE SPECIFIC - BANK #1 PLAN VIEW

Interkal
Spectator Seating World Wide
www.interkal.com

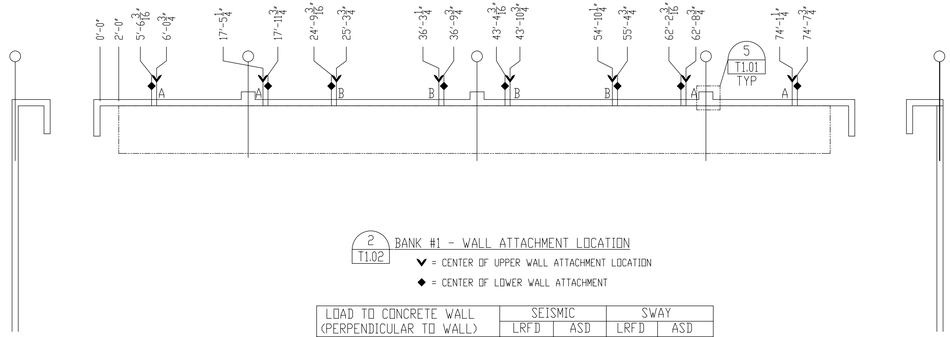
SHEET NUMBER: T1.01

DRAWING LOCATION - \\SERVER-2\ENGPRE_SUBVTGS83200\83256\83256-P1_GANESHA HIGH SCHOOL.DWG - PRINTED BY MCOPELAND ON 08-05-24 - 3:10pm

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

N

SPECIFY NORTH



2 T1.02 BANK #1 - WALL ATTACHMENT LOCATION

▼ = CENTER OF UPPER WALL ATTACHMENT LOCATION

◆ = CENTER OF LOWER WALL ATTACHMENT

LOAD TO CONCRETE WALL (PERPENDICULAR TO WALL)		SEISMIC		SWAY	
		LRFD	ASD	LRFD	ASD
UPPER WALL ATTACHMENT	A	402	282	1003	627
LOWER WALL ATTACHMENT	A	580	406	713	445
UPPER WALL ATTACHMENT	B	402	282	956	598
LOWER WALL ATTACHMENT	B	580	406	679	424

IN ADDITION TO THE SIGNAGE SHOWN ON T9.10 FOR WHEELCHAIR SPACES AND COMPANION SEATS, THE ISA PER DETAIL 1/T0.01 SHALL BE INSTALLED AT EACH SEMI-AMBULANT AND DESIGNATED AISLE SEAT AS LOCATED ON THIS PLAN. THE ISA SHALL BE APPLIED TO THE KICKBOARD BELOOARD BELOOARD BELOW THE CENTER OF THE SEAT SIMILAR TO THE COMPANION SEAT SIGNAGE ON T9.10

ACCESSIBILITY MATRIX - BANK #2				
	WHEELCHAIR SPACES	COMPANION SEATS C	SEMI AMBULANT SEATS S	DESIGNATED AISLE SEATS D	ALS RECEIVER NOT PROVIDED BY INTERKAL
REQUIRED	6	6	5	3	18
PROVIDED	6	6	5	3	N/A

STANDARD INTERKAL POWER REQUIREMENTS:

1. WIRING AND NON-FUSIBLE SAFETY SWITCH(ES) SUITABLE FOR THE LINE VOLTAGE TO BE PROVIDED BY ELECTRICAL CONTRACTOR OR OTHERS WITH BRANCH CIRCUIT PROTECTION TO EACH NOT EXCEEDING 15 AMPS. ALL PLATFORM WIRING FURNISHED BY INTERKAL.
2. BRANCH CIRCUIT PROTECTION DEVICES BY OTHERS TO BE ACCESSIBLE WHEN PLATFORMS ARE CLOSED.
3. VERIFY ELECTRICAL INFORMATION:
   CIRCUIT 3 PHASE, 208-230 VOLTS, 60 HERTZ
   EACH 1/2 HORSE POWER MOTOR DRAWS 2.0-2.2 AMPS. FULL LOAD.
   MOTORS RUN SIMULTANEOUSLY.
4. [S] SAFETY SWITCH(ES) LOCATED APPROXIMATE 5'- 0" ABOVE FINISHED FLOOR @ F.F. FOR REVERSE FOLD UNITS)
5. [M] FRICTION POWER MOTOR
6. ⊗ STOP/START REVERSING CONTACTOR (WIRING HARNESS)
7. ⊘ PENDANT SWITCH RECEPTACLE

THE MATERIAL BEING SUPPLIED WILL BE PER INTERKAL'S STANDARD SPECIFICATIONS AND APPLICATIONS AT TIME OF SHIPMENT.

APPROVED BY:

ARCHITECT OR GENERAL CONTRACTOR TO SKETCH IN AND DIMENSION ANY WALL OBSTRUCTIONS SUCH AS COLUMNS, PIPES, GRILLES, ETC...

ARCHITECT/CONTRACTOR TO SPECIFY:

WALL CONSTRUCTION --------- CONCRETE

WALL THICKNESS ---------- 8"

FINISHED FLOOR MATERIAL --- WOOD FLOATING

FINISHED FLOOR TO BE LEVEL PLUS OR MINUS 1/8" IN 8'-0"

THE LAYOUT SHOWN IS DRAWN ACCORDING TO INTERKAL'S INTERPRETATION OF (CBC 2022) SHOULD THE APPLICABLE CODE DIFFER FROM THAT STATED, PLEASE INDICATE IN THE SPACE PROVIDED:

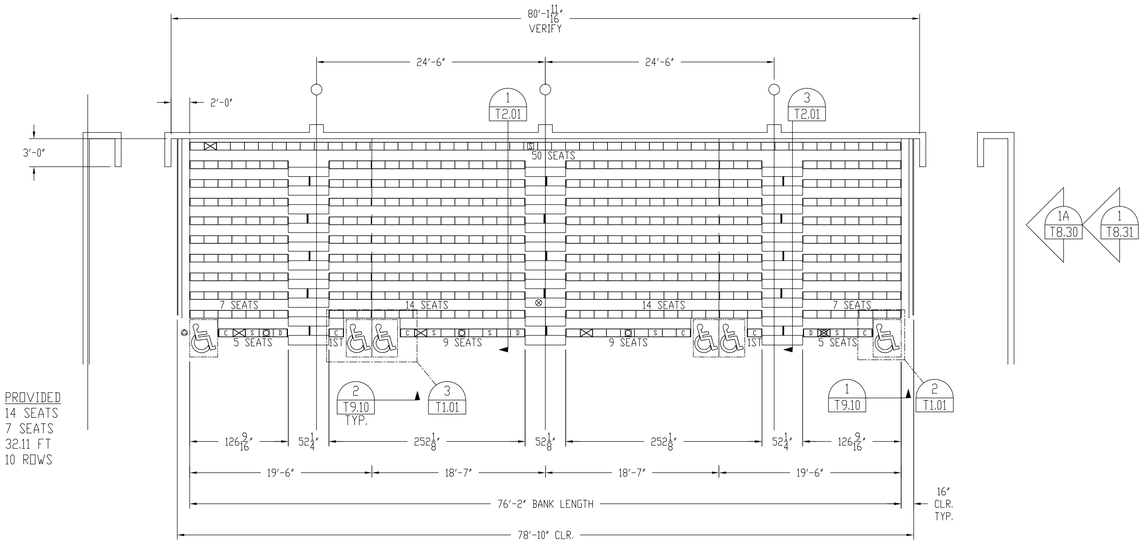
IF NO OTHER CODE IS INDICATED, IT WILL BE ASSUMED THE DISTRIBUTOR / ARCHITECT AGREES WITH THE CODE APPLIED AND ITS INTERPRETATION.

SHOULD THE APPLICABLE CODE DIFFER FROM THAT STATED INTERKAL SHALL NOT BE HELD ACCOUNTABLE FOR ANY DEVIATIONS TO THE LAYOUT SHOWN.

2022 CBC EGRESS CALCULATIONS
(PER SECTION 1030.1.1, ICC 300-17 GOVERNS BLEACHER EGRESS)

BANK #2	ICC 300 CODE REF.	ALLOWED	PROVIDED
NO. OF SEATS BETWEEN AISLES (DUAL ACCESS)	SECTION 407.3	27 SEATS	14 SEATS
NO. OF SEATS BEYOND AN AISLE (SINGLE ACCESS)	SECTION 407.4	13 SEATS	7 SEATS
PATH OF EGRESS TRAVEL	SECTION 407.4.1 EX.3	75 FT	32.11 FT
LENGTH OF DEAD END AISLE	SECTION 405.6	16 ROWS	10 ROWS
AISLE WIDTHS (SECTION 404.5 & 405)	SECTION 405.5		
	TABLE 404.5 (2)		
	RISER HT < 7"		
	HANDRAIL WITHIN 30"		

	ROWS	NO. SEATS			
1) OUTER AISLE (LH)					
	1	8			
	2-10	120			
	11	17			
TOTAL SEATS USING AISLE (DL)		137	0.300(DL) OR 48"	48"	52.25
TOTAL SEATS		145			
2) CENTER AISLE (CR)					
	1	14			
	2-10	126			
	11	16			
TOTAL SEATS USING AISLE (DL)		142	0.300(DL) OR 48"	48"	52.125
TOTAL SEATS		156			
3) OUTER AISLE (RH)					
	1	8			
	2-10	120			
	11	17			
TOTAL SEATS USING AISLE (DL)		137	0.300(DL) OR 48"	48"	52.25
TOTAL SEATS		145			
TOTAL SEATS FOR THE BANK		446			



1 T1.02 BANK #2 - PLAN VIEW

INTERKAL TELESCOPIC SEATING
EXCEL SEAT MODULE — NOTCHED
11 ROW SEATING CAPACITY @ 18" PER PERSON = 446
WHEEL CHAIR CAPACITY @ 36 1/4" PER PERSON = 6

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL K. VIZZINI
4688
exp. 6/30/26
STRUCTURAL
STATE OF CALIFORNIA
8/15/24

	ACCESSORY LIST
2	11 ROW SELF-STORING END RAILS
2	11 ROW VINYL END CURTAINS ×SPECIFY COLOR×
3	11 ROW FOOT LEVEL AISLES W/SSAR
3	11 ROW INTERMEDIATE STEPS
6	1 ROW x 36 1/4" PERMANENT NOTCHOUTS
1	BANK FRICTION POWER W/MOTION MONITORS
1	PAIR LIMIT SWITCHES-OPEN/CLOSED
	10" ×SPECIFY COLOR× EXCEL SEAT MODULE
	BLACK OPTION - B4

QTY	ACCESSORY

REV.	REVISION NOTES	INT/DATE

NAME: SCOPELAND DATE: 5/22/23 SCALE: 1/8"=1'-0"

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

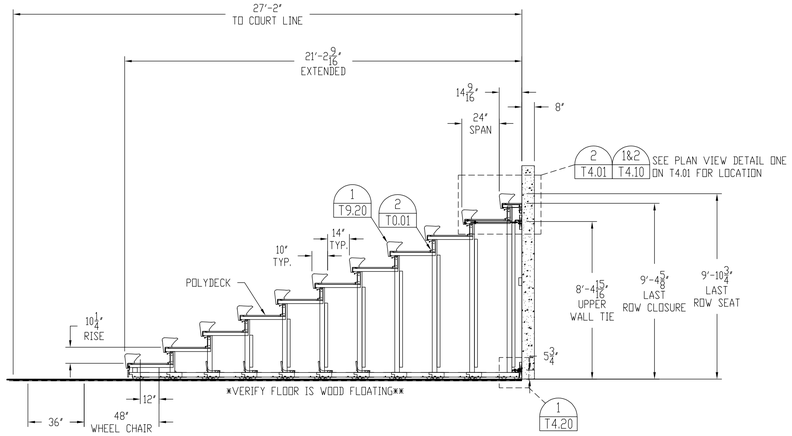
TITLE: *SITE SPECIFIC - BANK #2 PLAN VIEW*

Interkal
Spectator Seating World Wide
www.interkall.com

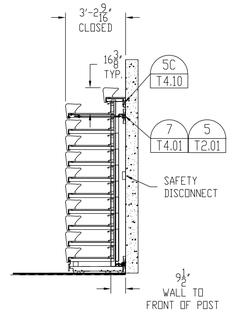
SHEET NUMBER: T1.02

DRAWING LOCATION - \\SERVER-2\ENG\PRE_SUB\TG83200\83256\83256-P1_GANESHA HIGH SCHOOL.DWG - PRINTED BY MCOPELAND ON 08-05-24 - 3:11pm

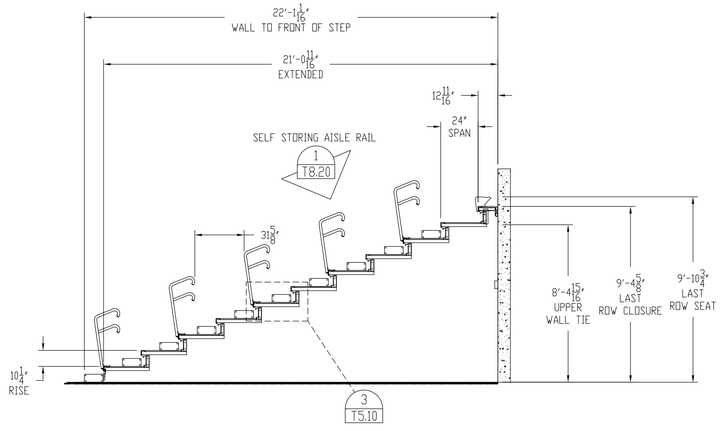
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



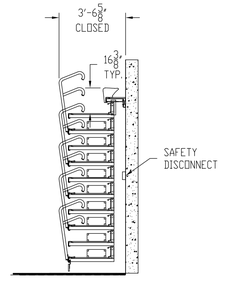
1 T2.01 11 ROW SIDE ELEVATION - AT SEATS
BANKS #1 & #2



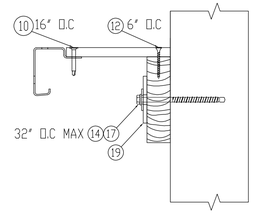
2 T2.01 11 ROW SIDE CLOSED VIEW



3 T2.01 11 ROW SIDE ELEVATION - AT AISLE
BANKS #1 & #2



4 T2.01 11 ROW SIDE CLOSED VIEW



5 T2.01 BANK #1 & #2 - 11 ROW - SCREW SPACING
REFERENCE T4.10 TABLES ONE & TWO
(10x SCALE)

19	PLATE WASHER 3 X 3 X .239	183720
17	1/2" FLAT WASHER - TYPE A WIDE	602155
14	3/8 X 5 SIMPSON S-T TITEN HD	614224
12	#8x2" BUGLE HD DECK SCREW	614260
10	#14-14 x 1-7/8 HX WASH HD SCR	614042
ITEM	DESCRIPTION	PART NO.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. VICTOR
4688
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
11/9/23

REV.	REVISION NOTES	INT/DATE
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .

NAME: SCOPELAND DATE: 5/22/23 SCALE: 1/4"=1'-0"

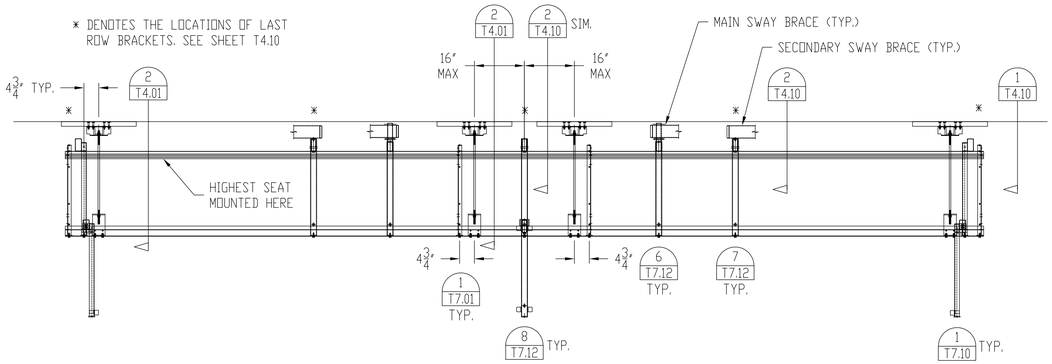
GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: TGS-83256

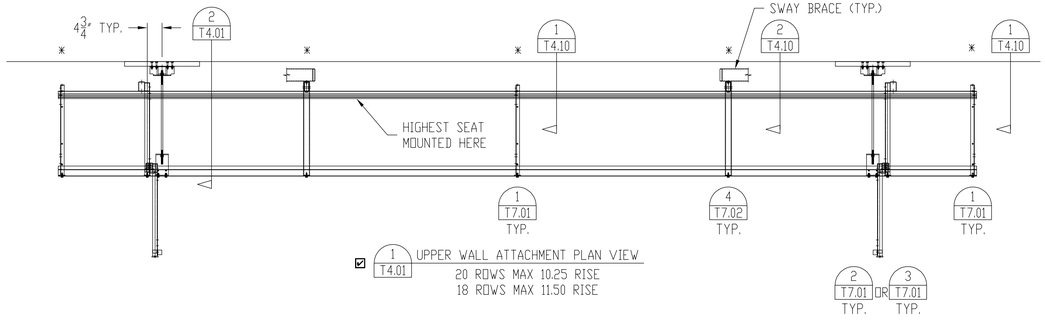
TITLE: *SITE SPECIFIC SIDE ELEVATIONS*

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T2.01



☐ 1 T4.01 UPPER WALL ATTACHMENT PLAN VIEW - HIGH ROW
MANDATORY FOR 21-29 ROWS 10.25 RISE
MANDATORY FOR 19-26 ROWS 11.50 RISE

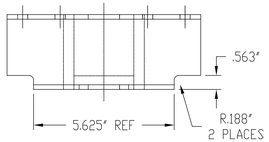


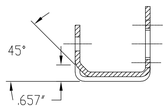
☑ 1 T4.01 UPPER WALL ATTACHMENT PLAN VIEW
20 ROWS MAX 10.25 RISE
18 ROWS MAX 11.50 RISE

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

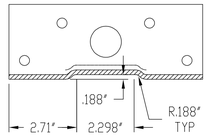
	A
☑ 10 1/4" RISE	12 3/16"
☐ 11 1/2" RISE	13 7/16"

2 T4.01 UPPER WALL ATTACHMENT
10 1/4" RISE, 24" SPAN SHOWN
(8 x SCALE)

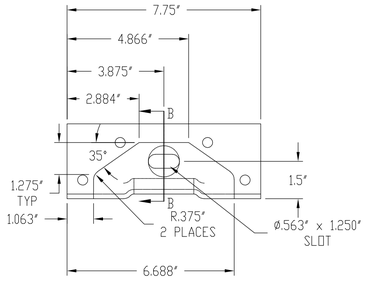




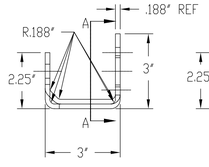
SECTION B-B

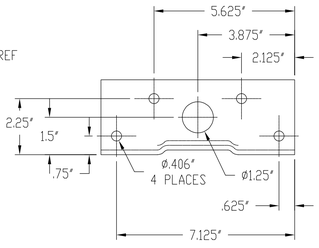


SECTION A-A



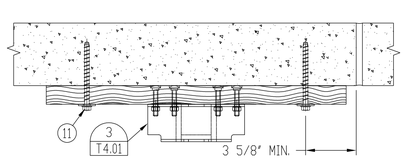
FRONT VIEW

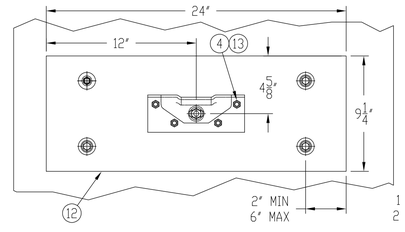


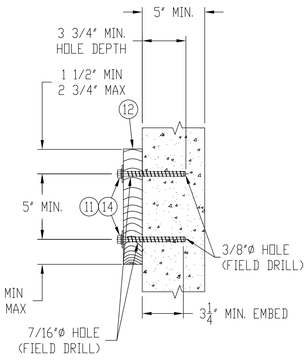


PARTIAL REAR VIEW

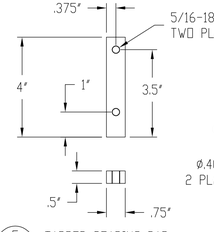
3 T4.01 WALL TIE BRACKET
(PN 183079) ASTM A653, GRADE 40
Fy = 40 KSI
Fu = 55 KS
Elong = 16%
(8 x SCALE)



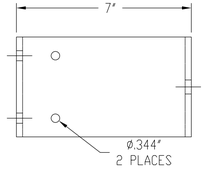


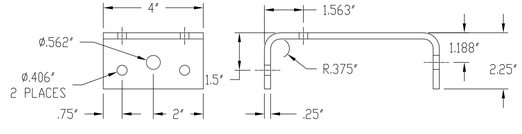


7 T4.01 UPPER WALL ATTACHMENT - CONCRETE
fc' = 3,000 psi MIN. NORMAL-WEIGHT
(4 x SCALE)



5 T4.01 TAPPED BEARING BAR
(PN 187426) A36 STEEL
(8 x SCALE)





6 T4.01 WALL ATTACHMENT CHANNEL
(PN 187427) A36 STEEL
(8 x SCALE)

NOTES:
1) 29 ROWS MAX 10.25" RISE
26 ROWS MAX 11.50" RISE
2) ANCHOR SYSTEM PER ICC ESR-2713 FOR CRACKED CONCRETE AND NOMINAL EMBEDMENT DEPTH OF 3.25 INCHES
3) Ø3/8" HOLE IN CONCRETE MUST BE DRILLED USING A BIT COMPLYING WITH ANSI B212.15-1994 TOLERANCES.
4) ANCHORS SHALL BE INSTALLED USING A SOCKET WRENCH OR POWERED IMPACT WRENCH WITH A MAXIMUM TORQUE RATING OF 150 FT-LBS. THE INSTALLATION TORQUE SHALL BE 50 FT-LBS.
5) MINIMUM CONCRETE EDGE DISTANCE IS 3 5/8" AND MINIMUM SPACING IS 5".
6) SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH SECTION 4.4 OF ESR-2713. ANCHORS IN CONCRETE SHALL BE TESTED PER CBC 1910A.5 USING THE TORQUE WRENCH METHOD. TEST TORQUE SHALL BE 50FT-LBF
7) THIS CONNECTION IS DESIGNED TO RESIST LOADING PERPENDICULAR TO THE PLANE OF THE WALL ONLY.
8) LRFD CONNECTION CAPACITIES:
NON-SEISMIC 2,154 LBS (BASED ON CAPACITY OF WALL ATTACHMENT CHANNEL)
SEISMIC 1,838 LBS (BASED ON SEISMIC ANCHOR CAPACITY DIVIDED BY ρo=2.0)

ITEM	DESCRIPTION	PART NO.
14	1/2" FLAT WASHER - WIDE	602155
13	3/8-16 X 2 1/4 CARRIAGE BOLT	613010
12	2 x 10 - S. PINE MSR 1800F-1.6E OR BETTER (FIELD CUT TO LENGTH)	519849
11	Ø3/8 x 5 SIMPSON STRONG-TIE TITEN HD	614224
10	TAPPED BEARING BAR	187426
9	WALL ATTACHMENT CHANNEL	187427
8	#8 X 2" BUGLE HD. DECK SCREW	614260
7	#14-14 x 1-7/8 SELF-DRILLING SCR	614042
6	1/2 FLAT WASHER - NARROW	602163
5	5/16-18 X 3/4 HFHCS GRADE 5	600029
4	3/8-16 KEPS NUT	601629
3	3/8-16 X 1 HFHCS A449	534512
2	1/2-13 JAM NUT	601081
1	1/2-13 THR'D ROD	182968-03

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STATEN
4686
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
	REVISIONS	

NAME: SCOPELAND DATE: 11-03-22 SCALE: 1/2" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

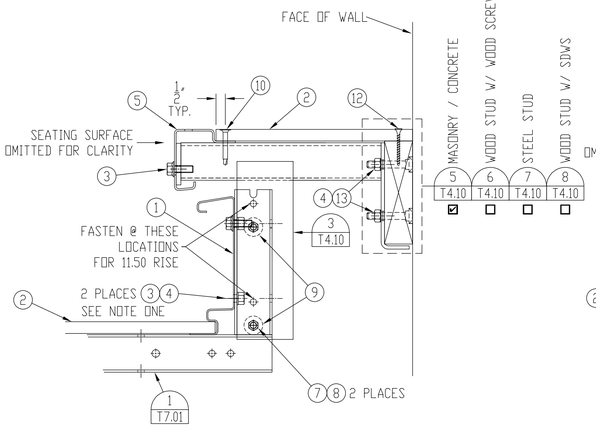
TITLE: UPPER WALL ATTACHMENT-CONCRETE

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T4.01

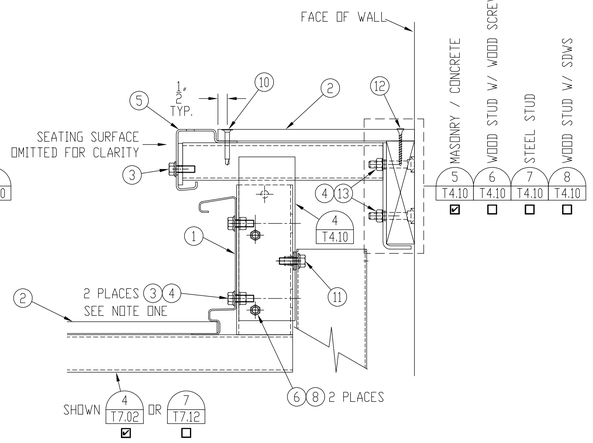
DRAWING LOCATION - P:\PROD_DEV\CALIFORNIA\PC 02-120827 2022 CBC\CAD FILES\T4.01.DWG - PRINTED BY MCOPELAND ON 10-25-23 - 4:23pm

SCREW CAPACITY:
ITEM #10 = 194 LBS (ASD) & 277 LBS (LRFD)
ITEM #12 = 77 LBS (ASD) & 110 LBS (LRFD)



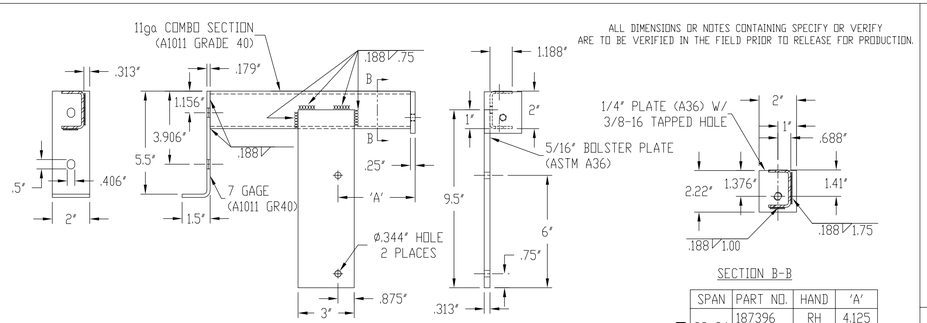
1 T4.10 TYPICAL LAST ROW COMBO
10.25 RISE 22-24 SPAN SHOWN

☑ NOTE ONE: IF B4 OPTION IS CHOSEN REPLACE ITEM #3 WITH ITEM #11



☑ 2 T4.10 TYPICAL LAST ROW SWAY COMBO
10.25 RISE 22-24 SPAN SHOWN

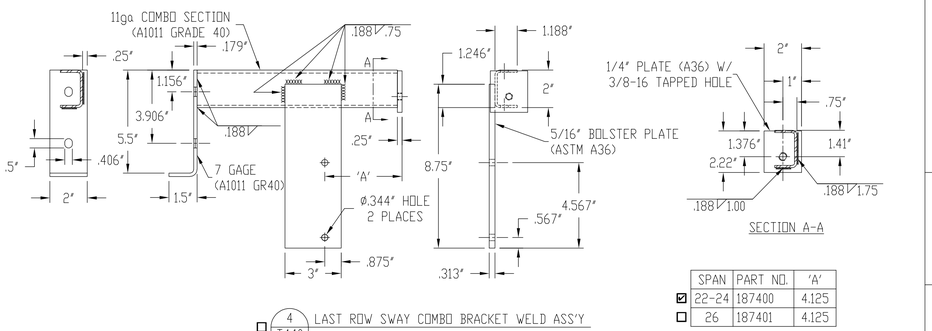
☑ NOTE ONE: IF B4 OPTION IS CHOSEN REPLACE ITEM #3 WITH ITEM #11



3 T4.10 LAST ROW BRACKET WELD ASS'Y
(RIGHT HAND SHOWN. LEFT HAND OPPOSITE)

SECTION B-B

	SPAN	PART NO.	HAND	'A'
☑	22-24	187396	RH	4.125
		187397	LH	4.125
☐	26	187398	RH	2.125
		187399	LH	2.125

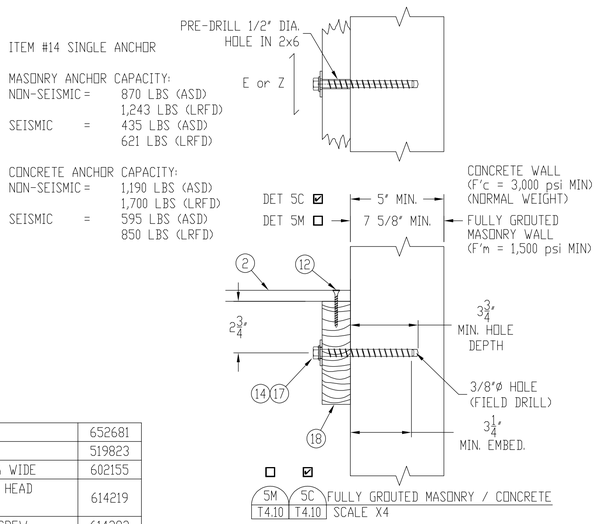


☐ 4 T4.10 LAST ROW SWAY COMBO BRACKET WELD ASS'Y

SECTION A-A

	SPAN	PART NO.	'A'
☑	22-24	187400	4.125
☐	26	187401	4.125

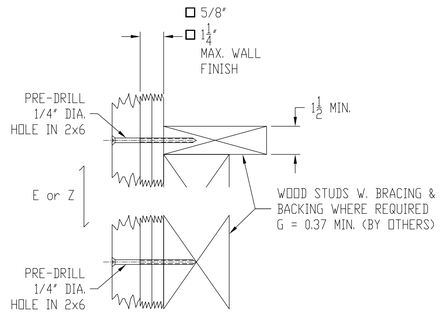
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



☐ 5M T4.10 ☑ 5C T4.10 FULLY GROUTED MASONRY / CONCRETE
SCALE X4

ITEM	DESCRIPTION	PART NO.
19	SST SDWS22500DB	652681
18	2" X 6" By CONT. S-PINE #1	519823
17	ø 1/2" FLAT WASHER - TYPE A WIDE	602155
16	1/4-14 (#14) X 4" HEX WASHER HEAD SELF DRILLING SCREW	614219
15	#14 x 4 1/2" FLAT HEAD WD SCREW	614282
14	ø3/8 x 5 SIMPSON S-T TITEN HD	614224
13	3/8-16 X 2 1/4" CARRIAGE BOLT	613010
12	#8x2" BUGLE HD DECK SCREW	614260
11	3/8-16 X 1 HFH BOLT-A354 BD (BLK)	614047
10	#14-14 x 1-7/8 WFR SELF-DRILLING SCREW	614042
9	3/8 FLAT WASHER .344 ID x 1.000 OD x .187	602281
8	5/16-18 KEPS NUT	601300
7	5/16-18 x 1 HHCS GR5	600294
6	5/16-18 X 2 1/4 HHCS GR5	610004
5	STEEL NOSE BEAM	VARIES
4	3/8-16 KEPS NUT	601629
3	3/8-16 X 1 HFH BOLT-A449 (ZN)	534512
2	PLYWOOD CLOSURE BOARD	VARIES
1	STEEL RISER BEAM	VARIES

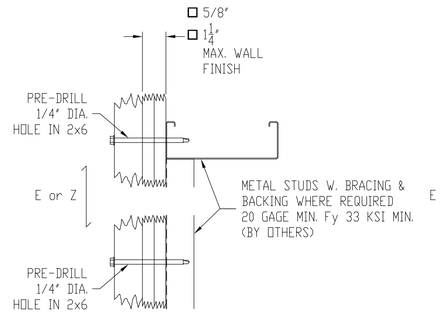
NOTES:
1. ANCHOR SYSTEM PER ICC ESR-1056 (MASONRY. DET 5M) OR ESR-2713 (CONCRETE. DET 5C) AS APPLICABLE FOR UNCRACKED MASONRY AND CRACKED CONCRETE.
2. HOLE IN MASONRY/CONCRETE MUST BE DRILLED USING A BIT COMPLYING WITH ANSI B212.15-1994 TOLERANCES.
3. ANCHORS IN CONCRETE SHALL BE INSTALLED USING A SOCKET WRENCH OR POWERED IMPACT WRENCH. FOR INSTALLATIONS IN CONCRETE, THE INSTALLATION TORQUE SHALL BE 50 FT-LBS AND THE MAXIMUM TORQUE RATING SHALL BE 150 FT-LBS.
4. IN MASONRY, ANCHOR SHALL NOT BE PLACED WITHIN 1 1/4" OF ANY VERTICAL JOINT (HEAD JOINT) OR WITHIN 12" OF ANY EDGE. WHERE SPACING IS LESS THAN 24" AN ANCHOR SHALL BE PLACED AT 4" FROM THE EDGE ON BOTH SIDES OF THE JOINT. IN CONCRETE, ANCHOR SHALL NOT BE PLACED WITHIN 3 5/8" OF ANY EDGE.
5. SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH SECTION 4.3 OF ESR-1056 (MASONRY DET. 5M) OR WITH SECTION 4.4 OF ESR-2713 (CONCRETE DET. 5C). ANCHORS IN CONCRETE SHALL BE TESTED PER CBC 1910A.5 USING THE TORQUE WRENCH METHOD. TEST TORQUE SHALL BE 50FT-LBF.



☐ 6 T4.10 WOOD STUD W/ WOOD SCREWS
SCALE X4

NOTES:
ITEM #15 SCREW PAIR CAPACITY:
5/8" FINISH = 254 LBS (ASD) & 363 LBS (LRFD)
1-1/4" FINISH = 160 LBS (ASD) & 229 LBS (LRFD)

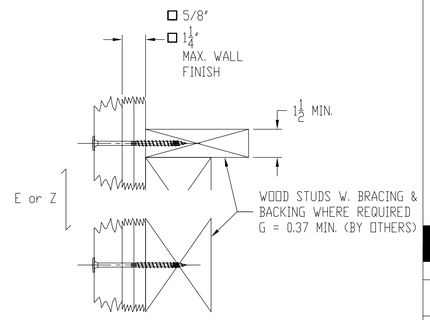
WHEN DETAIL 6/T4.10 IS USED WITHIN FURRED WALL CONSTRUCTION, WOOD BLOCKING IS REQUIRED. SUCH BLOCKING SHALL BE DESIGNED AND PROVIDED BY OTHERS AND SHALL ATTACH TO THE CONCRETE OR MASONRY WALL BEHIND.



☐ 7 T4.10 METAL STUD
SCALE X4

NOTES:
ITEM #16 SCREW PAIR CAPACITY:
5/8" FINISH = 208 LBS (ASD) & 297 LBS (LRFD)
1-1/4" FINISH = 114 LBS (ASD) & 163 LBS (LRFD)

WHEN DETAIL 7/T4.10 IS USED WITHIN FURRED WALL CONSTRUCTION, METAL BLOCKING IS REQUIRED. SUCH BLOCKING SHALL BE DESIGNED AND PROVIDED BY OTHERS AND SHALL ATTACH TO THE CONCRETE OR MASONRY WALL BEHIND.



☐ 8 T4.10 WOOD STUD W/ SDWS
SCALE X4

NOTES:
ITEM #20 SINGLE SCREW CAPACITY:
5/8" FINISH = 244 LBS (ASD) & 348 LBS (LRFD)
1-1/4" FINISH = 173 LBS (ASD) & 247 LBS (LRFD)

WHEN DETAIL 8/T4.10 IS USED WITHIN FURRED WALL CONSTRUCTION, WOOD BLOCKING IS REQUIRED. SUCH BLOCKING SHALL BE DESIGNED AND PROVIDED BY OTHERS AND SHALL ATTACH TO THE CONCRETE OR MASONRY WALL BEHIND.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STATES
4688
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .
	. .	. .

NAME: SCOPELAND DATE: 11-10-22 SCALE: 1/4" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

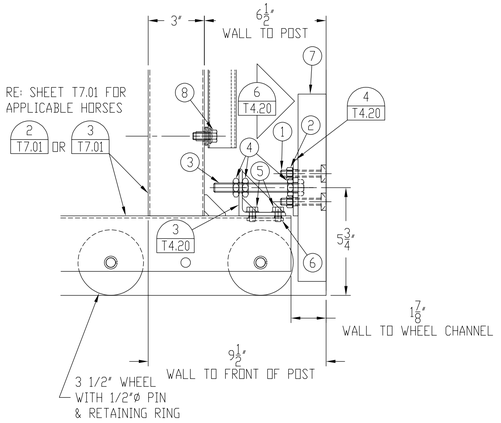
JOB NUMBER: 83256

TITLE: TYPICAL LAST ROW DETAILS

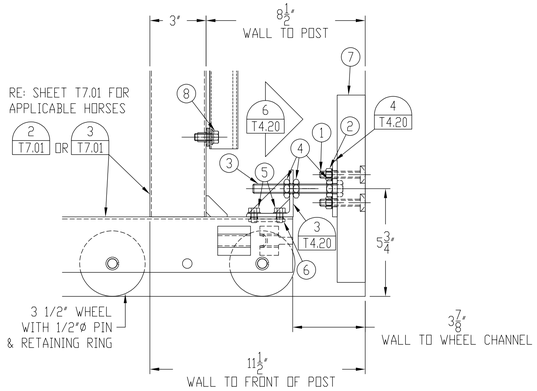
Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T4.10

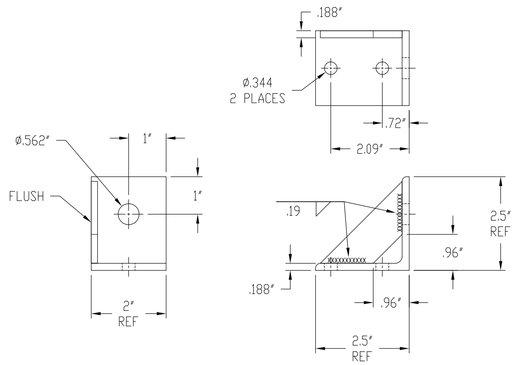
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



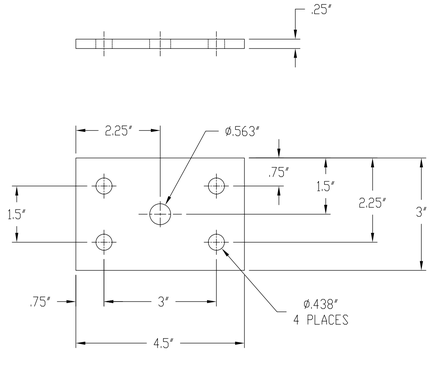
☑ 1 T4.20 LOWER WALL ATTACHMENT
22-24 SPAN



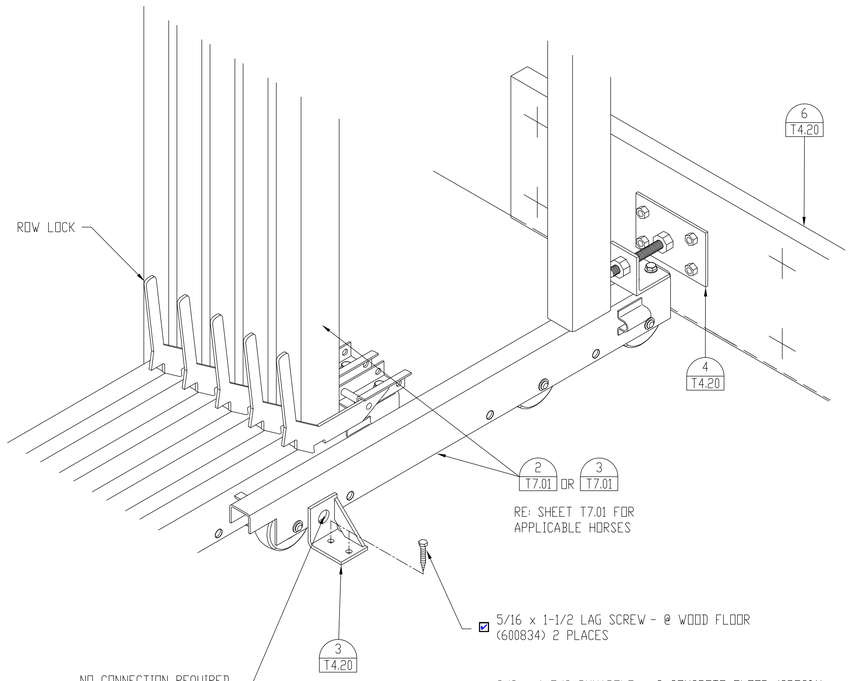
☐ 2 T4.20 LOWER WALL ATTACHMENT
26 SPAN



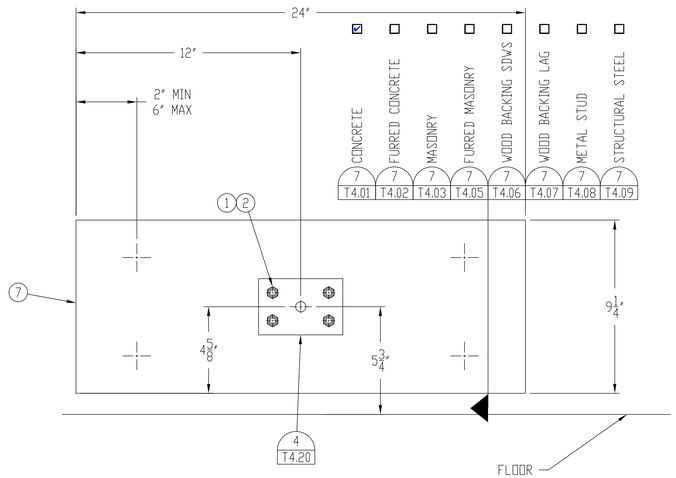
☑ 3 T4.20 WALL ATTACH ANGLE (183592)
2x SCALE
(ASTM A36)



☑ 4 T4.20 WALL PLATE
2x SCALE
(ASTM A36)



☑ 5 T4.20 ALIGNMENT ANGLE INSTALLATION



☑ 6 T4.20 WALL PAD DETAIL
15 ROWS MAX. 10.25" RISE
13 ROWS MAX. 11.50" RISE

NOTE:
15 ROWS MAX. 10.25" RISE
13 ROWS MAX. 11.50" RISE
FLOOR ATTACHMENT IS REQUIRED ON HIGHER ROWS

ITEM	DESCRIPTION	PART NO.
9	#12 X 3/4 PAN HD PHILLIPS SCREW	614054
8	3/8-16 x 1 HEX FLANGE CAP SCREW A354 BD	614047
7	2 x 10 - S. PINE MSR 1800F-1.6E OR BETTER (FIELD CUT TO LENGTH)	519849
6	5/16-18 NUT PLATE	601327
5	5/16-18 x 1/2 HEX WASHER HD	612408
4	1/2-13 HEX JAM NUT	601081
3	1/2-13 x 4-1/2 CAPSCREW GRADE 5	600415
2	3/8-16 KEPS NUT	601629
1	3/8-16 x 2 1/4 CARRIAGE BOLT	613010

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STERN
4688
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE

NAME: SCOPELAND DATE: 9-19-23 SCALE: 1/4" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

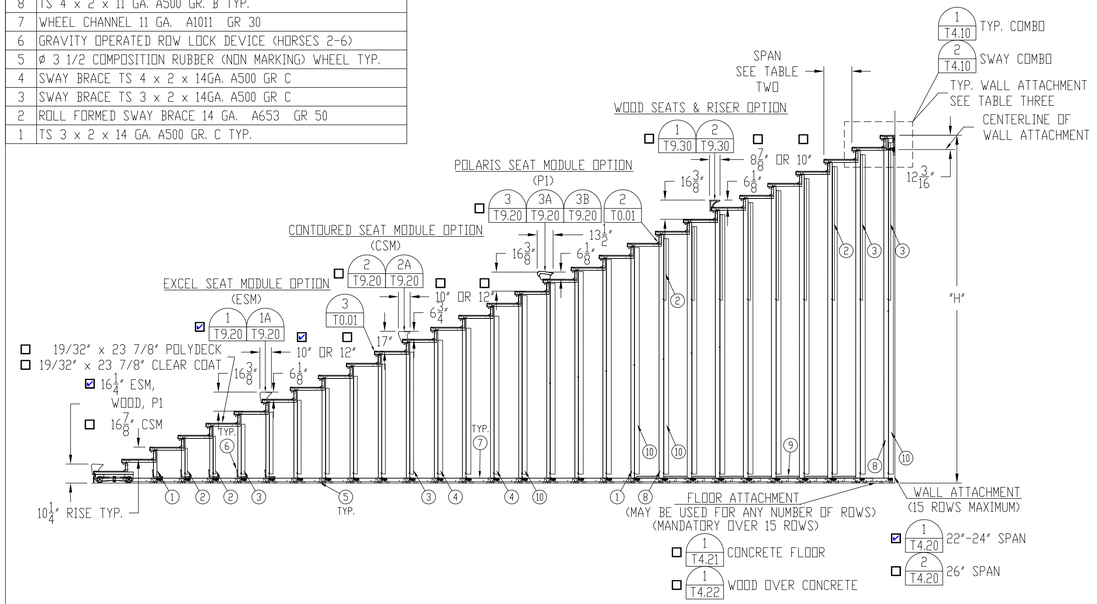
JOB NUMBER: 83256

TITLE: LOWER WALL ATTACHMENT

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T4.20

10	SWAY BRACE TS 4 x 2 x 11GA. A500 GR B
9	TS 1.5 x 1.5 x 11 GA. A513 1010 WHEEL CHANNEL STIFFENER
8	TS 4 x 2 x 11 GA. A500 GR. B TYP.
7	WHEEL CHANNEL 11 GA. A1011 GR 30
6	GRAVITY OPERATED ROW LOCK DEVICE (HORSES 2-6)
5	ø 3 1/2 COMPOSITION RUBBER (NON MARKING) WHEEL TYP.
4	SWAY BRACE TS 4 x 2 x 14GA. A500 GR C
3	SWAY BRACE TS 3 x 2 x 14GA. A500 GR C
2	ROLL FORMED SWAY BRACE 14 GA. A653 GR 50
1	TS 3 x 2 x 14 GA. A500 GR. C TYP.



1 T5.10 10.25" RISE SIDE ELEVATION AT SEATS EXTENDED
22", 24", & 26" SPAN (24" SPAN, 29 ROW SHOWN)
SEE NOTE ONE

TABLE ONE: ROW HEIGHT

ROW	H
29	24'-9 1/8"
28	23'-10 7/8"
27	23'-0 5/8"
26	22'-2 3/8"
25	21'-4 1/8"
24	20'-5 7/8"
23	19'-7 5/8"
22	18'-9 3/8"
21	17'-11 1/8"
20	17'-0 7/8"
19	16'-2 5/8"
18	15'-4 3/8"
17	14'-6 1/8"
16	13'-7 7/8"
15	12'-9 5/8"
14	11'-11 3/8"
13	11'-1 1/8"
12	10'-2 7/8"
11	9'-4 5/8"
10	8'-6 3/8"
9	7'-8 1/8"
8	6'-9 7/8"
7	5'-11 5/8"
6	5'-1 3/8"
5	4'-3 1/8"
4	3'-4 7/8"
3	2'-6 5/8"
2	1'-8 3/8"

TABLE THREE: WALL ATTACHMENT DETAILS

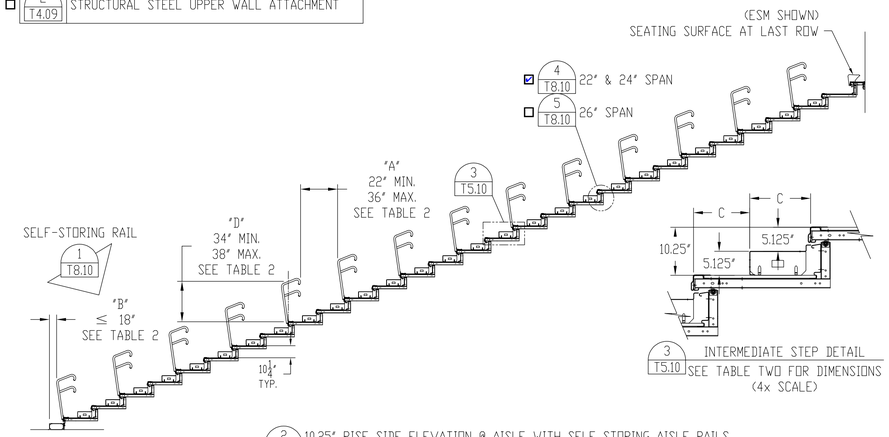
2 T4.01	CONCRETE UPPER WALL ATTACHMENT
2 T4.02	FURRED CONCRETE UPPER WALL ATTACHMENT
2 T4.03	MASONRY UPPER WALL ATTACHMENT
2 T4.04	HEAVY DUTY MASONRY UPPER WALL ATTACHMENT
2 T4.05	FURRED MASONRY UPPER WALL ATTACHMENT
2 T4.06	WOOD BACKING UPPER WALL ATTACHMENT
2 T4.07	WOOD BACKING UPPER WALL ATTACHMENT
2 T4.08	STEEL STUD UPPER WALL ATTACHMENT
2 T4.09	STRUCTURAL STEEL UPPER WALL ATTACHMENT

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

TABLE TWO: SIDE ELEVATION DIMENSIONS

SPAN	A	B	C	D
22"	27.59"	5.06"	11"	34.35"
24"	31.59"	6.06"	12"	34.35"
26"	35.59"	7.06"	13"	34.35"

A - CONFORMS WITH ICC 300-17 SECTION 409.1.1
B - CONFORMS WITH ICC 300-17 SECTION 409.5.1
C - CONFORMS WITH ICC 300-17 SECTION 406.2
D - CONFORMS WITH ICC 300-17 SECTION 409.2



2 T5.10 10.25" RISE SIDE ELEVATION @ AISLE WITH SELF STORING AISLE RAILS
22", 24", & 26" SPAN (24" SPAN, 29 ROW SHOWN)
SEE TABLE TWO FOR DIMENSIONS

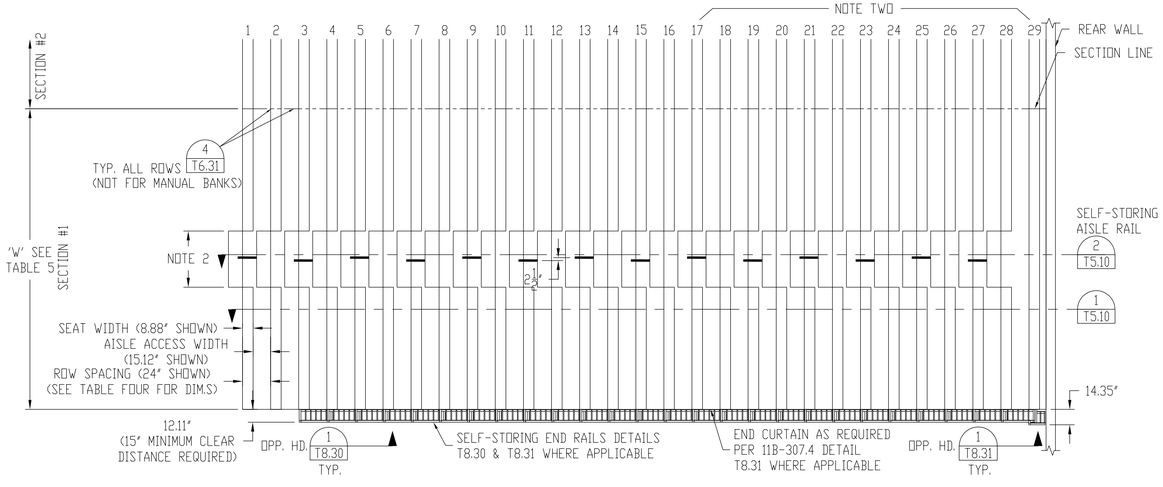
TABLE FIVE: MAXIMUM SECTION LENGTH

END CONDITION	'W' MAXIMUM SECTION LENGTH
NO END RAILS	26'-0"
SSER PER T8.30 ONE END	25'-10"
SSER PER T8.30 BOTH ENDS	25'-8"

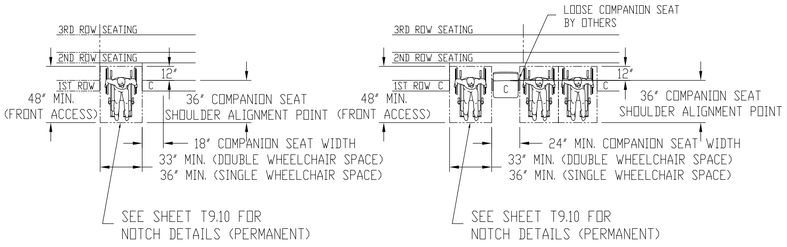
TABLE FOUR: AISLE ACCESS WIDTH

SEAT STYLE	SEAT DETAIL	SEAT WIDTH	ROW SPACING 22"	24"	26"
WOOD	T9.30	8.88"	13.12"	15.12"	17.12"
CSM	2/T9.20	10"	12"	14"	16"
ESM	1/T9.20				
WOOD	T9.30				
CSM	2/T9.20	12"	N/A	12"	14"
ESM	1/T9.20				
P1	3/T9.20	13.5"	N/A	N/A	12.5"

CONFORMS WITH ICC 300-17 SECTION 407.2



4 T5.10 PLAN VIEW OF SEATING WITH SELF STORING AISLE RAILS (29 ROWS SHOWN)
22", 24", & 26" SPAN (24" SPAN SHOWN)
SEE NOTE TWO



5 T5.10 ALTERNATE LOWER ROWS
INTEGRATED COMPANION SEAT
CBC 2022 11B-221.3/802

6 T5.10 ALTERNATE LOWER ROWS
LOOSE COMPANION SEAT
CBC 2022 11B-221.3/802

NOTE ONE:
THE DRAWINGS SHOWN ARE NOT INTENDED TO REPRESENT THE EXACT NUMBER OF ROWS OF A SITE SPECIFIC PROJECT. THIS GENERIC DRAWING REPRESENTS THE MAXIMUM NUMBER OF ROWS REVIEWED IN THIS PC. EQUIPMENT OPTIONS AND CODE LIMITS ARE PROVIDED. SEPARATE PROJECT SPECIFIC ELEVATIONS WILL SHOW THE APPROPRIATE SPAN, SEAT TYPE, SEAT WIDTH, AND WALL AND/OR FLOOR ATTACHMENT. SEE FRAMING PLAN T6.10.

NOTE TWO:
1. WHEN MORE THAN 16 ROWS ARE PROVIDED, DEAD END AISLES ARE ONLY ALLOWED UNDER ICC 300-17 SECTION 405.6 EXCEPTION 1. ALTERNATIVELY, A CROSS AISLE MAY BE CONSTRUCTED ACROSS THE REAR OF THE SEATING TO ELIMINATE THE DEAD ENDS.
2. AISLE WIDTH SHALL BE THE GREATER OF 48" & .3 X OCCUPANT LOAD AS REQUIRED BY ICC 300-17 SECTION 404.5.
3. THE QUANTITY OF WHEELCHAIR SPACES, COMPANION SEATS, DESIGNATED AISLE SEATS, AND SEMI-AMBULANT SEATS PROVIDED SHALL COMPLY WITH CBC SECTIONS 11B-221.1, 11B-221.3, 11B-221.4 AND 11B-221.6.
4. SEATING AND AISLE ACCESS CONFIGURATION SHALL COMPLY WITH ICC 300-17 SECTIONS 407.3-407.5.
5. SEMI-AMBULANT SEATS SHALL COMPLY WITH CBC 11B-802.5. SEMI AMBULANT SEATS SHALL PROVIDE AT LEAST 24 INCHES (610MM) CLEAR LEG SPACE BETWEEN THE FRONT OF THE SEAT TO THE NEAREST OBSTRUCTION OR TO THE BACK OF THE SEAT IMMEDIATELY IN FRONT.
6. HORIZONTAL DISPERSION SHALL COMPLY WITH CBC 11B-221.2.3.1. WHEELCHAIR SPACES SHALL BE DISPERSED HORIZONTALLY. IN ASSEMBLY AREAS THAT HAVE SEATING ENCIRCLING, IN WHOLE OR IN PART, A FIELD OF PLAY OR PERFORMANCE, WHEELCHAIR SPACES SHALL BE DISPERSED HORIZONTALLY AROUND THE FIELD OF PLAY OR PERFORMANCE AREA. EXCEPTION ONE: HORIZONTAL DISPERSION SHALL NOT BE REQUIRED IN ASSEMBLY AREAS WITH 300 OR FEWER SEATS IF THE COMPANION SEATS REQUIRED BY SECTION 11B-221.3 AND WHEELCHAIR SPACES ARE LOCATED WITHIN THE 2ND AND 3RD QUARTILE OF THE TOTAL ROW LENGTH. IF THE ROW IS INSUFFICIENT TO ACCOMMODATE THE REQUIRED NUMBER OF COMPANION SEATS AND WHEELCHAIR SPACES, THE ADDITIONAL COMPANION SEATS AND WHEEL CHAIR SPACES SHALL BE PERMITTED TO BE LOCATED IN THE 1ST AND 4TH QUARTILE OF THE ROW. EXCEPTION TWO: IN ROW SEATING, TWO WHEELCHAIR SPACES SHALL BE PERMITTED TO BE SIDE BY SIDE.
7. WHEN REQUIRED WHEELCHAIR SPACES ARE NOT OCCUPIED BY PERSONS ELIGIBLE FOR THESE SPACES, INDIVIDUAL REMOVABLE SEATS MAY BE PLACED IN THOSE SPACES (11B-221.2)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STERN
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023

REV.	REVISION NOTES	INT/DATE
⚠	.	.

NAME: SCOPELAND DATE: 9-19-23 SCALE: 3/16" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: 10.25" RISE WITH SSAR PLAN VIEW/SIDE ELEVATIONS

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T5.10

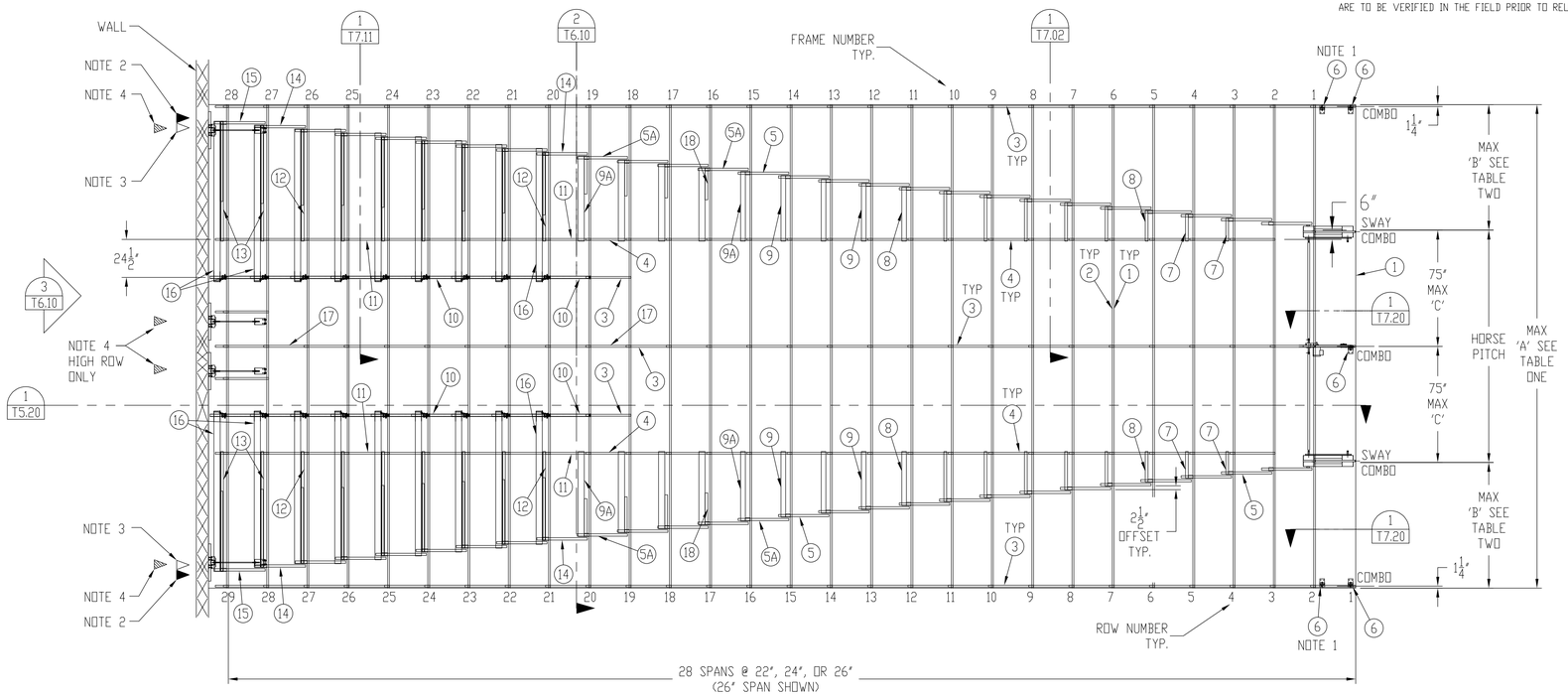
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

TABLE ONE: MAXIMUM SECTION LENGTH

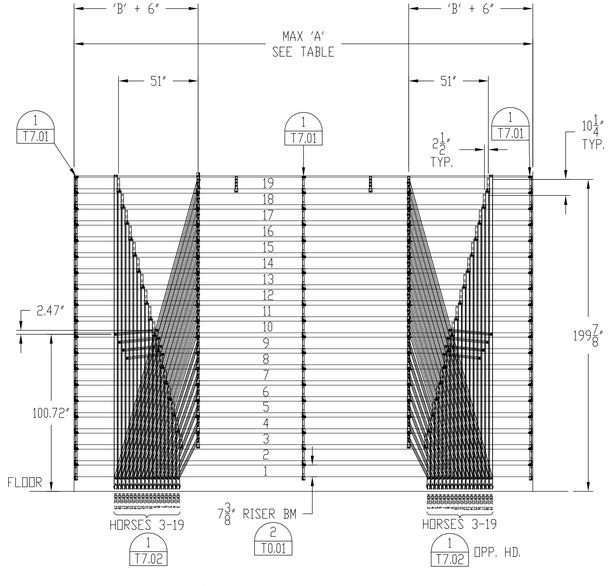
END CONDITION	'A' MAXIMUM SECTION LENGTH
NO END RAILS	26'-0"
SSER PER T8.30 ONE END	25'-10"
SSER PER T8.30 BOTH ENDS	25'-8"

TABLE TWO: MAXIMUM CANTILEVER LENGTH

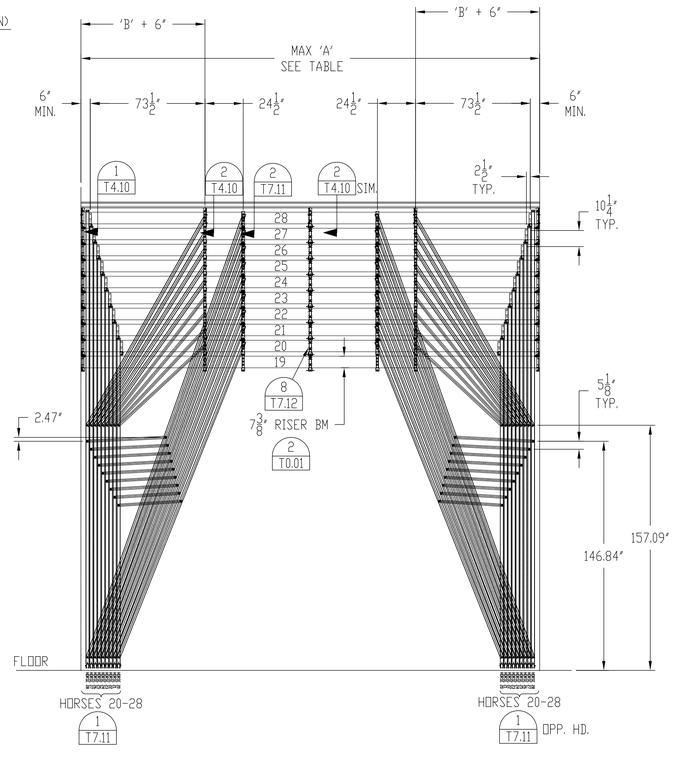
END CONDITION	'B' MAXIMUM CANTILEVER LENGTH
NO RAIL AT END	81"
SSER PER T8.30 AT END	79"



1 T6.10 FRAMING PLAN, (29 ROW UNDERSTRUCTURE SHOWN)



2 T6.10 REAR VIEW FRAMES 3-19



3 T6.10 REAR VIEW FRAMES 20-28

NOTES:
1) ITEM 6 REQUIRED AT ADDITIONAL 2 LOCATIONS ONLY WHEN DIM 'B' EXCEEDS 68.24" SEE 1 T7.20

2) '▼' INDICATES LOCATION OF FLOOR ATTACHMENTS. 1 T4.21 | 1 T4.22
(MAY BE REPLACED BY LOWER WALL ATTACHMENTS, BUT IS MANDATORY OVER 15 ROWS.)

3) '▽' INDICATES LOCATION OF LOWER WALL ATTACHMENTS. 1 T4.20 | 2 T4.20
(MAY BE USED TO REPLACE FLOOR ATTACHMENTS UP TO 15 ROWS MAXIMUM)

4) '▼' INDICATES LOCATION OF UPPER WALL ATTACHMENTS. 1 T4.01 | 1 T4.02 | 1 T4.03 | 1 T4.04 | 1 T4.05 | 1 T4.06 | 1 T4.07 | 1 T4.08 | 1 T4.09

RULES FOR CALCULATION OF HORSE PITCH

SECTION LENGTH (A) INCHES	STANDARD HORSE PITCH (2C) INCHES
96"<A<240"	A[(A-96)X(0.07)/144+0.43]
240"<A<294"	0.5(A) *

* TO AVOID INTERFERENCE AT COLUMNS OR OTHER OBSTRUCTIONS, THE HORSE PITCH MAY BE INCREASED TO 147" MAXIMUM. NO DECREASE IS ALLOWED ON MANUAL SECTIONS. ON SECTIONS WITHIN POWER OPERATED BANKS WITH NOSE BEAM AND RISER BEAM SPLICES, THE MINIMUM HORSE PITCH MAY BE REDUCED TO A MINIMUM OF A-162 OR 0.43A, WHICH EVER IS LARGER.

NOTES:
WHERE 20 ROWS OR MORE OF SEATING ARE PROVIDED, THE BLEACHER SHALL BE COMPOSED OF AT LEAST TWO SECTIONS CONNECTED PER SHEETS T6.30 & T6.31. THE BANK SHALL BE POWER OPERATED.

THE UNDERSTRUCTURE VIEW OF SEATING SHOWN ABOVE IS NOT INTENDED TO REPRESENT THE EXACT NUMBER OF ROWS OF A SITE SPECIFIC PROJECT. THIS GENERIC DRAWING REPRESENTS THE MAXIMUM NUMBER OF ROWS REVIEWED IN THIS PC.

ITEM	DESCRIPTION	REF. PAGE
18	TIE BAR	T7.02 TYPE 5
17	HIGH ROW CENTER COMBO	T7.12
16	SWAY BRACE, TS 4x2x.120	T7.12
15	LAST HIGH ROW HORSE	T7.10
14	INTERMEDIATE HIGH ROW HORSE	T7.10
13	SECONDARY SWAY BRACE TUBE	T7.12
12	SECONDARY SWAY BRACE, RF	T7.12
11	SWAY COMBO, SECONDARY	T7.12
10	SWAY COMBO, MAIN	T7.12
9A	SWAY BRACE, TS 4x2x.120	T7.02 TYPE 4
9	SWAY BRACE, TS 4x2x.083	T7.02 TYPE 3
8	SWAY BRACE, TS 3x2x.083	T7.02 TYPE 2
7	SWAY BRACE, ROLL FORMED	T7.02 TYPE 1
6	OUTRIGGER WHEEL	T7.20
5A	HORSE WELDMENT	T7.01
5	HORSE WELDMENT	T7.01
4	SWAY COMBO	T7.02
3	COMBO BRACKET WELD ASS'Y	T7.01
2	RISER BEAM	T0.01
1	NOSE BEAM	T0.01

REGISTERED PROFESSIONAL ENGINEER DANIEL R. STEVENS 4680 exp. 6/30/24 STRUCTURAL STATE OF CALIFORNIA

10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

REV.	REVISION NOTES	INT/DATE
⚠	REVISIONS	

NAME: SCOPELAND DATE: 9-19-23 SCALE: 1/4" = 1'

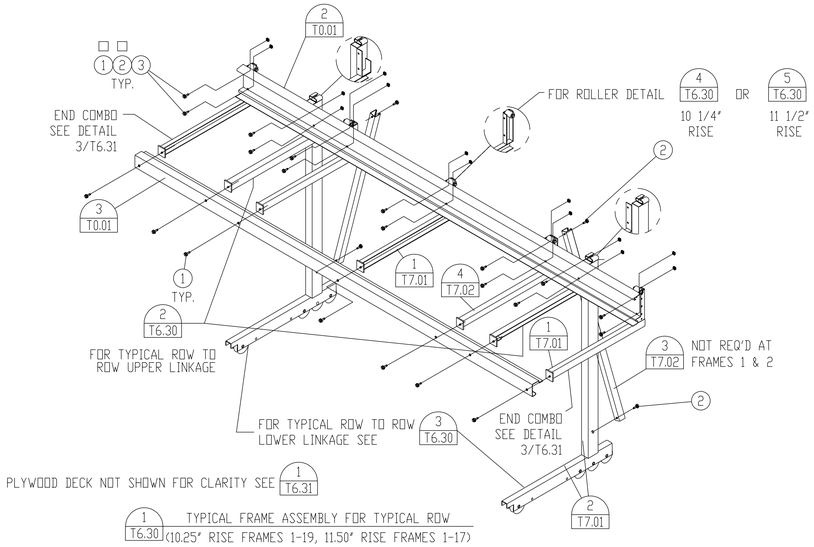
GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

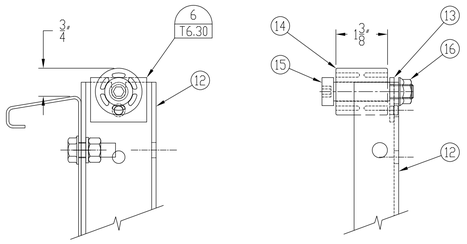
TITLE: 10.25" RISE FRAMING PLAN & REAR ELEVATION

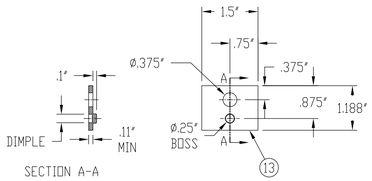
Interkal Spectator Seating World Wide www.interkal.com

SHEET NUMBER: T6.10



1 T6.30 TYPICAL FRAME ASSEMBLY FOR TYPICAL ROW
(10.25" RISE FRAMES 1-19, 11.50" RISE FRAMES 1-17)
(NTS)

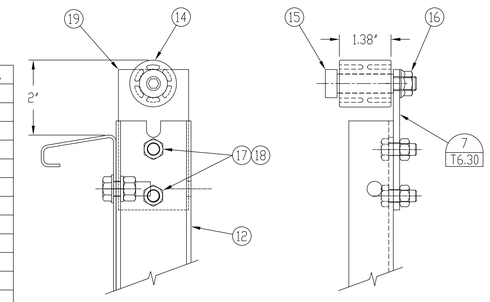




4 T6.30 ROLLER ASSEMBLY (10 1/4" RISE)
(NOTE: ROLLER PRE-ASSEMBLED TO COMBO IN FACTORY)
(2x SCALE)

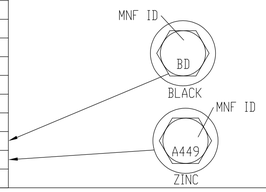
6 T6.30 ROLLER PLATE WASHER
A1011 GR. 40
(PN 602050)
(2x SCALE)

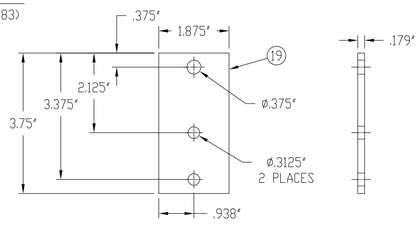
ITEM	DESCRIPTION	SPAN	ROD LENGTH	PART NO.
26	Ø 3/8" GUIDE ROD	22"	26 1/4"	163339
		24"	28 1/4"	163340
		26"	30 1/4"	181593
25	NUT PLATE			601327
24	5/16-18 x 1/2 MACHINE SCREW			612408
23	L.H. ROW LOCK ASS'Y			133683
	R.H. ROW LOCK ASS'Y			133682
22	Ø 1/2" RETAINING RING			650370
21	Ø 1/2" WHEEL PIN			133048
20	Ø 3 1/2" x 1 1/4" RUBBER WHEEL			163351
19	ROLLER PLATE 11 1/2 RISE, 7 GAGE			176445
18	5/16-18 KEPS NUT			601300
17	5/16-18 x 3/4 HEX HD CAP SCREW			600029
16	3/8-16 WHIZ LOCK NUT			601680
15	1/2 x 1 1/2 SHOULDER SCREW			610045
14	ROLLER, 1.25" O.D. NYLON 6-6			400082
13	ROLLER PLATE WASHER, 11 GAGE			602050
12	COMBO BRACKET			VARIES
11	19/32 PLYWOOD DECK BOARD			VARIES
10	3/8" x 1/2" OBROUND HOLE IN STEEL NOSE BEAM			N/A
9	3/8-16 TAPPED HOLE IN END PLATE			N/A
8	HORSE DECK SUPPORT ARM			N/A
7	10 GA. GUIDE CLIP			N/A
6	11 GA. SLIDE STOP ANGLE			N/A
5	.406" HOLE IN HORSE			N/A
4	.406" HOLE IN RISER BEAM			N/A
3	3/8-16 KEPS NUT			601629
2	3/8-16 x 1 HX FLG HD CAP SCR A354 BD (BLK)			614047
1	3/8-16 x 1 HX FLG HD CAP SCR A449 (ZINC)			534512



5 T6.30 ROLLER ASSEMBLY (11 1/2" RISE)
(NOTE: ITEMS 14, 15, 16, & 19 PRE-ASSEMBLED AS PN 176383)
(2x SCALE)

1 T6.31 SEE

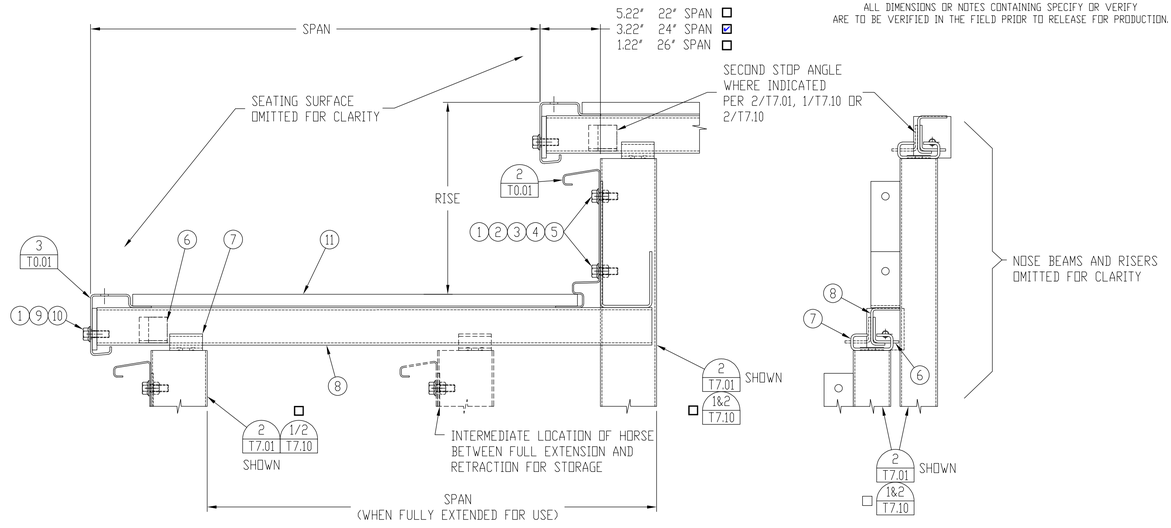




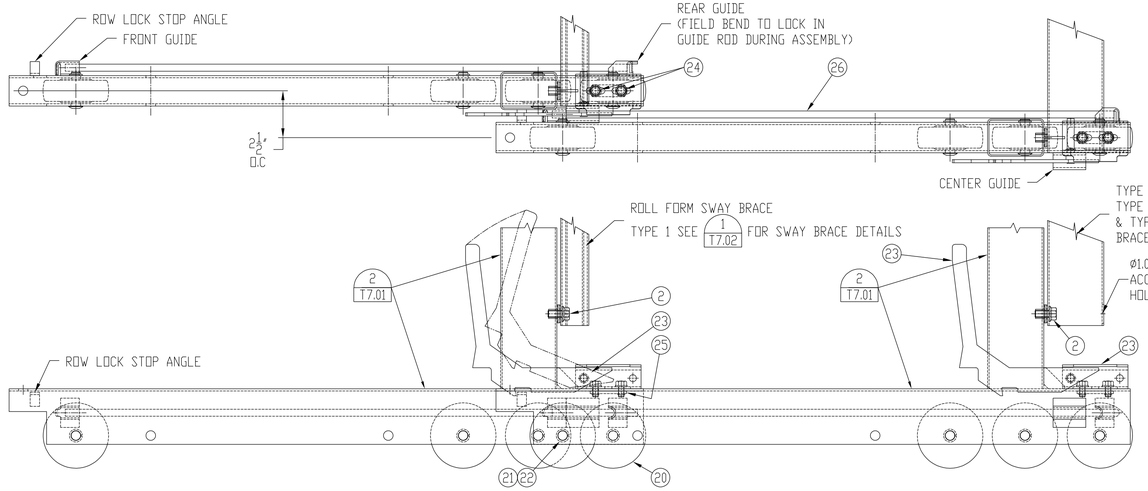
7 T6.30 ROLLER PLATE
A1011 GR. 40
(PN 176445)
(2x SCALE)

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

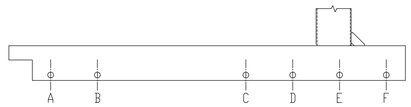
5.22" 22" SPAN ☐
3.22" 24" SPAN ☑
1.22" 26" SPAN ☐



2 T6.30 UPPER ROW TO ROW LINKAGE DETAIL



WHEEL CHART			
☑ 10 1/4" RISE		☐ 11 1/2" RISE	
HORSE NO.	LOCATION	HORSE NO.	LOCATION
1	A-B-D-E-F	1	A-B-D-E-F
☑ 2 - 15	A-D-E-F	2 - 15	A-D-E-F
☐ 16 - 19	A-B-D-E-F	16 - 17	A-B-D-E-F
☐ 20 - 27	A-B-C-D-E-F	18 - 24	A-B-C-D-E-F
LAST ROW	A-D-F	LAST ROW	A-D-F



3 T6.30 LOWER ROW TO ROW LINKAGE DETAIL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STATEN
4686
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023

REV.	REVISION NOTES	INT/DATE
⚠		

NAME: SCOPELAND DATE: 9-19-23 SCALE: 3" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

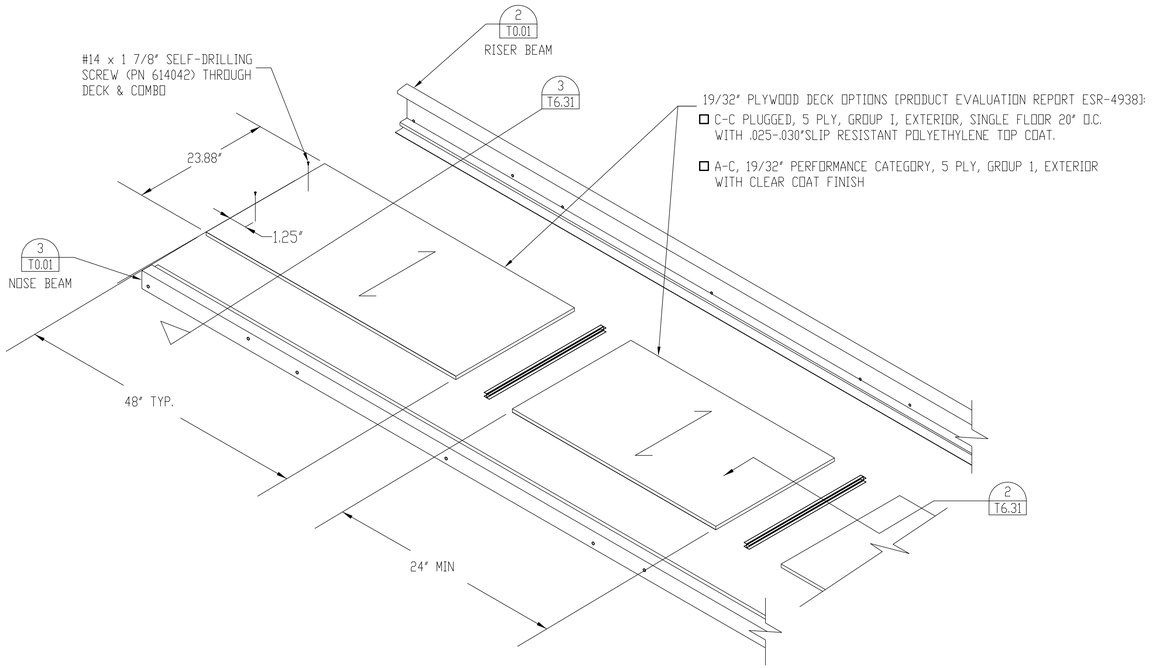
JOB NUMBER: 83256

TITLE: TYPICAL FRAME ASSEMBLY

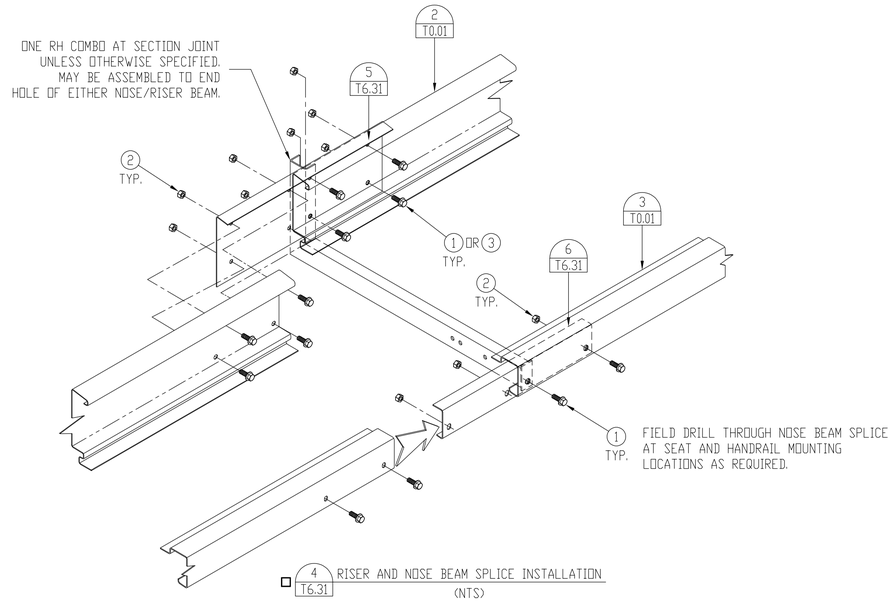
Interkal Spectator Seating World Wide www.interkal.com

SHEET NUMBER: T6.30

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

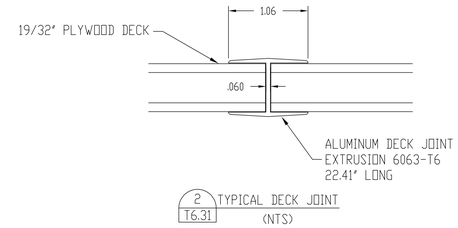


1 T6.31 TYPICAL PLYWOOD DECK ASSEMBLY
(NTS)

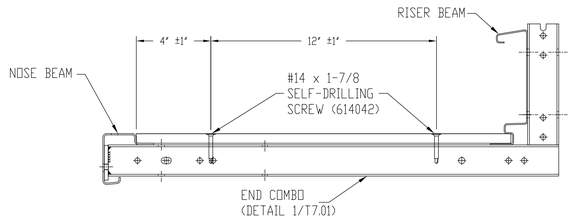


4 T6.31 RISER AND NOSE BEAM SPLICE INSTALLATION
(NTS)

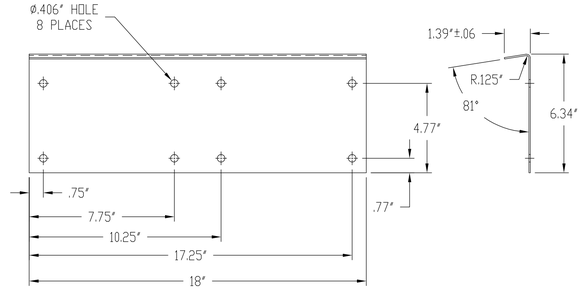
ITEM	DESCRIPTION	PART NO.
3	3/8-16 x 1 HX FLG HD CAP SCR A354 BD (BLK)	614047
2	3/8-16 KEPS NUT	601629
1	3/8-16 x 1 HX FLG HD CAP SCR A449 (ZINC)	534512



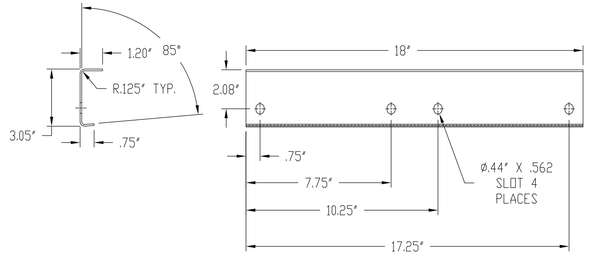
2 T6.31 TYPICAL DECK JOINT
(NTS)



3 T6.31 SECTION THROUGH DECK ASSEMBLY
(SCREWS REQ'D AT ALL END COMBOS)



5 T6.31 RISER BEAM SPLICE
14 GA ASTM A653 GRADE 33



6 T6.31 NOSE BEAM SPLICE
14 GA ASTM A653 GRADE 33

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STATEN
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
	REVISIONS	
⚠		

NAME: SCOPELAND DATE: 9-19-23 SCALE: 3" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

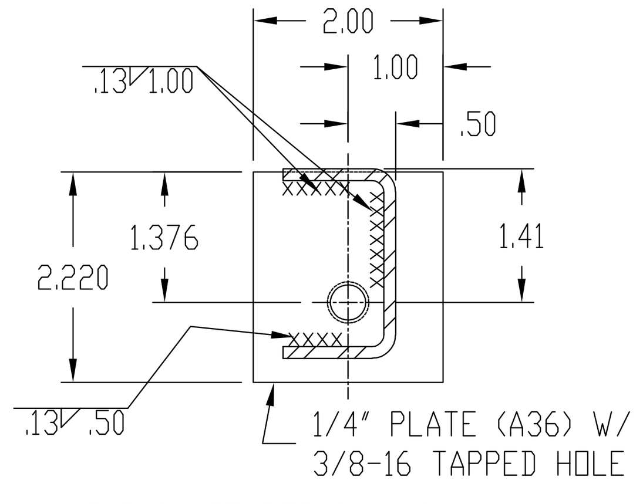
JOB NUMBER: 83256

TITLE: TYP. FRAME ASSEM. CONT. RISER & NOSE BEAM SPLICES

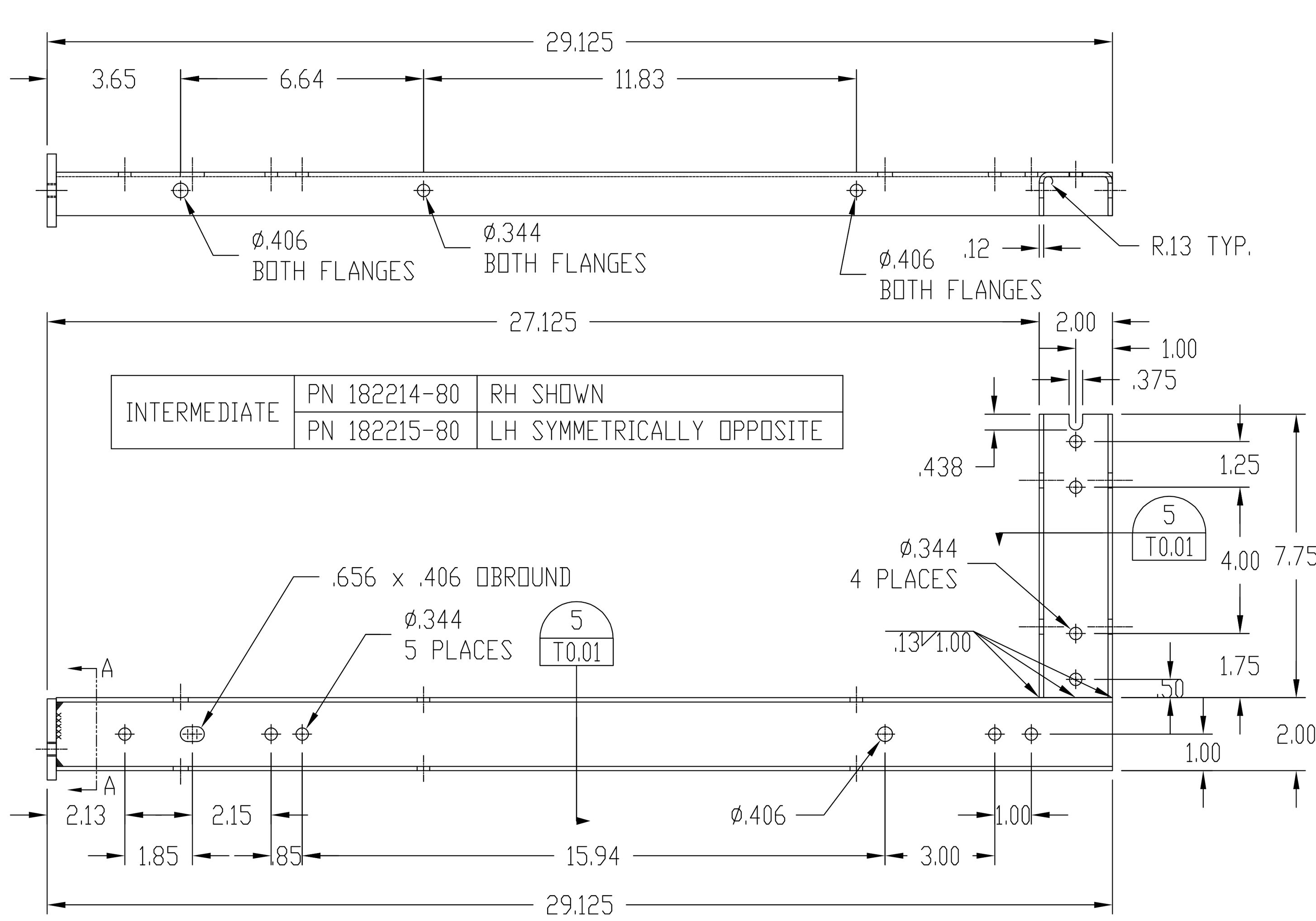
Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T6.31

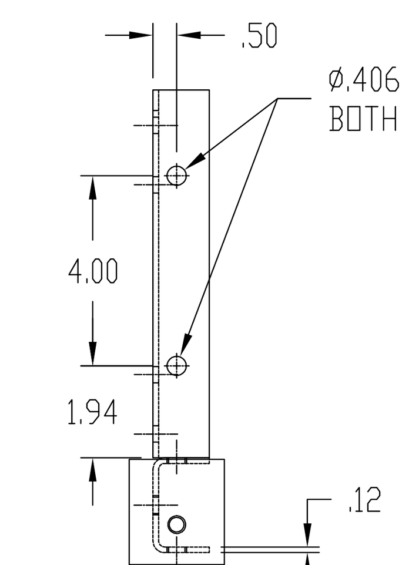
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



END PLATE DETAIL A-A
4x SCALE

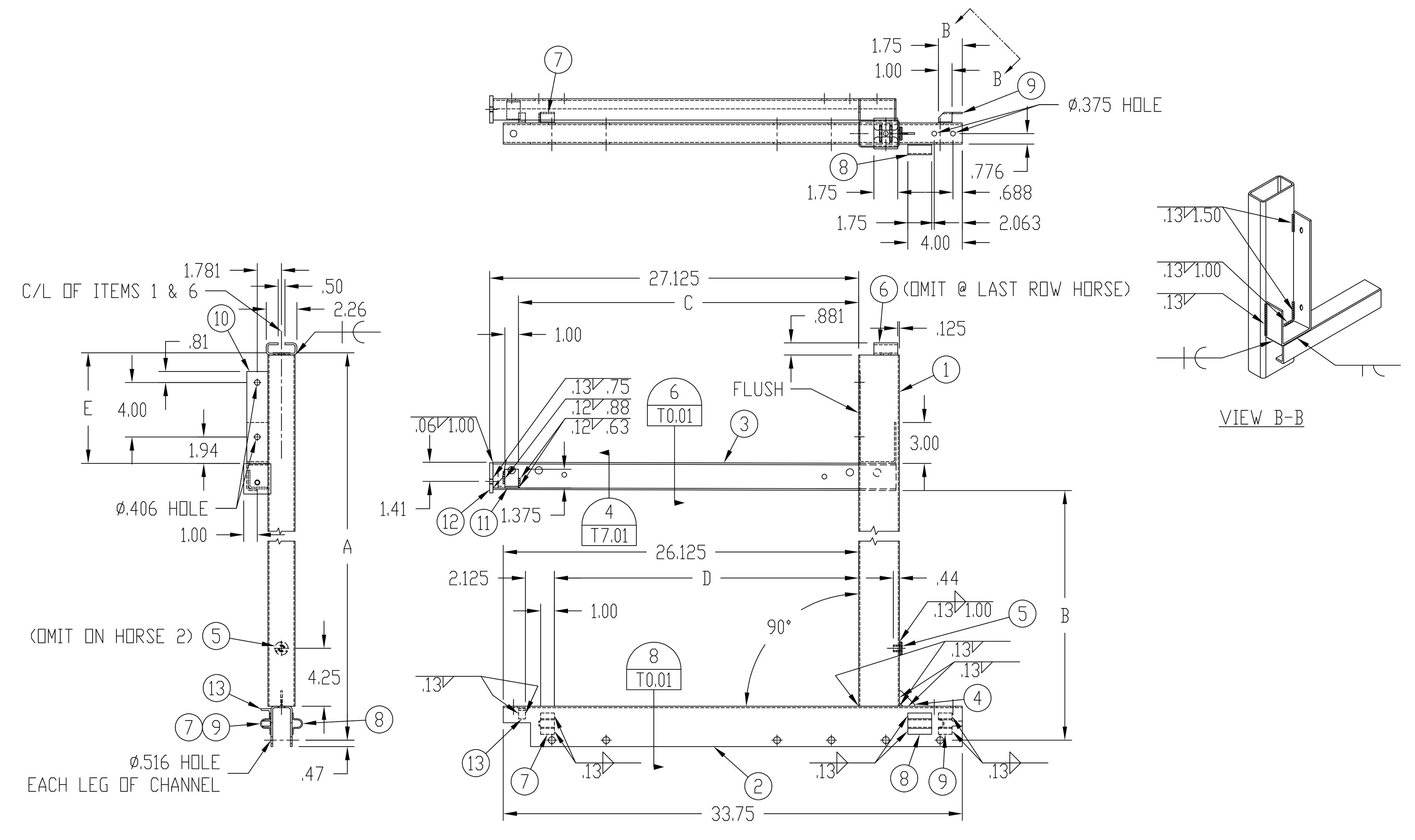


INTERMEDIATE	PN 182214-80	RH SHOWN
	PN 182215-80	LH SYMMETRICALLY OPPOSITE

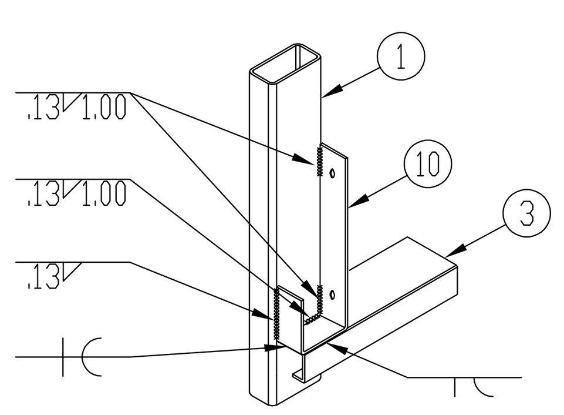


UNLESS NOTED OTHERWISE, ALL MATERIALS A1011 GRADE 40

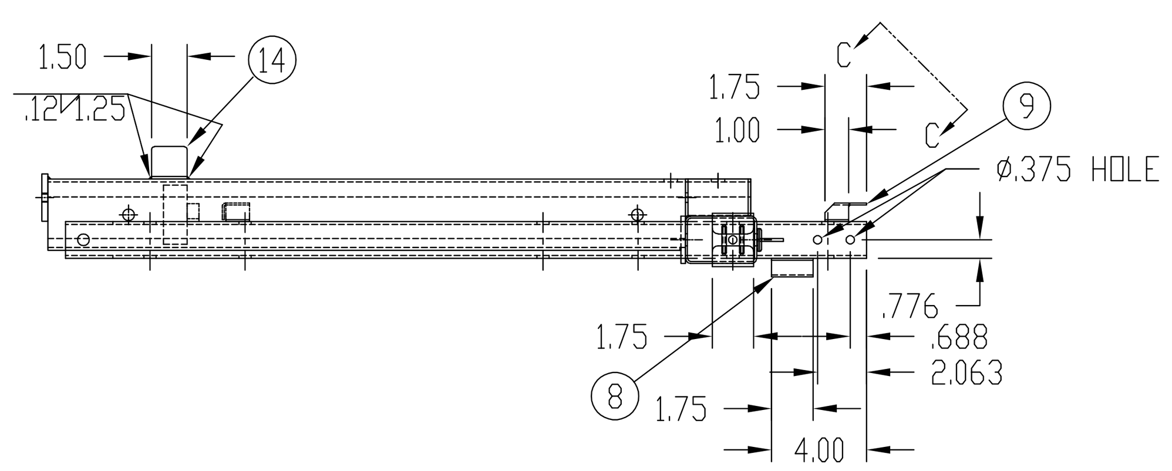
1 / T7.01 COMBO WELD ASSEMBLY
10.25 & 11.5 RISE
2x SCALE

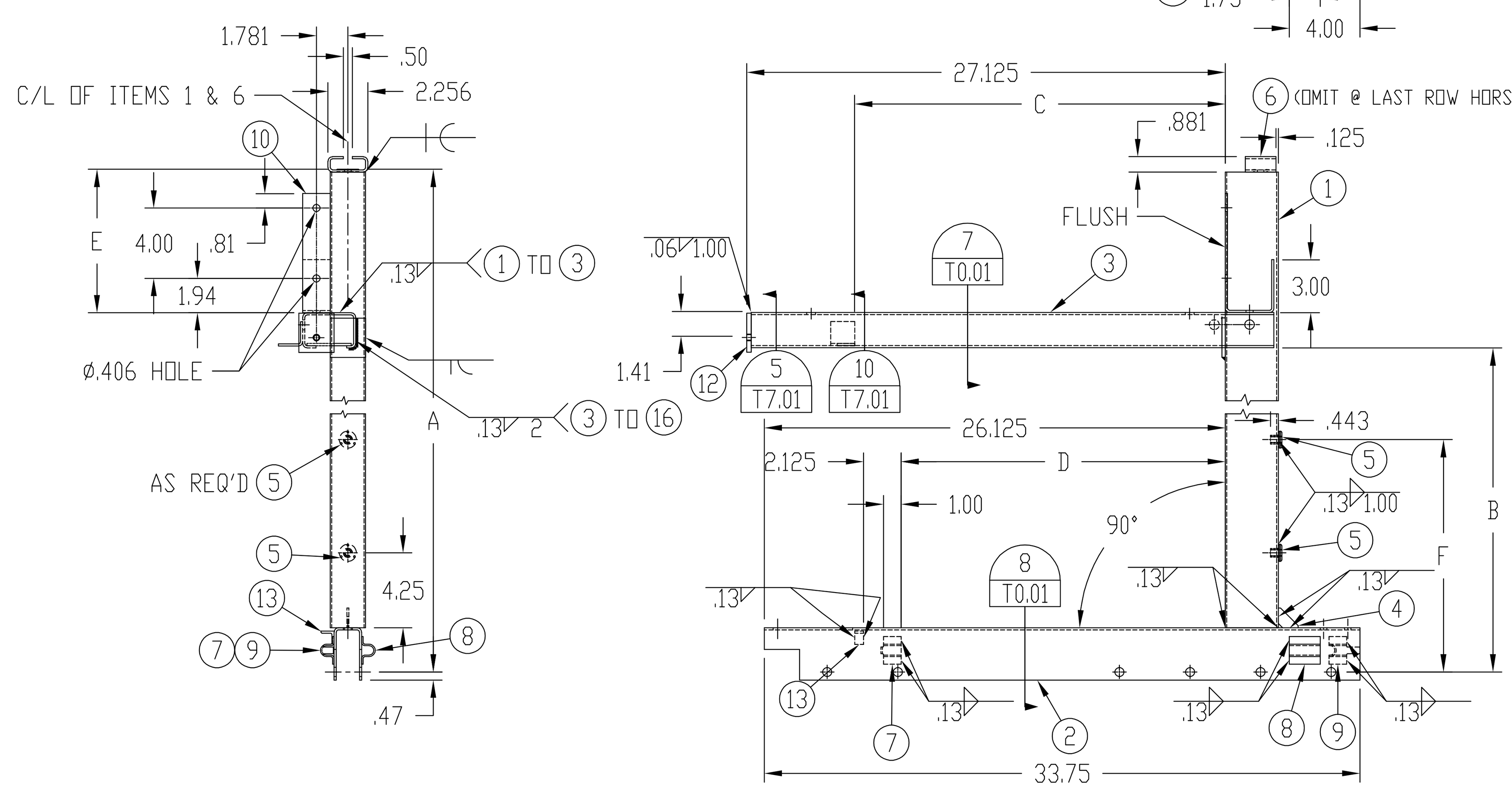


2 / T7.01 LOW ROW HORSE WELDMENT
RIGHT HAND SHOWN LEFT HAND SYMMETRICALLY OPPOSITE



VIEW C-C





☐ 3 / T7.01 MEDIUM ROW HORSE WELDMENT
RIGHT HAND SHOWN LEFT HAND SYMMETRICALLY OPPOSITE

	SPAN	C	D
☐	22"	21"	18 3/8"
☑	24"	23"	20 3/8"
☐	26"	25"	22 3/8"

☑ 10.25" RISE

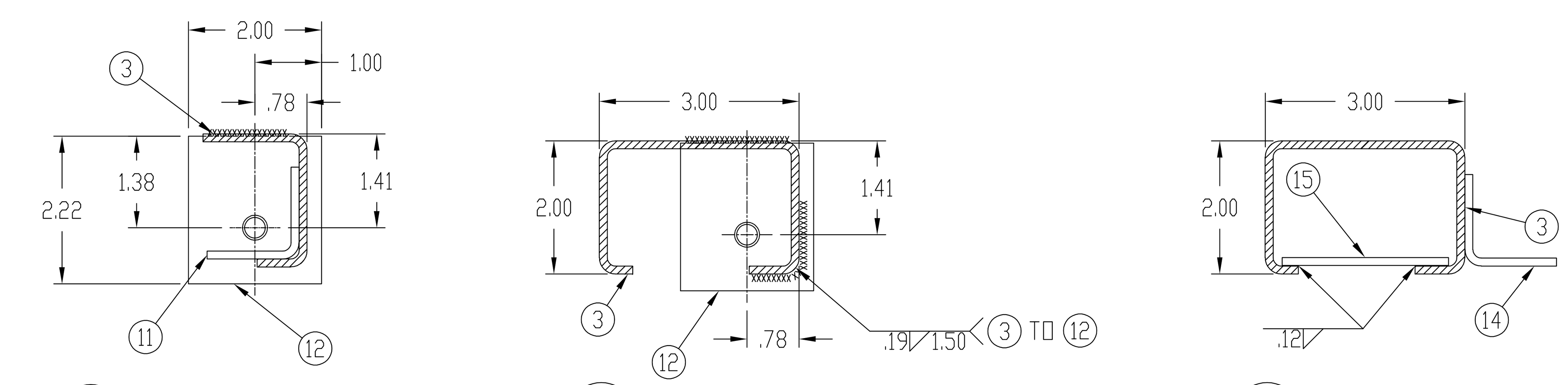
DETAIL NO.		HORSE NO.	A	B	F	E
2 / T7.01	☑	2	26.06	15.94	N/A	8.13
	☑	3	36.31	26.19		
	☑	4	46.56	36.44		
	☑	5	56.81	46.69		
	☑	6	67.06	56.94		
	☑	7	77.31	67.19		
	☑	8	87.56	77.44		
	☑	9	97.81	87.69		
	☑	10	108.06	97.94		
	☐	11	118.31	108.19		
	☐	12	128.56	118.44		
	☐	13	138.81	128.69		
	☐	14	149.06	138.94		
	☐	15	159.31	149.19		
3 / T7.01	☐	16	169.56	159.44	83.59	
	☐	17	179.81	169.69	88.72	
	☐	18	190.06	179.94	93.84	
	☐	19	200.31	190.19	98.97	

☐ 11.5" RISE

DETAIL NO.		HORSE NO.	A	B	F	E
2 / T7.01	☐	2	29.81	18.44	N/A	9.38
	☐	3	41.31	29.94		
	☐	4	52.81	41.44		
	☐	5	64.31	52.94		
	☐	6	75.81	64.44		
	☐	7	87.31	75.94		
	☐	8	98.81	87.44		
	☐	9	110.31	98.94		
	☐	10	121.81	110.44		
	☐	11	133.31	121.94		
	☐	12	144.81	133.44		
	☐	13	156.31	144.94		
3 / T7.01	☐	14	167.81	156.44	82.09	
	☐	15	179.31	167.94	87.84	
	☐	16	190.81	179.44	93.59	
	☐	17	202.31	190.94	99.34	

ITEM	DESCRIPTION	ASTM SPEC.
16	POST PLATE, 0.18 X 2 X 2.220	A1011, GRADE 40
15	STOP BAR, 10GA x 1.00 x 2.5	A1011, GRADE 40
14	DECK SUPPORT OUTER ANGLE, 1 3/8" x 1 3/8" x .12"	A1011, GRADE 40
13	STOP ANGLE, 1/8 x 3/4 x 3/4 BY 1/2	A36
12	END PLATE 1/4 x 2 x 2.220"	A36
11	SLIDE STOP, 11ga. ANGLE 1 3/8" x 1 3/8" x 1	A1011, GRADE 40
10	J BRACKET, 11ga. x 1.56"	A1011, GRADE 40
9	REAR GUIDE, 13ga. 9/7.01	A1011, GRADE 40
8	CENTER GUIDE, 13ga. 8/7.01	A1011, GRADE 40
7	FRONT GUIDE, 13ga. 7/7.01	A1011, GRADE 40
6	GUIDE CLIP, 10ga. 6/7.01	A1011, GRADE 40
5	WELD NUT - 3/8-16	C1008-1010
4	GUSSET - REAR, 11ga. 1" x 1"	A1011, GRADE 40
3	DECK CHANNEL WELD ASS'Y, 11ga.	A1011, GRADE 40
2	WHEEL CHANNEL ASS'Y, 11ga.	A1011, GRADE 40
1	SUPPORT POST, TS 3 x 2 x 14ga.	A500, GRADE C

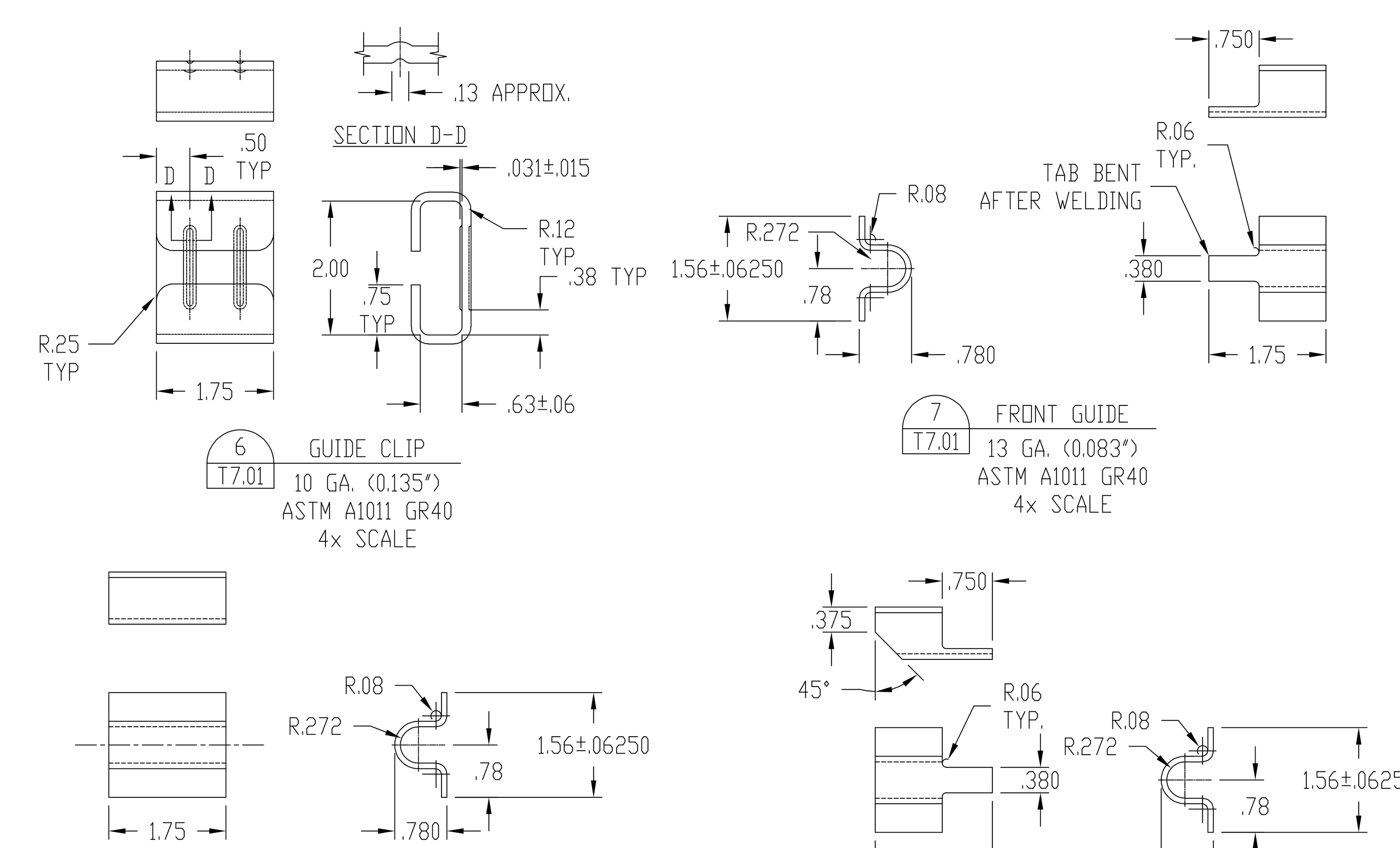
DRAWING LOCATION - P:\PROD_DEV\CALIFORNIA\PC 02-120827 2022 CBC\CAD FILES\T7.01.DWG - PRINTED BY MCOPELAND ON 08-17-23 - 4:30pm



4 / T7.01 END PLATE DETAIL
4x SCALE

☐ 5 / T7.01 END PLATE DETAIL
4x SCALE

☐ 10 / T7.01 STOP DETAIL
4x SCALE



6 / T7.01 GUIDE CLIP
10 GA. (0.135")
ASTM A1011 GR40
4x SCALE

7 / T7.01 FRONT GUIDE
13 GA. (0.083")
ASTM A1011 GR40
4x SCALE

8 / T7.01 CENTER GUIDE
13 GA. (0.083")
ASTM A1011 GR40
4x SCALE

9 / T7.01 REAR GUIDE
13 GA. (0.083")
ASTM A1011 GR40
4x SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 02-120827 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☐~~
~~DATE: 11/6/2023~~

REV.	REVISIONS / REVISION NOTES	INT/DATE

NAME: SCOPELAND DATE: 9-19-23 SCALE: 1-1/2" =1'

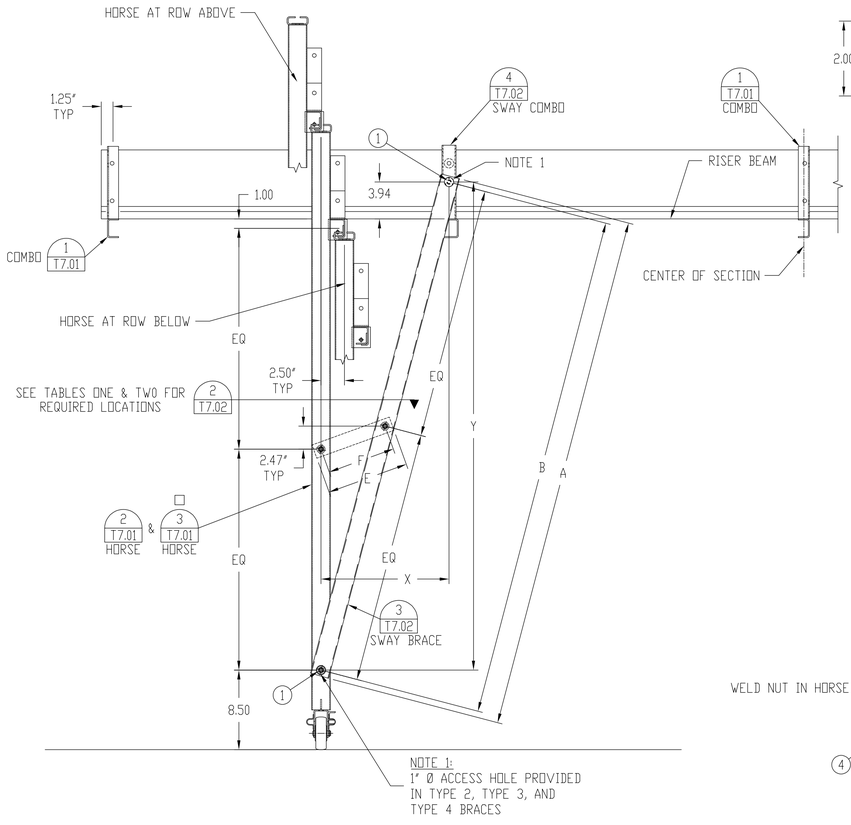
GANESHA HIGH SCHOOL
RENOVATION
POMONA, CALIFORNIA

JOB NUMBER: 83256

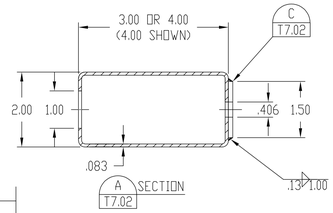
TITLE: LOW ROW HORSE WELDMENT & COMBO BRACKET

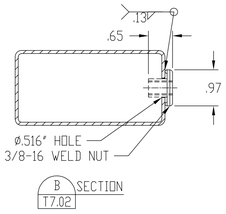
Interkal
Spectator Seating World Wide
www.interkal.com

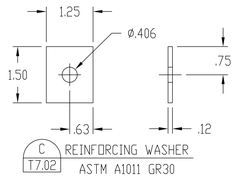
SHEET NUMBER: T7.01

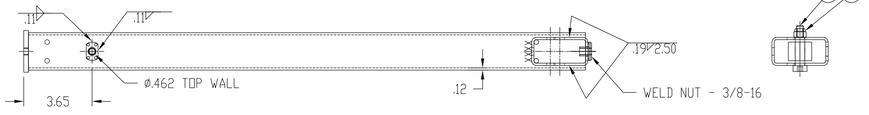


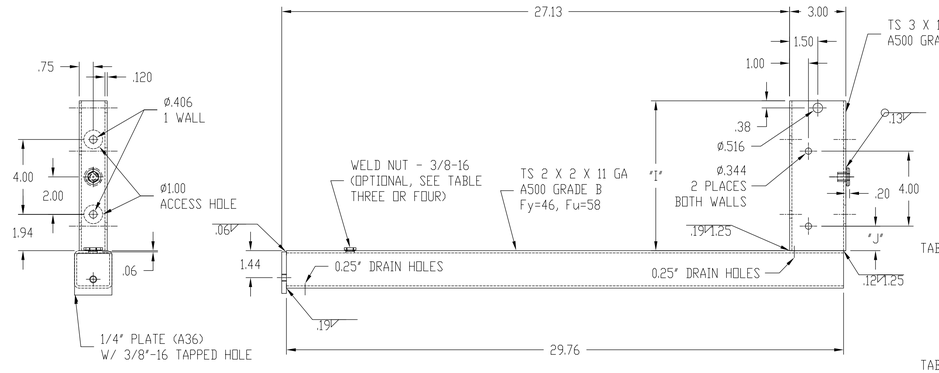
1 T7.02 REAR ELEVATION AT SWAY BRACE
SEE TABLE ONE OR TWO
TYPE 2, TYPE 3, AND TYPE 4 BRACES

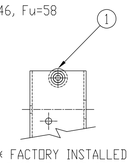












4 T7.02 SWAY COMBO WELDMENT
SEE TABLES THREE & FOUR

TABLE THREE: LAST ROW SWAY COMBO DIMENSIONS

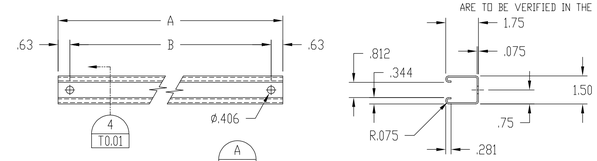
	RISE	PART NO. W/O NUT	PART NO. W/ NUT	"I"	"J"
☑	10.25	187112	187117	8.00	1.31
☐	11.50	187114	187119	9.25	2.56

TABLE FOUR: INTERMEDIATE ROW SWAY COMBO DIMENSIONS

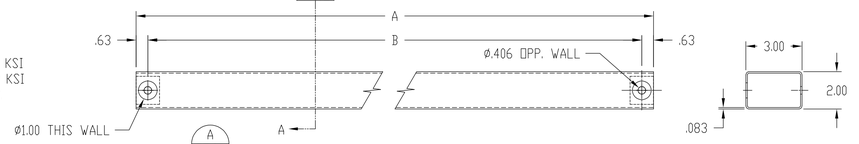
	RISE	PART NO. W/O NUT	PART NO. W/ NUT	"I"	"J"	
☑	10.25	187113	187118	8.00	1.31	SHOWN
☐	11.50	187115	187120	9.25	2.56	

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

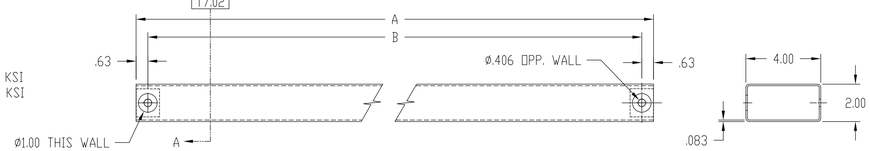
☑ TYPE 1
ASTM A653
Class 1
Fy = 50 KSI
Fu = 65 KSI
Elong = 12%



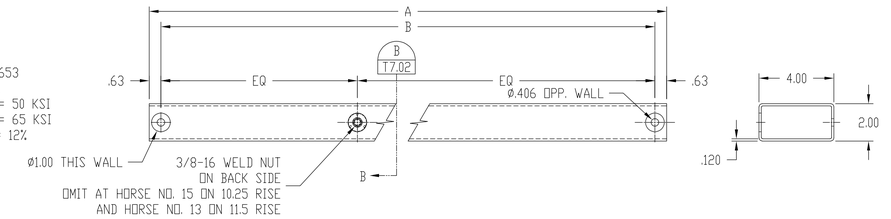
☑ TYPE 2
ASTM A500
GRADE C
Fy = 50 KSI
Fu = 62 KSI
Elong = 15%



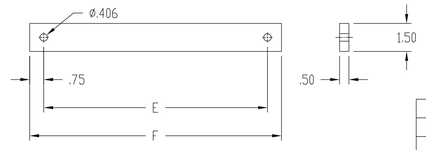
☐ TYPE 3
ASTM A500
GRADE C
Fy = 50 KSI
Fu = 62 KSI
Elong = 15%



☐ TYPE 4
ASTM A653
Class 1
Fy = 50 KSI
Fu = 65 KSI
Elong = 12%



☐ TYPE 5
ASTM A36
Fy = 36 KSI
Fu = 58 KSI



3 T7.02 SWAY BRACE MEMBER DETAILS

ITEM	DESCRIPTION	PART NO.
4	3/8-16 x 1 HEX FLANGE HD CAP SCREW	614047
3	3/8-16 ELASTIC LOCK NUT	601684
2	1/2 x 1 1/2 STEP BOLT	610045
1	1" OD x 0.516 ID x 1" NYLON ROLLER	187094

☑ TABLE ONE: 10.25 RISE SWAY BRACE DIMENSIONS

10.25 RISE HORSE NO.	TYPE	A OVERALL LENGTH	B HOLE TO HOLE	X	Y
3	1	29.66	28.41	12.78	25.38
4	1	40.01	38.76	15.28	35.63
5	2	50.45	49.20	17.78	45.88
6	2	60.93	59.68	20.28	56.13
7	2	71.43	70.18	22.78	66.38
8	2	81.94	80.69	25.28	76.63
9	2	92.46	91.21	27.78	86.88
10	2	102.99	101.74	30.28	97.13
11	2	113.52	112.27	32.78	107.38
12	3	124.06	122.81	35.28	117.63
13	3	134.59	133.34	37.78	127.88
14	3	145.13	143.88	40.28	138.13
15	4	155.67	154.42	42.78	148.38
16	4	166.22	164.97	45.28	158.63
17	4	176.76	175.51	47.78	168.88
18	4	187.3	186.05	50.28	179.13
19	4	197.85	196.60	52.78	189.38

10.25 RISE HORSE NO.	TYPE	E OVERALL LENGTH	F HOLE TO HOLE	X	Y	
16	5	24.27	22.77	22.64	2.47	TIE BAR
17	5	25.52	24.02	23.89	2.47	
18	5	26.76	26.26	25.14	2.47	
19	5	28.01	26.51	26.39	2.47	

☐ TABLE TWO: 11.5 RISE SWAY BRACE DIMENSIONS

11.5 RISE HORSE NO.	TYPE	A OVERALL LENGTH	B HOLE TO HOLE	X	Y
3	1	33.06	31.81	12.78	29.13
4	1	44.66	43.41	12.58	40.63
5	2	56.33	55.08	17.78	52.13
6	2	68.03	66.78	20.28	63.63
7	2	79.76	78.51	22.78	75.13
8	2	91.49	90.24	25.28	86.63
9	2	103.24	101.99	27.78	98.13
10	2	114.98	113.73	30.28	109.63
11	3	126.74	125.49	32.78	121.13
12	3	138.49	137.24	35.28	132.63
13	4	150.25	149.00	37.78	144.13
14	4	161.62	160.76	40.28	155.63
15	4	173.77	172.52	42.78	167.13
16	4	185.53	184.28	45.28	178.63
17	4	197.29	196.04	47.78	190.13

11.5 RISE HORSE NO.	TYPE	E OVERALL LENGTH	F HOLE TO HOLE	X	Y	
14	5	21.78	20.28	20.14	2.47	TIE BAR
15	5	23.02	21.52	21.39	2.47	
16	5	24.26	22.76	22.64	2.47	
17	5	25.51	24.01	23.89	2.47	

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STEVENS
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
⚠	. .	. .

NAME: SCOPELAND DATE: 9-19-23 SCALE: I-1/2" =I'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

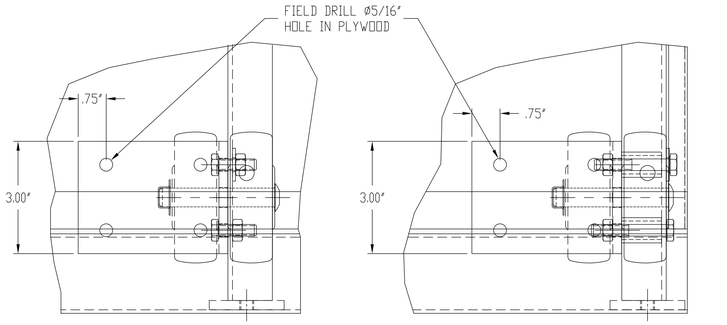
JOB NUMBER: 83256

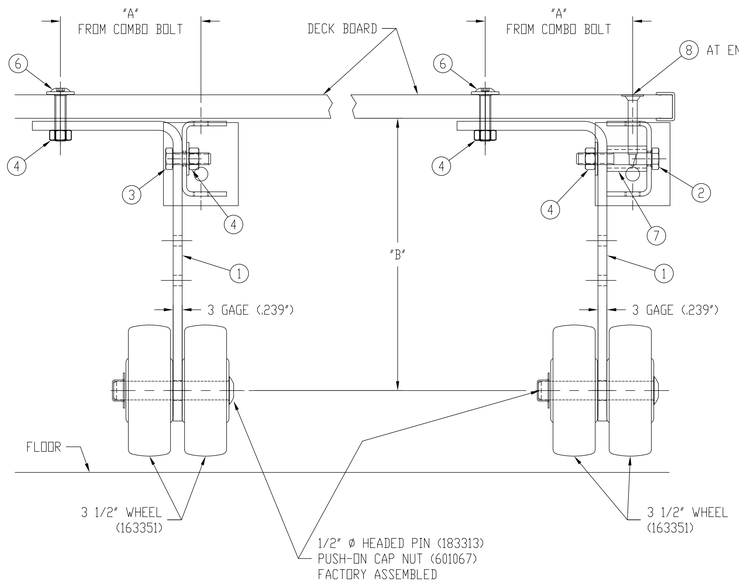
TITLE: LOW ROW - SWAY BRACE DETAILS

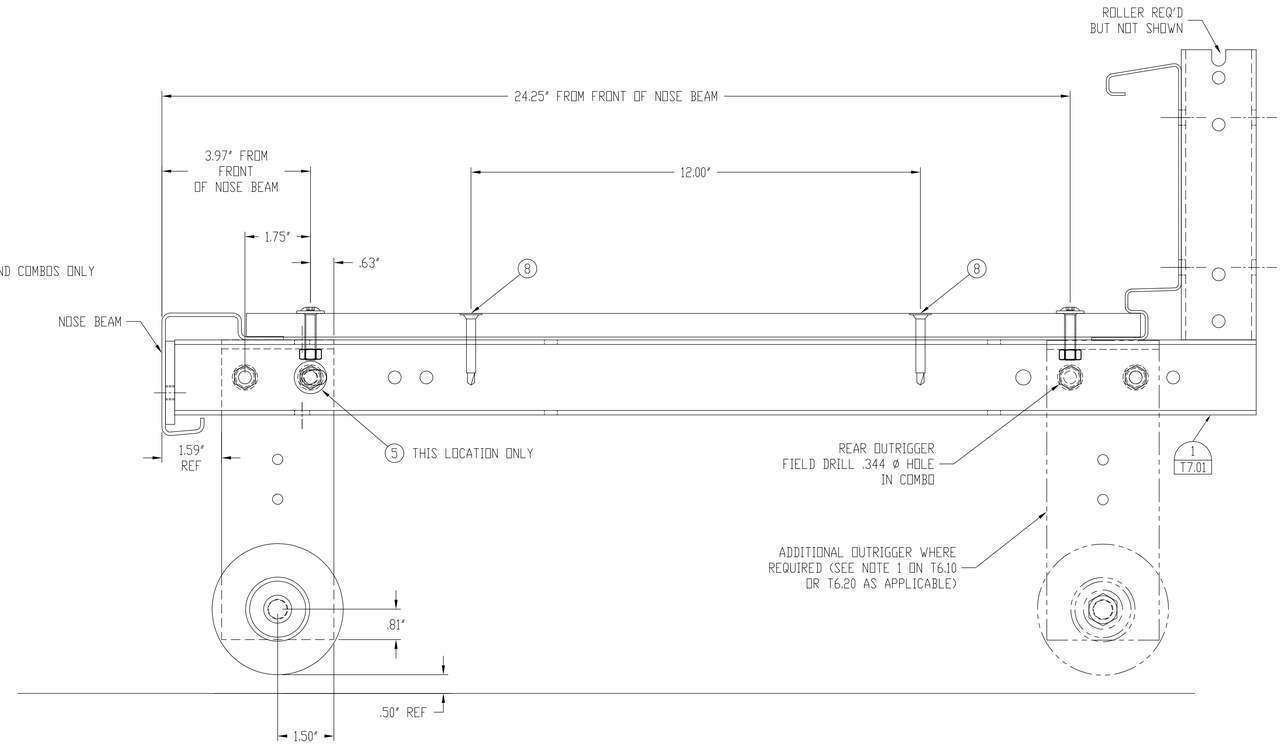
Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T7.02

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.







RISE	"A"	"B"	BRACKET
☑ 10-1/4 RISE	3.75	7.19	183112
☐ 11-1/2 RISE	2.5	8.44	183113

RIGHT END SHOWN,
LEFT END AND CENTER SYMMETRICALLY OPPOSITE

OUTRIGGER WHEEL BRACKET IS MADE
FROM ASTM A653 GRADE 33 MATERIAL

1
T7.20
FRONT ROW OUTRIGGER

ITEM	DESCRIPTION	PART NO.
8	#14 X 1-7/8" SELF-DRILLING SCREW	614042
7	SPACER TUBE, 3/8" SCHEDULE 40 PIPE x 1.06"	183116
6	5/16-18 x 1 1/4 TRUSS WASHER HEAD TORX SCREW	613031
5	5/16 FLAT WASHER	602259
4	5/16-18 KEPS NUT	601300
3	5/16-18 X 1 HEX HD CAP SCREW GR 5	600294
2	5/16-18 X 2 HEX HD CAP SCREW GR 5	651037
1	OUTRIGGER ASS'Y 11 1/2" RISE (INCLUDING WHEELS)	183115
	OUTRIGGER ASS'Y 10 1/4" RISE (INCLUDING WHEELS)	183114

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STERN
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
	REVISIONS	
⚠		

NAME: SCOPELAND DATE: 9-19-23 SCALE: 6" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: FRONT ROW OUTRIGGER

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER:
T7.20

ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.

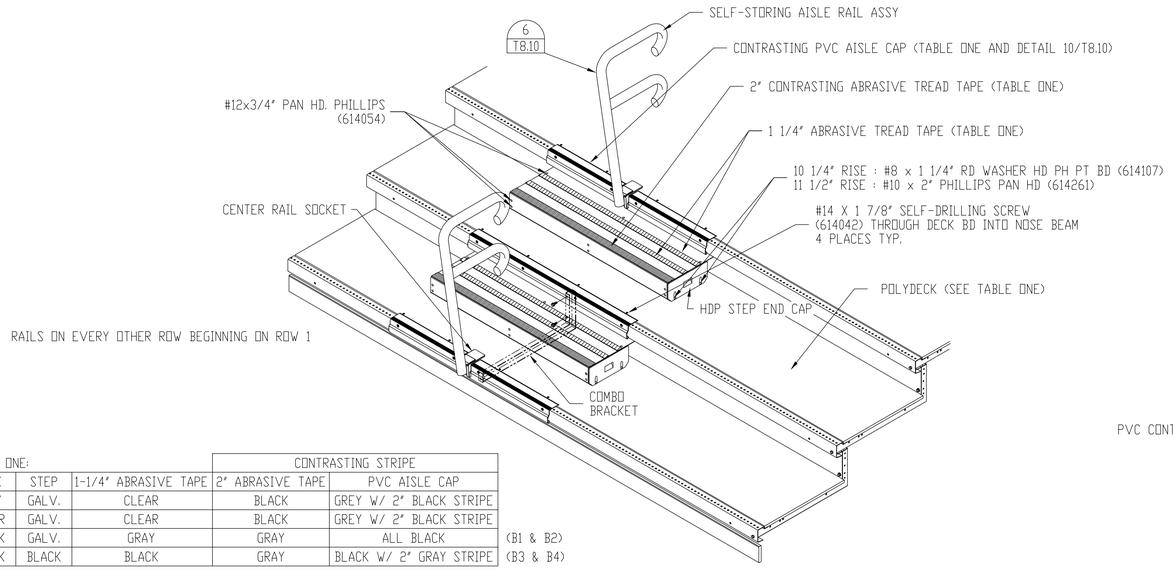
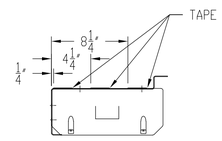


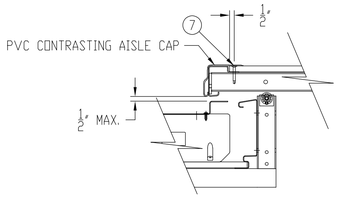
	TABLE ONE:			CONTRASTING STRIPE		
	DECK	STEP	1-1/4" ABRASIVE TAPE	2" ABRASIVE TAPE	PVC AISLE CAP	
☐	GRAY	GALV.	CLEAR	BLACK	GREY W/ 2" BLACK STRIPE	
☐	CLEAR	GALV.	CLEAR	BLACK	GREY W/ 2" BLACK STRIPE	
☐	BLACK	GALV.	GRAY	GRAY	ALL BLACK	(B1 & B2)
☑	BLACK	BLACK	BLACK	GRAY	BLACK W/ 2" GRAY STRIPE	(B3 & B4)

1 / T8.10 ISOMETRIC VIEW AT CENTER AISLE HAND RAIL
(22', 24', & 26' SPAN)
NTS

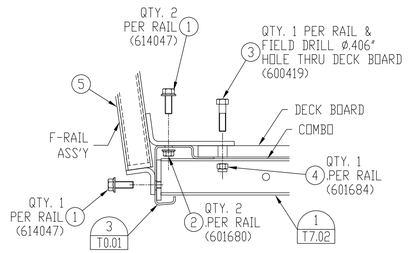


TAPE LOCATIONS
CLEAN SURFACES BEFORE APPLYING TAPE.
'SIMPLE GREEN' HAS BEEN SHOWN
TO BE AN EFFECTIVE DEGREASER.

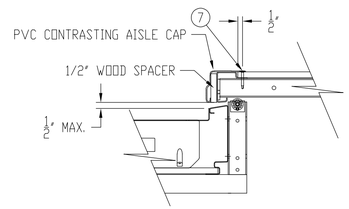
2 / T8.10 TREAD TAPE INSTALLATION



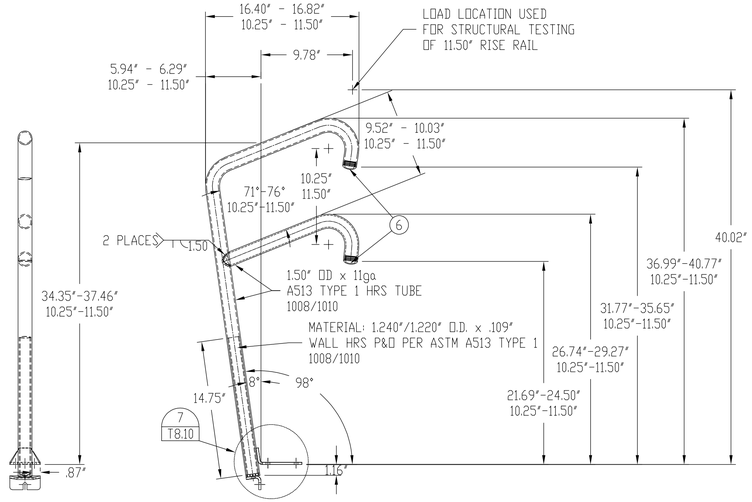
☑ 4 / T8.10 NOSE BEAM DETAIL (22' & 24' SPAN)
(22' SPAN SHOWN)



3 / T8.10 CENTER AISLE HAND RAIL ATTACHMENT

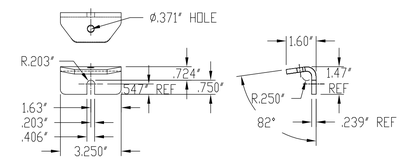


☐ 5 / T8.10 NOSE BEAM DETAIL (26' SPAN)

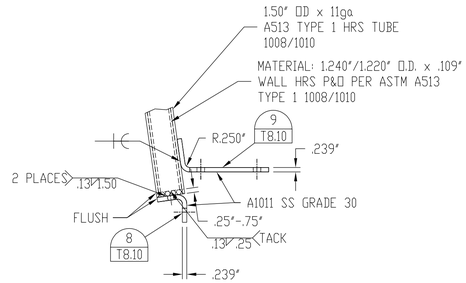


6 / T8.10 SELF-STORING AISLE RAIL
SHOWN (PN 183856-84) 10 1/4"
(PN 183857-84) 11 1/2"

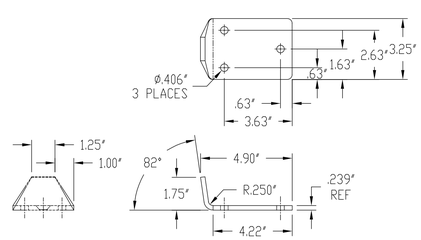
ITEM	DESCRIPTION	PART NO.
7	#14 X 1 7/8" SELF-DRILLING SCREW	614042
6	DOMED PLASTIC PLUG	183764
5	SELF-STORING AISLE RAIL (F-RAIL/SSAR)	VARIES
4	3/8-16 HEX ELASTIC LOCK NUT	601684
3	3/8-16 X 1-1/2" HEX HD SOCKET CAP SCREW, GRADE 5	600419
2	3/8-16 WHIZ LOCK NUT	601680
1	3/8-16 X 1" FLANGED HD CAP SCREW, A354 BD	614047



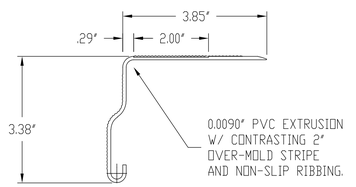
8 / T8.10 LOWER RAIL SUPPORT
A1011 SS GRADE 30
(183521)
(2x SCALE)



7 / T8.10 UPPER RAIL SUPPORT WELDMENT
(2x SCALE)



9 / T8.10 UPPER RAIL SUPPORT
A1011 SS GRADE 30
(184671)
(2x SCALE)



10 / T8.10 AISLE CAP WITH CONTRASTING STRIPE
SEE TABLE ONE FOR COLORS OF
CAP AND OVER-MOLD STRIPES
(186748)
(4x SCALE)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STATLER
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023

REV.	REVISION NOTES	INT/DATE
	REVISIONS	
⚠		

NAME: SCOPELAND DATE: 9-19-23 SCALE: 1-1/2" =1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

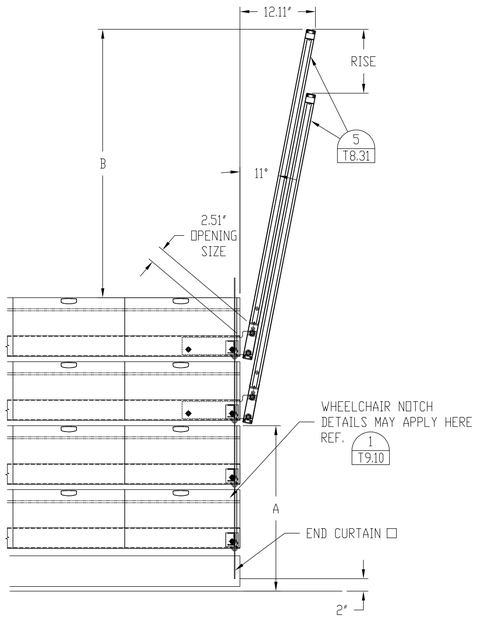
JOB NUMBER: 83256

TITLE: SELF-STORING AISLE RAILS & INT. STEP

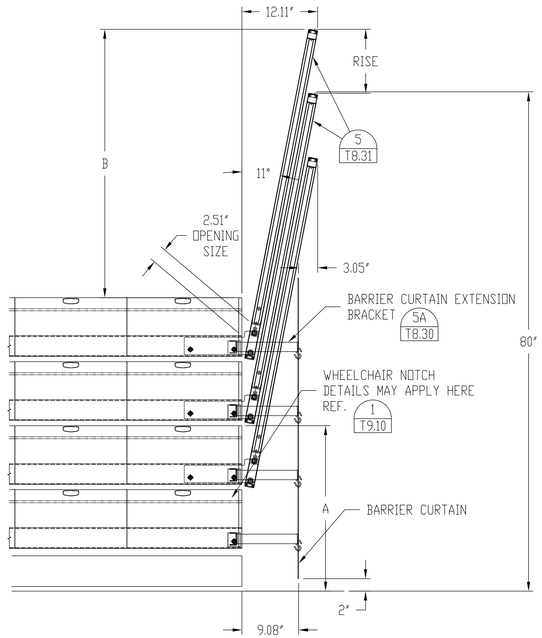
Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T8.10

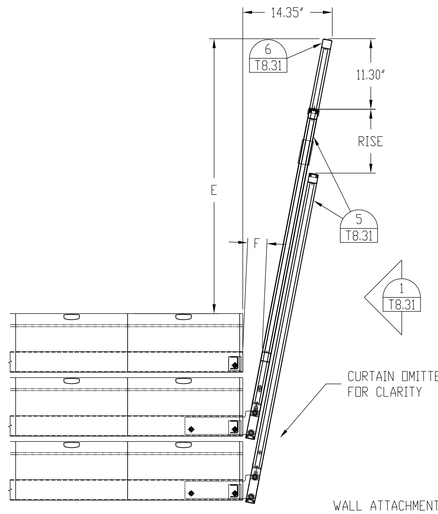
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



☐ 2 T8.30 FRONT ELEVATION @ ROWS 1-4 W/END CURTAIN
(10 1/4" RISE, ESM SHOWN)
(2x SCALE)



☑ 2A T8.30 FRONT ELEVATION @ ROWS 1-4 W/BARRIER CURTAIN
(10 1/4" RISE, ESM SHOWN)
(2x SCALE)



3 T8.30 FRONT ELEVATION @ LAST 3 ROWS
(10 1/4" RISE, ESM SHOWN)
(2x SCALE)

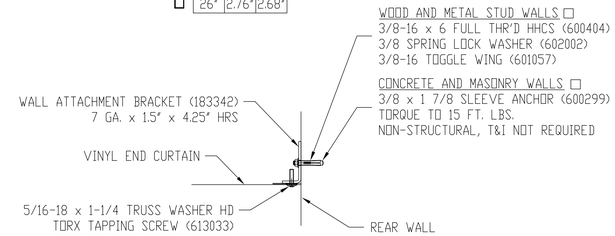
☑

10.25" RISE					
SEAT TYP	DETAIL REF	"A"	"B"	"E"	"F"
☑ ESM	1/T9.20	26.50"	43.07"	43.87"	3.21"
☐ CSM	2/T9.20	27.12"	42.45"	43.31"	
☐ P1	3/T9.20	26.50"	43.07"	43.87"	
☐ WOOD	T9.30	26.50"	43.07"	43.87"	

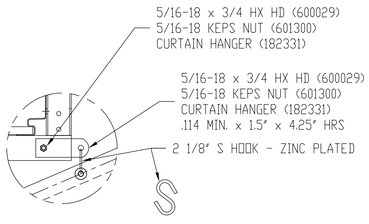
☐

11.5" RISE					
SEAT TYP	DETAIL REF	"A"	"B"	"E"	"F"
☐ ESM	1/T9.20	29.00"	43.07"	42.62"	3.48"
☐ CSM	2/T9.20	29.62"	42.45"	42.06	
☐ P1	3/T9.20	29.00"	43.07"	42.62"	
☐ WOOD	T9.30	29.00"	43.07"	42.62"	

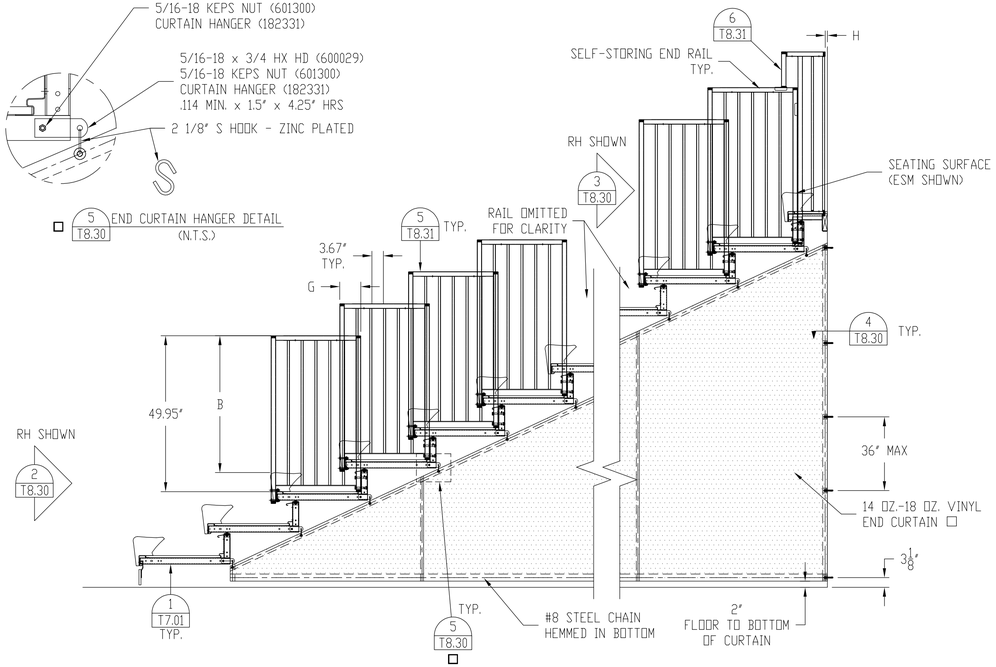
SPAN	"G"	"H"
☐ 22"	6.76"	0.68"
☑ 24"	4.76"	0.68"
☐ 26"	2.76"	2.68"



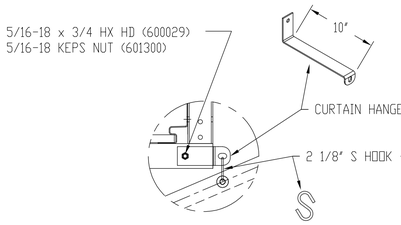
☑ 4 T8.30 WALL ATTACHMENT BRACKET
(N.T.S.)



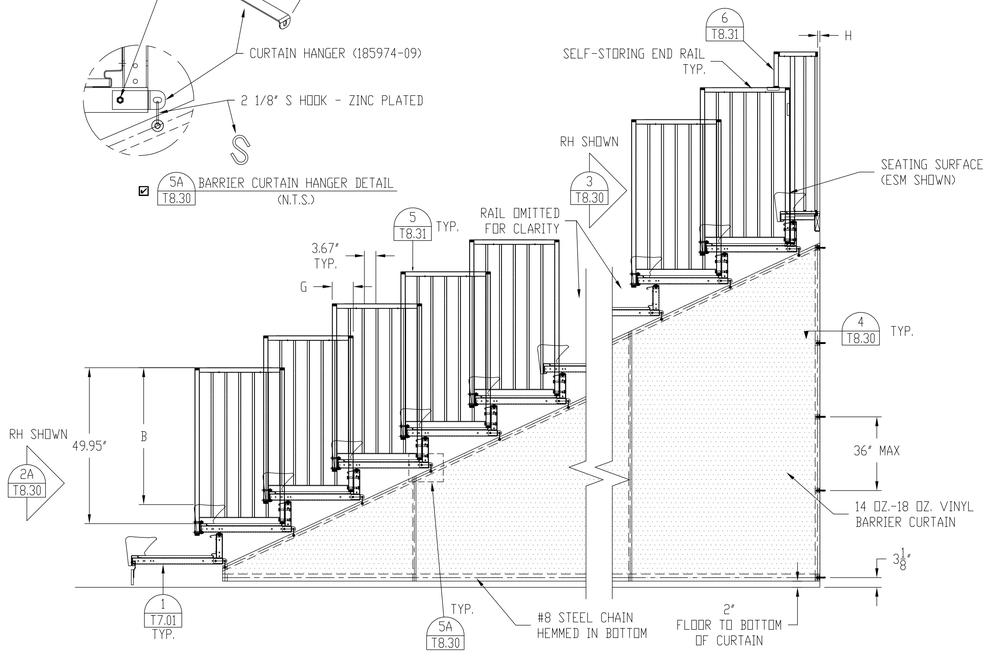
☐ 5 T8.30 END CURTAIN HANGER DETAIL
(N.T.S.)



☐ 1 T8.30 VINYL END CURTAIN & END RAIL DETAIL
(22" SPAN, 10 1/4" RISE SHOWN)
(END CURTAIN OPTIONAL WHEN
BARRIER CURTAIN IS NOT REQUIRED)



☑ 5A T8.30 BARRIER CURTAIN HANGER DETAIL
(N.T.S.)



☑ 1A T8.30 VINYL BARRIER CURTAIN & END RAIL DETAIL
AS REQD. FOR COMPLIANCE WITH 11B-307.4
(22" SPAN, 10 1/4" RISE SHOWN)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STATON
4686
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE

NAME: SCOPELAND DATE: 11-03-22 SCALE: 1/2" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

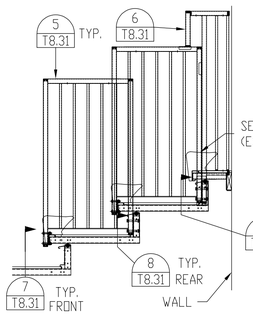
JOB NUMBER: 83256

TITLE: SELF-STORING END RAIL/
CURTAIN DETAILS

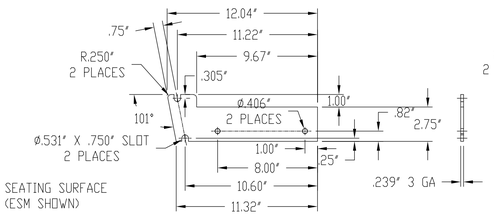
Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER:
T8.30

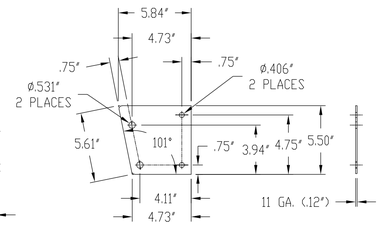
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



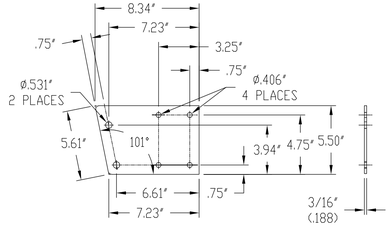
1 T8.31 END RAIL ATTACHMENT DETAIL
(1/2x SCALE)



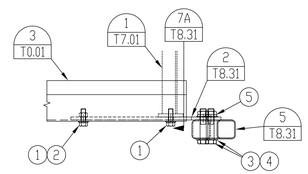
2 T8.31 FRONT ATTACHMENT PLATE
ASTM A1011 STRUCTURAL STEEL (SS) GRADE 40
(PN 184645-84)
(2X SCALE)

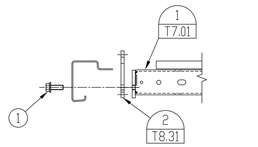


3 T8.31 REAR ATTACHMENT PLATE
ASTM A1011 STRUCTURAL STEEL (SS) GRADE 40
(PN 184644-84)
(2X SCALE)

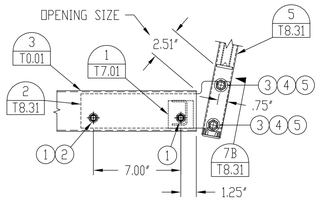


4 T8.31 REAR ATTACHMENT PLATE AT EXTENSION
ASTM A1011 STRUCTURAL STEEL (SS) GRADE 40
(PN 184643-84)
(2X SCALE)

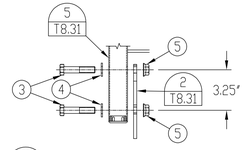




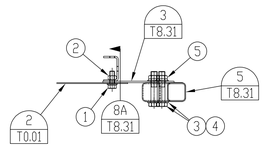
7A T8.31 FRONT ATTACHMENT @ NOSE BEAM
(2x SCALE)

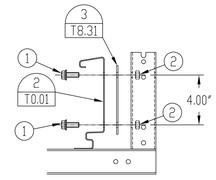


7 T8.31 FRONT ATTACHMENT
(2x SCALE)

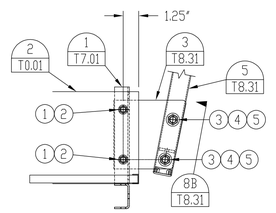


7B T8.31 FRONT ATTACHMENT @ RAIL
(2x SCALE)

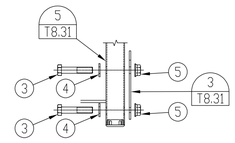




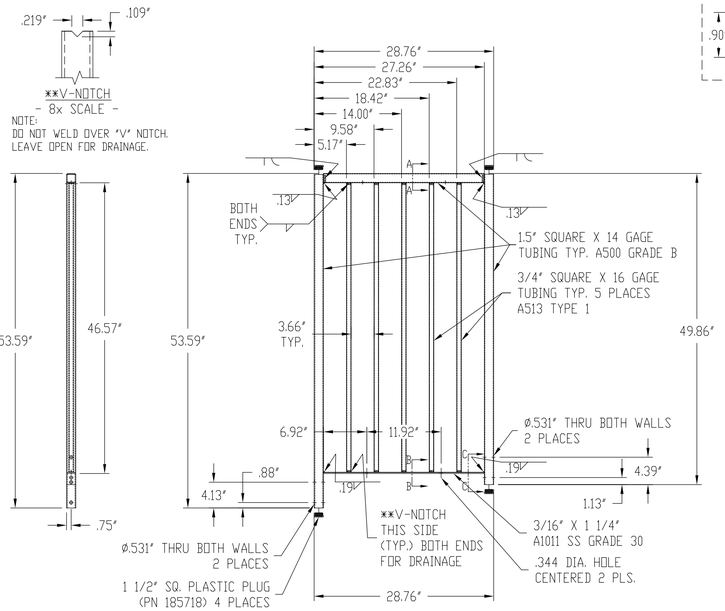
8A T8.31 REAR ATTACHMENT @ RISER
(2x SCALE)



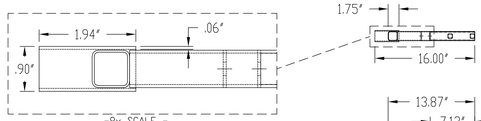
8 T8.31 REAR ATTACHMENT
(2x SCALE)



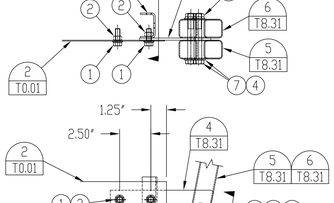
8B T8.31 REAR ATTACHMENT @ RAIL
(2x SCALE)

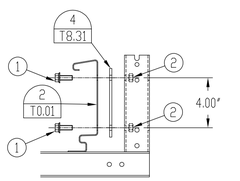


5 T8.31 SELF-STORING END RAIL WELDMENT
(PN 185196-84)

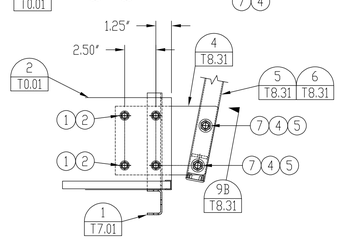


6 T8.31 SELF-STORING END RAIL EXTENSION WELDMENT
(PN 185198-84)

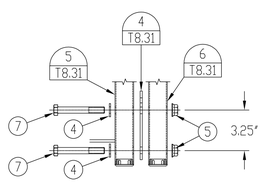




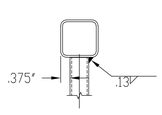
9A T8.31 EXTENSION ATTACHMENT @ RISER
(2x SCALE)



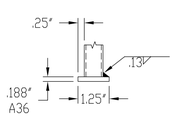
9 T8.31 EXTENSION ATTACHMENT
(2x SCALE)



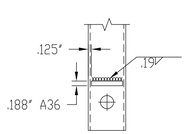
9B T8.31 EXTENSION ATTACHMENT @ RAIL
(2x SCALE)



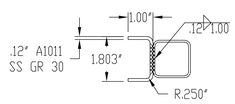
SECTION A-A
- 4x SCALE -



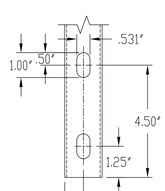
SECTION B-B
- 4x SCALE -



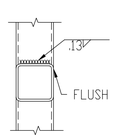
SECTION C-C
- 4x SCALE -



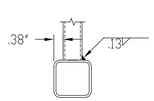
SECTION D-D
- 4x SCALE -



SECTION E-E
- 4x SCALE -



SECTION F-F
- 4x SCALE -



SECTION G-G
- 4x SCALE -

ITEM	DESCRIPTION	PART NO.
7	1/2"-13 X 3.75 HEX HD GR5, ZINC	604078
6*	3/8-16 x 1 HFH BOLT A354BD (BLK)	614047
5	1/2-13 WHIZ LOCK NUT	601050
4	1/2" FLAT WASHER TYPE A WIDE	602163
3	1/2"-13 X 2.50 HEX HD GR5, ZINC	600144
2	3/8-16 KEPS NUT	601629
1*	3/8-16 X 1 HEX FLG HD CAP SCREW ASTM A449, ZINC	534512

*NOTE:
WITH BLACK OUT OPTION B4 ONLY
REPLACE ITEM 1 WITH ITEM 6.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STERN
4688
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023

REV.	REVISION NOTES	INT/DATE

NAME: SCOPELAND DATE: 12-05-22 SCALE: 1" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

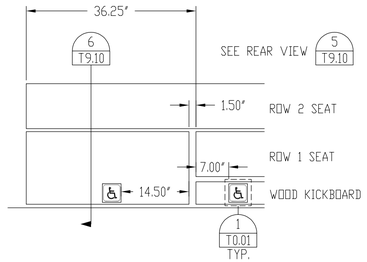
JOB NUMBER: 83256

TITLE: SELF-STORING END RAIL DETAILS CONTINUED

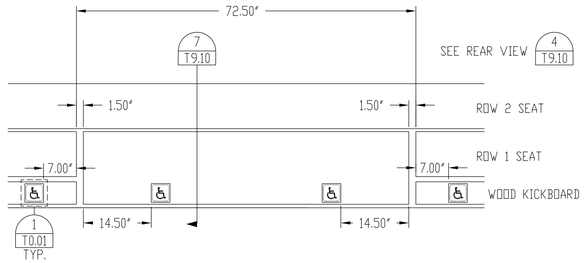
Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T8.31

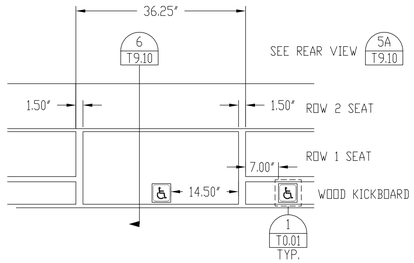
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



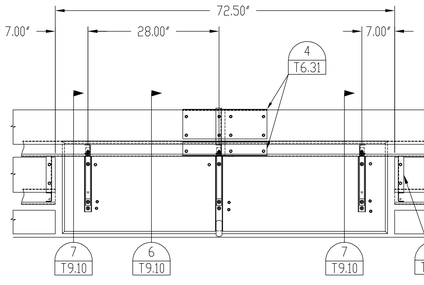
☑ 1 T9.10 FRONT VIEW WITH SIGNAGE
(1 WHEELCHAIR SPACE)



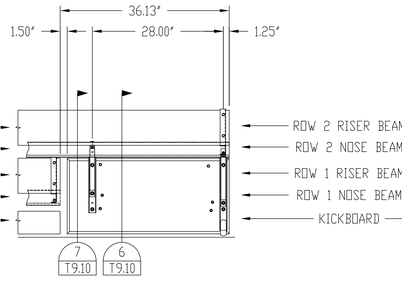
☑ 2 T9.10 FRONT VIEW WITH SIGNAGE
(2 WHEELCHAIR SPACES)



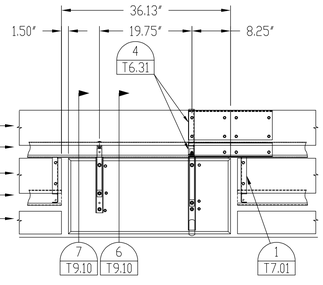
☐ 3 T9.10 FRONT VIEW WITH SIGNAGE
(1 WHEELCHAIR SPACE)



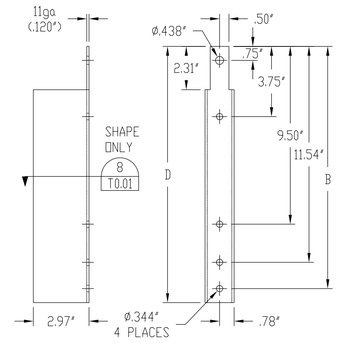
☑ 4 T9.10 REAR VIEW AT DOUBLE NOTCH
(2 WHEELCHAIR SPACES)



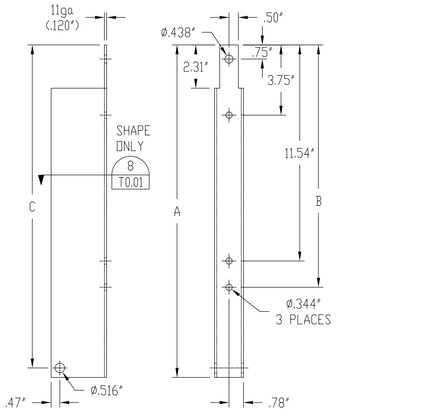
☑ 5 T9.10 REAR VIEW AT SINGLE NOTCH
SINGLE NOTCH AT THE END OF A BANK
(1 WHEELCHAIR SPACE)



☐ 5A T9.10 REAR VIEW AT SINGLE NOTCH
SINGLE NOTCH IN THE CENTER OF A BANK
(1 WHEELCHAIR SPACE)



10 T9.10 NOTCH VERTICAL BRACE
ASTM A653 GRADE 33, GALV.
SEE TABLE
4X SCALE

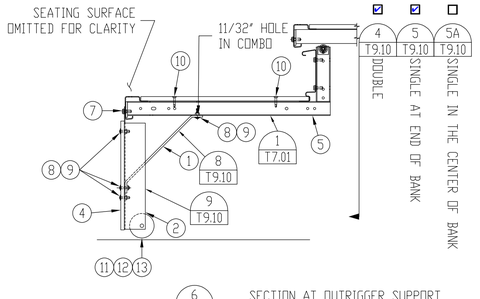


9 T9.10 NOTCH OUTRIGGER
ASTM A653 GRADE 33, GALV.
SEE TABLE
4X SCALE

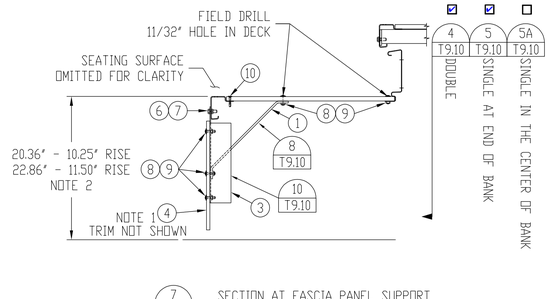
	RISE	A	B	C	D	OUTRIGGER	VERTICAL BRACE
☑	10.25"	17.75"	12.94"	17.25"	13.69"	PN 177050-01	PN 177052-01
☐	11.50"	20.25"	15.44"	19.75"	16.19"	PN 177050-02	PN 177052-02

NOTES:
1) FASCIA BOARD SUPPLIED W/O HOLES, FIELD DRILL 11/32" HOLE FOR ALL FASTENERS TYPICAL.
2) SEAT SURFACE ADDS 6.125" FOR ESM & WOOD AND 6.75" FOR CSM TO HT. NO GUARD REQ'D PER ICC 300-17 SECTION 408 BECAUSE HEIGHT ABOVE FLOOR IS LESS THAN 30".

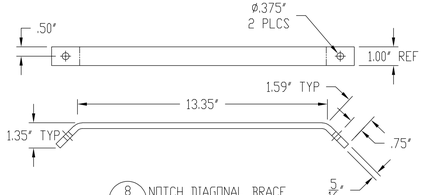
ITEM	DESCRIPTION	PART NO.
13	1/2" RETAINING RING	650370
12	WHEEL PIN	133048
11	STD. 3 1/2" DIA. WHEEL	163351
10	#14 x 1-7/8" WAFER HD TAP SCR	614042
9	5/16-18 KEPS NUT	601300
8	5/16-18 x 1-1/4 TRUSS TORX MS	613031
7	3/8-16 x 1 HEX FLG HD CAP SCR A449	534512
6	3/8-16 KEPS NUT	601629
5	END COMBO W/ ROLLER	SEE FRAMING PLAN
4	19/32" PLYWOOD FASCIA BD-CLEAR	VARIES
3	NOTCH VERTICAL BRACE - 10.25 RISE	177052-01
	NOTCH VERTICAL BRACE - 11.50 RISE	177052-02
2	NOTCH OUTRIGGER ASSY - 10.25 RISE	177051-01
	NOTCH OUTRIGGER ASSY - 11.50 RISE	177051-02
1	NOTCH DIAGONAL BRACE	177049



6 T9.10 SECTION AT OUTRIGGER SUPPORT
(10-1/4" RISE SHOWN. 11-1/2" RISE SIMILAR)



7 T9.10 SECTION AT FASCIA PANEL SUPPORT
(10-1/4" RISE SHOWN. 11-1/2" RISE SIMILAR)



8 T9.10 NOTCH DIAGONAL BRACE
ASTM A36 GALV.
(PN 177049)
4X SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STERN
4688
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE

NAME: SCOPELAND DATE: 9-19-23 SCALE: 3/4" = 1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

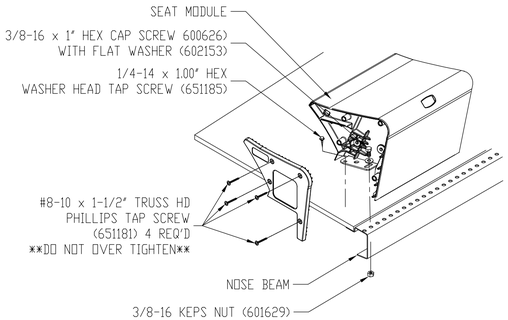
TITLE: WHEELCHAIR NOTCH-
1 ROW PERMANENT

Interkal
Spectator Seating World Wide
www.interkal.com

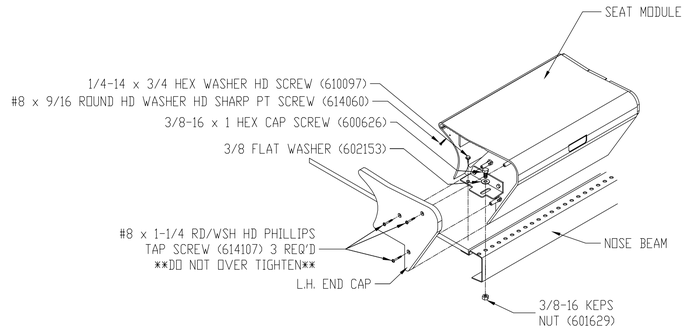
SHEET NUMBER: T9.10

DRAWING LOCATION - P:\PROD_DEV\CALIFORNIA\PC 02-120827 2022 CBC\CAD FILES\T9.10.DWG - PRINTED BY MCOPELAND ON 08-17-23 - 4:35pm

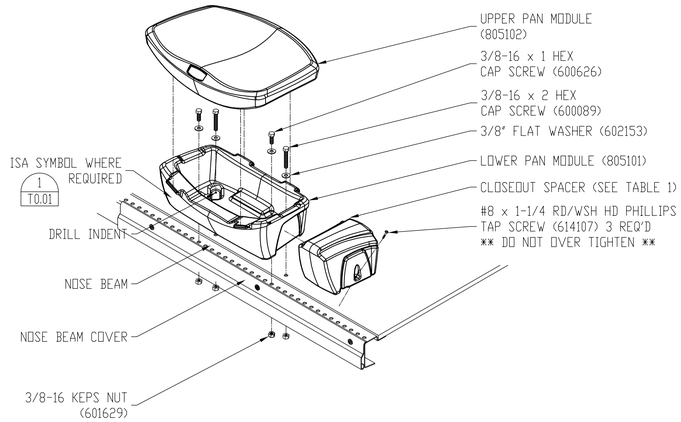
ALL DIMENSIONS OR NOTES CONTAINING SPECIFY OR VERIFY
ARE TO BE VERIFIED IN THE FIELD PRIOR TO RELEASE FOR PRODUCTION.



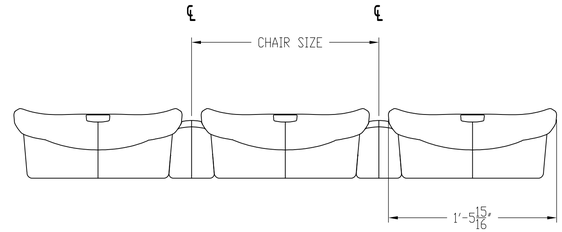
☑ 1 / T9.20 INSTALLATION OF TYPICAL ESM MODULE IN RUN



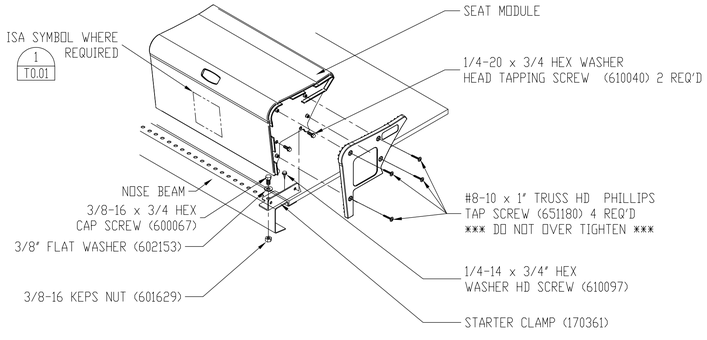
☐ 2 / T9.20 INSTALLATION LAST CSM MODULE IN RUN



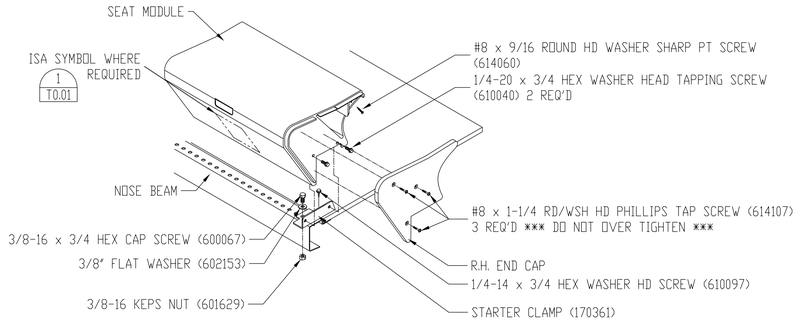
☐ 3 / T9.20 INSTALLATION OF POLARIS MODULES AND CLOSEOUT SPACERS



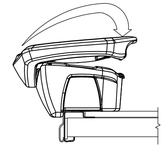
☐ 3A / T9.20 FRONT VIEW OF POLARIS MODULES AND CLOSEOUT SPACERS



☑ 1A / T9.20 INSTALLATION OF FIRST ESM MODULE IN RUN
NOTE: ALWAYS START MODULES AT R.H. END OF ROW



☐ 2A / T9.20 INSTALLATION FIRST CSM MODULE IN RUN
NOTE: ALWAYS START MODULES AT R.H. END OF ROW



HOOK UPPER SEAT PAN ON FRONT OF
LOWER PAN (MAKING SURE BOTH TABS ENGAGE)
AND ROTATE DOWN UNTIL UPPER PAN SNAPS INTO PLACE
ON BOTH REAR TABS

☐ 3B / T9.20 INSTALLATION OF UPPER PAN MODULE

TABLE ONE-POLARIS SEATS ONLY	
CHAIR SIZE	CLOSEOUT SPACER P.N.
☐ 18"	805111
☐ 19"	805112
☐ 20"	805113
☐ 21"	805114
☐ 22"	805115
☐ 23"	805116

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123614 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 09/10/2024

REGISTERED PROFESSIONAL ENGINEER
DANIEL R. STEERE
4680
exp. 6/30/24
STRUCTURAL
STATE OF CALIFORNIA
10/26/23

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120827 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 11/6/2023~~

REV.	REVISION NOTES	INT/DATE
	REVISIONS	
⚠		

NAME: SCOPELAND DATE: 9-19-23 SCALE: 1-1/2" =1'

GANESHA HIGH SCHOOL
RENOVATION
PAMONA, CALIFORNIA

JOB NUMBER: 83256

TITLE: SEAT OPTIONS-PLASTIC

Interkal
Spectator Seating World Wide
www.interkal.com

SHEET NUMBER: T9.20